RELATIONSHIPS BETWEEN LEADERSHIP STYLES AND ORGANISATIONAL INNOVATION IN VIETNAMESE PUBLIC ENTERPRISES: THE MEDIATING ROLE OF EMPLOYEE CREATIVITY

By

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DECLARATION OF ORIGINAL AUTHORSHIP

I declare that the work contained in this thesis has not been previously submitted for any degree or diploma at the University of Nottingham or any other higher education institution within or outside Malaysia. To the best of my knowledge and belief, the thesis contains no material previously published or written by another scholar except where due reference is made.

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ABSTRACT

Innovation plays an increasingly important role in the survival and growth of all organisations irrespective of public or private enterprises. Although public enterprises are critical vehicles for innovation, their innovative activities are lower and less efficient than private-owned ones, respectively in emerging and developing economies compared to developed ones. While research pointed out weak innovative capabilities of Vietnamese public and private enterprises and the underdeveloped national innovation systems, most innovative activities occurred in technical, product and process arena. As an immediate source of sustainable competitive advantage, studies on organisational innovation at workplaces, business practices and external relations that refer to organisational methods are still rare in terms of academic publications, particularly regarding the performance of Vietnamese enterprises. Inadequate research on innovation are also recorded in the manufacturing and processing industry in Vietnam, specifically public coffee enterprises.

Additionally, leadership remains an important factor that influences creativity and innovation in the organisations. Prior studies affirmed the existing linkages between leadership styles, specifically transformational and transactional leadership, employee creativity and innovation at the organisational level. However, these interrelationships are not fully understood, which is evidenced by the fact that the potential mediating role of employee creativity has not been unveiled. Moreover, existing gaps in the relationship between leadership role and innovation also influence the organisational effectiveness of public enterprises, which necessitates further investigation. Therefore, expanding and replicating past research, this study aims to look into the linkages between transformational leadership, transactional leadership and its dimensions on employee creativity and components of organisational innovation at public enterprises operating in the Vietnamese coffee sector. Additionally, employee creativity as a potential mediator in the leadership styles – organisational innovation relationships was examined.

A cross-sectional, quantitative and non-experimental correlation design was adopted in this study. Data were collected using a questionnaire from 369 employees working across departments in 39 Vietnamese public coffee enterprises nationwide utilising cluster sampling technique. IBM-SPSS and AMOS software were used to test the proposed theoretical model following by formulated hypotheses based on the collected data. Accordingly, descriptive analysis, inferential statistics, confirmatory factor analysis, measurement of fit indices as well as analyses for modification purposes were conducted. Additionally, by applying structural equation modelling approach, the path coefficient total effects of all variables on the dependent construct were investigated and assessing the mediating effect was also proceeded.

Findings of this study revealed that transformational leadership, transactional leadership, employee creativity were significant predictors of organisational innovation. Regarding the relationship between transformational leadership, its four dimensions and organisational innovation, transformational leadership was instrumental to organisational innovation. Moreover, apart from idealised influence, inspirational motivation, intellectual stimulation and individualised consideration were found to significantly influence business practices, workplace organisation and external relations and these effects were positive. The analysis of the relationship between transactional leadership and organisational innovation revealed that two dimensions of transactional leadership, namely contingent rewards and management by exception active had a significantly negative effect on three dimensions of organisational innovation. Similarly, findings partially supported the significantly positive effect of all dimensions of transformational leadership on employee creativity except for idealised influence. On the other hand, transactional leadership and its two dimensions were detrimental to employee creativity. Besides, employee creativity was found to significantly affect all dimensions of organisational innovation. Finally, employee creativity partially mediated transformational leadership - organisational innovation relationship. Likewise, the transactional leadership – organisational innovation relationship was also partially mediated by employee creativity.

Results of this study contribute to literature on leadership styles, creativity and innovation, looking into the context of Vietnamese public enterprises in the coffee industry. Specifically, this study provides precious empirical results in examining the effects of transformational and transactional leadership on employee creativity and organisational innovation. Accordingly, organisational innovation is more likely to be fostered by the positive influence of leadership behaviours and the improvement of employee creativity. Therefore, it benefits the management of organisations and policy makers by enlightening the management to recognise which leadership style will effectively suit public enterprises in tandem with promoting employee creativity to foster organisational innovation. Additionally, results also highlighted the significant role of employee creativity in enhancing the positively direct effect of transformational leadership on organisational innovation and modifying the negatively direct effect of transactional leadership on organisational innovation. Thus, the management of public enterprises in Vietnam should employ flexible and reformed policies regarding benefits and competitive gains to improve employee creativity, which in turns boosts organisational innovation. Equally important, selecting employees with required skills and appropriate personality profile concerning creative abilities must be considered during the recruitment process in the enterprises.

RESEARCH OUTPUT

Proceedings

1. Nguyen Nhat Tan, Hooi Lai Wan. (2017). "Relationship between leadership styles, employee creativity and organisational innovation: A proposed framework", in *The Sixth International Conference on Entrepreneurship and Business Management*, (pp. 135-143). Foreign Trade University, Ha Noi, Vietnam. 16th-17th November 2017. ISBN: 978-979-9234-59-9.

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LIST OF ABBREVIATIONS

Abbreviation	Explanation
AGFI	Adjust goodness of fit index
AMOS	Analysis of Moment Structures
ANOVA	Analysis of variance
AVE	Average Variance Extracted
CB-SEM	Covariance-Based-Structural Equation Modelling
CEO	Chief Executive Officer
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Construct reliability
DV	Dependent variable
EC	Employee creativity
EFA	Exploratory Factor analysis
FDI	Foreign Direct Investment
FRLT	Full range of leadership theory
FTA	Free Trade Agreements
GDP	Gross Domestic Product
GFI	Goodness of fit index
GOF	Goodness-of-Fit
GSO	General Statistics Office of Vietnam
HLM	Hierarchical linear modelling
HR	Human Resources
ICC	International Chamber of Commerce
ICO	International Coffee Organisation
IV	Independent variable
KMO	Kaiser-Meyer-Olkin
LPC	Least Preferred Co-worker
LS	Leadership style
MANCOVA	Multivariate analysis of covariance
MARD	Ministry of Agriculture and Rural Development
MI	Modification Index
MLE	Maximum Likelihood Estimation
MLQ	Multifactor Leadership Questionnaire

MSV	Maximum shared variance
MV	Mediating variable
NUBS	Nottingham University Business School
NUBS REC	Nottingham University Business School's Research Ethics Committee
OECD	Organisation for Economic Co-operation and Development
OI	Organisational innovation
PAF	Principal Axis Factoring
PLS-SEM	Partial Least Squares - Structural Equation Modelling
RMSEA	Root mean square error of approximation
SEM	Structural Equation Modelling
SME	Small and medium-sized enterprises
SOE	State-owned Enterprises
SPSS	Statistical Package For Social Sciences
TFL	Transformational leadership
TLI	Tucker-Lewis Index
TSL	Transactional leadership
USA	United States of America
USD	United States dollar
VICOFA	Vietnam Association of cocoa and coffee
VIF	Variance inflation factor
VINACAFE	Vietnam National Coffee Corporation
VIRI	Vietnam Rural Industries Research and Development Institute
χ^2	Chi-Square

CHAPTER 1: INTRODUCTION

1.1 Introduction

The increasing intensification of competition and accelerating globalisation trend in the current business environment have been widely agreed by business researchers, academics, scholars and practitioners all over the world (Herrera, 2016; Lin, Su, & Higgins, 2016). It is the complicatedness of such business environment that forces organisations including private and public ones to be more innovative and competitive to survive and grow (Janeiro, Proença, & da Conceição Gonçalves, 2013). As a result, creativity and innovation are believed to have strong influence on business performance of organisations towards achieving competitive advantages (Allen, Adomdza, & Meyer, 2015; Hamel, 2009; Houghton & DiLiello, 2010).

The generation of creative and useful ideas concerning products, services, processes or practices by employees was broadly recognised to be the first and most essential stage for organisational innovation, which positively affects the organisational innovation process (Cho & Pucik, 2005; Dougherty, 2006; García-Granero et al., 2015). Muñoz-Doyague, González-Álvarez and Nieto (2008) also posited that employee creativity served as the basis for organisational innovation to improve and was considered a key role in the success of organisational innovation. Moreover, the new corporate business model which is largely built upon employing employee creativity to facilitate organisational innovation is being adopted by more and more worldwide successful enterprises (Houghton & DiLiello, 2010).

There are a variety of factors that can influence organisational innovation such as leadership role (Amabile, 1998; Mumford & Gustafson, 1998), organisational culture and climate (Mumford & Gustafson, 1998), creativity-conducive work environment (Amabile, 1998) and others. Indubitably, the leadership role, among those factors, seems to be one of the most important one to stimulate organisational innovation and drive employee creativity as well as to create positive changes in an organisation (Amabile, 1998; Elenkov & Manev, 2005; Mumford, Scott, Gaddis & Strange, 2002; Oke, Munshi and Walumbwa, 2009; Robbins and Judge, 2013).

Particularly, effective leaders will support and expect their subordinates to display adaptive and proactive behaviours in order to cope with constant changes in the working environment (Rego, Sousa, Marques, & e Cunha, 2012). In other words, the leaders are responsible for building the working environment in which the followers - the most precious asset of the business (Wang, Le & Tran, 2015; Wright, Dunford & Snell, 2001) can utilise their knowledge and skills as well as maximise their creativity. Accordingly, the two popular leadership styles – transformational leadership and transactional leadership were supposed to have considerable effects on business performance and influence employee creativity and organisational innovation (Herrmann & Felfe, 2013; Jung & Avolio, 2000; Rowold & Heinitz, 2007;

Schweitzer, 2014; Yıldız, Baştürk, & Boz, 2014). Those above interrelated factors may contribute to the ultimate success of enterprises of all kinds.

As organisational innovation was considered as a long-run driver of organisational growth and survival (de Waal, Maritz, & Shieh, 2010; Goldman et al., 1995), the purpose of this study is to further explore the interactive effects of transformational leadership, transactional leadership, employee creativity and organisational innovation in the Vietnamese coffee sector at public enterprises, which partly contributes to the sustainable development of the national economy. Indisputably, the coffee sector plays a prominent role in the Vietnamese economy both in fostering the national economic development and providing a considerable employment for the populace. Studying organisational innovation, leadership styles and employee creativity still remains a hugely challenging task for researchers in the Vietnamese coffee sector (Armbruster et al., 2008; Battisti & Stoneman, 2010). Nevertheless, practical implications brought about by this research to the management team in public coffee enterprises are expected to be valuable in helping organisations recognise the importance of investing in organisational innovation instead of purely in technological, products or services innovation. Specifically, organisational innovation is the introduction of novel organisational methods that supports the business management in the working environment or in the firm-external agent relation in business practices, workplace organisation and external relations (Camisón & Villar-López, 2014). Simultaneously, it unveils the appropriate leadership style that can promote the employee creativity in the organisation that leads to the efficiency of organisational innovation.

Vietnamese economy has depended largely on Public or State-owned Enterprises (SOE), one of three kinds of economic sectors in Vietnam including public, private and joint venture enterprises (Nguyen, Dang & Nguyen, 2015; Quang & Vuong, 2002) especially after the transition from the period of centrally-planning to the period of socialist-oriented market (Dang, 2010). As Vietnamese economy is integrating deeper and deeper into the world economy, SOEs constitute an important part in the national economic development (Hai, 2016). However, there are big differences between public enterprises and non-state enterprises that make the leadership role at public enterprises in fostering organisational innovation and employee creativity is more challenging than ever to compete with foreign enterprises in the globalised market (Hai, 2016). Particularly, Hai (2016) reported that such differences were exhibited in the relation between the rights and interests of leaders; perceived success or failure of the organisation; the decision-making procedure and practical interests of enterprises; the appointment criteria of leaders and their potential contribution to the organisation. Moreover, finding out which type of leadership best promotes the innovation process in the organisation is critically important (Oke et al., 2009). It is this context that the study intends to investigate the underlying linkages between different leadership styles, employee creativity and organisational innovation.

The first chapter of this study will begin by justifying the rationale for researching the relationship between leadership styles, employee creativity and organisational innovation at public coffee enterprises in Vietnam. Specifically, organisational innovation and employee creativity will be deliberated, followed by the two leadership styles – transformational and transactional leadership. Subsequently, the importance of studying the public coffee enterprises in Vietnam will be examined. Additionally, the research problem of the study will be clearly presented. After that, the research questions, research objectives, scope of the study and significance of the study will also be delineated. This chapter concludes by presenting the definitions of key terms and organisation of thesis used in the study.

1.2. Justification for the Research Problem

This particular section will focus on providing research background that serves as a basis for research problem to be identified as well as highlighting motivations to conduct this study. Respectively, the importance of studying organisational innovation regarding organisational methods will be discussed. Moreover, justifications will be made on examining linkages between leadership, specifically transformational and transactional leadership and organisational innovation along with investigating the potential mediator of employee creativity in leadership style-organisational innovation relationship. Subsequently, rationales for linking leadership styles, employee creativity, organisational innovation and its research gaps in the literature to the practical scenarios, looking into the specific context of Vietnamese public enterprises will also be elaborated.

1.2.1 The importance of studying organisational innovation on organisational methods

Innovation was indisputably regarded by academics and practitioners as the driver of organisational adaptation to rapid changes in the current global business market characterised by high uncertainty and turbulence, strong competition and dynamic development (Ganter & Hecker, 2014; Sarros, Cooper & Santora, 2008). Accordingly, organisational capability to quickly adapt to changes in economic, technological, legal and social climate increases the opportunities for organisations to strengthen competitive advantages, sustainable growth and prosperity (Ganter & Hecker, 2014; Hamel, 2009; Sarros, Cooper & Santora, 2008). While innovation occurs in various aspects in the organisation, research attention was mostly paid to technical and marketing innovation that focus on technological, product and services innovation (Ali, Kan & Sarstedt, 2016; Bao, Chen & Zhou, 2012; Damanpour & Aravind, 2012; Forés & Camisón, 2016; Ganter & Hecker, 2014; Guidetti & Mazzanti, 2007; Hogan & Coote, 2014; Ismail, 2005; Munene, 1995; Mustafa, 2015; O'Donohue, 2016; Sadegh Sharifirad & Ataei, 2012; Wong, 2013; Wu & Lin, 2011). Another type of non-technical innovation, organisational innovation on organisational methods,

still remains inadequately researched (Armbruster et al., 2008; Battisti & Stoneman, 2010; Camisón & Vilar-López, 2014; Damanpour & Aravind, 2012; Hervas-Oliver & Sempere-Ripoll, 2015).

Camisón and Vilar-López (2014), Hervas-Oliver and Sempere-Ripoll (2015) and Wischnevsky, Damanpour and Méndez (2011) argued that the nature of adaptive attempts to environmental changes was non technological because initial changes in organisational methods was considered the root of innovation in an organisation followed by technological changes (Hamel, 2009), which seems in contrast to the prevalent thinking. Specifically, organisational innovation emphasises on implementing novel organisational methods concerning three dimensions that are business practices, workplace organisations and external relations (OECD, 2005), which is supposed to drive organisational effectiveness in the contemporary business contexts (Damanpour & Schneider, 2006; Damanpour & Wischnevsky, 2006; Ganter & Hecker, 2014; Hamel, 2009). Therefore, this study decides to investigate organisational innovation in relation to other organisational contextual variables.

1.2.2 Justifications of examining the missing link between leadership styles and organisational innovation

Leadership, specifically leadership style, as a key contextual construct, was acknowledged by numerous studies to have a strong influence on innovation and competitiveness (Aarons & Sommerfeld, 2012; Chen & Hou, 2016; Chen, Lin, Lin, & McDonough, 2012; Dominguez Escrig, 2016; Müceldili, Turan, & Erdil, 2013; Schweitzer, 2014; Somech, 2006; Waite, 2014; West et al., 2003). In the context of fast technological change and fierce competition, the role of leaders in organisations proves to be more significant in guiding employees and the whole setting towards achieving the established goals (Chen et al., 2016; Kahai, Sosik, & Avolio, 2003; Lee, 2008; Rosing, Frese, & Bausch, 2011). Moreover, the leaders, through their significant influence on organisational policies, are frequently expected to promote innovation in the organisation by their supports and strategies (Aragón-Correa, García-Morales, & Cordón-Pozo, 2007; Chen et al., 2016; Müceldili et al., 2013; Schweitzer, 2014; Williams & Foti, 2011).

There will be certain underlying factors that indirectly influence, facilitate or hinder the relationship between leadership styles and innovation in organisations (Elenkov & Manev, 2005; Dominguez Escrig et al., 2016; İşcan, Ersarı, & Naktiyok, 2014; Kang, Solomon, & Choi, 2015; Norbom & Lopez, 2016; Prasad & Junni, 2016; Smith, 1997; Yoshida et al., 2014). Therefore, Makri and Scandura (2010) argued that processes acting as the mediator in the leadership style-organisational innovation relationship should be systematically investigated to identify the direct and indirect effects. Particularly, employee creativity has been identified as a potential mediator in this study for the following reasons.

Employee creativity was affirmed by a number of studies to have significant positive effects on the organisational competitiveness in the current knowledge-driven economy (Anderson, Potočnik, & Zhou,

2014; Chen & Huang, 2010; Cho & Pucik, 2005; Dougherty, 2006; Park et al., 2013; Sohn & Jung, 2010). Moreover, in order for organisational innovation to be successfully implemented, employee creativity definitely appears to be the foundation as well as the core contributor (Anderson et al., 2014; Chen & Huang, 2010; Grimm & Brandert, 2016; Park et al., 2013; Sohn & Jung, 2010). Accordingly, the ability of employees to generate novel, useful ideas and solutions to enhance organisational innovation process indirectly leads to organisational development and competitiveness (Anderson et al., 2014; Bubel, 2015; Chen & Huang, 2010; Hamel, 2009; Park et al., 2013; Wang & Zhu, 2010; Wu et al., 2008). Higher level of employee creativity will increase the creation of opportunities to improve the efficiency of existing organisational practices, which in turn, promote overall organisational performance (Kouloubandi, Jofreh, & Mahdavi, 2012; Müceldili et al., 2013; Sohn & Jung, 2010). In general, Anderson et al. (2014) posited that employee creativity and organisational innovation were tightly correlated, which partly explains why employee creativity is selected to investigate its relationship with organisational innovation in this study.

Additionally, leaders are believed to be one of the most influential predictors of employee creativity (Derecskei, 2016; Jaussi & Dionne, 2003; Jiang & Gu, 2015; Kahaia, Sosik, & Avolio, 2003; Moss & Ritossa, 2007; Pan et al., 2015; Zhang, Tsui, & Wang, 2011; Wu et al., 2008). Employees who are motivated by the leader tend to have higher levels of creativity compared to those working under the strict control and supervision of the leader (Gu, Tang, & Jiang, 2015; Gupta & Singh, 2015; Jiang & Gu, 2015; Rego et al., 2012; Zhou & Ren, 2011). De Stobbeleir, Ashford and Buyens (2011) and Oreg and Berson (2011) pointed out that effective leaders supported employee creativity by setting creativity as a job requirement, establishing a creative and dynamic working environment to foster their creative ability. Moreover, they provide constructive feedbacks or rewarding employees with their creative outcomes, which indirectly affects the organisational innovation process (Chen & Hou, 2016; Jiang & Gu, 2015; Rego et al., 2012; Semedo, Coelho, & Ribeiro, 2016; Yoshida et al., 2014; Wu et al., 2008). Therefore, an appropriate leadership style will help promote the level of employee creativity that enhances organisational innovation and overall organisational effectiveness.

There is a clear distinction between the creativity and innovation concept in this study, particularly, employee creativity and organisational innovation (Baer, 2012; Camisón & Vilar-López, 2014; Hervas-Oliver & Sempere-Ripoll, 2015; OECD, 2005; Thatcher & Brown, 2010; Wang & Zhu, 2010; Wischnevsky et al., 2011). Accordingly, innovation tend to be developed and implemented from the creativity of employees who contribute new and useful ideas as well as useful solutions to the innovative process in an organisation (Grimm & Brandert, 2016). Moreover, innovation is considered as the effective application of creative ideas in the organisation, which is likely brought by the leaders as argued by Amabile et al. (1996). There exists the relationships between leadership styles and organisational innovation (Ebrahimi, Moosavi, & Chirani, 2016; İşcan et al., 2014; Prasad & Junni, 2016; Yoshida et al., 2014), leadership styles and

employee creativity (Carmeli, Reiter-Palmon, & Ziv, 2010; Dedahanov et al., 2016; Derecskei, 2016; Gu et al., 2015; Herrmann & Felfe, 2013; Tung, 2016; Yoshida et al., 2014) and employee creativity and organisational innovation (Anderson et al., 2014; Bubel, 2015; Chen & Huang, 2010; Park et al., 2013;Wang & Zhu, 2010). Therefore, leadership styles are expected to have conducive effects on employee creativity that subsequently influences organisational innovation. In addition, regardless of service or manufacturing industry, employee creativity in the organisation was influenced by the leadership to develop efficiently and bring about innovative outcomes (Shalley & Gilson, 2004). Thus, the study further attempts to investigate employee creativity as a mediator in the leadership styles-organisational innovation relationships.

1.2.3 Rationales for research focus on the context of Vietnamese public enterprises

As a long-term driver of organisational efficiency and competitiveness, innovation, specifically organisational innovation affects the operations of businesses irrespective of public or private-owned enterprises (Borins, 2002; De Waal et al., 2010; Florio, 2014; Girma, Gong, & Görg, 2009; Goldman et al., 1995). Developed economies have long realised the strategic importance of creativity and innovation to the national competitiveness by focusing on strengthening the innovative capacity of public sectors, particularly public enterprises (Agolla & Lill, 2013). Nevertheless, this situation in emerging and developing economies, specifically in the context of Vietnam was slow in terms of change adaptation and dynamic level despite recently positive outcomes in improving creativity and innovation in public enterprises (Agolla & Lill, 2013; Anh, 2014; Aubert, 2005; OECD, 2014).

As an integral part in the economy of each nation, public sectors account for 20-50 percent of GDP in OECD countries, which marks a significant component of the macro-economy (Potts & Kastelle, 2010). Specifically, public enterprises constituted 5 percent of GDP in OECD nations and 10 percent of the global GDP (Budiman, Lin, & Singham, 2009; Stan et al., 2014). Moreover, public enterprises also represent 80 percent of the stock market capitalisation in China while the number for Russia and Brazil is 62 percent and 38 percent respectively (Stan et al., 2014; Whittington, 2012).

Additionally, the motivation of this study to focus on public enterprises is due to its high incidence in the national economy of worldwide developing countries including Vietnam (Peng, Bruton, Stan, & Huang, 2016; Ralston et al., 2006; Stan, Peng, & Bruton, 2014). In the specific context of Vietnamese public sectors, public enterprises contribute on average around 28 percent out of 35 percent of GDP between year 2001 and 2010 and 28.8 percent in 2011-2016 (Mai Thanh, 2016). Furthermore, although the number of Vietnamese public enterprises merely constitutes a minor percentage (0.67%) compared to the total number of enterprises of all types, contributions made by public firms still account for considerable percentages (28.8%) of GDP in Vietnam while this respective number in private enterprises and FDI

enterprises is 11.8 percent and 17.9 percent (Mai Thanh, 2016). Therefore, it is concluded that public enterprises in Vietnam play a major role in boosting the national economic development.

Public enterprises in developing countries generally and in the context of Vietnam particularly differ from private-owned firms in terms of organisational goals that vary between profit maximisation and social welfare concerns (Aharoni, 1981; Kropp & Zolin, 2008; Tonurist & Karo, 2016; Zhang, Rezaee, & Zhu, 2010). Specifically, Peng et al. (2016) argued that the variations between social focus and profit focus depend on the norms of institutions as well as preferences of governmental shareholders. Accordingly, the hindrances of innovative efficiency and firm growth may occur as the pursuit of social focus such as welfare and employment protection overrides that of profit orientation and new product innovation in public enterprises (Stan et al., 2014; Tonurist & Karo, 2016). Additionally, the comparative inefficiency of innovative activities including organisational innovation in public enterprises is partly due to the inconsistency between leadership role and innovation management, which motivates this study to investigate the linkages between leadership styles, creativity and innovation (Belloc, 2014; Florio, 2014).

Leadership style was regarded as one of the primary factors that positively and negatively affected organisational outcomes in public enterprises (Borins, 2002; Nusair et al., 2012). Specifically, the effects of transformational and transactional leadership on creativity of employees impacts innovation in public enterprises differently (Alsalami et al., 2014; Holten & Brenner, 2015; Judge & Piccolo, 2004; Jung & Avolio, 2000; Rowold & Heinitz, 2007; Schweitzer, 2014). Transformational leadership refers to the interaction between leaders and their followers in raising one another to higher levels of motivation and morality, inspiring employees through visions and persuading them to excel in performance and goal attainment (Li, Bai & Xi, 2012; Redmond et al., 1993; Wang & Howell, 2010). Accordingly, its four dimensions are idealised influence, individualised consideration, inspirational motivation and intellectual stimulation. On the other hand, transactional leadership builds the foundation for relationships between leaders and followers by specifying expectations, clarifying responsibilities, negotiating contracts, providing supervisory control and output control, based on an exchange process whereby followers are recognised and rewarded for accomplishing specified goals (Wei, Yuan, & Di, 2010). This style of leadership includes two specific dimensions that are contingent reward and management by exception active.

According to Judge and Piccolo (2004) and Sethibe (2016), an effective leader in an organisation was argued to combine the characteristics of both transformational and transactional leadership in order to reach the highest level of organisational effectiveness. On the other hand, it is remarkable that the nature of organisational structure and culture in public enterprises with management approach, bureaucratic processes, established rules and standards and incentives policy (Windrum & Koch, 2008) also influence relationships between leadership styles, employee creativity and organisational innovation. Therefore, due

to the important role of public enterprises in the national economy, the practice of creativity and innovation and the influence of leadership styles on employee creativity and organisational innovation in public firms, this study determines to explore relationships between transformational, transactional leadership and its dimensions, employee creativity and organisational innovation regarding organisational methods in public enterprises.

1.3 Research Problem

Increasing interests in studying the effect of innovation on organisational performance have been recorded in the innovation literature due to the significant role of innovation towards the long-term survival and development of organisations (Ganter & Hecker, 2014; Sarros et al., 2008). Innovation is perceived as a broad and complicated concept which used to be studied at the organisational level and categorised into three common types, namely, technical, marketing and organisational innovation (Damanpour & Aravind, 2012; Wong, 2013). Compared to numerous studies on technical and marketing innovation (Forés & Camisón, 2016; Hogan & Coote, 2014; Mustafa, 2015; Sadegh Sharifirad & Ataei, 2012; Wong, 2013), there is a lack of understanding in studying the importance of specific organisational innovation concerning organisational methods that concentrates on business practices, workplace organisation and external relations in business performance (Armbruster et al., 2008; Battisti & Stoneman, 2010; Camisón & Vilar-López, 2014; Damanpour & Aravind, 2012; Hervas-Oliver & Sempere-Ripoll, 2015).

Previous studies revealed that innovation at the organisational level was influenced by leadership, specifically leadership styles (Aarons & Sommerfeld, 2012; Chen & Hou, 2016; Chen, Lin, Lin, & McDonough, 2012; Schweitzer, 2014; Somech, 2006). Moreover, the relationship between leadership styles and innovation was also found to be mediated and moderated by different contextual variables such as organisational environment, leadership characteristics or employee behaviours that reached inconclusive results (Dominguez Escrig et al., 2016; Jansen et al., 2008; Jansen, Vera, & Crossan, 2009; Kang, Solomon, & Choi, 2015; Pieterse et al., 2010; Prasad & Junni, 2016; Rank et al., 2009; Sarros, Cooper, & Santora, 2011; Yoshida et al., 2014; Zacher & Rosing, 2015). Employee creativity was investigated either as a predicting variable or as an outcome variable in tandem with leadership styles and innovation as well as other contextual behaviours (Amundsen & Martinsen, 2015; Dedahanov et al., 2016; Derecskei, 2016; Gu, Tang, & Jiang, 2015; Herrmann & Felfe, 2013; Jung, 2001; Kim & Lee, 2011; McMahon & Ford, 2013; Semedo, Coelho, & Ribeiro, 2016; Tung, 2016). However, there was hardly any study carried out to examine employee creativity as a mediating variable in the leadership styles - innovation relationship, particularly organisational innovation on organisational methods (Dominguez Escrig et al., 2016; Makri & Scandura, 2010; Prasad & Junni, 2016; Yoshida et al., 2014). Therefore, interrelationships between leadership styles, employee creativity and organisational innovation are not fully understood due to

potential interchangeable usages of the creativity and innovation concepts by scholars (Waples & Friedrich, 2011; McLean, 2005).

Research areas on leadership styles, creativity and innovation have attracted huge attentions of scholars evidenced by the publication of a considerable number of quantitative and qualitative studies (Chen & Hou, 2016; Halbesleben, 2003; Kang, Solomon & Choi, 2015; Lindsey, 2016; Pieterse et al., 2010; Tung, 2016; Yoshida et al., 2014). Particularly, the two popularly opposite styles of leadership namely transformational and transactional leadership were reported to impact employee creativity and organisational innovation differently (Cheung & Wong, 2011; Gong, Huang, & Farh, 2009; Gumusluoglu & Ilsev, 2009; Jung, 2001; Jung & Avolio, 2000; Kim & Lee, 2011; Rowold & Heinitz, 2007; Schweitzer, 2014; Si & Wei, 2012; Tung, 2016). While the majority of leadership studies focused on transformational leadership style in examining its effects on creativity and innovation, the number of research on transactional leadership was scarce (Gao et al., 2012; Liu, Liu, & Zeng, 2011; Wei et al., 2010). The linkages between leadership styles, employee creativity and organisational innovation on organisational methods are also not uncovered (Armbruster et al., 2008; Battisti & Stoneman, 2010). In addition, while both styles of leadership were found to influence employee creativity and organisational innovation, findings of theoretical and empirical studies on those variables were inconsistent (Abbas & Riaz, 2012; Gao et al., 2012; Hu, Gu, & Chen, 2013; Khalili, 2016; Liu, Liu, & Zeng, 2011; Prasad & Junni, 2016).

Public enterprises are argued to play an important vehicle for innovation due to financial and non-financial supports such as government-owned budget resources, policy and fiscal capacities for strategic planning and risky innovative projects (Benassi & Landoni, 2017; Tonurist & Karo, 2016). However, public enterprises showed less efficient and lower innovative activities compared to private-owned ones (Belloc, 2014), respectively in emerging and developing economies compared to developed ones (Agolla & Lill, 2013; Anh, 2014; Aubert, 2005; OECD, 2014). While research pointed out weak innovative capabilities of Vietnamese public and private enterprises and the underdeveloped national innovation systems, most innovative activities occurred in technical, product and process arena (Anh, 2014; Nguyen, Nguyen, & Doan, 2013; OECD, 2013; OECD, 2014). Despite its importance to the overall competitiveness and growth of firms (Hamel, 2009), studies on organisational innovation at workplaces, business practices and external relations that refer to organisational methods in the performances of Vietnamese enterprises are still rare in terms of academic publications (Anh, 2014; Armbruster et al., 2008; Battisti & Stoneman, 2010; Damanpour & Aravind, 2012; Mol & Birkinshaw, 2009; Nguyen et al., 2013). Moreover, compared to computerising or research and development sectors (Cheung & Wong, 2011; Hervas-Oliver & Sempere-Ripoll, 2015), little attention is recognised towards research on innovation in businesses that operate in Vietnamese manufacturing and processing industry, specifically public enterprises in the coffee industry.

Supporting evidences for focusing on public enterprises in the coffee industry revealed that the coffee sector is one of the core industries that contributes to the economic development in Vietnam where public enterprises play the fundamental role in coffee planting and exporting activities (Nguyen, 2014; VBCSD, 2015; Vietrade, 2017). Particularly, coffee has been in the top three nationally strategic exporting agriculture and forestry products in Vietnam which accounts for 15 percent of the total export value of Vietnamese agricultural and forestry goods (Nguyen, 2014; VIRI, 2015). The favourable climate condition, low production cost and high output provided the coffee sector in Vietnam strong competitive advantages compared to other producers in the region and in the world (Dat, 2011; Export promotion center, 2007; Nguyen, 2014; VBCSD, 2015). For instance, the coffee industry contributed 10 percent of GDP to the agricultural sector (VIRI, 2015) and made up an average of USD 2.2 billion in exported trade value, which constituted about 2.34 percent of the total value of all Vietnamese commodities (VIRI, 2015). Between 2011 and 2018, the average contribution of coffee export compared to the total exporting value of all Vietnamese commodities was 3.48 percent. Moreover, coffee constituted a relatively average ratio of the national economy at 1.83 percent of GDP in Vietnam compared to other coffee exporting countries (Vietrade, 2017). In addition, coffee was one of leading exporting products for a long period of time in Vietnam and ranked the fourth highest product export value compared to other commodities such as wooden products, seafood and vegetables and fruits in 2018. Importantly, it provided the huge employment opportunities for the local populace. With the total coffee plantation area of over 500,000 hectares and an average productivity of 1.4-1.6 millions tons per year, the coffee industry provides approximately 550,000 jobs and peaking at 600,000 to 800,000 during the harvesting season (Dat, 2011; Exporting promotion center, 2007; VIRI, 2015).

Existing problems pertaining to innovation in public enterprises, specifically in the Vietnamese coffee industry, are reflected by weak linkages between science and local enterprises, innovative incapability due to lack of international cooperation and limited funds in the manufacturing and processing industries (Nguyen, 2014; Nguyen et al., 2013; OECD, 2013). Moreover, while the rate of originating innovative activities about research and development in Vietnamese enterprises was quite low, specific organisational innovation concerning organisational methods remains questionable (CIEM, DoE, & GSO, 2012). Additionally, existing gaps in the relationship between leadership role and innovation also influence the organisational effectiveness of public enterprises, which necessitates further investigation (Stan et al., 2014; Tonurist & Karo, 2016). The fact that there is a dearth of studies examining relationships between transformational, transactional leadership and its dimensions, employee creativity and organisational innovation in Vietnamese public enterprises, particularly in the coffee industry indicates very first attempts of this research to look into (Daglio, Gerson & Kitchen, 2014; Khuong & Hoang, 2015; Quang & Vuong, 2002; Van Ho, 2013; Wang, Le & Tran, 2015).

1.4 Scope of the Study

The purpose of this quantitative study is to expand prior research on the relationship between leadership styles, employee creativity and organisational innovation at public enterprises in the Vietnamese coffee sector. Specifically, the two leadership styles under investigation are transformational leadership and its four dimensions: idealised influence, individualised consideration, inspirational motivation and intellectual stimulation; transactional leadership and its two dimensions: contingent reward and management by exception active. The organisational innovation construct refers to the process of implementing new organisational methods regarding business practices, workplace organisations and external relations. Data will be gathered from approximately 369 non-managerial employees working across departments in Vietnamese public coffee enterprises using a survey questionnaire. Accordingly, 57 public coffee enterprises, located primarily in the highland provinces of Vietnam, have been identified as the participating companies. The aim of the survey is to ask employees to assess the effects of the two different leadership styles on the employee creativity and organisational innovation.

1.5 Research Objectives

Owing to the recognition of the increasingly important role of organisational innovation in Vietnamese enterprises irrespective of public or private sectors, this study attempts to find out whether leadership style appears to be a key predictor that influences organisational innovation at public enterprises operating in the Vietnamese coffee sector (Borins, 2002; Holten & Brenner, 2015; Judge & Piccolo, 2004; Nusair et al., 2012; Stan et al., 2014; Tonurist & Karo, 2016). Unarguably, a number of previous studies on leadership styles and organisational innovation have been conducted in diversified countries and various industries, however, the impact on the coffee sector at Vietnamese public enterprises is still ambiguous (Ebrahimi, Moosavi, & Chirani, 2016; İşcan et al., 2014; Prasad & Junni, 2016; Yoshida et al., 2014). Moreover, the critical literature review also witnessed that there was a scarcity of such research context investigated before. Therefore, this study focuses on examining whether what has been observed in the leadership styles literature can be applied in the Vietnamese public coffee organisations. As transformational leadership and transactional leadership possibly co-exist in varying degrees within the same leader (Avolio, 1999; Bass, 1985), it remains possible for the most appropriate leader to simultaneously demonstrate two different types of leadership styles, depending on the requirements of particular situations in the organisations (Fiedler, 1978). Thus, the primary objective of this study is to test the effect of transformational and transactional leadership style and its dimensions on the components of organisational innovation namely business practices, workplace organisations and external relations.

As leadership styles are also supposed to influence employee creativity, different research have been carried out to understand the relationship between these two constructs. Moreover, this study attempts to examine whether employee creativity has an impact on organisational innovation. The influence of two different leadership styles on employee creativity and organisational innovation is hypothesised to vary. Therefore, this study will investigate the relationship between transformational leadership, transactional leadership and its dimensions on the components of organisational innovation and employee creativity. In addition, the study will propose that employee creativity mediates the relationship between each leadership style and organisational innovation. Findings of this study hope to fill the gaps in the current literature and resolve the inconclusive outcomes in prior studies. In conclusion, the objectives of this study are as follows.

(a) To investigate the relationship between leadership styles and organisational innovation at public enterprises operating in the Vietnamese coffee sector

a_1. To investigate the relationship between transformational leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector

a_2. To investigate the relationship between transactional leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector

(b) To determine whether leadership styles influence the employee creativity at public enterprises operating in the Vietnamese coffee sector

b_1. To determine whether transformational leadership influences the employee creativity at public enterprises operating in the Vietnamese coffee sector

b_2. To determine whether transactional leadership influences the employee creativity at public enterprises operating in the Vietnamese coffee sector

(c) To examine whether the employee creativity affects organisational innovation at public enterprises operating in the Vietnamese coffee sector

(d) To assess whether employee creativity mediates the relationship between leadership styles and organisational innovation at public enterprises operating in the Vietnamese coffee sector

d_1. To assess whether employee creativity mediates the relationship between transformational leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector

d_2. To assess whether employee creativity mediates the relationship between transactional leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector

1.6 Research Questions

The exhaustive literature review presented in this research has explored several knowledge gaps that need to be studied in the relationship between transformational leadership, transactional leadership, employee creativity and organisational innovation. Therefore, the following questions will be addressed based on the gaps identified in the literature.

1. What is the relationship between leadership styles and organisational innovation at public enterprises operating in the Vietnamese coffee sector?

   1a. What is the relationship between transformational leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector?

   1b. What is the relationship between transactional leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector?

2. What is the relationship between leadership styles and employee creativity at public enterprises operating in the Vietnamese coffee sector?

   2a. What is the relationship between transformational leadership and employee creativity at public enterprises operating in the Vietnamese coffee sector?

   2b. What is the relationship between transactional leadership and employee creativity at public enterprises operating in the Vietnamese coffee sector?

3. What is the relationship between employee creativity and organisational innovation at public enterprises operating in the Vietnamese coffee sector?

4. Does employee creativity mediate the relationship between leadership styles and organisational innovation at public enterprises operating in the Vietnamese coffee sector?

   4a. Does employee creativity mediate the relationship between transformational leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector?

   4b. Does employee creativity mediate the relationship between transactional leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector?

1.7 Significance of the Study

Leadership styles proved to have a strong influence on organisational innovation and employee creativity, which in turn, affect the overall organisational performance and effectiveness (Redmond et al., 1993). Nevertheless, studying the effects of leadership styles on employee creativity and organisational innovation in Vietnamese public coffee enterprises is still limited.

As the coffee sector plays an important role in driving the national economic development of Vietnam, improper strategies for innovation will impact the competitive advantages of public coffee enterprises as well as the overall competitiveness of the coffee sector. While creativity and innovation in public

enterprises was reported slow compared to private businesses, innovative outcomes and processes in developing countries including Vietnam were weaker and less appropriately-invested compared to developed nations. Furthermore, investments in technical innovation, products, services and processes aspects without proper attention to organisational innovation will not lead enterprises, particularly public ones to sustainable development. Therefore, it is worth remembering that the root of innovation lies in non-technological innovation, especially organisational innovation, which helps enhance organisational effectiveness and drive businesses to long-term growth and survival.

In the current globalised world where fierce competition among business rivals and fast technological changes become prevalent, creativity and innovation definitely play an increasingly important role in securing organisational competitiveness. However, organisational innovation itself cannot occur without interactions with other contextual factors in the organisation. Therefore, as already mentioned, leadership and employee creativity were both found to have an influence on organisational innovation in the manner that leadership styles will affect organisational innovation through promoting employee creativity. Moreover, as employee creativity is also supposed to be influenced by leadership styles, studying the effects of leadership styles on employee creativity and organisational innovation is much significant to employee working in the particular context of public enterprises operating in the Vietnamese coffee sector.

In terms of the theoretical aspect, the valuable contribution to leadership, creativity and innovation literature is that this study investigates employee creativity as a mediator in the relationship between leadership styles and organisational innovation that very few studies have conducted before (Dominguez Escrig et al., 2016; Makri & Scandura, 2010; Prasad & Junni, 2016; Yoshida et al., 2014). That unique contribution of the study lies in the fourth research question. Understanding the direct and indirect factors that affect organisational innovation will help public enterprises to direct their attention towards those factors that foster organisational innovation. Moreover, the study hopes to enrich the leadership literature in public enterprises by examining the effects of transformational and transactional leadership on employee creativity and organisational innovation that previous research reached inconclusive findings. While research on transactional leadership and its contextual factors remain scarce, especially the effect of transactional leadership on employee creativity and organisational innovation in public firms, this study attempts to supplement other precious empirical results to the literature.

Another theoretical contribution is that the organisational innovation construct this study examines concerns implementing novel organisational methods relating to business practices, workplace organisations and external relations (Armbruster et al., 2008; Battisti & Stoneman, 2010; Damanpour & Aravind, 2012; Mol & Birkinshaw, 2009). This approach is different from other previous research that concentrates on general aspects of innovation in the organisation or on purely technological, products, services or process innovation (Armbruster et al., 2008; Battisti & Stoneman, 2010). Employing this

approach of organisational innovation construct, this study tests its relation to leadership styles and employee creativity, which is expected to bring different and novel results, serving as references for future studies in similar research areas.

In terms of managerial practices, an effective leadership was expected to be crucial for organisational success whereby the leader demonstrates leadership abilities to address organisational issues and improve organisational performance (Zhu, Chew & Spangler, 2005). Therefore, this study aims to investigate how employees working in public firms perceive the leadership style that their leader reflects and how their leader affects their creative abilities and organisational innovation. Findings of this study hope to enlighten the management to recognise which leadership style will effectively suit public enterprises in tandem with promoting employee creativity to foster organisational innovation. Particularly, proper investments in organisational innovation and an effective leadership that promotes employee creativity will increase the opportunities for public enterprises to compete with other types of local businesses. Those are supposed to jointly contribute to strengthening the overall organisational performance of public firms, the national competency and prosperity.

With respective to the local context, research on public enterprises operating in the Vietnamese coffee sector contributes to the enrichment of literature relating to leadership styles and organisational contextual factors in Vietnamese public enterprises. Specifically, the study hopefully pioneers research on relationship between leadership styles, employee creativity and organisational innovation, specifically regarding organisational methods, conducted in public coffee enterprises. Results of this study may be generally applicable to other local industries in Vietnam where public enterprises play a signification role.

In the context of creativity and innovation, results of this study are likely to suggest that emphasis should be put on promoting employee creativity through both extrinsic and intrinsic motivation (Waples & Friedrich, 2011). Additionally, appropriate policies and incentives that may encourage the creative ability of employees and enhance organisational innovation should be considered. Exerting strong influence on employee creativity and organisational innovation, leaders in public enterprises should demonstrate responsibilities and abilities through appropriate strategies and prompt supports to help employees achieve organisational objectives and sustainability. In a dynamic global business environment, bureaucratic process, rigid rules and standards, traditional business patterns become the main constraints for public enterprises (Wei, Yuan, & Di, 2010). Therefore, leaders should be active in renovating and restructuring the organisation, establishing a conducive working environment that facilitates employee performance and fosters creativity to maximise efficiency. Once employees are satisfied with the working environment led by the leader that can inspire them to be creative, they will endeavour to contribute their talents and skills that support organisational innovation and ultimately leads to organisational success.

1.8 Definition of Key Terms

Captain is responsible for regular supervision of the progress of workers and reminding them of errors in their work for prompt remedies to maximise their productivity and work efficiency (Vinacafe, 2016).

Contingent reward refers to the extent which the transactional leader appeals to the subordinates' needs and desires, then direct and motivate them to achieve those through rewards that are contingent upon their negotiated level of work role performance and goal achievement (Brymer & Gray, 2006; Bycio, Hackett, & Allen, 1995; Nguni et al., 2006; Waldman et al., 1990; Yulk, 2012).

Creativity is defined as the process when individuals or small group of individuals produced new and useful ideas (Amabile, 1988).

Employee creativity is understood as the process in which novel, useful and appropriate ideas concerning products, services, processes, business and management practices, organisational models and strategies are generated by employees so as to solve problems in the pursuit of work objectives (Scott and Bruce, 1994; Zhou and George, 2001).

Idealised influence represents the degree to which leaders are respected, admired and trusted by their followers and act as a role model in building respects, demonstrating confidence and instilling pride in subordinates (Avolio & Bass, 2004).

Individualised consideration occurs when the transformational leader pays equal attention to the individual needs, abilities, skills and aspirations of the follower based on one-to-one interactive relationship between the leader and the follower, thereby help the follower achieve personal growth by providing coaching, mentoring and developmental feedback (Boerner et al., 2007; Nusair et al., 2012).

Innovation is understood as the process when creative, new ideas are appropriately implemented and commercialised into useful, novel tangible or intangible outcomes so as to achieve the specific purpose (Nusair et al., 2012).

Inspirational motivation refers to the behaviour that the transformational leader shapes the clear future vision of the organisation; setting ambitious goals and high standards; direct and challenge followers to achieve extraordinary outcomes as well as provide them with the meaning of their tasks for serving the general mission and vision of the organisation (Avolio & Bass, 2004; Sarros & Santora, 2001)

Intellectual stimulation occurs when the transformational leader encourages and challenges followers to think themselves about old problems, assumptions and the status quo in a new and creative approach (Hater and Bass, 1998; Nusair et al., 2012).

Leadership encompasses a shared vision by the leader, an interactive influence between the leader and followers towards attaining the specific goals to improve organisational performance (Bennis & Townsend, 1995; Handy, 1992).

Management by exception active occurs when the transactional leader demonstrates positive, continuous intensive observation and supervision on subordinates' performances, take corrective actions so as to properly determine and prevent errors, mistakes or deviations from happening based on rules, standards and expectations of the organisation (Egan, Sarros, & Santora, 1995; Si & Wei, 2012).

Management by exception passive is characterised by the degree to which the transactional leader intervenes into the performance of followers once standards were not satisfied, serious problems or mistakes already took place (Nguni, Sleegers, & Denessen, 2006).

Organisational innovation refers to the introduction of novel organisational methods which supports the business management in the working environment or in the firm-external agent relations (Camisón and Villar-López, 2010; OECD, 2005).

Transactional Leadership builds the foundation for relationships between leaders and followers in terms of specifying expectations, clarifying responsibilities, negotiating contracts, providing supervisory control and output control, based on an exchange process whereby followers are recognised and rewarded for accomplishing specified goals and achieving the expected performance (Avolio and Bass, 2004; Bass and Avolio, 1995).

Transformational leadership refers to the interaction between leaders and their followers in raising one another to higher levels of motivation and morality, inspiring employees through visions and persuading them to excel in performance and goal attainment (Avolio and Bass, 2004; Bass and Avolio, 1995).

Vice-captain is entrusted with the responsibility of supporting the captain in directly supervising the manufacturing performance of the workers and keep the captain informed about their work progress for the sake of increasing work efficiency (Vinacafe, 2016).

1.9 Organisation of Thesis

This study focuses on examining the relationship between leadership styles, employee creativity and organisational innovation, which will be separately presented into six chapters. Chapter 1 provides the introduction of the research topic as well as the research outline. Accordingly, a general overview of the study on the effect of leadership on organisational innovation will be introduced. Additionally, problem statement, research questions, research objectives, scope of the study and the significance of the study will also be clearly stated. The presentation of Chapter 1 aims to provide a profound understanding of how the research is developed. Finally, this chapter outlines the definitions of key terms and terminologies used in the study.

Chapter 2 covers a comprehensive overview of the general coffee industry in Vietnam as well as the specific performance of Vietnam National Coffee Corporation (Vinacafe) – the research object of this study.

This chapter will be structured by initially giving a general overview about the coffee industry in Vietnam followed by outlining the performance of the coffee industry including cultivation and production output, export activity as well as the performance of Vinacafe. By analysing the contribution of the coffee industry and Vinacafe to the Vietnamese economic development, this chapter subsequently will discuss the importance and urgency of studying leadership, employee creativity and organisational innovation in Vietnamese public coffee enterprises.

Chapter 3 emphasises on providing a complete literature review of the main constructs and the relationship between variables in this study. Specifically, related literature on transformational leadership, transactional leadership, employee creativity and organisational innovation together with dimensions of each variable will be discussed. Subsequently, related theories of leadership styles, creativity and innovation will be presented. Importantly, the critical review of the empirical relationship that potentially exists between transformational leadership, transactional leadership, employee creativity and organisational innovation will be provided to support the understanding of how these constructs interact in this study. On the basis of empirical evidences and arguments clarified in the literature, research hypotheses are respectively formulated in accordance with research objectives and research questions.

Chapter 4 presents the methodology applied in this study by outlining the theoretical framework, research design and justifications, population of the study, data analysis and interpretation.

Chapter 5 clarifies the preliminary data analysis and interpretation of collected data by outlining sampling results that cover data collection procedures, demographic information, data screening, refining of measures to assess the scale reliability and validity as well as provides a detail review of research findings in terms of the hypothesised relationships between leadership styles, employee creativity and organisational innovation.

Chapter 6 focuses on discussing the research findings of this study as well as identifying contributions to the relevant literature. Managerial implications, limitations and further recommendations of this study for future research on leadership, creativity and innovation will be also mentioned.

1.10 Summary

Fast technological changes have been conducive to the urgent requirements for all business, especially technologically-driven enterprises, to quickly adapt and innovate so as to compete, survive and develop (Gumusluoglu & Ilsev, 2009). With regard to the highly competitive business climate, organisations irrespective of public or private enterprises have no better choice than keep innovating through creativity in order to sustain competitive advantage (Chen & Huang, 2010; Hamel, 2009; Somech & Drach-Zahavy, 2013). Specifically, the creative ability of employees to create new and useful ideas considerably contributes to innovative process in the organisation (Sheehan et al., 2013). However, due to

the complexity of creativity and innovation, organisations still need appropriate leadership to maximise the efficiency of organisational performance (Anderson et al., 2014). Furthermore, leadership has a strong position in driving organisations towards achieving established goals and influences employee creativity and organisational innovation. Due to the importance of organisational innovation in organisational development and its empirical relationship with leadership styles and employee creativity, exploring the extent of how these factors influence organisational innovation is critically important.

This study proved to be essential for public enterprises to outline suitable management strategies towards achieving organisational effectiveness. Therefore, in terms of theoretical contributions and practical implications, one of the strongest significance is that employee creativity mediates in the leadership-organisational innovation relationship. Specifically, this provides a thorough understanding of the direct and indirect factors that affect organisational innovation of public enterprises in the Vietnamese coffee sector. Moreover, this helps managers formulate appropriate policies and strategies to boost the performance of coffee enterprises.

Overall, this chapter aimed to introduce the research topic as well as outlined the research area. Accordingly, a general overview of the study on the effect of leadership on organisational innovation was presented. Importantly, justification for studying public enterprises in the Vietnamese coffee sector to examine the effect of leadership styles on employee creativity and organisational innovation was meticulously considered. Additionally, the problem statement and research questions were clearly stated. Research objectives of this study were explicitly presented to serve as the foundation for formulating hypothesis testing. Moreover, significance of the study highlights the theoretical and managerial contributions. Finally, this chapter provides definitions of the key terms and terminologies used in the study. The next chapter will focus on outlining the coffee sector and performance of Vinacafe, a public corporation in Vietnam.

CHAPTER 2: THE VIETNAMESE COFFEE SECTOR AND VINACAFE

2.1. Introduction

This chapter aims to provide an overview of the performance, growth and contribution of the coffee industry in general, and Vinacafe in particular, to the economic and social development of Vietnam. Diversified sources of data are employed from General Statistics Office of Vietnam (GSO), International Coffee Organisation (ICO), internally financial reports from Vinacafe and other relevant scholarly newspaper articles and journal articles. Specifically, the chapter begins with a general overview of the coffee industry in Vietnam, followed by a clear description of the performance of the coffee industry regarding cultivation, production and export activities. The subsequent sections emphasise on the particular performance of Vinacafe concerning the historical development, production and exporting as well as its position in contributing to the national economic and social development. The chapter concludes with a discussion on the importance of studying the coffee industry and particularly Vinacafe in Vietnam.

2.2. General overview about the coffee industry in Vietnam

Once being known as an infant country in the world coffee map, strong development in recent years has led Vietnam to become a really big and important coffee country within the region and worldwide (VIRI, 2015). Thanks to the suitable environment and climate condition (Xinhua News Agency, 2014), major economic policy reforms by the government in turning Vietnam into an export-oriented market socialist economy, coffee production has grown dramatically since 1980s. Especially, in the 2000s with the average cultivation area above 620,000 hectares (mainly Robusta coffee), the high production output not only served the domestic demand but also exporting activities. Each year, nearly 10 million bags of coffee are produced and simultaneously the same quantity are exported (Best, 2014; Trang, 2011). The exponential growth of this national industry in terms of production output and export turnover has put Vietnam at the second largest position of coffee producers and exporters in the world after Brazil from 2000 till now (OECD, 2015; Roldán-Pérez et al., 2009). Moreover, the coffee industry has become one of the largest and fastest growing primary commodity industries in Vietnam.

Playing an important role in the agricultural commodities generally in the world and particularly in Vietnam, coffee is currently known as a globally traded primary commodity (Dat, 2011). The importance of this commodity has been ranked fifth in terms of consumption value in the world and top three nationally strategic exporting agriculture and forestry products in Vietnam, which accounts for 15 percent of the total export value of Vietnamese agriculture and forestry goods. Low production cost, high output in combination with favourable climate condition have provided Vietnamese coffee strong competitive

advantages compared to other coffee producers in the region as well as in the world (Xinhua News Agency, 2014).

Macro strategic solutions have been raised by relevant parties in coordinating the state, the farmers, the enterprises, the scientific experts and communication agents to help Vietnamese coffee maintain its advantages and deal with potential challenges and competition in the worldwide coffee industry. At the micro level, particularly for coffee enterprises, much attention has been paid to increase innovative activities in cultivating, processing and exporting phases. As the globally competitive business environment is the prevalent trend, the trade barrier (tariff and non-tariff) has been gradually removed among nations. Free Trade Agreements (FTA) between countries have been signed that facilitate the flow of products and services region wide and worldwide. Therefore, it is essential that organisations stay innovative to survive and innovation must be perceived by employees as an inevitable task to help their organisations remain competitive. Furthermore, to grasp the opportunities brought about by globalisation and economic integration in the world, it is imperative for organisations to consider which factor will affect organisational innovation. It is believed that innovation itself in an organisation without proper support and inspiration from the management level will not be effective, which may be true for most enterprises regardless of sectors. In this study, the emphasis is on leadership styles, among managerial perspectives, potentially influence organisational innovation through employee creativity as the potential mediator. The following section will analyse the contribution of coffee industry in general and Vinacafe in particular to the Vietnamese economy and society. Then, the importance of studying the relationships between leadership styles, employee creativity and organisational innovation in public coffee enterprises will be discussed.

2.3. Performance of the coffee industry

2.3.1. Cultivation and production output

2.3.1.1. Favourable natural conditions

Coffee has been planted in many different countries all over the world, which mostly focuses on those nations near the equator with the hot and wet tropical weather such as Vietnam, Indonesia, India, Colombia, Brazil, Ethiopia and others (Dat, 2011). However, the coffee productivity and taste also partly depend on the soil quality and unique location of the planting area. That is the reason why the ideal climate brings Vietnamese coffee a really special flavour, which is different from other countries with similar conditions (Export Promotion Centre, 2007).

The two popular types of coffee, which are Arabica and Robusta, are planted in different parts of Vietnam. While the Arabica suits the cold and humid weather condition in the highly mountainous area in the northern provinces of Vietnam such as Son La, Lai Chau and Ha Giang, Robusta best grows in the southern part of Vietnam with red fertile basaltic soil, at the average height of over 800 meters above the

sea level and concentrates on such provinces as Dong Nai, Dak Lak, Lam Dong, Kon Tum and Gia Lai. Those are also the leading provinces in annual coffee production in Vietnam and account for over 80 percent of the total national coffee cultivation area and production (Trang, 2010; VIRI, 2015).

2.3.1.2. Coffee cultivation area

Vietnamese coffee, which is mainly Robusta coffee, constitutes approximately 95 percent of the total coffee cultivation area in Vietnam and is mostly planted in highland provinces. In addition, 5 percent of Arabica coffee plantation has also been developed with about 40,000 hectares in several particular highland regions (Lam Dong), northern mountainous areas (Son La, Lai Chau, Dien Bien) and coastal central areas (Quang Tri) (Quan, 2016; Trang, 2010).

In one research conducted by Trang (2010), the author states that the reason for Robusta to dominate the Vietnamese coffee structure mainly lies in the nature of this type of coffee: resistance to diseases, short time to bear fruit and unnecessarily high technology to plant. However, the economic value of Robusta is only half compared to Arabica in the world coffee market. Moreover, the price of Robusta coffee has been reducing much faster than that of Arabica due to rich supplies in recent years. As Arabica coffee scores higher in terms of economic value, coffee growers and producers in Vietnam must also consider balancing the coffee structure between these two types of coffee so as to adapt quickly to the fast-changing international market and gain more benefits.

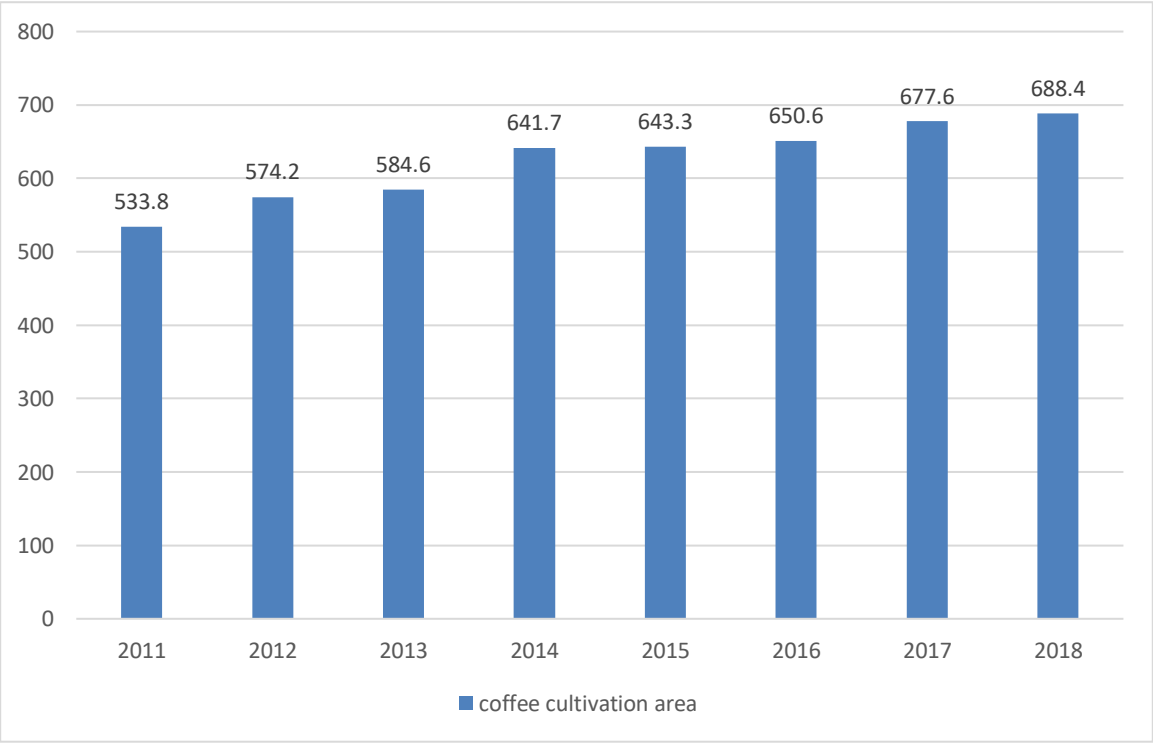


Figure 2.1. Vietnamese coffee cultivation area 2011-2018 by thousand hectares. *General Statistics Office of Vietnam*.

Figure 2.1 above reveals the coffee cultivation areas in Vietnam between 2011 and 2018. As can be observed from the figure, the planting areas keep increasing within this period, ranging from 533,800 hectares in 2011 to 688,400 hectares in 2018, which marks an increase of approximately 29 percent, and an average of 3.75 percent annual increase in the cultivation areas within eight years. The coffee planting area in 2018 scores the highest value owing to the continual expansion of plantation in which Robusta and Arabica coffee accounts for 95 percent and 5 percent respectively.

2.3.1.3. Coffee production output

There has been a dramatic increase in Vietnamese coffee production output since the 1980s. Uninterrupted successive increase in the coffee production has also been recorded from that period of time apart from slight fluctuations in 2001/2002 crop (ICC, 2014). An estimated calculation shows that between 1990/1991 and 2012/2013 crop, coffee production witnessed a sharp increase of nearly 670,000 tons. This drastic increase in Robusta production can be attributable to the growth of coffee plantation areas and high productivity in Vietnamese coffee plants (Export promotion centre, 2007; ICC, 2014). Furthermore, it was notable that between 1990 and 2012, the world coffee production increased by more than 50 percent due to the strong emergence of Vietnam as a major producer (ICC, 2014). It is estimated that about 41.3 percent of Robusta coffee produced all over the world comes from Vietnamese coffee market (Huyen, 2008). Inversely, according to the Ministry of Agriculture and Rural Development (MARD), Arabica coffee only accounts for 3 percent of the total coffee production in Vietnam (Huong & Quan, 2011). The low productivity and stricter climate condition requirement for Arabica coffee makes it hard for this type of coffee to grow quickly, which is expressed by the slow expansion of production area in the Northern and Central region in Vietnam (Huong & Quan, 2011). There is not much expectation that Arabica production will be more than 3 percent in five years ahead from 2016.

It can be seen from the Figure 2.2 below that the coffee production output in Vietnam between 2011 and 2018 generally showed an upward trend except for 2013 due to the climate changes such as excessive rains and prolonged dry seasons that negatively affected the coffee yield production and quality (Huong, 2013). Compared to 2011, the coffee production output in 2018 reached 1,626.2 thousand tons, a stark difference of around 458,000 tons over eight years. The annual average rate of 4.91 percent increase in the coffee production output was recorded during the period 2011-2018. Those impressive numbers consolidated the top-ranking nations producing and exporting Robusta coffee of Vietnam in the global coffee market.

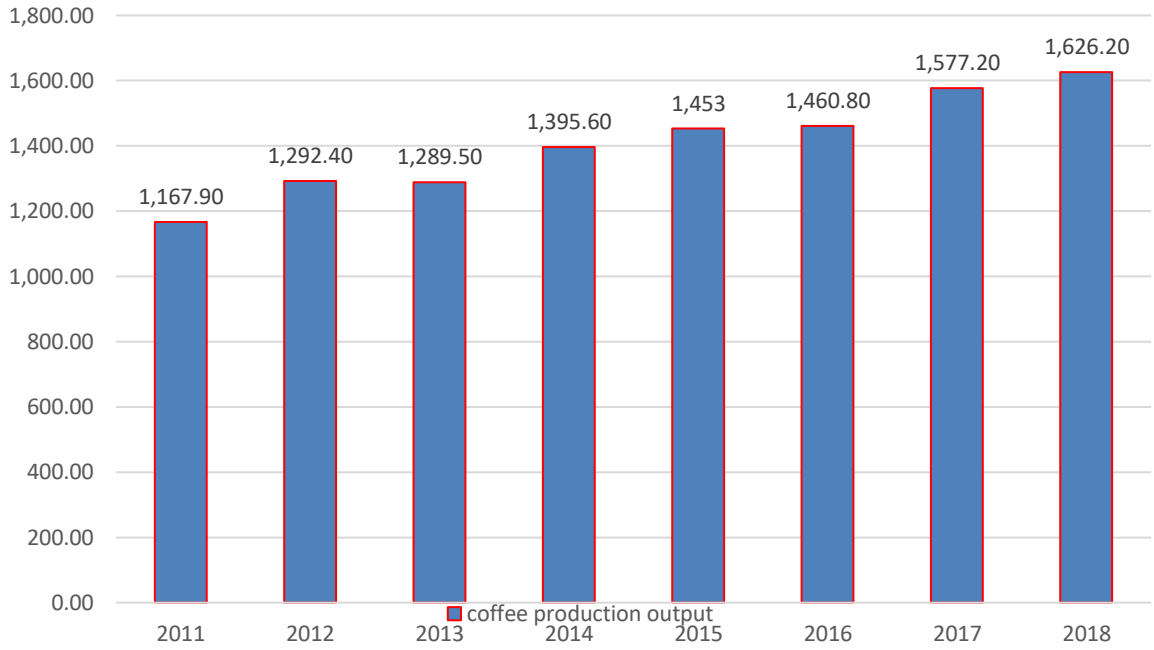


Figure 2.2. Vietnamese coffee production output 2011-2018 (thousand tons)**.** *General Statistics Office of Vietnam*.

Figure 2.3 and Figure 2.4 below display the top coffee producers in the world in 2018 as well as their percentage of coffee production in the global coffee market. It is evident that Brazil was still number one in producing coffee among exporting countries with 3,702 thousand tons in 2018, which accounts for 37 percent of the total coffee production in the world. Vietnam was ranked the second largest coffee producers after Brazil with approximately 1,770 thousand tons in the same year and 18 percent of market share in worldwide coffee production. The amount of Vietnamese coffee production also clearly doubled the third ranked country, namely, Colombia, at 852 thousand tons, which supports the strong position of Vietnam as a top coffee producer in the world.

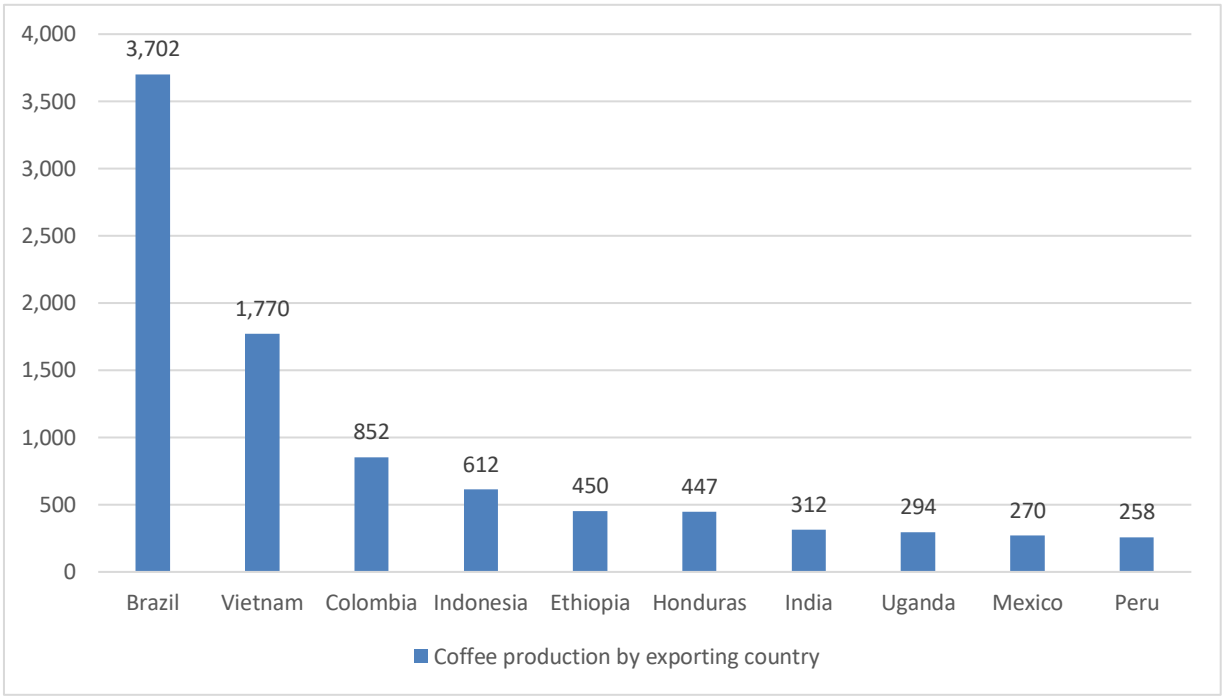


Figure 2.3. Worldwide top coffee producers in 2018 (thousand tons). *International Coffee Organisation (ICO).*

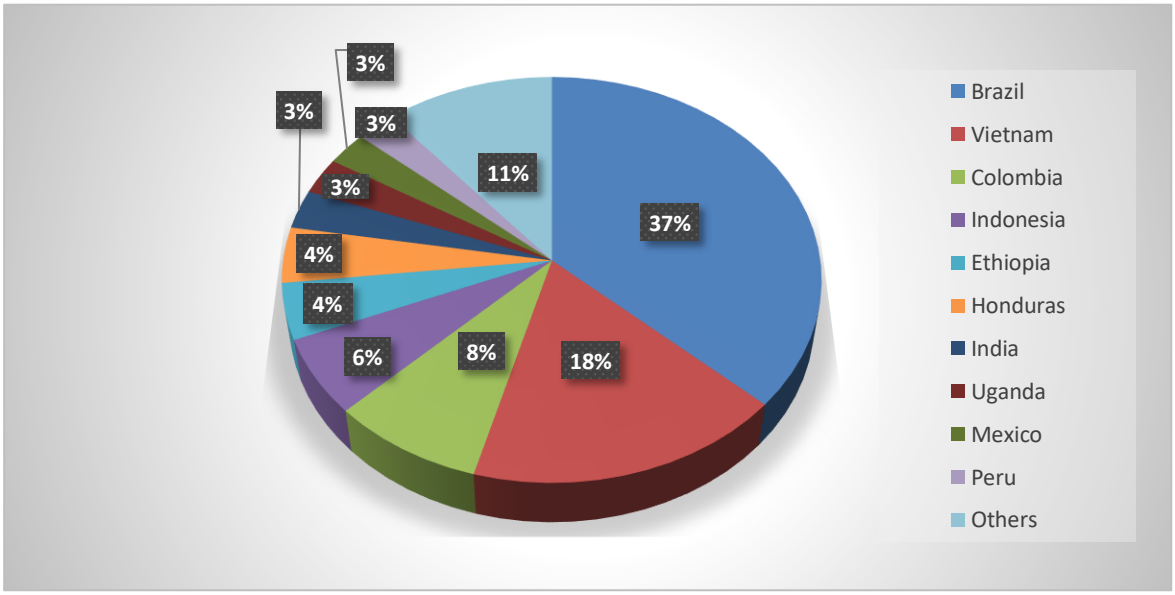


Figure 2.4. Worldwide top coffee producers market share in 2018 (percentage). *International Coffee Organisation (ICO).*

However, compared to the 95 percent of coffee export in Vietnam, domestic consumption only makes up 5 percent, which means Vietnamese coffee market depends too much on the foreign markets and customers. In contrast, in Brazil, 60 percent of the total coffee production was exported and the remaining 40 percent served the domestic market; in Indonesia, this number is 67 percent for exporting and 33 percent for domestic consumption (Trang, 2010). This problem raises a question on how to boost domestic consumption of processed coffee in order to create a stable coffee market for Vietnam.

2.3.2. Export activity

2.3.2.1. Coffee product export structure

According to statistical data, 93-95 percent of Vietnamese coffee exports are green coffee beans while only 3-4 percent belongs to instant coffee and the remaining 1-2 percent is roasted ground coffee (Huyen, 2008; VIRI, 2015). This unbalanced proportion can be mainly attributed to the weak processing capacity in addition to the lack of marketing activities for Vietnamese coffee. Moreover, Arabica coffee only constitutes 5 percent of Vietnamese total coffee exports despite its higher price (Roldán-Pérez et al., 2009).

There are currently over 100 enterprises in coffee exporting and importing business, most of which are located in Ho Chi Minh city and highland areas (VIRI, 2015). Leading exporters comprise subsidiaries of Vinacafe, Intimex Import-Export Corporation (Intimex), Thai Hoa Group and Coffee 2/9 (Dat, 2011; Huyen, 2008).

2.3.2.2. Coffee export volume and value

There were recorded fluctuations in the quantity of Vietnamese coffee export in the period 2001-2018, and particularly 2011-2018. For example, the coffee export output increased dramatically between 2001 and 2005 (Roldán-Pérez et al., 2009) and largely fluctuated between 2011 and 2018 (Figure 2.5). Possible reasons were mainly due to negative and unforecastable climate changes as well as the influence of the global coffee price. For instance, between 2014 and 2015, the coffee industry in Vietnam was affected by climate changes: severe drought and earlier rainy season led to the low productivity and quality of coffee trees. In addition, the global coffee price also reduced, which made the farmers hesitate to sell off to the traders and hold huge stocks to wait for the price to improve (Nga, 2016; Quan, 2016). For the period 2011-2018, the average growth rate of coffee export output only stood at 10.08 percent due to big changes in export quantity each year.

It was recognised that the fluctuations in export prices have led to changes in export turnover or export value. Moreover, the reality was that although export output increased dramatically, export value did not seem to increase equivalently (Figure 2.7) and it, in several situations, increased more slowly than output

growth and even showed a decrease (Roldán-Pérez et al., 2009). Therefore, it was clear that the global coffee price affected the export value of Vietnamese coffee considerably, which raised the problem of how to balance and gradually balance the export of Vietnamese green coffee bean (Robusta) with lower value by processed or soluble coffee products with higher value.

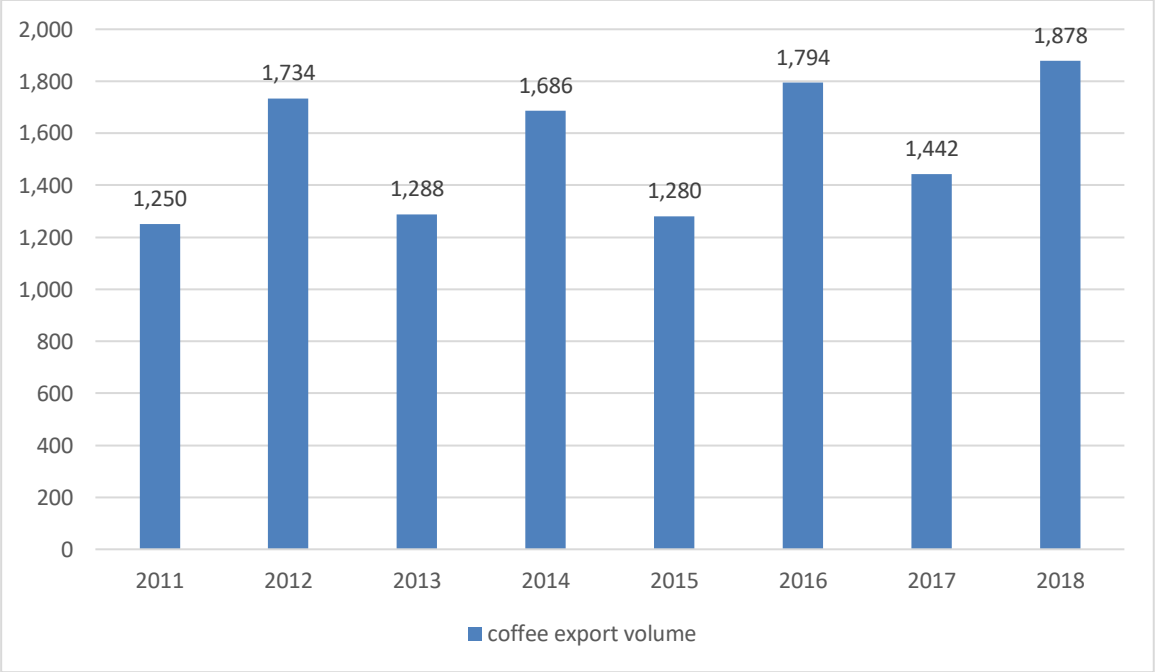


Figure 2.5. Vietnamese coffee export volume 2011-2018 (thousand tons). *General Statistics Office of Vietnam*.

Figure 2.6 illustrates the export value of Vietnamese coffee in the period 2011-2018. It is evident that coffee export turnover fluctuated correspondingly to the coffee export volume with the highest coffee export value in 2012 (USD 3,686 millions) and the lowest value in 2015 (USD 2,567 millions). In order to have a general view of the correlated relationship between export volume and export value, Figure 2.7 shows an integrated chart of both export quantity and export value of Vietnamese coffee between 2011 and 2018. It can be seen from the figure that the impact of the global coffee export price as a definite determinant caused the inequivalency in comparing between coffee export volume and value within this period. Particularly, taking the period of 2011 and 2013 into consideration, while the quantity of coffee export in 2013 was higher than that of 2011 (1,288 thousand tons compared to 1,250 thousand tons), the export value decreased disproportionally (from USD 2,741 millions in 2011 down to USD 2,694 millions in 2013). Similar cases were also witnessed in the period of 2011 and 2015, 2012 and 2016, 2014 and 2016, 2012 and 2018 as well as 2014 and 2018 that demonstrated the lower coffee export value in spite of the higher coffee export quantity between the latter year and the former one.

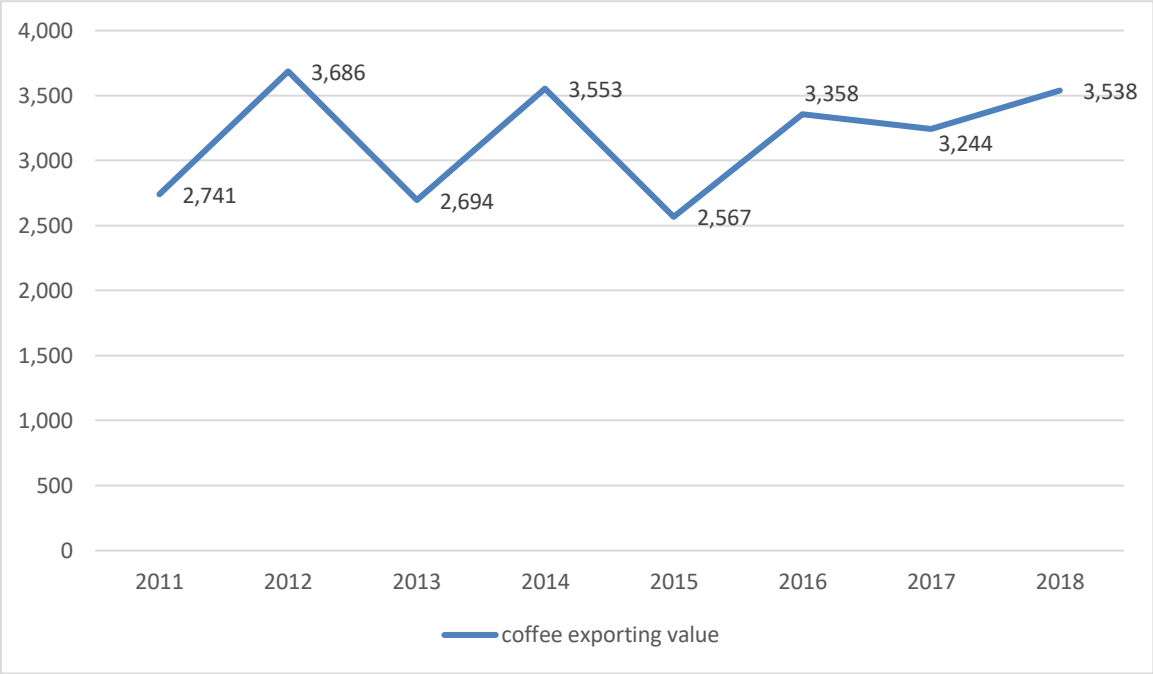


Figure 2.6. Vietnamese coffee export value 2011-2018 (USD millions). *General Statistics Office of Vietnam*.

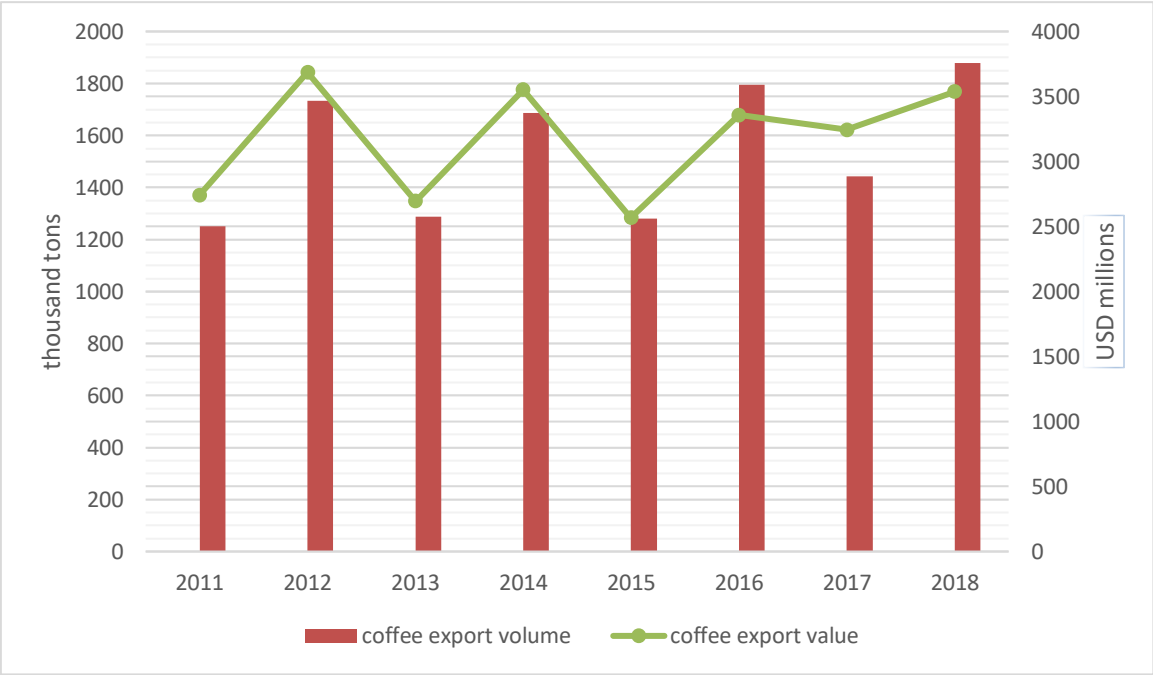


Figure 2.7. Vietnamese coffee export volume and value 2011-2018. *General Statistics Office of Vietnam*.

2.3.2.3. Export market

Vietnamese coffee has been exported to over 80 countries and territories all over the world so far (VIRI, 2015) with the top ten coffee importers in 2018 including Germany, USA, Italy, Spain, Japan, Russia, Philippines, Algeria, Belgium and Indonesia (Figure 2.8). EU and USA still have been the traditional and main exporting markets of Vietnamese coffee for the past 15 years (Nhan, 2008), which was contrasting to the period 1992-1993 when such countries as Singapore, Hong Kong and Japan were dominant importers of Vietnamese coffee (Roldán-Pérez et al., 2009). Besides, the two traditionally big markets in Asia are Japan and Korea which are also valued customers for Vietnamese coffee while in the South East Asia, Philippines and Indonesia are permanent coffee import markets (Roldán-Pérez et al., 2009).

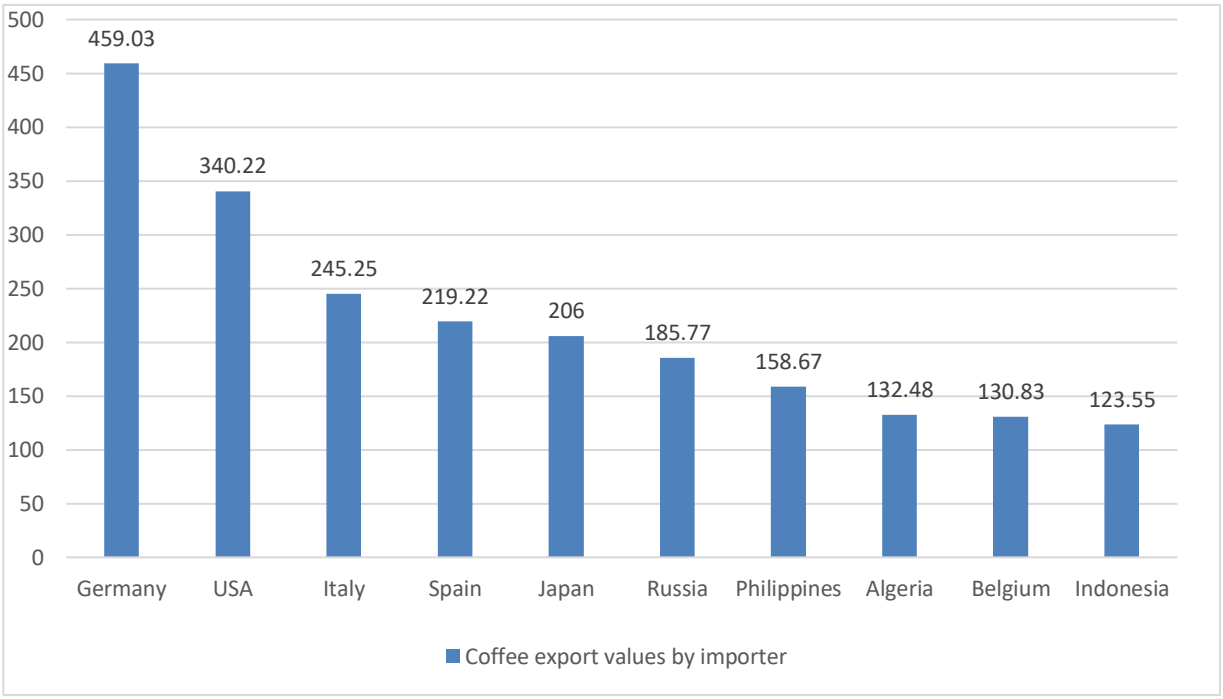


Figure 2.8. Crop 2017/2018 top Vietnamese coffee importers (USD millions). *Vietnam Association of Cocoa and Coffee (VICOFA)*.

Figure 2.8 and figure 2.9 showed that Germany, out of 10 countries, appeared to be the largest coffee importer of Vietnamese coffee in 2018 (USD 459.03 million) and accordingly, European countries continued to be the primary coffee importer which accounts for more than 35 percent of the total value (mainly Germany, Italy, Spain, Belgium and Russia), followed by Asian countries (nearly 13%) and the USA valued at USD 340.22 million (approximately 10%). These numbers proved that the exporting markets of Vietnamese coffee are diversified and the reputation of this national coffee continues to improve.

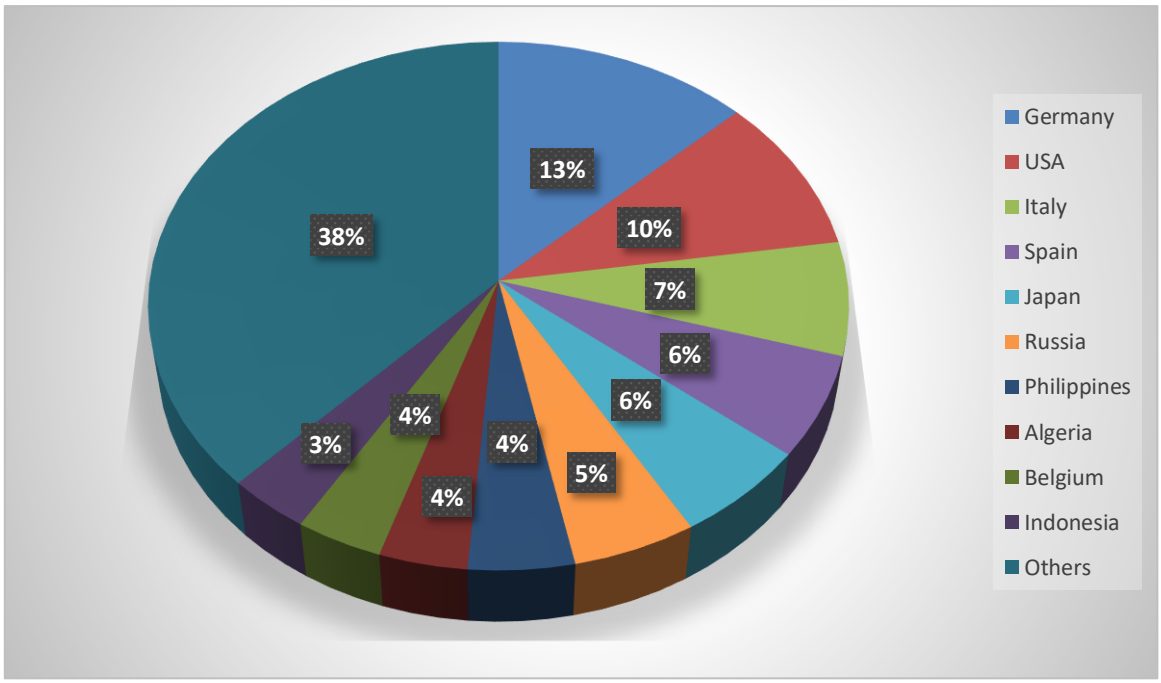


Figure 2.9. Vietnamese coffee main export markets in 2018 (percentage). *Vietnam Association of Cocoa and Coffee (VICOFA)*.

2.4. Performance of Vietnam National Coffee Corporation (Vinacafe)

2.4.1. Historical development and organisational feature

Vietnam National Coffee Corporation (Vinacafe) was established in 1995 under the Prime Minister's decision and known as the biggest general state corporation which specialises in producing, processing and exporting coffee in Vietnam. Moreover, Vinacafe also participates in conducting other business activities and importing agricultural materials, equipment and fertilisers (OECD, 2015). Vinacafe is also the state owned enterprise under MARD with 100 percent state capital, the biggest member of Vietnam Association of Cocoa and Coffee and currently manages other 59 public enterprises (Export Promotion Centre, 2007; Huong, 2013; OECD, 2015).

Vinacafe has subsidiaries that are now operating in over 15 provinces and cities nationwide and mainly focus on highland areas, which contributes to the overall social and economic development as well as stabilises the security and politics in the region. Besides, this state corporation also has a system of Trade and Service Centres in the big coffee production and consumption areas and cities which aims to develop coffee trading and marketing its brand.

This state organisation currently has 30,000 employees in which the number of direct employees are 28,563, indirect employees 1,149 and the remaining 2,888 are ethnic groups.

2.4.2. Plantation area and production

Vinacafe currently manages and exploits 31,504 hectares (ha) of lands including 27,533 ha for agricultural land, 619 ha for forestry land and 3,762 ha for non-agricultural land. Moreover, Vinacafe owns 40 state farms with about 27,000 ha of coffee plantations and continues replanting activities in highland provinces (Huong, 2013). Each year, Vinacafe produces 50,000 tons of green coffee beans on average and exports 250,000 to 300,000 tons of coffee to more than 30 countries, which accounts for 20-25 percent of the total amount of Vietnamese green coffee beans exports. Moreover, Vinacafe also exports other agricultural products such as chilly and cashew nuts, imports fertilisers and equipment for the coffee sector as well as supports coffee producers with coffee seeds and consultancy. In general, Vinacafe, through its subsidiaries, members and joint ventures, participates in all steps of coffee chain (OECD, 2015). In reality, the collection, processing and export roles are still performed by public enterprises which make up 76 percent of the total national coffee market, the rest belongs to joint companies (14%) and others (10%) (Pham, 2010).

Table 2.1 below shows the coffee plantation areas and production between 2011 and 2018. It can be seen that the coffee plantation area is still kept rather stable at over 17,377 hectares despite the unexpected weather changes. Moreover, the percentage of coffee area for business is recorded at approximately 78 percent in this period and the coffee production output fluctuated around 30,440 tons during the eight years.

Table 2.1

Vinacafe coffee plantation area and production in the period 2011-2018

	Unit	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Coffee plantation area	ha	19,427	19,236	18,876	16,299	16,233	15,806	16,501	16,638
Coffee area for business	ha	17,417	17,111	14,576	13,272	13,110	11,582	11,520	10,560
• **Average productivity**	ton/ha	2.15	1.70	2.20	2.38	2.38	2,2	2,57	2,57
• **Production output**	ton	37,524	29,144	32,067	31,605	31,242	25,088	29,685	27,165

Note: Vietnam National Coffee Corporation (Vinacafe).

Vinacafe possesses a fully-established system of production units with modern technology for producing high quality and high productivity green coffee beans, soluble coffee, cocoa, rice, sugar cane and pepper, import-export traders, processed factories from raw materials to ready-for-sale products that serves domestic consumption and exports. Moreover, Vinacafe keeps investing in technology and draws up proper business strategies to improve the productivity and quality of products regularly.

2.4.3. Economic performance

Vinacafe endeavours to achieve the set targets for economic development despite suffering from unpredicted turbulence of the national economy and world economy in the period 2011-2018. For example, the strong fluctuations in world coffee prices, climate changes and high input materials prices have hindered the coffee production and business activities.

Table 2.2

Vinacafe financial performance in the period 2011-2018 (VND billions)

	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Total revenues	5,247	5,122	4,590	4,551	3,405	3,034	3,714	3,808
Performed profits	187	72	402	80	74	94	77	96
State budget contribution	178	126	165	84	76	61	63	63

Note: Vietnam National Coffee Corporation (Vinacafe).

Between 2011 and 2018, it was clear from Table 2.2 that the total revenues of Vinacafe reached VND 33,471 billions (≈ USD 1.439 billions)[1], VND 4,184 billions (≈ USD 179.952 millions)[1] per year on average; profit gains of VND 1,082 billions (≈ USD 46.538 millions)[1], VND 135.25 billions (≈ USD 5.817 millions)[1] per year on average; and state budget contribution touched VND 816 billions (≈ USD 35.097 millions)[1], VND 126 billions (≈ USD 4.387 millions)[1] per year on average. Despite the reduction of revenues in certain years, Vinacafe gains profit each year in the period 2011-2018 owing to the best efforts of all employees in the corporation and proper business policy from the management team.

2.4.4. Export volume and value

As the leading state owned corporation trader in coffee production and export, Vinacafe accounts for nearly 30 percent of the market share of green coffee bean exports in Vietnam and over 50 percent of the market share of the instant coffee (Export promotion centre, 2007; Huong & Quan, 2012). Table 2.3 below presented the import-export performance of Vinacafe between 2011 and 2018. It can be concluded from the table that the average import-export turnover of Vinacafe between 2011 and 2018 is kept relatively stable, which peaked in 2018 at USD 92 millions. The main exporting commodity is green coffee beans with the average amount each year reaching over 23,000 tons, with the equivalent export turnover of between USD 20-75 millions.

[1] 1 USD ≈ 23,250 VND (as at 30 March 2019, Vietcombank)

Table 2.3

Vinacafe import-export performance in the period 2011-2018

	Unit	2011	2012	2013	2014	2015	2016	2017	2018
Total import-export turnover	USD millions	60	38	39	58	32	41	74	92
Export turnover	USD millions	42	20	21	53	29	41	73	75
Green coffee beans	tons	18,500	9,800	10,700	27,000	17,532	21,860	37,044	43,107

Note: Vietnam National Coffee Corporation (Vinacafe).

2.5. The importance of studying the Vietnamese coffee sector

The final section of this chapter discusses the importance of studying the coffee industry in Vietnam, specifically organisational innovation problems pertaining to public coffee enterprises that are utilised as samples in this research. The following sub-sections further elaborate considerable impact of the Vietnamese coffee sector on the national economic and social development as well as the specific problems relating to organisational innovation in public coffee enteprises in the Vietnamese coffee sector.

2.5.1. Economic development

Agricultural, forestry and seafood products in Vietnam largely contribute to the national economic development through production and export activities every year and coffee is not the exception. Table 2.4 below shows the growth rate of agricultural, forestry and seafood products in particular, and GDP in general, in the period 2011-2018. It can be seen from the table that the average growth rate of agricultural, forestry and seafood products between 2011 and 2018 is 2.91 percent and GDP is 6.14 percent respectively. Therefore, agricultural, forestry and seafood products including coffee account for approximately 50 percent of the GDP growth rate throughout this period. This can be explained by the fact that the traditional competitive advantage of Vietnam has long been known as an agricultural economy, which focuses on agricultural, forestry and seafood products.

Table 2.4

Agricultural, forestry and seafood products and GDP growth rate 2011-2018 (percentage)

Item	2011	2012	2013	2014	2015	2016	2017	2018
Agricultural, forestry, and seafood products	4.01	2.72	2.67	3.44	2.41	1.36	2.90	3.76
GDP	5.89	5.03	5.42	5.98	6.68	6.21	6.81	7.08

Note: General Statistics Office of Vietnam.

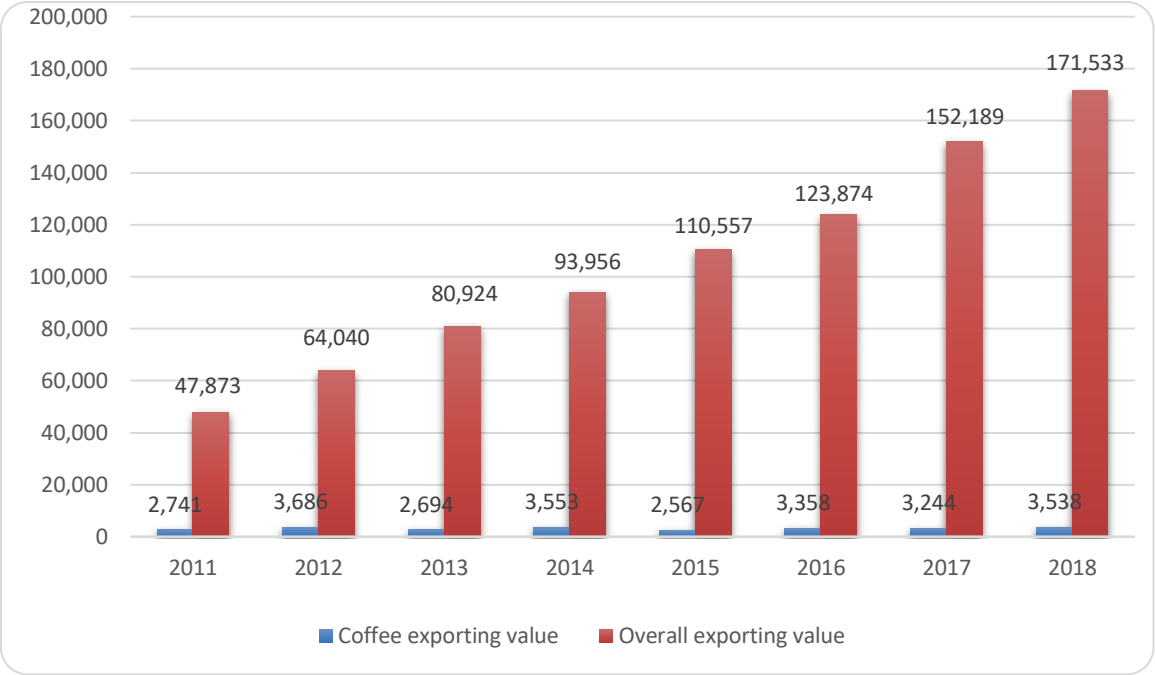


Figure 2.10. Vietnamese total exporting value and coffee exporting value 2011-2018 (USD millions). *General Statistics Office of Vietnam*.

Regarding the coffee commodity, looking back at the global coffee producers and exporters, it can be inferred from the practice that Vietnam, compared to other countries, produces coffee mainly for exporting due to limited domestic coffee consumption. Recent statistics show that other coffee exporting countries have significant levels of domestic consumption such as Indonesia (8.2%), Ethiopia (7.8%), Mexico (5.4%), in Vietnam it is only 3.6 percent (ICC, 2014). Therefore, coffee is considered one of the main exporting commodities in Vietnam and the contribution made by the coffee industry to the national economy comes from exporting activities. Statistical data shows that the coffee industry contributed 10 percent of GDP to the agricultural sector (VIRI, 2015) and made up USD 2.2 billion on average in export trade value, which accounted for about 2.34 percent of the total value of all Vietnamese commodities. Figure 2.10 provides a clear picture of Vietnamese total exporting value and coffee exporting value between 2011 and 2018. It can be inferred from the figure that within eight years, the average contribution of coffee export compared to the total exporting value of all Vietnamese commodities was 3.48 percent; the highest value was recorded in 2012 with over 5.7 percent. Moreover, coffee constituted a relatively average ratio of the national economy at 1.83 percent of GDP in Vietnam compared to other coffee exporting countries. For example, coffee export accounts for a much higher proportion of GDP in such small economies as Honduras (7.37%), Nicaragua (6.1%) and Ethiopia (2.59%). In contrast, considering top coffee exporters and developing economies, coffee export experienced a smaller proportion of the national GDP such as Brazil (0.35%), Colombia (0.86%) and Indonesia (0.08%) (Export Promotion Trade, 2007).

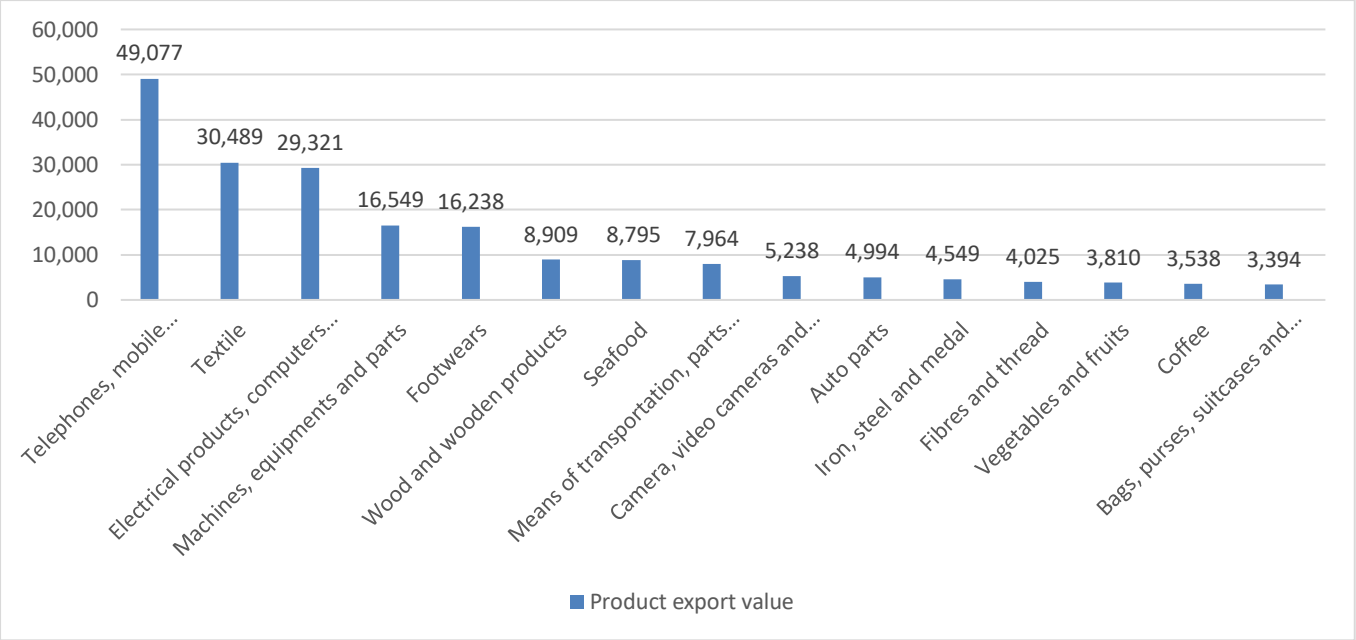


Figure 2.11. Vietnamese top product export values in 2018 (USD millions). *General Statistics Office of Vietnam*.

Vietnam has a diversified category of exporting commodities ranging from telephones, mobile phones and electronic components to agricultural, forestry and seafood products, crude oil, footwear and garment and others. In particular, coffee has been one of the leading exporting products for a long period of time, which was clarified in Figure 2.11 and Figure 2.12. In the first place, Figure 2.11 demonstrates the leading exporting commodities according to the export value in 2018, despite being affected by the fluctuations in the world coffee prices, outstanding export quantity helps coffee continue to be listed in the top exporting products in 2018 in terms of export value. Next, Figure 2.12 reveals the export value of the specific agricultural, forestry and seafood products in 2018. It can be seen from the figure that coffee has the fourth highest product export value compared to other commodities such as wooden products, seafood and vegetables and fruits. These figures confirm the importance of coffee as one of the leading export commodities in contributing to the overall economic development of Vietnam.

Coffee industry plays a significant role in the Vietnamese economy in which coffee export brings considerable benefits for the economic development of the country. It is unarguable that the important source of financial capital from coffee export (the average coffee export turnover at about USD 3.2 billions each year or equivalently 3.5 percent of the total export turnover) will assist in importing overseas machines, equipment and state-of-the-art technology for coffee producing and processing, thereby, contributing to the industrialising and modernising of the whole country. Additionally, coffee export also promotes domestic coffee production, processed industries, infrastructures and related services. Moreover, exporting coffee is

also the fastest way to expand the consumption market while the domestic coffee consumption is still limited, which partly builds up the prestige and branding of Vietnamese coffee in the global coffee market. However, Vietnamese exporters have to deal with the challenges from the fierce competition among coffee exporters in the world in terms of their high quality coffee beans and competitive prices that help them penetrate into the global market and capture the potential market shares.

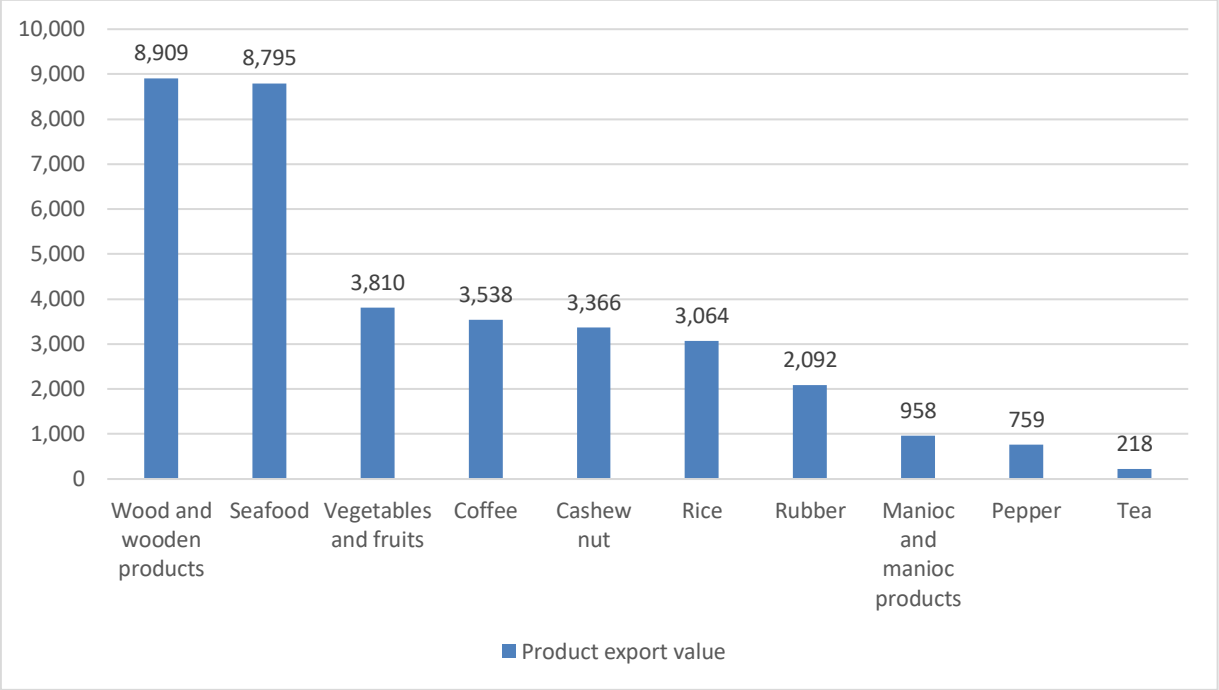


Figure 2.12. Vietnamese top agricultural, forestry and seafood products export values in 2018 (USD millions). *General Statistics Office of Vietnam*.

2.5.2. Employment opportunities

Characterised by the total coffee plantation area of over 500,000 hectares and the average productivity of 1.4-1.6 millions tons per year, coffee industry is one of the sectors that attracts and uses a large number of labours in Vietnam. It is estimated that the coffee industry provides more than one million jobs for the citizens nationwide in which the average number of direct labours who participate in the coffee production reaches approximately 550,000 people (VIRI, 2015), peaking at 600,000-800,000 people in harvesting crops (Dat, 2011). In addition, the number of labours working in the coffee industry generally accounts for 1.83 percent of the total number of labours in Vietnam and particularly makes up 2.93 percent of the total number of labours working in the agricultural sector (Export Promotion Centre, 2007). Therefore, the Vietnamese coffee industry, particularly coffee exports, greatly influence the employment opportunities of labours in the country with more than 90 million population and over 50 percent of which are in labour ages. That partly solves the unemployment problem, reduces social evils, improves the living condition and enriches the life of local citizens as well as help them keep up with the level of the world development.

2.5.3. Problems pertaining to organisational innovation

Existing problems pertaining to innovation in state-owned enterprises, specifically in the Vietnamese coffee industry, are reflected by weak linkages between science and local enterprises, innovative incapability due to lack of international cooperation and limited funds in the manufacturing and processing industries (Nguyen, 2014; Nguyen et al., 2013; OECD, 2013). Moreover, while the rate of originating innovative activities about research and development in Vietnamese enterprises was quite low, specific organisational innovation concerning organisational methods remains questionable (CIEM, DoE, & GSO, 2012). Additionally, existing gaps in the relationship between leadership role and innovation also influence the organisational effectiveness of state-owned enterprises, which necessitates further investigation (Stan et al., 2014; Tonurist & Karo, 2016).

Vietnamese public enterprises operating in the coffee industry specialise in producing, processing and exporting coffee to worldwide countries. Therefore, innovative activities focused on exploiting and examining the technical innovation aspect that was represented by how the enterprises have applied new planting, irrigating, fertilising techniques into the coffee plantation process to boost the production output and enhance the coffee bean quality for exporting activities. Furthermore, scientific studies also pay attention to how enterprises have invested in modern production technology in manufacturing instant coffee with high quality and unique flavour instant coffee. The research practice in Vietnam proved that there has been very few studies that emphasise on investigating the innovative activities in organisational methods, business management practices, workplace organisations such as organisational structures, leadership and behavioural styles despite their important roles in contributing to the efficient growth and development of the organisation (Armbruster et al., 2008; Damanpour & Aravind, 2012; Mol & Birkinshaw, 2009).

2.6. Summary

As the globally competitive business environment is the prevalent trend, trade barrier (tariff and non-tariff) has been gradually removed among nations. As Free Trade Agreements (FTA) between countries have been signed that facilitates the flowing of products and services region wide and worldwide, it is essential that organisations stay innovative in order to survive and the innovation must be perceived by the employees as an inevitable task to help their organisations remain competitive. Furthermore, to grasp the opportunities brought about by the globalisation and economic integration in the world, it is imperative for organisations to consider which factor will affect organisational innovation. It is believed that innovation itself in an organisation without the proper support and inspiration from the management level will not be effective, which may be true for enterprises regardless of all kinds, both in manufacturing and services sector. This study emphasises on, among various managerial perspectives, the effect of leadership styles on organisational innovation with employee creativity as the potential mediator.

CHAPTER 3: LITERATURE REVIEW

3.1 Introduction

Innovation, in general, and organisational innovation, in particular, is considered as one of the key factors that drives the long-term survival and sustainable growth of the organisations of all types in the current business environment (Goldman et al., 1995; Sadegh Sharifirad & Ataei, 2012). Thus, this study attempts to find out the effects of leadership styles on organisational innovation, simultaneously to investigate employee creativity as a potential mediator. The general purpose of this chapter is to provide a comprehensive review of the literature that is relevant to how transformational and transactional leadership associate with employee creativity and organisational innovation.

Specifically, this chapter will begin by defining leadership and presenting studies on leadership styles as well as introducing the definitions, dimensions and studies on transformational leadership, transactional leadership, employee creativity and organisational innovation. In the next part of this chapter, the most influential related theories of leadership, creativity and innovation will be discussed, which builds up the basic understanding on how each construct under investigation in this study is developed and relationships between those constructs are formulated. Subsequently, relationships that potentially exist between leadership styles, employee creativity and organisational innovation will be deeply analysed, which serves as a significant basis for developing hypotheses. In the final part, this study will discuss research on leadership, creativity and innovation in public enterprises that tightly relates to the particular research object in the study.

3.2 Leadership styles

3.2.1 What is leadership?

The topic of leadership has been intensively researched, studied and examined over the last century (Bennis & Nannus, 1985; Yıldız et al., 2014). In addition, the impact of leadership has undergone various contexts involving businesses, education, societies and others (Flanigan, 2012). Therefore, leadership seems to be contextually defined depending on the culture, people or the organisation involved.

There are numerous definitions of leadership attempted by authors and scholars regarding individual behaviour, traits, influence, interaction patterns and relationships (Bass, 1981; Nusair, Ababneh, & Kyung Bae, 2012; Stogdill, 1974). The “leadership” concept was coined by Stogdill (1950) to describe the process or action of influencing an organised group’s activities in order to achieve the established goals. To be clearer, Tannenbaum, Weschler, and Massarik (2013) later added to the leadership literature as they defined leadership as an “interpersonal influence” between an individual and a group of individuals. Specifically, that interpersonal influence was exercised in a particular situation and directed through communication

process to attain certain goals of the organisation (Northouse, 2013). According to Burns (1978), the achieved targets of the organisation should represent the desires and needs, the values and the motivations as well as the aspirations and expectations of the leader and followers. Noticeably, the core aspect of "influence" in the leadership concept was also reflected in the research by Zaleznik (1977) as this author opined that leadership was to exert the influence on how other people think and act.

Generally, the above-mentioned definitions of leadership refer to an influence process where the leader intentionally exercises his or her impact on followers (Egan et al., 1995) to reach mutual purposes (Rost, 1993). Moreover, it extensively inferred that leadership is also a relationship process (Rost, 1993) where interactive influence occurs between the leader and followers (Silva, 2016b).

Table 3.1.

Leadership definitions

Authors	Year	Definition	Key words
Stogdill	1950	The process (act) of influencing the activities of an organised group in its efforts toward goal setting and goal achievement.	Influence, goal achievement
Zaleznik	1977	Leadership requires using power to influence the thoughts and actions of other people.	Influence
Burns	1978	Leaders inducing followers to act for certain goals that represent the values and the motivations—the wants and needs, the aspirations and expectations—*of both leaders and followers.*	Power, goal achievement
Kotter	1988	The process of moving a group (or groups) in some direction through mostly non-coercive means.	Direction, group
Handy	1992	A leader shapes and shares a vision which gives point to the work of others.	vision
Rost	1993	Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes.	Influence, mutual purposes
Bennis & Townsend	1995	The capacity to create a compelling vision and to translate vision into organisational realities.	Vision, realities
Firestone	1996	Belongs to a specific position and it covers obligatory tasks and functions that businesses have to fulfill in order to live, develop and be efficient.	Obligatory tasks, function
Sichon	2004	An ability of inspiring and impressing follower by providing them with the purposes to fight for them.	Inspiration, impression
Northouse	2013	A process whereby an individual influences a group of individuals to achieve a common goal.	Influence, goal achievement
Tannenbaum, Weschler & Massarik	2013	Interpersonal influence, exercised in a situation, and directed, through the communication process, toward the attainment of a specified goal or goals.	Interpersonal influence, goal achievement
Silva	2016	The process of interactive influence that occurs when, in a given context, some people accept someone as their leader to achieve common goals.	Interactive influence, goal achievement

Concerning other perspectives in defining leadership, Handy (1992) focused on the vision that was set and shared by the leader to what others work. Bennis and Townsend (1995) highlighted the capacity of the leader in creating a compelling vision and translating it into organisational realities. Additionally,

Firestone (1996) posited that leadership was a particular position that constituted fulfilling obligatory tasks and functions to help business survive and develop efficiently.

In general, leadership encompasses a shared vision by the leader, an interactive influence between the leader and followers towards attaining the specific goals to improve organisational performance. Table 3.1 above shows a variety of approaches on leadership definitions from different studies.

3.2.2 Development of studies on theories of leadership styles

In the early 20th century, most leadership studies put emphasis on the concept that leaders possessed physical or psychological traits that were different from their followers (Chemers, 1984). This so-called trait theory leadership by Bowden (1927), which will be further analysed in the leadership theories section in this study, focuses primarily on the measurement of physical traits, abilities and personalities. Nevertheless, the transition has shifted to the behavioural or style approach due to the insufficient strength of the trait theory itself to identify leadership qualities (Stogdill, 1948).

Since the introduction of behaviourism, increasing interests in this approach have been proven in various studies represented by a prominent research by Lewin, Lippet and White (1939) on the initial three leadership styles namely autocratic, democratic and laissez-faire. The advancement of the behavioural approach compared to the trait theory lies in the ability to identify leader behaviours that can boost the subordinates' effectiveness, which was later affirmed by Bryman (1992).

It was evident that we could not predict the effects of leadership on organisational success without the development of the new theory named Contingency Theory, based on one of the first theory models – Contingency model that was developed by Fiedler (1967). Fiedler's model emphasised that how leaders ascertain, predict and control will demonstrate the significance of a particular situation in an organisation. Further, contingency-oriented leadership models were developed such as the normative decision theory of leadership by Vroom and Yellow (1973), the path goal theory of leadership by House and Mitchell (1986).

With the development of leadership studies, new leadership approaches have been introduced and the most attentive one was the full range of leadership theory (FRLT) that was firstly proposed by Bass (1985) and then developed by Avolio and Bass (2004). The current version includes three different leadership styles namely transformational, transactional and laissez-faire (non-leadership) or passive-avoidant (Avolio & Bass, 2004). Leadership theories and each leadership style will be deeply examined in both incorporated and separate approaches in the next sections.

As the most-researched contemporary theory, the FRLT suggests that effective leadership depend on particular situations and obligatory tasks that different behaviours will be exhibited by the leader (Harms & Credé, 2010; Schweitzer, 2014). Accordingly, transformational leadership style is characterised by the influential, inspirational, motivational and humanistic behaviour of the leader towards the followers, which

focuses on future needs and long-term issues (Avolio & Bass, 2002). In contrast, transactional leadership style concentrates mainly on goal-oriented and the transactional leader sets objectives, monitors and controls organisational outcomes. Finally, laissez-faire or passive-avoidant leadership style represents the non-transaction decisions in which the leader avoids taking action and making decision, as well as ignoring their responsibility and authority, which is considered the least effective leadership style (Antonakis, Avolio, & Sivasubramaniam, 2003; Sarros & Santora, 2001; Skogstad et al., 2007). Due to the negative support from theoretical justification and poor characteristics of laissez-faire leadership, this study will not investigate its relations with other variables that are employee creativity and organisational innovation.

In this study, the definition of leadership is framed under the relationship between the leader, employee creativity and organisational innovation. Accordingly, leadership styles are selectively researched to investigate the relationship between the leader and the followers in the context of leadership, creativity and innovation. Specifically, the two leadership styles under investigation are transformational and transactional leadership and their dimensions.

Effective leadership goes tightly with followers' needs and goals (Burns, 1978) and an effective leader should be the one who can understand followers' needs and help them achieve the common objectives of the organisation. Bass et al. (2003) found out that both active transformational and transactional leadership demonstrated positive correlation with potency, cohesion and organisational performance. Specifically, while the transactional leader facilitates their followers in attaining the organisational goals through an exchange process, the transformational leader motivates and inspires their followers to reach extraordinary goals based on collective interests (Antonakis et al., 2003).

Considerable attention has been paid to the study on the effect of leadership styles and organisational factors by academic researchers and professionals for many years (Giambatista, 2004). The possible rationale for this phenomenon can be explained by the shared belief that leadership has a huge impact on the overall organisational performance of the majority of organisations (Rowe et al., 2005). In general, a specific leadership style adopted by the leader remains a key component in deciding whether the leader shall foster or demotivate the performance of employees in the setting for the sake of achieving organisational success (Berson et al., 2001; Zacharatos et al., 2000).

Organisational factors such as creativity and innovation in the workplace have attracted significant interests from scientific studies in recent years because of their important roles as effective determinants of the development, success and long-term survival of the organisation (Anderson, Potočnik, & Zhou, 2014). Leadership, in that context, as a key contextual factor, plays an important role in enhancing the creativity and innovation in the workplace (Müceldili et al., 2013). Furthermore, tremendous studies have been conducted on the relationship between transformational, transactional leadership and organisational contextual factors (Yıldız et al., 2014). This study, therefore, primarily focuses on examining the two

specifically contrasting leadership styles and investigating their separate linkages with employee creativity and organisational innovation in the context of Vietnamese public coffee enterprises. Specific characteristics, componential dimensions and measures of each leadership style will be clarified in the next section of this study.

3.3 Transformational leadership

3.3.1 What is transformational leadership?

The theory of transformational leadership proved to have attracted increasing interests in the past 30 years and is currently considered as one of the most dominating leadership theories (Banks, McCauley, Gardner, & Guler, 2016). Particularly, the theory has been documented to be beneficial from various critical reviews on both theoretical and methodological aspects (Van Knippenberg & Sitkin, 2013) as well as meta-analytic reviews (Grant, 2012; Judge & Piccolo, 2004; Van Knippenberg & Sitkin, 2013; Vera & Crossan, 2004). Initialised by Burns (1978, p. 20) and further developed by Bass (1985), the "transformational leadership" term has been depicted as an interaction between leaders and their followers in raising one another to higher levels of motivation and morality. This concept has been proposed based on the definition of leadership that transformational leaders, with a shared vision, create a sense of identification and act as a role model to motivate and inspire followers by instilling faith, pride in followers and gaining trust and confidence from them (Bass, 1999; Cole et al., 2009).

Moreover, Kark, Shamir and Chen (2003) also clarify that transformational leaders help followers recognise the importance and value of organisational missions and outcomes. In addition, they link followers' self-concept and personal values with the mission of the setting using their influence. Transformational leaders encourage followers to sacrifice their self-interest for the overall organisational goals (García-Morales, Jiménez-Barrionuevo, & Gutiérrez-Gutiérrez, 2012) by providing support, coaching and mentoring (Boerner, Eisenbeiss, & Griesser, 2007), building collective aspirations and beliefs based on relationships, shared values and common objectives (Bass & Bass, 2009; Bass & Riggo, 2006; Guay & Choi, 2015; Rubin et al., 2005; Wang & Howell, 2005; Yukl, 1999).

Sosik et al. (1997) postulated that transformational leadership positively fosters and enhances creativity and innovation among all available leadership style theories. The reason behind this argument is because transformational leaders demonstrate certain behaviours that enhance the level of innovative thinking from employees to improve their performance. As a result, that leads to the enhancement of organisational innovation as well as overall organisational performance (Aragon-Correa, Garcia-Morales, & Cordon-Pozo, 2007; Colbert, Kristof-Brown, Bradley, & Barrick, 2008; Piccolo & Colquitt, 2006).

Transformational leadership, in the context of creativity and innovation, refers to the interaction between leaders and their followers in raising one another to higher levels of motivation and morality,

inspiring employees through visions and persuading them to excel in performance and goal attainment (Avolio and Bass, 2004; Bass and Avolio, 1995). Additionally, followers who are aware of working beyond their self-interests and embrace the importance of their valuable contribution to the organisation are self-motivated to achieve the organisational vision (Bass, 1998). Nusair et al. (2012) argued that the transformational leadership theory marked a transition from leader-centered approach to process-centered approach, which reflects the change in the traditional view compared to the modern view. In summary, transformational leadership style fits the dynamic environment where the need for change is recognised, changes are institutionalised and the need for accomplishment and self-actualisation are addressed (Tichy & Devanna, 1990).

3.3.2 Dimensions of transformational leadership

Distinct components of transformational leadership have been characterised by different scholars that encompass individualised consideration, idealised influence, charisma influence, idealised influence (attributed), idealised influence (behaviour), inspirational motivation, intellectual stimulation, articulating visions, providing appropriate models, providing individualised support, maintaining high performance expectation and fostering the acceptance of group goals (Bass et al., 2003; Chen, Lin, Lin, & McDonough, 2012). However, later research found out the similarity and high inter-correlation between some pairs of these components such as fostering the acceptance of group goals and articulating visions (Podsakoff et al., 1996); charisma influence and idealised influence (Shamir, House, & Arthur, 1993), idealised influence (attributed) and idealised influence (behaviours) (Barling, Christie, & Hoption, 2011). Therefore, the majority of researchers have universally adopted the four important dimensions featured as idealised influence, inspirational motivation, intellectual stimulation and individualised consideration (Bass, 1985; Bass & Avolio, 1994). Generally, these components of transformational leadership are expected to transform followers and motivate them to achieve beyond initially expected (Egan et al., 1995; Taylor, Psotka, & Legree, 2015; Whittington, Coker, Goodwin, Ickes, & Murray, 2009). In the following part of the study, each of four components will be separately presented.

3.3.2.1 Idealised influence

Idealised influence, or charisma, represents the degree to which leaders are respected, admired and trusted by their followers and act as a role model. Specifically, the transformational leader highlights the importance of a collective sense of organisational vision and values among employees and involves employees in decision making process (Barling et al., 2011; Bass, 1985; Nusair et al., 2012). Additionally, that leader aligns followers' behaviours with organisational values and purposes as well as goes beyond their self-interests so as to achieve the common goals (Prasad & Junni, 2016). Moreover, the leader also

displays a high standard of ethical and moral conduct (Coad & Berry, 1998), shares risks with followers and maintains a high level of intrinsic motivation and creativity among followers (Moriano et al., 2014; Shin and Zhou, 2003). Noticeably, research have shown that idealised influence strongly correlated with inspirational motivation and in several situations the distinction between these two dimensions was impossible to be empirically confirmed (Nguni et al., 2006).

3.3.2.2 Inspirational motivation

Inspirational motivation refers to the behaviour that the transformational leader displays to shape a clear future vision of the organisation; setting ambitious goals and high standards; directing and challenging followers to achieve extraordinary outcomes (Coad & Berry, 1998; Jung et al., 1995; Moriano et al., 2014; Nusair, Ababneh, & Kyung Bae, 2012; Sarros & Santora, 2001). Moreover, the leader also provides subordinates with the meaning of their tasks that are aligned with the general mission and vision of the organisation (Coad & Berry, 1998; Jung et al., 1995; Nusair, Ababneh, & Kyung Bae, 2012; Sarros & Santora, 2001). In addition, the leader also exhibits motivation, enthusiasm, optimism and belief that followers will perform their tasks and achieve the future organisational plans and objectives (Boerner et al., 2007; Hater & Bass, 1998; Prasad & Junni, 2016). In general, through inspirational motivation, the transformational leader expects contribution from the followers to develop and help sustain the organisation through such key indicators as organisational vision, clear communication, challenges and motivation.

3.3.2.3 Intellectual stimulation

Intellectual stimulation occurs when the transformational leader encourages and challenges followers to think themselves about old problems, assumptions and the status quo in a new and creative approach (Hater and Bass, 1998; Moriano et al., 2014; Nusair et al., 2012). Followers, accordingly, use their critical thinking and imagination (Coad & Berry, 1998) to solve problems, which benefits and develops the overall organisational performance in the long-term. Besides, followers feel confident to try out new ways without fearing that their ideas will be publicly criticised if they make mistakes (Boerner et al., 2007; Moriano et al., 2014; Sarros & Santora, 2001). Therefore, intellectual stimulation is expected to promote creative thinking and help followers come up with their own solutions to overcome obstacles in their jobs and achieve the organisational mission (Bass & Avolio, 1990; Jung et al., 1995; Sarros & Santora, 2001; Yammarino et al., 1993). In general, the transformational leader supports the working culture which favours creative thinking process, risk taking and challenges.

3.3.2.4 Individualised consideration

Using individualised consideration, the transformational leader pays equal attention to the individual needs, abilities, skills and aspirations of followers based on one-to-one interactive relationship between the

leader and the follower. Therefore, the leader can help the follower achieve personal growth by providing coaching, mentoring and developmental feedback (Boerner et al., 2007; Moriano et al., 2014; Nusair, Ababneh, & Kyung Bae, 2012; Sattayaraksa & Boon-itt, 2016; Tipu, Ryan, & Fantazy, 2012). Furthermore, the leader also supports followers' initiatives to facilitate their risk-taking process with new ideas and develop their competence (Coad & Berry, 1998), which improves employee satisfaction and foster performance to meet high expectations of the leader (Jung et al, 1995). More importantly, individualised consideration may indirectly help link individual needs to organisational mission (Bass, 1985). In general, individualised consideration underlines individual care, coaching and mentoring activities, open approach and encouragement.

3.3.3 Studies on transformational leadership

This part of the study provides a general overview of prior research regarding effects of transformational leadership styles on diverse aspects of organisational outcomes including the creativity and innovation. The relationship between transformational leadership, creativity and innovation under investigation will be further analysed in the next sections of this study.

Transformational leadership paradigm as proposed by Bass (1997) provides a foundation for understanding leadership perspectives across situations and settings. Since the introduction of the transformational leadership concept by Burns (1978), numerous research have been conducted to examine and substantiate the effectiveness of this leadership style on organisational outcomes in both eastern and western countries (Avolio et al., 1988; Barling et al., 1996; Hater & Bass, 1988; Podsakoff et al., 1996; Spreitzer et al., 2005; Wang et al., 2005; Yu et al., 2002; Yukl, 2012). There have been prominent rationales that could explain for this situation. In the first place, according to Bass (1985), transformational leaders were supposed to inspire their followers to achieve the organisational goals beyond expectation. Moreover, employing transformational leadership, the leader tends to create a dynamic working environment that encourages the employees to face changes, foster their creativity, simultaneously attracts their interests and attentions to perform better, which improves organisational performance (Berson & Avolio, 2004). Additionally, Rubin et al. (2005) argued that transformational leaders could transform followers from their self-interests, values and beliefs to the collective organisational vision that help them enhance their self-confidence in job performance (Bass, 1985; Burns, 1978; Jung & Avolio, 1999). Finally, transformational leaders also pay attention to individual needs and stimulate their followers intellectually (Avolio & Bass, 1988).

Table 3.2.

Summary of transformational leadership and organisational outcomes studies.

Authors	Year	Research area
Bass, Avolio, & Goodheim, 1987; Waldman, Bass, & Einstein, 1987; Deluga, 1988; House, Woycke, & Fodor, 1988; Seltzer & Bass, 1990; Waldman, Bass, & Yammarino, 1990; Keller, 1992		Subordinates satisfaction and effectiveness
Bass & Avolio	1990	Individual, team, and organisational development
Podsakoff, MacKenzie, Moorman, & Fetter	1990	Followers' trusts in leader, satisfaction and organisational citizenship behaviours
Yammarino & Bass	1990	Subordinates' extra efforts, satisfaction with focal officers and the officer effectiveness
Koh, Terborg, & Steers	1991	organisational commitment, organisational citizenship behaviour, teacher satisfaction, and student performance
Howell & Avolio	1993	Support for innovation
Bycio, Hackett, & Allen	1995	Employees' intent to leave, organisational commitment
Kirkpatrick & Locke	1996	Task performance and attitudes
Lowe, Kroeck, & Sivasubramaniam	1996	Organisational effectiveness
Sosik, Avolio, & Kahai	1997	anonymity on group potency, effectiveness in a group decision support system environment
Wofford, Goodwin, & Whittington	1998	subordinate satisfaction with supervision, subordinate perception of leader effectiveness, and leaders' evaluation of group effectiveness
Dumdum, Lowe, & Avolio	2002	Organisational effectiveness and satisfaction
Pearce & Sims	2002	The longitudinal effectiveness of change management teams
Bass, Avolio, Jung, & Berson	2003	Unit performance
Judge & Piccolo	2004	Organisational commitment, organisational performance and creativity
Lim & Ployhart	2004	Team performance
Whittington, Goodwin, & Murray	2004	Employee performance, organisational citizenship behaviours, organisational commitment
Wang, Law, Hackett, Wang, & Chen	2005	Followers' performance and organisational citizenship behaviours
Keller	2006	Technical innovation
Ensley, Hmieleski, & Pearce	2006	New venture performance
Aragon-Correa, Garcia-Morales, & Cordon-Pozo	2007	Organisational learning, innovation
Eisenbeiss, Van Knippenberg, & Boerner	2008	Team innovation
Gong, Huang, & Farh	2009	Employee learning orientation, employee creativity
Jansen, Vera, & Crossan	2009	Organisational learning: exploration and exploitation
Pieterse, Van Knippenberg, Schippers, & Stam	2010	Innovative behaviour
Wang & Rode	2010	Follower creativity
Bushra, Usman, & Naveed	2011	Employee job satisfaction, organisational commitment
Zhang, Tsui & Wang	2011	Group creativity
Chi & Pan	2012	Task performance
García-Morales, Jiménez-Barrionuevo, & Gutiérrez-Gutiérrez	2012	Organisational performance, organisational learning, innovation
Sun, Zhang, Qi, & Chen	2012	Employee creativity
Hermann & Felfe	2013	Employee creativity
Mokhber, bin Wan Ismail, & Vakilbashi	2015	Organisational innovation
Ebrahimi, Moosavi & Chirani	2016	Organisational performance, innovation

Deriving from the primary focus on leadership development, the leader in an organisation not only helps the employees complete their tasks successfully and efficiently but also creates a working environment that can promote their personal development, social awareness and well-being (Brymer & Gray, 2006). Accordingly, transformational leadership seemed to be more effective compared to transactional leadership in terms of its characteristics (Jaworski & Senge, 2011). According to Bass and Avolio (1994), studies on transformational leadership considered this leadership style as the most effective where the transformational leader played the most active role.

Specifically, transformational leadership was supposed to effectively motivate employees to accomplish higher performance due to the transformational leader's proactiveness, which was evidenced by various studies such as the positive effects of transformational leadership on organisational effectiveness (Dumdum, Lowe, & Avolio, 2002; Low et al., 1996), the significant effects of transformational leadership on enhancing employee satisfaction (Bushra, Usman, & Naveed, 2012) and perceived leadership effectiveness (Bass & Avolio, 1990; Dumdum, Lowe, & Avolio, 2002). Research on relationships between transformational leadership and organisational commitment by Bycio, Hackett and Allen (1995) and Avolio (1999) also showed that followers tend to work harder, demonstrate higher level of organisational commitment and trust to the organisation where they work under the transformational leader.

Concerning the performance perspective, a number of research found that transformational leadership is positively associated with the performance, behavioural and attitudinal outcomes of subordinates in the organisation irrespective of organisational types and culture (Bass, 1997; Yammarino et al., 2005). For instance, studies focused on followers' positive attitude and performance (Bass & Avolio, 1990) task performance (Chi & Pan, 2012; Kirkpatrick & Locke, 1996; Low at al., 1996) work unit performance (Judge & Piccolo, 2004), leader effectiveness (Judge & Piccolo, 2004; Koh, Terborg, & Steers, 1991; Low at al., 1996; Wofford, Goodwin, & Whittington, 1998); cohesion, potency and performance (Bass et al., 2003) and organisational citizenship behaviour (Podsakoff, MacKenzie, Moorman & Fetter, 1990; Whittington, Goodwin, & Murray, 2004).

Moreover, transformational leadership was studied to boost the creativity and innovation in an organisation at the individual and organisational level (Aragon-Correa, Garcia-Morales, & Cordon-Pozo, 2007; Bass, Avolio, Jung & Berson, 2003; Ebrahimi, Moosavi & Chirani, 2016; Eisenbeiss, Van Knippenberg, & Boerner, 2008; García-Morales, Jiménez-Barrionuevo, & Gutiérrez-Gutiérrez, 2012; Jansen, Vera, & Crossan, 2009; Keller, 2006; Mokhber et al., 2015; Pearce & Sims, 2002; Sosik et al., 1997), employee creativity (Gong et al., 2009; Hermann & Felfe, 2013; Kark, Shamir & Chen, 2003; Sun, Zhang, Qi, & Chen, 2012; Wand & Rode, 2010; Zhang et al., 2011) and support for innovation (Howell & Avolio, 1993). Additionally, transformational leadership also proved to effectively help business executives deal with rapid change occurring in the business environment because transformational leaders demonstrate

the capability to face problems in the uncertain, fast-changing and modern working environment (Bass et al., 2003; Lim & Ployhart, 2004).

Generally, representative studies on the effects of transformational leadership and work-associated outcomes contributed to the provision of in-depth views on how leaders greatly influence their followers and the organisation. Particularly, through shared vision, learning motivation, growing encouragement in an unforeseen working environment, transformational leaders help develop the organisation effectively (Grant, 2012; Mittal & Dhar, 2015). Table 3.2 above summarises research on the association between transformational leadership and organisational outcomes.

3.4 Transactional leadership

3.4.1 What is transactional leadership?

The leadership study dated back to the paradigm which was commonly employed as a transaction or exchange process (Evans, 1974; Graen & Cashman, 1995). Specifically, Burns (1978) was known as the first author to initiate the concept of transactional leadership when the author contrasts with transformational leadership style. This style of leadership encompasses a psychological, economic or political exchange relationship between the leader and followers. Accordingly, followers will be rewarded with wages or prestige in exchange for successfully complying with what the leader expects (Bass & Riggo, 2006; Burns, 1978; Podsakoff et al., 1982) under the employment contract boundaries (Epitropaki & Martin, 2013).

Bass (1985) added that transactional leadership was formulated based on the mutual exchange process in which followers fulfilled the performance of promissory obligations required by the leader (Ensley et al., 2006). In addition, followers also perform their tasks under the goal setting, constructive feedbacks, supervisory and output control of the leader (Bass & Avolio, 2000). In contrast, transactional leadership developed on the basis of the Contingency model (Fiedler, 1967) and the Path-goal theory (House, 1971), primarily focused on the clarification of responsibilities and roles for the subordinates as well as specific expectations from the leader. In turn, the leader would use the immediate exchange mechanism of rewards, praise, resources and punishment based on what subordinates performed (Gao, Qu, Shi, & Lu, 2012).

Similar to transformational leadership, transactional leadership was defined on the background of the leadership definition. Particularly, in the context of this study, transactional leadership builds the foundation for relationships between leaders and followers in terms of specifying expectations, clarifying responsibilities, negotiating contracts, providing supervisory control and output control, based on an exchange process whereby followers are recognised and rewarded for accomplishing specified goals and achieving the expected performance (Avolio and Bass, 2004; Bass and Avolio, 1995). Moreover, the transactional leader prefers to operate in the existing culture and system, stable and predictable environment

that does not put emphasis on taking risks, prioritising changes but focuses on maintaining the status quo, standards, time constraints and efficiency (Bass, 1985; De Hoogh et al., 2005; Ployhart et al., 2001). The current needs and desires of subordinates are noticeably satisfied by the transactional leader through reward-based exchanges and task-focused behaviours. Simultaneously, closer attention is also paid to deviations, irregularities or mistakes and necessary actions to make corrections are timely taken, which makes followers hesitate to adopt changes or new methods in approaching problems (Avolio & Gardner, 2005; Bass, 1985; Epitropaki & Martin, 2013; House, 1996; Lee, 2008; Waldman et al., 2001).

Regarding the performance theory, it has been widely supported that subordinates tend to have high levels of performance when they have challenging or specific tasks to achieve with suitable strategies. More importantly, subordinates recognise the explicit linkages between their performance and the desired rewards they expect to receive (Locke & Latham, 1990). Owing to clarified requirements, extrinsic rewards emphasis and contractual agreement between the leader and followers, the transactional leader directs and motivates their followers to achieve the established objectives (McCleskey, 2014).

Several research also reveal that the transactional leadership may reduce the creative performance of the subordinate to some extent (Si & Wei, 2012). However, when subordinates themselves were not intrinsically motivated and satisfied in their jobs and working environment, extrinsic rewards were considered to compensate for those deficiency through the transactional leader's behaviours (Eisenberger, Armeli, & Pretz, 1998; Eisenberger & Rhoades, 2001; House, Woycke, & Fodor, 1988). In summary, transactional leadership style is featured in the manner that followers identify clear organisational goals required by the leader, endeavour to achieve the expected performance with the direction and motivation from the leader in exchange for rewards or consequences.

3.4.2 Dimensions of transactional leadership

According to Bass (1985), two dimensions of the transactional leadership conception are *contingent reward* and *management by exception (active and passive).* Hinkin and Schriesheim (2008) argued that compared to transformational leadership, these two dimensions affect organisational outcomes differently. The authors added that while contingent reward positively relates to the organisational outcome, management by exception shows the opposite association. The two main dimensions of transactional leadership will be further investigated in the following part of this study.

3.4.2.1 Contingent reward

Contingent reward refers to the extent to which the transactional leader appeals to the subordinates' needs and desires, then directs and motivates them to achieve those through rewards that are contingent upon their negotiated level of work role performance and goal achievement (Brymer & Gray, 2006; Bycio,

Hackett, & Allen, 1995; Moriano et al., 2014; Nguni et al., 2006; Waldman et al., 1990; Yulk, 2012). By the exchange of rewards for satisfied performance, the leader not only meets needs and desires of the followers but also indirectly achieves the organisational goals contributed by the followers (Burns, 1978; Sarros & Santora, 2001). Moreover, contingent reward on performance helps enhance individual effectiveness, which consolidates performance-outcome expectancies and serves as a basis for an effective leadership (Coad & Berry, 1998; Waldman et al., 1990). Specifically, tangible rewards such as bonus, pay raise, promotion or intangibles such as recognition, approval, praise, constructive feedback are presented to the follower (Bass & Bass, 2009; Coad & Berry, 1998; Holten & Brenner, 2015; Vito, Higgins, & Denney, 2014). In general, key indicators of contingent reward are tangible and psychological transactions for performance, direction and goal setting, empowering and reciprocity.

3.4.2.2 Management by exception

The dimension of management by exception has received less attention from researchers compared to contingent reward (Hinkin & Schriesheim, 2008). Therefore, this component and its effects on organisational outcomes are not much studied. Management by exception can be either active or passive, which represents the case when the transactional leader supervises the performance of followers, solves arising problems and takes active or passive action, punishment in case evidences about deviations from expectations are determined (Bass, 1985; Brymer & Gray, 2006; Coad & Berry, 1998; Moriano et al., 2014). Although the transactional leader builds trust in their followers, he or she will not inspire subordinates to perform and achieve beyond the expected outcomes. That behavior is represented by the leader's lack of confidence, poor communication and maintenance of the status quo (Sarros & Santora, 2001). Additionally, formal and centralised decision-making process, standard compliance, rigid and inflexible control system as well as ineffective performance by subordinates are common features of management by exception that are employed by the transactional leader (Schweitzer, 2014). In general, in the working environment where management by exception is exhibited, the leader tends to intervene in non-compliant circumstances based on the set standards. As a result, subordinates' problem solving, changes adopting, confidence developing and experience learning are not encouraged (Bass, 1985).

a. Management by exception active

Management by exception active occurs when the transactional leader demonstrates positive, continuous intensive observation and supervision on subordinates performances (Birasnav, 2014; Kevin Kelloway & Barling, 2000). Moreover, the leader takes corrective actions so as to properly determine and prevent errors, mistakes or deviations from happening based on rules, standards and expectations of the organisation (Egan et al., 1995; Si & Wei, 2012). Specifically, the active transactional leader pays attention

to regular search for failures and planning to deal with problems prior to their occurrence (Hater & Bass, 1988). Depending on the leader's behavioural criticism, subordinates will perceive themselves to be motivated or discouraged regarding their performance and effort (Russell & Mizrahi, 1995). Fair criticism with clear performance standards and proper corrections for poor performance by the transactional leader will positively enhance subordinates' performance. In contrast, heavy criticism with immediate punishment from the leader brings about aversive consequences on the performance of followers.

b. Management by exception passive

Management by exception passive is characterised by the degree to which the transactional leader intervenes into the performance of followers once standards were not satisfied and serious problems or mistakes have already taken place (Nguni et al., 2006). This passive transactional leader assesses and determines the problematic situation after their subordinates completed their tasks, which limits the role of the leader in monitoring and supervising their followers' tasks. As a consequence, that will negatively affect their work performance (Brymer & Gray, 2006; Howell & Avolio, 1993).

3.4.3 Studies on transactional leadership

Studies on transactional leadership have consolidated the linkage between this leadership style with transformational leadership as investigating its effects on organisational outcomes (See section 3.5). Therefore, only those studies that have been separately conducted and related to transactional leadership will be prominently introduced in this part of the study to avoid repetition.

Generally, the current trend on leadership research and theories largely focuses on transformational leadership or interchangeably used as charismatic leadership in comparison with transactional leadership (Hartog, Muijen and Koopman, 1996). However, significant interests in studying transactional leadership style have been recorded in recent years by academics and researchers such as linkages between big five personality factors and transactional leadership by De Hoogh, Den Hartog and Koopman (2005); work attitudes, organisational citizenship behaviour by Tremblay and Gibson (2016) and Walumbwa, Wu and Orwa (2008), organisational-focused ideas by Deichmann and Stam (2015), perceived supervisor support by Tremblay and Gibson (2016) and organisational commitment by Afshari and Gibson (2016).

Prior studies have proved that transactional leadership, compared to transformational leadership, were less positively associated with behavioural outcomes (Bass & Avolio, 1990; Halter & Bass, 1988; Hartog, Muijen and Koopman, 1996). Specifically, that association was demonstrated by studies between transactional leadership and followers satisfaction (Deluga, 1988; Podsakoff, Todor, Grover, & Huber, 1984), leadership effectiveness (House, Woycke, & Fodor, 1988; Waldman, Bass, & Einstein, 1987; Waldman, Bass, & Yammarino, 1990) and organisational citizenship behaviour (Braun, Peus, Weisweiler,

& Frey, 2013; MacKenzie, Podsakoff, & Rich, 2001), organisational commitment (Afshari & Gibson, 2016). Moreover, similar outcomes were also found in research between transactional leadership and followers' extra effort, satisfaction and effectiveness (Yammarino & Bass, 1990) and attitudinal outcomes such as big five personality factors (De Hoogh, Den Hartog, & Koopman, 2005).

Regarding the aspect of inspiring employees to achieve higher level of performance, Bass and Avolio (1994) and Burns (1978) argued that transactional leadership and passive avoidant leadership were not as effective as transformational leadership. This finding can be explained by the fact that transactional leaders focus on maintaining the status quo with their followers, employing the exchange mechanism of reward and punishment to influence subordinates on achieving organisational objectives (Hartog et al., 1997; House, 1996). Accordingly, transactional leaders clarifies expectations, task procedures, structures and rules for their followers (Hartog et al., 1997; House, 1996). In addition, subordinates seek motivation from the transactional leader only by the contingent reward-based exchanges to achieve the negotiated level of performance, which proved to have less effects on their behaviours (Nahum-Shani & Somech, 2011). Graen & Cashman (1995) also added that the transactional leadership style was found to have a consistency with leader-member exchange relationship that the leader focused on satisfying the needs and desires of followers in exchange for their expected performance.

However, there remained empirical studies which supported the relationship between transactional leadership and effectiveness such as Bass, Avolio, Jung and Berson's (2003) on unit performance and Zhu, Sosik, Riggio and Yang's (2012) on followers' organisational identification. In addition, Bass and Avolio (1997) argued that transactional and transformational leadership behaviour were regarded as representatives of active leadership styles owing to the cognitive and behavioural skills of the leader. Moreover, several other research found a positive association between transactional leadership and employee performance and organisational commitment (Jackson, Meyer, & Wang, 2013; Podsakoff, Todor, Grover, & Huber, 1984), effectiveness (Lowe et al., 1996), employee engagement (Breevaart et al., 2014), employees' proactive behaviour, task performance (Chiaburu, Smith, Wang, & Zimmerman, 2014) and well-being (Arnold, Kelloway, McKee, & Barling, 2007).

Remarkable findings from Whittington et al. (2009) showed that employing the paradigm of self-other agreement, there was a positive relationship about agreement between transactional leadership and followers' outcomes in terms of performance, trust in the leader, organisational citizenship behaviour and affective commitment. In contrast, no relationship about agreement between transformational leadership and work outcomes of employees was recognised. Furthermore, Bass et al. (2003) in their studies pointed out that transactional leadership style was not only positively associated with cohesion, potency and organisational performance but also was considered a solid foundation for constituting the effective leadership behaviour in the context of temporary organisations. This is due to daily task handling

implemented by the transactional leader who actively monitors the subordinates' performance based on established structures and processes. Therefore, transactional leadership should be employed as a proper model that supports task-oriented leadership although this leadership style was argued not to be really effective in case of unforeseeable outcomes or long-term outcomes developments (Brymer & Gray, 2006).

Studies on transactional leadership style also concentrate on examining the relationship of each separate dimension of this leadership style with employee performance outcomes. Lowe et al. (1996) argued that while contingent reward was found to positively associate with leader effectiveness, management by exception revealed an insignificant relationship with leader effectiveness (Avolio, 2005). Klimoski and Hayes (1980) added that contingent reward leadership indicated a positive influence on employee performance and employee satisfaction in the workplace. Moreover, one study by Kuhnert and Lewis (1987) examined the link between transactional leadership and Leader-member exchange model in terms of the role development of members in an organisation and the exchange of tangible and psychological rewards. Findings of that study revealed that a high-order transaction encompassed the exchange of psychological rewards like trust, loyalty while a low-order transaction focused on tangible rewards such as pay rise or bonuses (Kuhnert & Lewis, 1987). Studies on transactional leadership and organisational outcomes are presented in Table 3.3 for further reference.

Table 3.3.

Summary of transactional leadership and organisational outcomes studies.

Authors	Year	Research area
Klimoski & Hayes	1980	effort expenditure, perception of organisational contingencies, facets of job satisfaction
Podsakoff, Todor, Grover, & Huber	1984	subordinates performance and satisfaction
Waldman, Bass, & Einstein	1987	leadership effectiveness
Deluga; Hater & Bass	1988	employee satisfaction, employees influencing system
House, Woycke, & Fodor	1988	leadership effectiveness
Waldman, Bass, & Yammarino	1990	performance appraisal scores, employee satisfaction with performance appraisal processes
MacKenzie, Podsakoff, & Rich	2001	salesperson performance
De Hoogh, Den Hartog, & Koopman	2005	big five factors of personality
Arnold, Kelloway, McKee, & Barling	2007	well-being
Walumbwa, Wu, & Orwa	2008	work attitudes, organisational citizenship behaviour
Whittington, Coker, Goodwin, Ickes, & Murray	2009	follower performance, organisational citizenship behaviour, affective commitment, trust in the leader
Zhu, Sosik, Riggio, & Yang	2012	followers' organisational identification
Jackson, Meyer, & Wang	2013	organisational commitment
Breevaart, Bakker, Hetland, Demerouti, Olsen, & Espevik	2014	employee engagement
Chiaburu, Smith, Wang, & Zimmerman	2014	employees' proactive behaviour, task performance
Deichmann & Stam	2015	organisation-focused ideas
Afshari & Gibson	2016	organisational commitment
Buch, Thompson, & Kuvaas	2016	followers' work performance
Tremblay & Gibson	2016	perceived supervisor support, citizenship behaviour

3.5 Employee creativity

3.5.1 Creativity definition

Prior to approaching the concept of employee creativity, it was essential to understand the originality of the term "creativity". Different versions of creativity concept have been acknowledged by research of many scholars (Cohen-Meitar, Carmeli, & Waldman, 2009; Gumusluoglu & Ilsev, 2009). Amabile (1988) defined creativity as the process when individuals or small group of individuals produced new and useful ideas, which is also a widely accepted definition (Binnewies, Ohly, & Niessen, 2008; George & Zhou, 2007). According to Ward (2004), the creativity concept is a complicated phenomenon because it necessitates theoretical models that link both individual cognition, personality traits and environmental impacts. In another context, Mumford (2000), Gilson and Shalley (2004) clarified that creativity was the result of a three-stage process including identifying problems, searching information and encoding (combining information from various sources) and generating ideas. Later, Beth and Amabile (2010) introduced a broader concept of creativity as stating that creativity means generating new ideas, concepts and even solutions to problems.

Overall, as defining creativity, the authors not only aimed to focus on the originality of ideas, but also on the appropriateness, usefulness and value of those novel ideas to organisational development (Runco & Jaeger, 2012). Novel ideas prove to be unique compared to other existing ones in the organisation while appropriate and useful ideas potentially contributes direct or indirect, economic or non-economic and short-term or long-term value to the growth of the organisation (Shalley, Zhou, & Oldham, 2004). Table 3.4 below provides a general overview of creativity definition by scholars for further reference.

Table 3.4.

Summary of creativity definitions.

Authors	Year	Definition
Amabile	1988	The production of new, useful ideas by individual or small group of individuals who work in the same organisation
Amabile	1998	A function of three main factors: expertise, critical thinking skills and motivation
Mumford	2000	The identification of problems, search and encoding information and generating ideas
Gilson & Shalley	2004	The identification of problems, search and encoding information and generating ideas
Hirst	2009	The generation of novel, useful ideas regarding products, processes, procedures at work
Beth & Amabile	2010	The generation of new ideas, useful concepts and solutions to problems
Houghton & DiLiello	2010	The formulation of novel, useful, appropriate ideas to solve problems and increase effectiveness

3.5.2 Employee creativity

Employee creativity has long been recognised as a significant source of organisational innovation and competitive advantage for organisations of all types (Borovskaia & Dedova, 2014; Gupta & Singh, 2015; Herrmann & Felfe, 2014; Lin & Wong, 2014; Oldham & Cummings, 1996; Runco, 2004; Zhou, 2003). Zhou and George (2001) affirmed that employee creativity marked the first step in leading to organisational innovation because innovation occurred when novel and useful ideas created by employees' creative process have been successfully implemented (Chen & Huang, 2010). Moreover, employee creativity also contributes to the long-term survival and success of the organisation in a competitive business environment (Tang & Naumann, 2016). The important role of employee creativity partly helps explain the increasing concerns by researchers in investigating the relationship between this variable and other organisational contextual factors.

3.5.2.1 Employee creativity definition

The definition of employee creativity is basically developed on the broadly accepted creativity concept. According to Wang and Zhu (2010), employee creativity was defined as a process when employees develop new and useful ideas or solutions relating to products, services, procedures and processes within the organisation (Thatcher & Brown, 2010). Previously, Shin and Zhou (2007) also broadened this definition towards the context of team working instead of individual talents in an organisation. Then, Gisber-López, Verdú-Jover and Gómez-Bras (2013) added to the definition that employee creativity also reflected how members in a team interact with each other in a dynamic, uncertain and unpredictable knowledge-based working environment (Grant & Berry, 2011). Nevertheless, team work creativity is not within the interest of this study. Cheung and Wong (2011), on the other hand, considered that employee creativity occurs when employees utilise their expertise, critical thinking skills and experience to brainstorm novel ideas for making decisions, solving problems and completing assigned tasks efficiently.

Overall, in the context of this study, employee creativity is understood as the process in which novel, useful and appropriate ideas concerning products, services, processes, business and management practices, organisational models and strategies are generated by employees to solve problems in the pursuit of work objectives (Scott and Bruce, 1994; Zhou and George, 2001). This definition is proposed on the basis that employees exhibit their creativity because of job requirements and for the sake of goal-oriented achievement in the organisation. Accordingly, that is supposed to increase the effectiveness in their job performance and improves the overall organisational effectiveness (Hon, 2013; Houghton & DiLiello, 2010).

3.5.2.2 Studies on employee creativity

The generation of novel and useful ideas by employee creativity to develop new products or services, or improving existing products or processes will benefit organisational competitiveness and innovative capabilities (Shalley, Gilson, & Blum, 2000; Zhou & Shalley, 2008). Zhang and Bartol (2010) argued that the higher level of employee engagement in the creative process may help them produce creative outcomes. Previous research on employee creativity paid the most attention to employees working in research and development department or section in the organisation because researchers perceived that those employees, rather than others working in other departments, were capable of brainstorming new ideas (Bai, Lin, & Li, 2016). However, current studies have shown changes in the perception of researchers by extending the perspective of employee creativity to all employees regardless of their positions, levels and departments in the organisation (Bai et al., 2016). Gong et al. (2012) argued that employees could totally contribute their novel ideas to the organisation in a direct or non-direct way because creativity was a function of personality traits and cognitive abilities of employees. For example, Barley and Kunda (2001) stated that employee creativity became more and more important in the service-oriented corporations because of the strong competition occurring among organisations that makes employees endeavour to develop their innovative capabilities. In particular, employee creativity was expected to demonstrate in daily work performance and dealing with customers' needs (Barley & Kunda, 2001).

A number of empirical studies have investigated the antecedents of employee creativity (Amabile, Schatzel, Moneta, & Kramer, 2004; Kim, Hon, & Lee, 2010). Specifically, Hahn et al. (2015) argued that there were three different categories of employee creativity: personal characteristics, contextual characteristics and interaction factors between creative individuals and situational traits. On the other hand, Kouloubandi et al. (2012) claimed that three major approaches namely person-centered, process-centered and outcome-centered conceptualised employee creativity. Accordingly, the person-centered approach targeted at differences of individuals like personality, creative potential and cognitive process that helped employees think creatively. The process-centered approach concentrated on the whole creative process of employee engagement to generate creative outcomes including identifying problems, preparing resources and generating and evaluating ideas (Madjar & Shalley, 2008). Lastly, the outcome-centered approach certainly focused on examining employee creativity under the form of tangible or psychological output.

It is worth noticing that in both process-centered and outcome-centered approaches, personal and contextual factors significantly influence the creative process of employees as well as the novelty of their ideas (Shalley et al., 2004). In the outcome-centered approach, employee creativity is further divided into radical creativity and incremental creativity (Madjar & Gilson, 2008). Radical creativity refers to fundamentally different ideas from existing organisational paradigms while incremental creativity concerns

the new ideas that need a few changes in the contemporary paradigms of the organisation or modification of current organisational practices.

Succeeding studies, notably, have focused on clarifying individual and contextual factors which impacted employee creativity (Rodan & Galunic, 2004; Kim, Hon, & Lee, 2010). Individual factors, accordingly, encompass personal characteristics like creative personality and cognitive process (Oldham & Cummings, 1996; Zhou, 2003). Contextual factors such as organisational culture, supervisor support (Zhou & George, 2001; Tierney & Farmer, 2004), climate for support (Shalley & Oldham, 1997), working environment (Amabile et al., 1996), job characteristics such as job complexity and requirement (Coelho & Augusto, 2010; Coelho, Augusto & Lages, 2011; Oldham & Cummings, 1996; Shalley, Gilson, & Blum, 2000; Tierney & Farmer, 2004) also affect the creative performance of employees. Hur, Moon, and Jun (2016) further argued that working environment positively and negatively influenced employee creativity in the organisation. Especially, from the negative side effects, the working environment characterised by political problems, rigid rules, bureaucratic practices, conservative attitudes from the management and supervisor team seemed to diminish the level of employee creativity and vice versa (Zhang et al., 2014).

Leadership (Rego et al., 2012; Shin & Zhou, 2003), noticeably, appears to be one of the contextual factors that also either helps strengthen or undermine employee creativity. That partly constitutes the basis for this research to investigate relationships between leadership styles, employee creativity and organisational innovation. Moreover, Chang and Teng (2017), Waples and Friedrich (2011) and Baer (2012) indicated that intrinsic and extrinsic factors were also important components that motivated employee creativity. Intrinsically motivated employees are those who had the tendency to take risks, accept challenging tasks, brainstorm ingenious ideas as well as suggest novel solutions to organisational problems. On the contrary, employees are externally motivated by mutual relationship that concentrates on tangible and intangible rewards (Baer, 2012; Wang, Tsai, & Tsai, 2014). In this situation, Gong, Huang and Farh (2009) took the leadership style of the supervisor as a stark example that played a significant role of extrinsic factors in enhancing employee creativity.

3.6 Innovation concept

In this section of the study, prior to discussing organisational innovation – one out of three types of innovation, the definition of innovation will be presented and clarified. This aims to provide the theoretical background of how the innovation term is originated and developed as well as its relation to the introduction of innovation-related concepts. In addition, different types of innovation will also be mentioned to clarify how innovation is categorised and its purposes. Organisational innovation is built up on the basis of the innovation concept and developed in the particular context.

3.6.1 Innovation definition

The importance of innovation to the strong competitive advantages and sustainable development of enterprises in the global business environment has been proven by a number of empirical studies (e.g. Hamel, 2009; Rosenbusch, Brinckmann, & Bausch, 2011; Wu & Lin, 2011). Innovation, accordingly, was supposed to occur in a variety of sectors such as business, economics, engineering, law, science, psychology and others (Müceldili et al., 2013). Additionally, innovation concerns organisational aspects ranging from research and development of products and services to marketing, organisational methods (Wu & Lin, 2011; Yıldız et al., 2014). That leads to the modification or the implementation of new products or services, new technology, organisational restructuring, employee behaviours and improved policy (Sadegh Sharifirad & Ataei, 2012). Waples and Friedrich (2011) indicated that creativity generally focused on identifying problems and generating ideas that used to be at individual or group level. Innovation, conversely, concentrates on implementing solutions to problems by organisational stakeholders, which belongs to the organisational level.

A multi-perspective approach has been employed by various researchers to define innovation (Goswami & Mathew, 2005). Damanpour and Evan (1984) argued that innovation was a broadly used concept and various ways of defining innovation reflected specific requirements and features of the study. Thompson (1965) was one of the initiators of the innovation concept as the author defined it as the process when new ideas, products, services and processes are generated, accepted and implemented. However, because other researchers pay more attention to the adoption perspective of innovation, this definition failed to be developed although it highlights that main aspects of innovation are creation and utilisation (de Waal et al., 2010). Subsequently, Knight (1967) presented another definition of innovation as the process of adopting a novel change in an organisation or the relevant environment. Zaltman, Duncan and Holbek (1973) developed that concept by perceiving that innovation is the adoption of new idea or behaviour to the organisation concerning process, product, service, system or policy, which includes two major phases: initiation and implementation. This definition also received the shared view from Daft (1982), Urabe, Child, and Kagono (1988) and Wu and Lin (2011).

West and Farr (1990) assumed that innovation refers to the situation that ideas, products, processes or procedures are intentionally introduced and applied within a group or an organisation. Specifically, those are considered new to the unit of adoption and significantly beneficial for the individual, group, organisation and the overall society (West & Farr, 1990). According to Amabile et al. (1996), innovation occurs when creative ideas are successfully implemented within an organisation. In the context of management, innovation was defined as a notable departure from the existing management practices, process or current organisational formality, which significantly changes how the management is performed in the organisation (Hamel, 1999). In the context of organisation, innovation is featured by the process when creative novel

ideas are generated and converted into useful as well as viably commercial products, services or business practices (Bartel & Garud, 2009; Waal et al., 2010; West, Sacramento, & Fay, 2006).

Table 3.5.

Summary of innovation definitions.

Authors	Year	Definition
Thompson	1965	new ideas, products, services and processes are generated, accepted and implemented
Knight	1967	adopting a novel change in an organisation or the relevant environment
Zaltman, Duncan, & Holbek	1973	the adoption of new idea or behaviour to the organisation concerning process, product, service, system or policy, including initiation and implementation
Daft	1982	the adoption of new idea or behaviour to the organisation concerning process, product, service, system or policy, including initiation and implementation
Urabe, Child, & Kagono	1988	the adoption of new idea or behaviour to the organisation concerning process, product, service, system or policy, including initiation and implementation
West and Farr	1990	ideas, products, processes or procedures are intentionally introduced and applied within a group or an organisation which are considered new to the unit of adoption and significantly beneficial for the individual, group, organisation and the overall society
Amabile, Conti, Coon, Lazenhy, & Herron	1996	creative ideas are successfully implemented within an organisation
Hamel	1999	a notable departure from the existing management practices, process or current organisational formality, which significantly change how the management is performed in the organisation
West, Sacramento, & Fay	2006	creative novel ideas are generated and converted into useful as well as viably commercial products, services or business practices
Bartel & Garud	2009	creative novel ideas are generated and converted into useful as well as viably commercial products, services or business practices
De Waal, Maritz, & Shieh	2010	creative novel ideas are generated and converted into useful as well as viably commercial products, services or business practices
Camiso´n &Villar-Lo´pez	2011	implementing a new or considerably improving an existing product, service or process, a new business practice, marketing method, workplace organisation, organisational methods, or external relations
Wu and Lin (2011)	2011	the adoption of new idea or behaviour to the organisation concerning process, product, service, system or policy, including initiation and implementation

The broad definition of innovation has also been proposed by Camiso´n and Villar-Lo´pez (2011) as the process of implementing a new or considerably improving an existing product, service or process, a

new business practice, marketing method, workplace organisation, organisational methods, or external relations (Ganter & Hecker, 2014). Tidd and Bodley (2002) recognised that the shared features among various definitions of the innovation term was the changes brought about by the innovation, the usage of knowledge to create new way of thinking and action instilled into the organisation, market and industry (Nusair et al., 2012). Overall, innovation may be understood as the process when creative, new ideas are appropriately implemented and commercialised into useful, novel tangible or intangible outcomes to achieve specific goals. Table 3.5 above summarises the main definitions of innovation for further reference.

3.6.2 Types of innovation

Different methods of classifying innovation and its antecedents have been utilised by researchers (Avermaete et al., 2003; Damanpour & Evan, 1984). Miles and Snow (1978) have categorised innovation into three different types that are technical, administrative and entrepreneurial innovation. Munene (1995) clarified that technical innovation refers to the new transformation process, administrative innovation focuses on changes in the administrative structure and entrepreneurial innovation relates to new products or services.

In another context, five detailed types of innovation have been recommend by Schumpter (1934) include introducing a totally new product or quality change in an existing product; innovating new process to an industry, opening of new market, developing new sources of raw materials and innovating in industrial organisations. However, this classification focuses primarily on the product or process innovation. On the other hand, another broad classification of innovation which received wide agreements by scholars has been proposed including organisational innovation, technical innovation and marketing innovation (Camisón and Villar-López, 2014; Damanpour & Evan, 1984; OECD, 2005). The three types of innovation were supposed to help businesses respond to changes and competitions in the global business environment (Wong, 2013). Particularly, technical innovation refers to changes in functional features or technological standards, which can be further categorised into product and process innovation (Mavondo, Chimhanzi, & Stewart, 2005). Marketing innovation purely refers to the adoption of new marketing approaches to seek for market opportunities and potential customers with new products or services. Organisational innovation focuses on innovating business practices, workplace organisation and external relations (Ganter & Hecker, 2014; OECD, 2005).

This study, accordingly, focuses on organisational innovation, which is more specific to previous studies that concentrates on the overall innovation, technological innovation or marketing innovation. Additionally, organisational innovation and its relations with leadership styles and employee creativity will be examined. The organisational innovation concept and its dimensions will be further analysed in the next section of this study.

3.6.3 Organisational innovation

3.6.3.1 Overview of organisational innovation approaches

The majority of the early literature primarily focused on studying innovation at the individual level which was reflected by addressing the individual adoption of novel ideas and practices (Slappendel, 1996). Organisational innovation has been later investigated in relation to organisational variables since the 1980s and attracted the attention of researchers. Research on innovation at the organisational level is critically essential to enterprises because organisations would face severe problems and challenges in a competitive business environment if individual or subunit innovative behaviour were found inconsistent with the overall organisational objectives and outcomes (Hamel, 2009; Mokhber, Wan Ismail, & Vakilbashi, 2015).

Organisational innovation was a complicated concept supported by various and arguable approaches in the literature (Mol & Birkinshaw, 2009; Müceldili, Turan, & Erdil, 2013). Its complication lies in the diversified contexts of the organisation where it was defined to reflect a suitable measure and linkage with other related variables under investigation. In this section of the study, different approaches of organisational innovation concept will be discussed. Then, a specific approach of organisational innovation will be adopted in the context of Vietnamese public firms operating in the coffee industry.

Damanpour (1991) and Rietzschel (2011) contended that organisational innovation was impossibly evaluated as a direct consequence to performance such as technical innovation and marketing innovation because the benefits of organisational innovation are less obvious and indirect to the organisation. Moreover, organisational innovation is a pre-requisite condition for any kind of innovation in the organisation including the generation and implementation of new organisational processes, structures and practices (Goldman et al., 1995; Hamel, 2009; Hipp & Grupp, 2005; Lam, 2005). Additionally, Prasad and Junni (2016) claimed that organisational innovation encompassed three influential perspectives which were organisational structure, organisational process and organisational change.

Another approach developed by Wong (2013) shows that organisational innovation consists of administrative innovation and human capital innovation. Han, Kim and Srivastava (1998) and Lin and Chen (2007) argued that administrative innovation refers to innovation in administrative systems such as introducing new practices, new measures to improve organisational structure or administrative procedures of the organisation. Moreover, Damanpour, Szabat and Evan (1989) added that administrative pertains to resource allocating, task structuring or authority and rewards. Those are thought to facilitate the risk-taking work environment and encourage the contribution of new ideas (Damanpour et al., 1989). Human capital innovation, on the other hand, occurs when the organisation adopts new approaches in recruitment practices and measuring employee performance (Wong, 2013). Accordingly, it is thought to be contributed by innovative individuals who endeavour to brainstorm new and useful ideas in the process of value creation

for the organisation (Glynn, Kazanjian, & Drazin, 2010). Table 3.6 below presents a summary of organisational innovation definitions from different authors.

Table 3.6.

Summary of organisational innovation definitions.

Authors	Year	Definition
Damanpour	1984	Innovativeness - the process of adopting new ideas or behaviour to the organisation
Woodman, Sawyer & Griffin	1993	The creation of useful, valuable and new products or services
Damanpour	1996	The generation and implementation of new organisational structures, process or practices
Hooff and Weenen	2004	New leadership styles, organisational commitments and organisational culture
OECD	2004	The successful introduction of new product or service to the market
Jaramillo	2005	New leadership styles, organisational commitments and organisational culture
Hipp & Grupp	2005	The generation and implementation of new organisational structures, process or practices
Lam	2005	The generation and implementation of new organisational structures, process or practices
OECD	2005	New organisational methods in business practices, workplace organisation and external relations
Damanpour & Aravind	2006	Innovativeness - the process of adopting new ideas or behaviour to the organisation
Birkinshaw, Hamel and Mol	2008	Management innovation - any organisational or managerial activities
	2009	Technological innovation - implementing the innovative organisational practices (product and process innovation)
Gumusluoğlu & Ilsev	2009	The creation of useful, valuable, new products or services
Loksin, Gils and Bauer	2009	Technological innovation - implementing the innovative organisational practices (product and process innovation)
Mol & Birkinshaw	2009	Management innovation, new marketing innovation
Battisti & Stoneman	2010	Management innovation, new marketing innovation
Jiménez & Sanz-Valle	2011	Innovativeness - the process of adopting new ideas or behaviour to the organisation
Wong	2013	Administrative innovation and human capital innovation
Ali, Kan & Sarstedt	2016	Product innovation, process innovation and management-related innovation
Prasad & Junni	2016	Organisational structure, organisational process and organisational change

3.6.3.2 The adoption of specific organisational innovation concept

Camisón and Vilar-López (2014), Hervas-Oliver and Sempere-Ripoll (2015) and Wischnevsky et al. (2011) argued that the nature of adaptive attempts to environmental changes was non technological because initial changes in organisational methods was considered the root of innovation in an organisation followed by technological changes, which seems in contrast to the prevalent thinking. OECD (2005) and Camisón and Villar-López (2010) refer organisational innovation to the introduction of novel organisational methods

which supports the business management in the working environment or in the firm-external agent relation. This definition combines traditional and new approaches of organisational innovation (Armbruster et al., 2008; Camisón & Villar-López, 2014) in such a way that OECD (2005) targeted at three concrete aspects: business practices, workplace organisation and external relations. Specifically, organisational innovation in business practices focuses on implementing new organisational methods for the efficient organisation of procedures and routines within the company such as database establishment practice, employee retention improvement and management system introduction (Collins & Smith, 2006; Foss et al., 2011; Ganter & Hecker, 2014; Hervas-Oliver & Sempere-Ripoll, 2015). Organisational innovation in workplace concerns implementing new methods of responsibility distribution, task division among employees, decision-making process in the organisation and other activity structuring (Bougrain & Haudeville, 2002; Ganter & Hecker, 2014; Hervas-Oliver & Sempere-Ripoll, 2015; Laursen & Foss, 2003). Regarding external relations, organisational innovation concentrates on implementing new ways of expanding and maintaining relationships with other enterprises or public firms, dealing and cooperating with customers, integrating or outsourcing with suppliers (Cantner & Schmidt; 2011; Foss et al., 2011; Ganter & Hecker, 2014; Hervas-Oliver & Sempere-Ripoll, 2015; Kremp & Mairesse, 2006; Tomlinson, 2010).

The definition of organisational innovation introduced by OECD (2005) was considered appropriate in the current organisational contexts (Damanpour & Schneider, 2006; Damanpour & Wischnevsky, 2006). In fact, businesses compete with each other not only on innovating their products, processes or marketing areas, but also on organisational methods for managing business efficiently, both in the workplace and in the relationship with external parties. Ultimately, this is supposed to influence business activities of organisations (Damanpour & Schneider, 2006; Damanpour & Wischnevsky, 2006).

In the context of this study, the employment of organisational innovation approach was decided based on the following perspectives. In the first place, existing problems pertaining to innovation in public enterprises, specifically in the Vietnamese coffee industry, are reflected by weak linkages between science and local enterprises, innovative incapability due to lack of international cooperation and limited funds in the manufacturing and processing industries (Nguyen, 2014; Nguyen et al., 2013; OECD, 2013). Moreover, while the rate of originating innovative activities about research and development in Vietnamese enterprises was quite low, specific organisational innovation concerning organisational methods remains questionable (CIEM, DoE, & GSO, 2012).

Additionally, Vietnamese public enterprises operating in the coffee industry specialise in producing, processing and exporting coffee to worldwide countries. Therefore, innovative activities focused on exploiting and examining the technical innovation aspect that was represented by how the enterprises have applied new planting, irrigating, fertilising techniques into the coffee plantation process to boost the production output and enhance the coffee bean quality for exporting activities. Furthermore, scientific

studies also pay attention to how enterprises have invested in modern production technology in manufacturing instant coffee with high quality and unique flavour instant coffee. The research practice in Vietnam proved that there has been very few studies that emphasise on investigating the innovative activities occurring in organisational methods, business management practices, workplace organisations such as organisational structures, leadership and behavioural styles despite their important roles in contributing to the efficient growth and development of the organisation (Armbruster et al., 2008; Damanpour & Aravind, 2012; Mol & Birkinshaw, 2009). This study, therefore, selects the organisational innovation concept by OECD (2005) to examine its relationship with leadership styles and employee creativity.

3.7 Theories on leadership styles, employee creativity and organisational innovation

In this section of the study, a discussion on the most influential theories on leadership styles, creativity and innovation in the organisation will be provided, which supports the thorough understanding of how each construct is developed and linked. There are a recorded number of theories and models that attempt to explicate the nature of leadership styles, employee creativity and organisational innovation, focusing on differentiating the behaviour of leaders and followers in a specific context. Those theories and models are considered significant to the management team in the organisation in building up appropriate strategies to promote organisational innovation. Generally, the development of different theories will enrich the knowledge on diversified aspects of leadership styles, individual creativity and organisational innovation for the management team to consider through the provision of in-depth view of factors. Moreover, despite the inconclusiveness of various theories, related ones also provide a referencing framework for organisations especially public enterprises operating in the Vietnamese coffee sector to promote leadership style, employee creativity and organisational innovation efficiently.

Accordingly, leadership theories encompass situational leadership and full range leadership that investigate how these two leadership styles and their dimensions are fundamentally initiated and developed in relation to contextual factors. In terms of employee creativity and organisation innovation theories, the componential theory of individual creativity, the model of organisational innovation and the intersection model of creativity and innovation will be addressed to clarify the origin of creativity, employee creativity and its interaction with innovation at the organisational level. Overall, these theories support the management team to implement suitable actions to promote employee creativity, which positively affects organisational innovation.

3.7.1 Leadership theories

Over the past decades, the attraction of leadership area has led organisational researchers to develop an intensive variety of leadership theories that aims to support the explication of the effect of leadership on employee behaviour and attitudes as well as other contextual factors in the organisation (Gilbert, Horsman, & Kelloway, 2016). Through the development process of leadership theories, such related theories as trait (Stogdill, 1948), behavioural (Stogdill, 1948), situational (Blanchard, Hershey and Johnson, 2000), contingency (Fiedler, 1964), path-goal (House, 1971) and full range leadership (Avolio & Bass, 2004; Bass, 1985) have been introduced to best justify changes in the leadership behaviour within the specific period. According to Rose (2014), improvement has been witnessed in the modern leadership approach compared to early leadership theories. Particularly, this was reflected by the way that leadership researchers, from purely focusing on leadership traits themselves, broaden the relation between leadership and situation and currently expand towards leadership behaviour – follower performance relationship. Regarding the scope of this study, situational leadership theories and FRLT that are strictly related to leadership styles will be deeply discussed.

3.7.1.1 Situational leadership theories

Prior to discussing each approach of situational leadership theories, a key summary of previous leadership theories that are trait theory and behavioural style approach by Stogdill (1948) will be presented. The presentation of past theories aims to provide a good appreciation and systematic understanding of developmental characteristics of leadership theories as well as rationales for the gradual replacement by later theories in explaining leadership behaviour in the organisation.

According to *the trait theory,* leaders are believed to possess capabilities that are inherent to lead over others (Kinicki & Kreitner, 2008). Specifically, this theory emphasises on leaders' set of physical and personality traits that are developed through engaging experience and learning (Robbins & Judge, 2007) as well as make them different from subordinates (Awan & Zaidi, 2009; Bass, 1981; Mostovicz, 2009). Nevertheless, results of studies on the trait theory reported only two possibilities of this theory that were the predictability of leadership abilities and the capabilities of one individual to become a leader (Smith & Foti, 1998). Regrettably, this theory failed to reflect the consistently universal set of traits that identify the effective leader (Rose, 2014). That also means leadership traits that are recognised and exhibited do not guarantee the effectiveness of leaders in influencing their follower to achieve organisational objectives (Robbins & Judge, 2007). Moreover, concerning innovation and trait theory, contributions made by leadership traits to innovation were almost restricted as few studies specifically outline how traits of the leader relate to the behaviour of innovation in the organisation (Rose, 2014).

The behavioural style approach was developed on the basis of the trait theory to investigate the behaviours of certain leaders (Awan & Zaidi, 2009) as well as identify the relations between those patterns of behaviours with their leadership roles in the organisation (Robbins & Judges, 2007). Due to the inadequate explanation of the leadership concept by the trait theory, the introduction of the behavioural style approach enriched the understanding of leadership effectiveness by realising how behaviours of the leaders influence their followers (Robbins & Judge, 2007; Rose, 2014). Particularly, this theory assumed that the particular behaviour demonstrated by the leader was expected to result in followers' behaviour that were specific or measurable (Davis & Luthans, 1979). Subsequently, the leader reacted to behaviours of followers by repeating, reinforcing or extinguishing his behaviour for another action, which leads to the effectiveness depending on leadership styles (Rose, 2014). The suggested patterns of leaders' behaviour were found to vary among researchers: initiating structure and consideration patterns by Schriesheim, Cogliser and Neider (1995), employee-oriented and production-oriented patterns by Fernandez (2008) and task-oriented, relations-oriented and development-oriented by Fernandez (2008). Unfortunately, these patterns of leaders' behaviours to examine their relations to employee performance or employee satisfaction proved to be inconclusive (Northouse, 2007; Stogdill, 1948). More importantly, an effective leadership style that can be employed in every situation was not suggested. Therefore, it triggered the necessity to develop new leadership theories that are able to justify the relationship between leadership styles and leadership outcomes in the organisation, called situational leadership theories.

Kinicki and Kreitner (2008) argued that the growth of situational leadership theories originated from the inconsistent findings of research conducted on leadership traits and behavioural styles. Moreover, leadership styles, which was later fully addressed by the modern leadership approach named FRLT, was affirmed by Mostovicz, Kakabadse and Kakabadse (2009) to basically develop from the situational leadership theories. Specifically, those theories primarily focused on the important role of a situation in the effectiveness of the leader behavioural style. Therefore, a change in the situation will definitely lead to the requirement of change in the leadership style, which contributes to the effectiveness in organisational management.

In general, according to the argument of situational leadership theories, there exists no best leadership style or approach in every situation (Kinicki & Kreitner, 2008) when leadership effectiveness relies simultaneously on the situation and the ability of the leader to employ the appropriate style that fits the specific situation (Robbins & Judge, 2008). The three componential related approaches in situational leadership theories to be discussed in this sub-section are the contingency model by Fiedler (1964), the path goal theory by House (1971) and the situational leadership theory by Blanchard, Hershey and Johnson (2000).

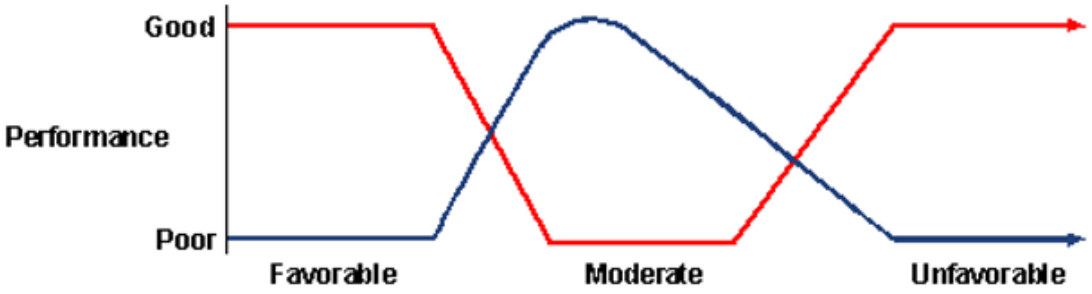
a. Contingency leadership model

The contingency leadership model, which was developed by Fiedler (1971), was one of the situational leadership theories. The underlying assumption of this theory was that the achievement of the leader depends on how the degree of control and influence were displayed by the leader in a particular situation as well as how the leader was motivated by task or relationships (Kinicki & Kreitner, 2008). Specifically, as suggested by Fiedler's contingency model, the leadership style of control was functioned by the ability of a group to perform assigned tasks (Robbins & Judge, 2007). In other words, depending on how the leadership style and the favourableness (or the level of control) of each situation, the leadership style is supposed to match a respectively appropriate situation (Fiedler, 1971). According to Fiedler (1971), the degree of favourableness refers to a particular situation when the leader can demonstrate his potential power or influence over the behaviour of an interacting group, which can also be considered the level of control in this situation. Additionally, the proposition made by this contingency model showed that the right leadership was the important factor that determines the success of an organisation and facilitate the leader in determining leadership outcomes in given situations (Northouse, 2013; Robbins & Judge, 2007).

Robbins and Judge (2007) argued that the identification of leadership style played an important role that influenced the decisions concerning replacing or modifying situations as incompatibilities relating to the leadership style and situation occurrence. In addition, a suitable leadership style that matches the situation will help determining organisational effectiveness (Van Ho, 2013). Therefore, in order to identify the suitability of either task-oriented or relationship-oriented leadership style, the Least Preferred Coworker (LPC) scale was formulated by Fiedler (Northouse, 2013). To be more specific, low LPC scale highly reflects task-oriented leaders while high LPC scale is more likely related to relationship-oriented leaders (Fiedler, 1972). The next step, which is followed by identifying leadership style, is assessing the situation. Accordingly, Fiedler has identified three factors in the contingency approach: leader-member relation (good or poor), task structure (high or low) and leader position power (strong or weak) that describe the situation elements contributing to the leadership effectiveness.

Leadership was hypothesised by Fiedler (1971) to be effective as the leader displays his power that was respected, accepted by a group as well as the task was clearly outlined in the high structured group. Specifically, leader-member relation concerns the relationship between the leader and members while task structure refers to the clarity and ambiguity level of the assigned tasks that determines the respectively high or low level of leader control. Inversely, position power indicates the level of authority exhibited by the leader in the organisation (Rose, 2014). Van Ho (2013) pointed out that these above-mentioned factors influenced the determination of the degree of leader-follower relations. Eventually, the information collected using the LPC evaluation tool to determine an individual orientation together with the assessment of three contingency dimensions and suitable factors shape the achievement of leadership effectiveness. As

clarified in Figure 3.1 below, the contingency leadership model reveals that those leaders who are task-oriented tend to perform more efficiently in such situations with high or low level of control (favourable or unfavourable situations). On the other hand, relationship-oriented leaders appear to excel in a situation with moderate control (moderate favourableness). In general, the success of the contingency model has been proven in empirical studies (Strube & Garcia, 1981) despite the limitations in the application of three contingency dimensions into practical settings.



	Category	1	2	3	4	5	6	7	8
Least Preferred Coworker (LPC)	Leader-Member Relations	Good	Good	Good	Good	Poor	Poor	Poor	Poor
	Task Structure	High	High	Low	Low	High	High	Low	Low
	Leader Position Power	Strong	Weak	Strong	Weak	Strong	Weak	Strong	Weak

Figure 3.1. Fiedler's Contingency Model of Leader-Situation Matches. Adapted from *Leadership and effective management*, by F. E. Fiedler & M.M. Chemers, 1974, Glenview, IL: Scott, Foresman. Copyright 2002 by South-Western.

b. Path-goal theory

The path-goal theory, proposed by House (1971) and developed by House (1996), primarily concerns that effective leaders encourage their subordinates to accomplish set objectives by eliminating such barriers that prevent employees from performing their tasks. In playing the key role, the leader is expected to provide employees with essential resources to work and apply an appropriate leadership style that serves the motivation needs of employees (Northouse, 2013). According to Rose (2014), generally leaders will identify clear goals, determine follower needs, align equivalent rewards with expected goals and support followers by clarifying a path to achieve success.

The effect of leadership on followers was characterised by the model of path-goal theory under four leadership styles that have been categorised as directive, supportive, participative and achievement-oriented

(Northouse, 2013). The leaders are directive as they clarify their expected performance for employees and provide subordinates with clear schedules and guidelines towards task achievement. On the other hand, the supportive leadership style is featured by the way leaders show concern and pay close attention to the followers' needs. The participative leadership style involves welcoming opinions, suggestions and recommendations from subordinates before the leaders make a decision. Finally, achievement-oriented leaders tend to set ambitious goals and high expectations and enable their employees to achieve. Robbins and Judge (2007) argued that based on the path-goal theory of House regarding the flexibility and capability of the leader, different behaviours should be considered so as to respond to each particular situation (Schweitzer, 2014).

Furthermore, whether the leadership style is effective or not is also influenced by available contingency factors in each situation, which are divided into two groups of factors: subordinate characteristics and work environmental factors (Kinicki & Kreitner, 2008). Specifically, subordinate characteristics encompass internal and external locus of control, experience, task ability, clarity needs and achievement needs while work environmental factors include task structure (independent and interdependent task) and work group dynamics (Kinicki & Kreitner, 2008). Within a specific situation, subordinates characteristics tend to have influence on the effectiveness of the leadership style. For instance, employees with internal locus of control or high task ability prefer to work under achievement-oriented or participative-oriented leadership style in which the leaders can empower and stimulate them to perform the tasks. On the other hand, employees with external locus of control or little experience tend to accept directive or supportive leadership because they are in needs of support and direction from their leaders (Northouse, 2007).

Overall, based on the path-goal theory, it can be concluded that the combinational influence of contingency factors and leadership behaviour styles on each particular situation may result in different levels of motivation, satisfaction and performance of subordinate outcomes (See Figure 3.2 below). This model proved to be helpful in describing how leaders motivate their employees to reach organisational goals through the application of four various leadership styles and the consideration of followers characteristics as well as work environment factors. However, Behling and Starke (1973) pointed out drawbacks of this theory in terms of unrealistic depiction of human behaviours and the extremely complicated level in conducting test (Robbins & Judge, 2007).

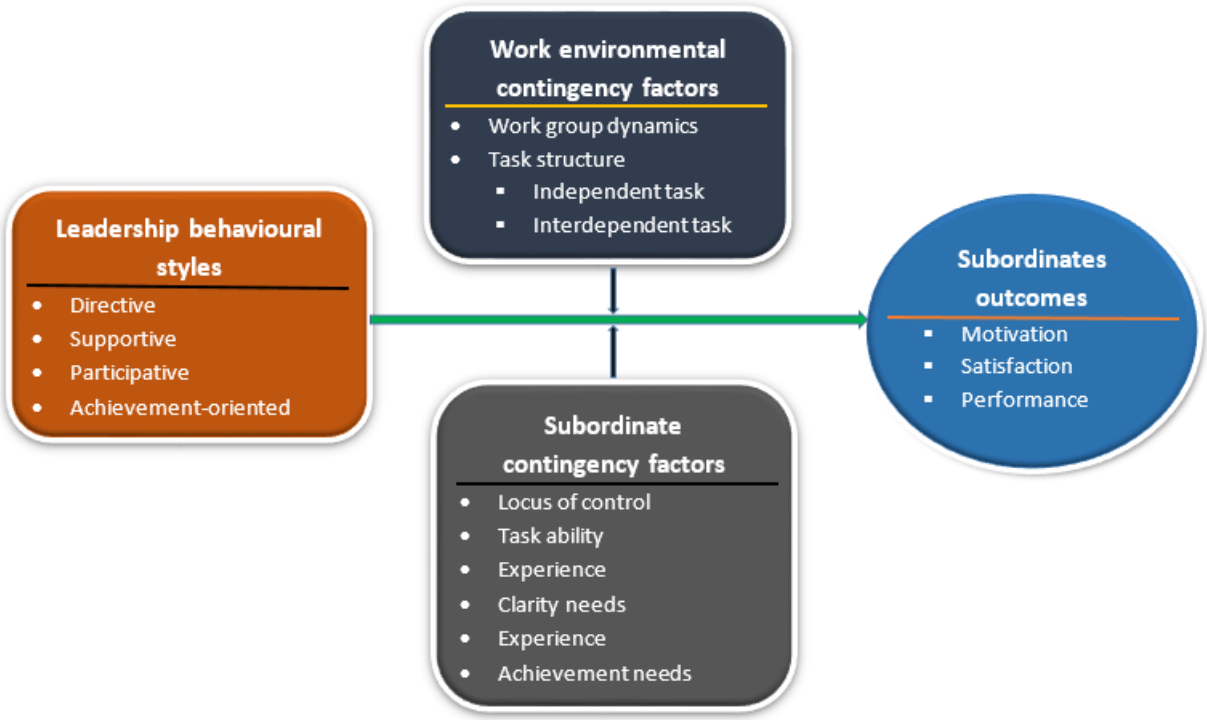


Figure 3.2. House's Path-goal theory. Adapted from "A path goal theory of leader effectiveness", by R. J. House, 1971, *Administrative science quarterly*, *16*(3), 321-339.

c. Situational leadership theory

The situational approach was first proposed by Hersey and Blanchard (1969) and then developed by Blanchard, Hersey and Johnson (2000), which focuses on how analysing leadership involves the study of leaders (leader behaviours and traits) and situation. Particularly, this situational leadership model is based on two leader dimensions: task behaviour and relationship behaviour; and two follower dimensions: the maturity level and the effectiveness of leadership behaviour (Hersey & Blanchard, 1969). While task behaviour refers to the degree to which the leader focuses on getting job done by clarifying procedure, structures and deadlines, relationship behaviour concentrates on how the leader supports and motivates employees. The maturity level of the individual follower in this context concerns the willingness and ability displayed by a follower to perform a specific task using knowledge and skills, confidence and self-respect, which was thought to determine what the most effective leadership style would be (Hung, 2010). Accordingly, the leadership style is matched and adapted by the leader in compatible with the ability and commitment of followers as well as their needs (Johansen, 1990). By combining task behaviour and relationship behaviour, four different leadership styles that leaders could employ to impact their followers have been outlined by Blanchard et al. (2000).

As depicted in Figure 3.3 below, the telling and directing leadership style is a one-way communication when the leader clearly defines objectives and instructs followers what to do. The selling

and coaching style refers to the two-way communication situation in which both the leader and followers discuss what should be done and reach agreements on assigned tasks and roles. On the other hand, the leader who demonstrates participating style tends to be support and work together with employees within a friendly and informal working environment. Finally, by displaying delegating style, the leader involves in giving direction and support to employees at the minimum level where task orientation is limited and followers appear to perform their jobs independently.

Overall, despite the widespread application in training, situational leadership theory received restricted empirical support in terms of scientific aspects (Kinicki & Kreitner, 2008) due to the incomplete and oversimplified model (Rose, 2014). Therefore, its validity and worthiness regarding the clarity in the model and approaches in testing the theory are still under reconsideration.

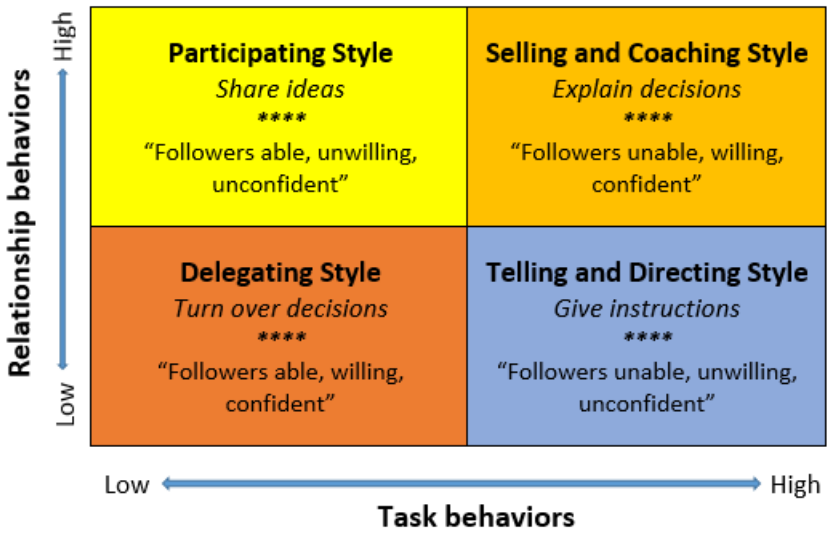


Figure 3.3. Blanchard et al.'s Situational leadership theory. Adapted from *Management of organisational behaviours: Leading human resources* (8th ed.), by H. K. Blanchard, P. J. Hersey, & E. Johnson, 2000, Englewood Cliffs, NJ: Prentice- Hall

3.7.1.2 Full range leadership theory

The FRLT was briefly mentioned in Section 3.2.2 in this study and will be further discussed in this part. The introduction of FRLT marked a critically significant development in leadership theory (Elenkov & Manev, 2005) that aims to improve the limitations of traditional leadership approach in justifying the relationship between effective leadership styles and subordinates outcomes as well as organisational outcomes in specific situation. Moreover, FRLT has been widely considered by many scholars as being one of the contemporarily most-researched theories compared to various leadership models (Antonakis & House, 2014; Gardner et al., 2010).

Initiated by Bass (1985) and continually developed by Avolio and Bass (2004), the current FRLT encompasses three different leadership styles that are transformational leadership, transactional leadership and laissez-faire (passive avoidant) leadership and nine componential factors (Abbas & Riaz, 2012; Deinert, Homan, Boer, Voelpel, & Gutermann, 2015). According to Harms and Credé (2010), the basic assumption of the FRLT is that depending on the characteristics of each particular situation and the task, leadership effectiveness occurs in the organisation if leaders demonstrate different behaviours such as the two centrally highlighted behaviours: transformational and transactional (Schweitzer, 2014).

While transactional leadership was found to effectively address the material needs of followers, transformational leadership was believed to help employees transcend their extrinsic needs as well as ambition towards achieving organisational goals by extraordinary performances (Ensley, Pearce & Hmieleski, 2006). Particularly, transformational leaders tend to display individually considerate behaviour that motivate their followers to share ideas and contribute to the decision making process in the organisation (Khan, Aslam, & Riaz, 2012). Moreover, employees are also inspired, empowered and stimulated by transformational leaders to develop critical thinking and individual solutions to achieve organisational objectives beyond expected performance (Harms & Credé, 2010).

As a multidimensional construct, transformational leadership style in the FRLT comprises four main facets which are idealised influence (idealised influence attributed and idealised influence behaviour), inspirational motivation, intellectual stimulation and individualised consideration (Abbas & Riaz, 2012). Based on the FRLT theory, transformational leadership was perceived to be the most superior leadership styles compared to other two and all of its respective dimensions appear to be active and effective (Bass & Riggo, 2006). More detailed discussions of this transformational leadership styles and its dimension can be found in section 3.3.1 and 3.3.2 above in this study.

On the other hand, transactional leadership style focuses on an exchange process occurring between the leader and subordinates in the way that followers are expected to achieve the expected performance in exchange for rewards or profits (Antonakis et al., 2003). Accordingly, the transactional leader set clear organisational objectives, explicit agreements and monitor the performance of the subordinates as well as controlling outcomes, which are represented by three specific dimensions: contingent reward, management by exception active and management by exception passive (Schweitzer, 2014). According to the FRLT, transactional leadership may not aim to promote shared leadership as well as develop informal leadership. Instead, this leadership style supports the maintaining and improvement of established working procedures and practices in the organisation due to the focus on goal and task achievement (Harms & Credé, 2010; Schweitzer, 2014). Similar to transformational leadership, section 3.4.1 and 3.4.2 in this study provided a thorough description of transactional leadership and its facets.

Lastly, laissez-faire or passive avoidant leadership, one of the three leadership styles in the FRLT, is characterised by the passive and irresponsible involvement of the leader into solving arising problems in the organisation (Antonakis et al., 2003). Hoel et al. (2010) argued that this leadership style is the originality of the rising role conflicts and role ambiguity among subordinates in the organisation, which negatively affects employee performance and the overall organisational development. Moreover, the passive-avoidant leader is not adequately motivated to display his role and authority, skills and knowledge to implement supervisory tasks (Hartog, Muijen, & Koopman, 1997). Although there remains several arguments regarding the fact that the less active leader may empower subordinates to perform more independently in their jobs, laissez-faire leadership is still perceived as the least effective among three leadership styles in the FRLT (Antonakis et al., 2003; Bass, 2000). Figure 3.4 below clarifies the characteristics of three leadership styles in the FRLT.

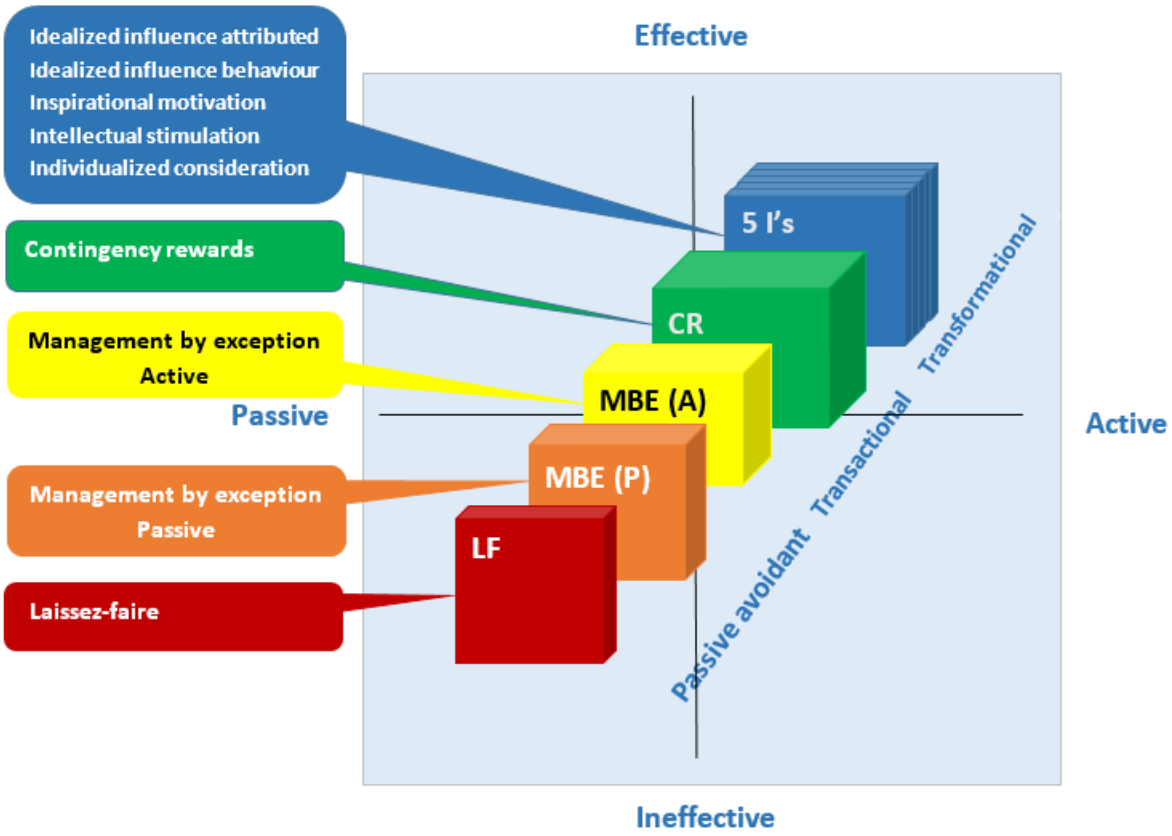


Figure 3.4. Full Range Leadership Theory. Adapted from *MLQ multifactor leadership questionnaire: Manual and sample set (3rd ed.)*, by B. J. Avolio & B. M. Bass, 2004, Redwood City, CA.

3.7.2 Employee creativity and organisational innovation theories

Similar to the discussion on the leadership style theories, in this section, the study will focus on discussing tightly related employee creativity and organisational innovation theories despite the evolution of a number of theories addressing creativity and innovation domains over the years. Particularly, the

componential theory of individual creativity by Amabile (1983) will be analysed, which serves as the basis to look into the model of organisational innovation that is developed by Amabile (1988). Both theories relating to individual creativity and organisational innovation will present the major components that initiate and affect creativity and innovation, the process of creativity and innovation as well as their interaction effects on each other. Simultaneously, the intersection model of creativity and innovation that indicates the level of creativity and innovation based on the overlapping area of the three componential influences will also be addressed.

3.7.2.1 The componential theory of individual creativity

The componential theory of individual creativity, originally proposed by Amabile (1983), was widely recognised by scholars as one of the major creativity theories concerning individuals or employees in the organisation (Anderson et al., 2014). This theory provides a comprehensive model that describes the creative process and differently influential factors encompassing necessary social and psychological components for employees to produce creative performance (Amabile, 2012). The definition of creativity basically serves as a solid foundation for the componential theory of individual creativity to develop. Creativity, particularly, employee creativity is the process of generating and producing novel, appropriate ideas relating to products, processes or solution that are considered useful, valuable and feasible for reaching a particular objective in the required job (Thatcher & Brown, 2010).

According to Amabile (2012), there exists two underlying assumptions of this creativity theory that are the perceived continuum levels of creativity in social life and the levels of creativity in the work of each individual at any point of time that characterises the function of creativity components. Accordingly, three major within-individual and one outside-individual components were suggested by the componential theory of creativity to have influence on individual creativity. Individual creativity was expected to score the highest level when an employee was intrinsically motivated with high expertise and strong creative-thinking skills performing in a working environment featured by high supports for creativity, which required the joint influence of four components (Amabile, 2012; Anderson et al., 2014; Baer, 2012). Amabile (1997) also posited that contributions made by affecting components to individual creativity would represent the fundamental source for organisational innovation.

Specifically, three within-individual influences are domain-relevant skills (expertise), creativity-relevant processes (creative-thinking skills) and task motivation (intrinsic motivation). Domain-relevant skills refer to the expertise, knowledge, intelligence or technical skills that are possessed and employed by the individual in his creative process within a particular working area. Creativity-relevant processes concern the cognitive process and personality traits (self-discipline and ambiguity tolerance) that are contributory to creative and independent thinking as well as risk-taking in producing ideas. On the other hand, task

motivation particularly refers to the intrinsic motivation brought about by the nature of the task due to its interest, involvement, challenge and satisfaction that encourages the individual to take over instead of extrinsic motivators relating to rewards and benefits, competition and evaluation or certain requirements from the specific task.

Noticeably, the intrinsic motivation of creativity, the central principle of the componential theory, clearly mentioned that the individual was intrinsically motivated to perform creatively because of the intrinsic motivation by the job itself rather than other extrinsic motivators (Amabile, 1996; Shalley & Oldham, 1997). However, Amabile (2012) and Baer (2012) posited that extrinsic motivators still play a critically significant role in undermining or fostering intrinsic motivation of the individual creativity. For instance, according to Amabile (1993), if rewards - the specific extrinsic motivator are employed to recognise what individuals have achieved and their competencies as well as stimulate individuals to get involved more deeply into their interested work, then the extrinsic motivator may actually enhance the intrinsic motivation and individual creativity. That is also partly the rationale that explains the appearance of the social environment as an outside-individual component in this theory.

The work or social environment covers extrinsic motivators and other factors within the environment that potentially obstruct or stimulate intrinsic motivation and individual creativity. Amabile and Conti (1999) argued that work environmental factors include positive work challenge, collaborative and diversely skilled team, time availability, organisational motivation and available financial and personnel resources. Additionally, those factors also involve supervisory encouragement of new ideas, top management support of creativity and innovation, supporting management practices and mechanisms, appropriate rewards and recognition for creative work, which were believed to stimulate individual creativity in the organisation. In contrast, destructive feedbacks for creative ideas, political problems, status quo practice, time pressure, low support and risk-avoiding attitude from top management were those environmental factors that were considered as hindrances to individual creativity.

As clarified in Figure 3.5 below regarding the components and the creative process of the theory, the model indicated that the creative process was influenced by all four components. Subsequently, although the social or work environment undoubtedly affected all three within-individual factors, intrinsic motivation appears to be the most directly impacted. Moreover, additional sub-processes were clearly identified in this model including analysing the nature of the problem, gathering necessary information and resources as well as improving essential skills, producing ideas to solve problems, validating ideas against the task criteria, assessing outcomes by communicating those solutions to others.

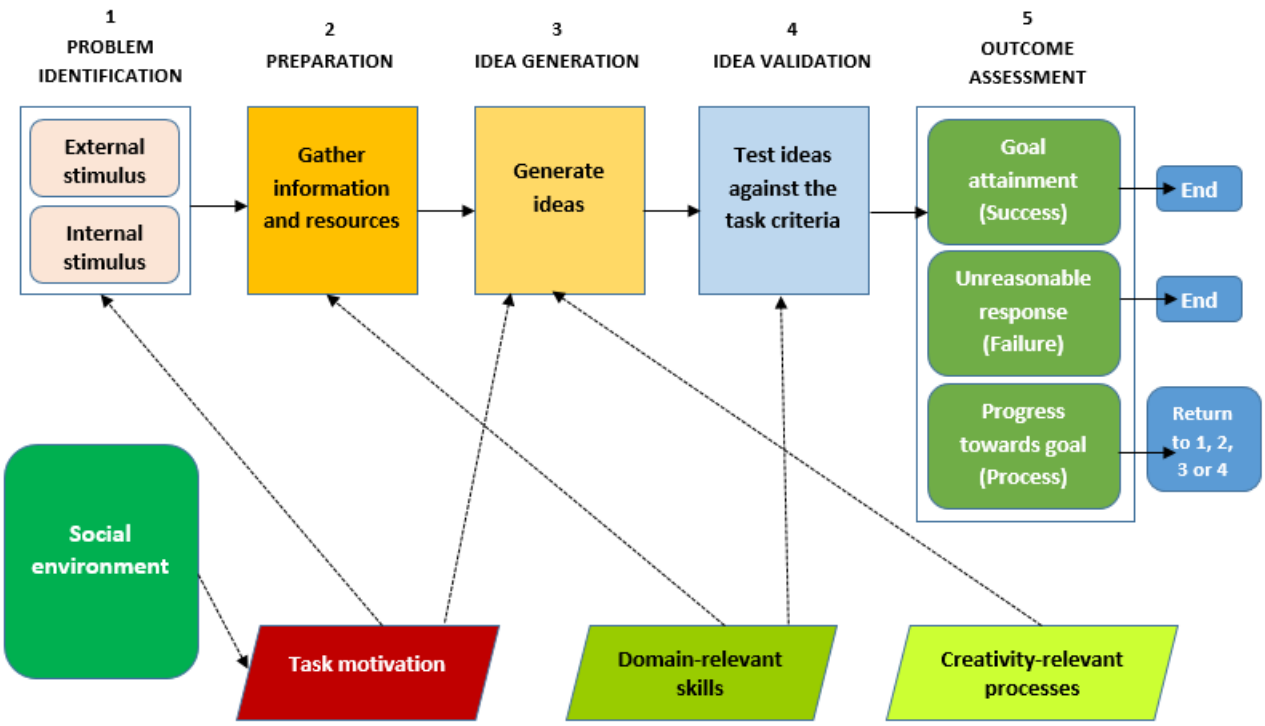


Figure 3.5. The componential theory of individual creativity. Broken lines indicate the influence of particular factors on others. Solid lines indicate the sequence of steps in the process. Only direct and primary influences are depicted. Adapted from *Creativity in Context* by T. M. Amabile, 1996, Boulder, CO: Westview Press. Copyright 1996 by Westview Press.

Overall, the componential theory has proved its usefulness as a foundation for developing other theories and conducting empirical investigations by scholars and creativity researchers (Zhou & Shalley, 2010). Noticeably, the task motivation component or intrinsic motivation was prominently used by several studies as a psychological mechanism that underlies impacts from the social environment on employee creativity, which provides empirical supports for this model (Zhou & Shalley, 2010). Despite the unpopular application of other components of this theory into empirical research, the componential theory was widely supported by researchers in including three intra-individual and the social environmental influences to describe their effects on individual creativity.

3.7.2.2 The componential model of organisational innovation

As innovation is the implementation of creative and useful ideas produced by individuals working in the organisation, understanding how individual creativity occurs is regarded as a critically important step in developing organisational innovation (Anderson et al., 2014). After considerable evolutions, the extension of the componential theory of creativity was introduced by Amabile (1988) that includes both individual creativity and organisational innovation process. According to Amabile (1988), a general

organisational innovation model was suggested to possess the following essential features: the crucial factor of the individual creativity process, the incorporation of all influences from organisational aspects, the major stages of the organisational innovation process and the description of organisational influences on individual creativity.

Accordingly, as can be seen from Figure 3.6 below, the model of organisational innovation encompasses the fundamental framework of innovation process (in the upper part of the model), the presentation of three influential components on the process (in the centre part of the model), following by the depiction of direct and primary influences (arrows). Particularly, the three major components of organisational innovation: *resource in the task domain*, *skills in innovation management and motivation to innovate* covered almost organisational facets that potentially affected the success of organisational innovation. Those have been pointed out in previous research on investigating the effects of specific organisational factors that influence individual creativity and organisational innovation.

In this model, the category of influential components is based on its impact on a variety of levels and functional areas in the organisation instead of functional organisational units compared to other innovation process models. *Resource in the task domain* refers to all available sources coming from various divisions and departments in the organisation that are expected to support innovation. Particularly, those are personnel resources (competent employees with relevant knowledge and experience in the task domain), financial resources (available and sufficient funds), useful data and materials as well as appropriate training policies. On the other hand, *Skills in innovation management* relates to management skills and styles at diversified levels including individual departments, projects and organisation. Those skills are thought to facilitate individual creativity and other aspects of the organisational innovation process. Particularly, such aspects relate to feasible organisational goal-setting, participative and collaborative management, open communicating systems, frequently constructive and supportive feedback on employee efforts, suitable reward and recognition of employee creative performance, improvements on the shortcomings of strictly formal, hierarchical and complex management structures. Finally, *Motivation to innovate* concerns the organisational orientation towards innovation, a thorough corporate vision and innovative objectives from top management. It is worth recognising that a true value, a sense of pride and a risk-oriented trend put on overall innovation are the most significant factors of motivation to innovate.

Regarding the fundamental framework of innovation process, Amabile (1988) presented five basic steps that are setting the mission statement, setting the project goals, producing the ideas, checking and implementing ideas and assessing innovation outcomes. In the first stage, setting the mission statement covers the overall direction and demonstrating general objectives that suits the direction for the organisation, which is influenced by motivation to innovate component. Subsequently, the management is expected to clarify the project goals and the organisation is facilitated to stimulate the idea generating process. The

impact of external environment on this stage is also taken into account to identify the feasibilities of different approaches. The third stage focuses on the process when individuals or project team members produce the creative ideas, which is believed to tightly correlate with the process of individual creativity including domain-relevant skills, creativity-relevant processes and task motivation. The subsequent step concerns the implementation of creative ideas, which is impacted by the joint effects of skills in innovation management and resources in the task domain components. Finally, the last step refers to the assessment of organisational innovation outcomes.

The inclusion of basically the same model of componential theory of creativity proved the absolute impact of individual creativity in the whole organisational innovation process. Particularly, the major influence of individual creativity can be observed on the idea producing step in the innovation process, which also affects the final innovation outcome in the organisation. The rationales for replicating individual creativity in this organisational innovation model are to underline the significant role of individual creativity and clarify the influential factors from the organisational environment on its component.

Overall, the purpose of this model is to describe how organisations assemble and utilise available resources in producing novel and valuable products, services or processes and internal administrative systems. Indisputably, the three influential components also contribute to organisational innovation and motivation to innovate component appears to play a major controlling role in initiating the innovation process compared to resources to the task domain and skills in innovation management. Moreover, as the ultimate organisational innovation was supposed to depend on three organisational components and the level of individual creativity as above-mentioned, organisational innovation may potentially apply to any organisational innovation levels.

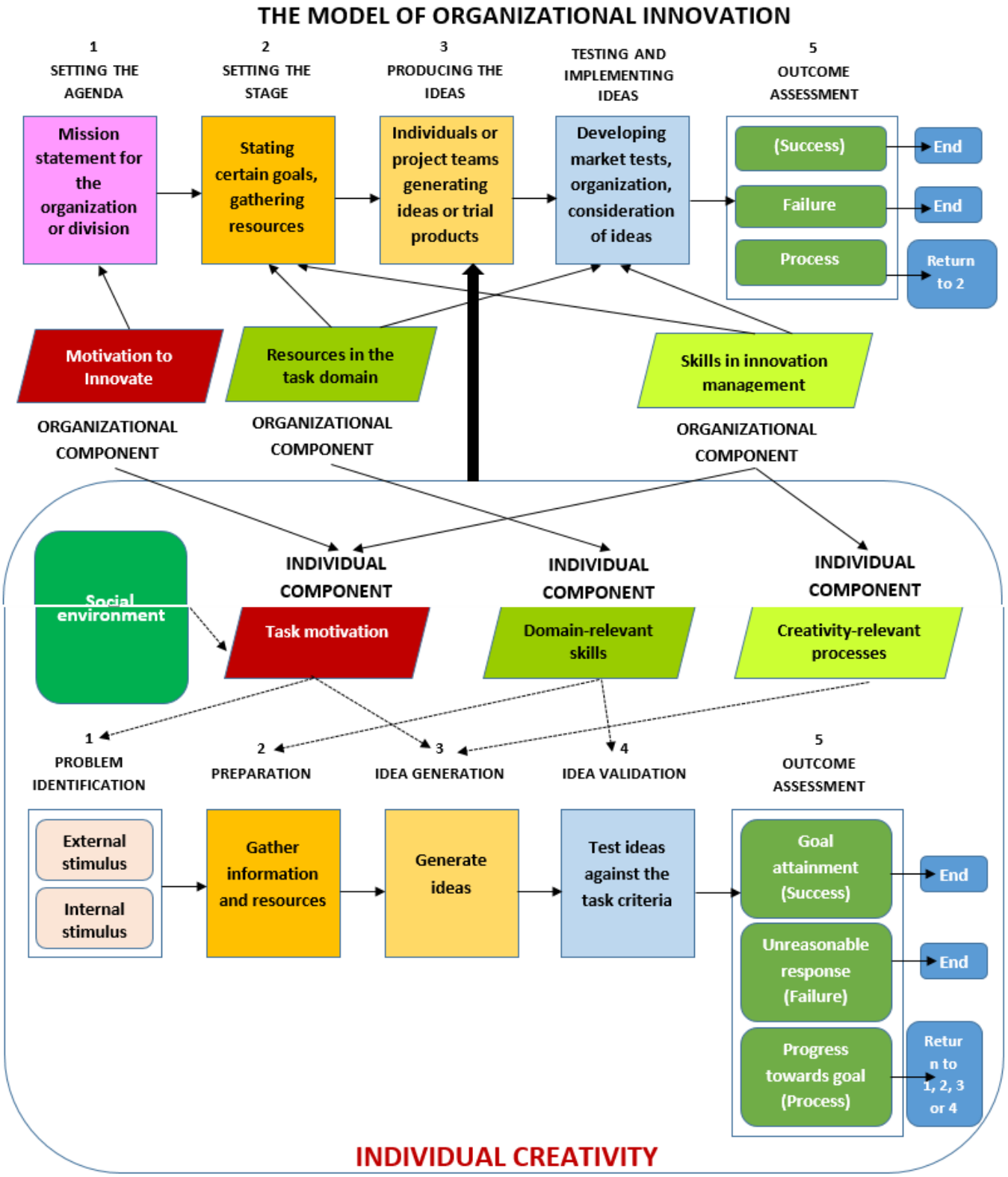


Figure 3.6. The componential model of organisational innovation. Arrows indicate sequences of steps in the process (top of figures) and the influence of particular factors on others. Only direct and primary influences are depicted here. Adapted from *A model of creativity and innovation in organisations* by T. M. Amabile, 1988 in B. M. Staw & L. L. Cummings (Eds.), *Research in organisational behaviour, 10*, 123-167, Greenwich, CT: JAI Press. Copyright 1988 by JAI Press.

3.7.2.3 The intersection model of creativity and innovation

As suggested by Amabile (1988), individual creativity and organisational innovation process are explicitly interdependent. By discussing the model of organisational innovation, it can be inferred that its three investigated components bear a strong resemblance to those of earlier-discussed individual creativity. Accordingly, the creativity intersection model reveals the overlapped area among resources, techniques and motivation, which represents the highest probability area for individual creativity and organisational innovation (Figure 3.7).

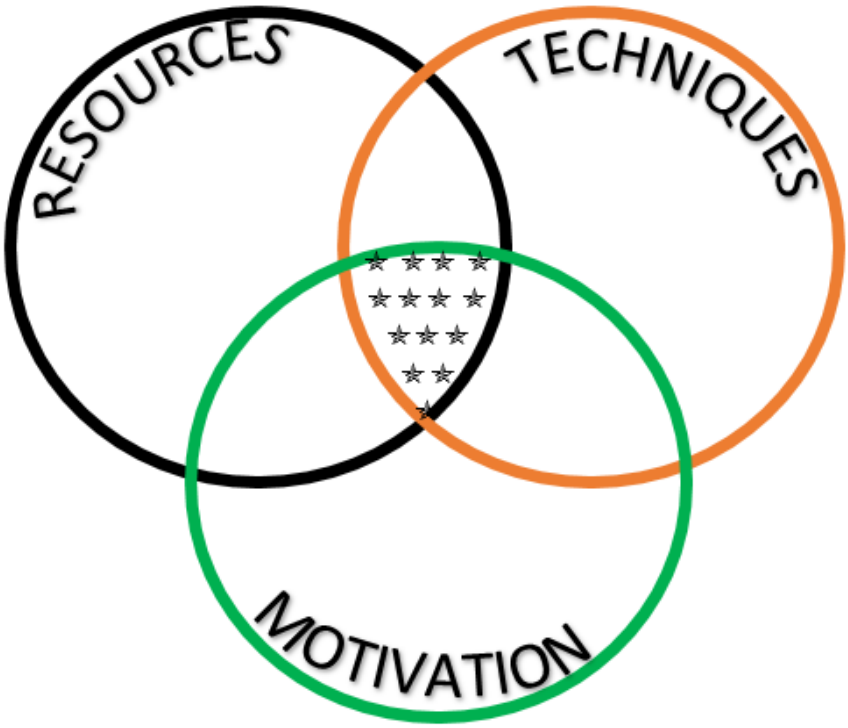


Figure 3.7. The intersection model of creativity and innovation. Adapted from *A model of creativity and innovation in organizations* by T. M. Amabile, 1988 in B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behaviour, 10,* 123-167, Greenwich, CT: JAI Press.

Specifically, in terms of resources, both the individual and organisational level indicate that resources are obviously necessary for creativity and innovation within a particular field. Resources for individual creativity refers to domain-relevant skills component that include acquired knowledge, intelligence and technical competencies in the domain. On the other hand, resources in the task domain for organisational innovation involve people, financial funds, materials, information and systems that are available to support the work in the determined task domain.

With respect to techniques, the crucial techniques for the individual creativity are presented in creativity-relevant skills including cognitive, working and approaching styles that are potentially conducive to new and useful ideas. On the other hand, the major techniques for organisational innovation are skills in

innovation management that concerns management skills at a diversified level in the organisation that incubate the development and implementation of creative ideas. Generally, techniques are considered essential skills for creative work operating on resources by the individual or innovative results for the organisation (Amabile, 1988).

Motivation is regarded as the most significant facet among three components for individual creativity and organisational innovation. For the individual creativity, while domain-relevant skills and creativity-relevant skills are determinants of individual capability, the presence or absence of intrinsic motivation will definitely affect what that employee really does. Similarly, the core component that initiates organisational innovation is the motivation to innovate in the organisation. Accordingly, that is represented by the risk-oriented vision and clear innovative objectives from the top management level.

Overall, it can be concluded that the higher level each of the three components is displayed, the greater the overall level of individual creativity or organisational innovation is. Moreover, as observed in Figure 3.7 above, the three component types for individual creativity and organisational innovation consists circles that are likely to overlap to a greater or lesser extent. Therefore, the greater the overlap areas of resources, techniques and motivation are, the higher the probability of individual creativity and organisational innovation.

3.8 Relationship between leadership styles, employee creativity and organisational innovation

Leadership plays an important role in the improvement of employee performance and the overall growth of the organisation (Wart, 2003). Effective leadership with clear direction and vision was thought to bring employees to higher level of satisfaction and personal development. Particularly, leadership has been considered as a key factor by a number of empirical research that not only promotes employee creativity (Qu, Janssen & Shi, 2015; Scott & Bruce, 1994; Tierney, Farmer & Graen, 1999; Tung & Yu, 2016; Yoshida et al., 2014), but also influences organisational innovation (Cummings & O 'Connell, 1978; Denti & Hemlin, 2012; Zacher & Rosing, 2015).

This section of the study focuses on providing a critical review of the empirical relationship that potentially exists among leadership styles, employee creativity and organisational innovation. It also aims to clarify conceptual arguments on studies of leadership styles, employee creativity and organisational innovation. The relationships under investigation between leadership styles and employee creativity, leadership styles and organisational innovation, employee creativity and organisational innovation, leadership styles, employee creativity and organisational innovation are developed based on theoretical constructs in sub-sections from 3.1 to 3.8 in this study.

Research showed arguable findings on the thorough understanding of the relationships among leadership styles, employee creativity and organisational innovation, but still remain controversial in

organisational innovation literature. Therefore, by verifying the relationship between those variables, this section aims to contribute to the literature by determining the importance of each leadership style component (transformational and transactional leadership) on dimensions of organisational innovation. Moreover, this part of the study also attempts to provide a clearer understanding of the relationship between leadership styles and organisational innovation by examining employee creativity as a mediating variable. Besides, this section also further develops empirical evidences on utilising leadership styles to enhance employee creativity as a key strategy to foster organisational innovation. Accordingly, the overall influence of leadership styles on organisational innovation is expected to strengthen through its role in enhancing employee creativity in the organisation. A theoretical framework of this study is formulated and research hypotheses are developed based on well-presented arguments in the literature review section. Then, it proposes the basis for testing hypotheses in order to answer research questions and establishes the solid foundation for further analysis in the following sections.

3.8.1 Relationship between leadership styles and organisational innovation

Many studies have investigated a variety of factors including individual and contextual factors that affect workforce innovation and widely agreeable ones are diversity, leadership, motivation, organisational structure, culture and organisational climate (Janssen, Van & West, 2004; Ofori-Dankwa, & Julian, 2002; Paulus, 2000). Specifically, leadership, as a contextual factor (Hammond et al., 2011), has been considered a key driver that fosters innovation in the organisation (Aragon-Correa et al., 2007; Gumusluoglu & Illsev, 2009; Sharifiad & Ataei, 2012; Wang & Rode, 2010) by using their skills, action and motivation to help organisations stay innovative. Hogan and Kaiser (2005) and Tung and Yu (2016) added that effective leaders, with specific goals setting, tend to initiate changes and implement changes. That will subsequently help their organisations innovate effectively by creating a dynamic working environment where changes and new ideas are welcomed (Aragon-Correa et al., 2007; Oke, Munshi & Walumbwa, 2009).

As leadership style has been a significant factor to innovation, recent studies have paid close attention to examine the effects of leadership on organisational innovation (Ebrahimi, Moosavi, & Chirani, 2016; İşcan et al., 2014; Prasad & Junni, 2016; Yoshida et al., 2014). Accordingly, positive as well as negative effects of leadership styles on organisational innovation have been revealed by different empirical research (Jung, Chow & Wu, 2003; Rosing, Frese & Bausch, 2011; Shallen & Gilson, 2004). In order to examine further the relationship between leadership styles and organisational innovation, the following sub-sections (3.8.1.1 and 3.8.1.2) in this study will focus on analysing separate relationship between transformational leadership and organisational innovation as well as transactional leadership and organisational innovation.

3.8.1.1 The empirical relationship between transformational leadership and organisational innovation

Limited research have been done on the relationship between transformational leadership and innovation at the organisational level although the importance of leadership on organisational innovation has been widely recognised by prior researchers (Makri & Skandura, 2010; Oke at al., 2009). In addition, Imran and Anis-ul-Haque (2011) argued that previous studies on the leadership and innovation field were separately conducted, which insufficiently benefited each other. However, increasing attention by researchers and scholars on investigating the influence of transformational leadership on organisational innovation has frequently been acknowledged (Baskarada, Watson & Cromarty, 2016; Di Benedetto, 2013; Elrehail et al., 2018; Fritz & Ibrahim, 2010; Kassotaki, 2019; Luo et al., 2018; Nusair, Ababneh, & Kyung Bae, 2012; Xie et al., 2018). Owing to the important role of the leader in an organisation as a predictor of changes in business environment and an initiator of innovative measures, organisational effectiveness and higher level of organisational innovation are achieved (Elenkov, Judge, & Wright, 2005).

Transformational leadership refers to the situation when the leader motivates their followers to perform beyond expectation to achieve organisational goals, satisfy their own needs, supports and promote innovation to contribute to the long-term growth of the organisation (Sarros et al., 2008). Therefore, transformational leadership has been proven to be more effective than any other leadership styles in terms of fostering organisational innovation (Bass & Riggio, 2006; Elrehail et al., 2018; Sarros, Cooper & Santora, 2008; Nijstad, Berger-Selman & De Dreu, 2014; Xie et al., 2018). A variety of outcomes on relationship between transformational leadership and organisational innovation studied on different manufacturing and service industries have been proposed. Mumford et al. (2002) in their study posited that transformational leadership was a key predictor of organisational innovation. Findings from a study conducted by Jung et al. (2003) on 32 Taiwanese firms in the electronics and telecommunications industry further revealed that there was a positive relationship between transformational leadership and organisational innovation, which were measured by the number of patents and research and development expenditures spent over a period of three years. Similarly, Aragón-Correa et al. (2007) found that transformational leadership, organisational learning, collective process and individual feature positively influenced organisational innovation, based on a survey of 408 large Spainish companies operating in four sectors namely farming, manufacturing, construction, and services.

Additionally, a survey of 300 innovative SMEs in Austria by Matzler et al. (2008) demonstrated a direct and positive effect of transformational leadership on innovation, growth and profitability. Simultaneously, Jung, Wu and Chow (2003) conducted a study on 50 electronics and telecommunication firms in Taiwan and reached the conclusion that CEO's transformational leadership and organisational innovation are positively interrelated. Another research on 163 research and development employees and

43 managers from micro and small sized entrepreneurial software development enterprises in Turkey, Gumusluoğlu and Ilsev (2009) also indicated that the organisational contextual factor - transformational leadership had a positive influence on the organisational innovation.

Besides, there existed a positive relationship between transformational leadership and operational capabilities as well as the development of innovation (Schweitzer, 2014). In Iran, a research on 219 managers from 63 different enterprises supported the positive link between transformational leadership and organisational innovation (Mokhber et al., 2015). Garcıa-Morales et al. (2008) and Oke et al. (2009) also produced the same results on confirming the positive impact of transformational leadership on organisational innovation and the supportive role of leader in innovative process.

Transformational leadership has been conceptually linked to the innovative process as transformational leaders initiate changes in business practices, processes and motivate employees to adapt to new trends in the organisation (Bass, 1985; Nijstad et al., 2014; Vaccaro et al., 2012). Moreover, transformational leaders with interactive vision are considered by theoretical and empirical research as efficient in supporting followers to satisfy their needs and desires (Aragon-Correa et al., 2007; Jung et al., 2003; Redmond et al., 1993). Researchers who support transformational leadership believe that through their behaviour, transformational leaders inculcate personal commitment and professional commitment into their employees toward higher levels of self-esteem and self-actualisation needs (Bryant, 2003; Elrehail et al., 2018; Gardner & Avolio, 1998). Consequently, that intrinsically motivates their employees, fosters employee creativity and organisational innovation (Mumford et al., 2002; Oldham & Cummings, 1996).

Transformational leaders influence organisational innovation using their specific characteristics. By intellectual stimulation, the leader points out changes in the business environment and customer requirements, challenges their employees' capacity to question assumptions and think about novel approaches in solving and improving existing problems (Mumford et al., 2002; Oldham & Cummings, 1996; Xie et al., 2018). Specifically, employees may be motivated to create new knowledge and technology relating to business practices such as management rules, structures and systems, organisational methods (Bass, 1985, Jung et al., 2003), which contributes to organisational innovation (Mokhber et al., 2015).

By individualised consideration, transformational leaders establish a one-to-one relationship with subordinates, considering their own needs and aligning their individual interests with the organisation vision (Bass et al., 2003; Shamir et al., 1993; Waldman & Bass, 1991). Additionally, transformational leaders also play the role of mentor, trainer and provider of opportunities for their employees to learn (Bass et al., 2003; Shamir et al., 1993; Waldman & Bass, 1991). As a result, these leadership behaviours help enhance employee capabilities to attain organisational goals and creatively implement new and useful business practices and workplace organisation (Gardner & Avolio, 1998; Sosik, Kahai & Avolio, 1998).

Transformational leaders use inspirational motivation to articulate the future vision, provide their followers challenges and support employees (Coad & Berry, 1998; Jung et al., 1995; Kassotaki, 2019; Nusair et al., 2012; Sarros & Santora, 2001). By demonstrating organisational vision, clear communication, challenges and motivation, they help employees to achieve organisational goals and explain how their works are meaningful to them (Elrehail et al., 2018; Xie et al., 2018; Zacher, Robinson & Rosing, 2016). Accordingly, by stressing the significance of organisational innovation, transformational leaders encourage their employees to be more creative and come up with new ideas as well as solutions regarding business practices, organisational methods and workplace organisation.

Using idealised influence, transformational leaders are supposed to be loyal to basic and significant values and acted as a role model with creative behaviours to promote organisational innovation (Howell & Higgins, 1990). The idealised influence of transformational leadership will help the leader capture the development and initiation of new organisational practices and structures (Prasad & Junni, 2016). According to a study by Mokhber et al. (2015), inspirational motivation and intellectual stimulation, two out of the four dimensions of transformational leadership, were found to be positively related to organisational innovation. Elkins and Keller (2003) added that inspirational motivation and intellectual stimulation were critically essential for organisational innovation.

This study will broaden previous research by examining a model that investigates the relationships between the four dimensions of transformational leadership and components of organisational innovation in Vietnamese public coffee corporations. In order to validate whether transformational leadership influences organisational innovation, the following hypotheses are purposefully tested.

H1a: Transformational leadership positively influences the dimensions of organisational innovation.

$H1a_1$: Idealised influence positively influences the dimensions of organisational innovation.

$H1a_2$: Inspirational motivation positively influences the dimensions of organisational innovation.

$H1a_3$: Intellectual stimulation positively influences the dimensions of organisational innovation.

$H1a_4$: Individualised consideration positively influences the dimensions of organisational innovation.

3.8.1.2 The empirical relationship between transactional leadership and organisational innovation

Bass et al. (2003) argued that transactional leadership appeared to be most effective style of organisational leadership prior to the appearance of transformational leadership theory in the leadership literature (Bass, 1985; Burns, 1978). The effectiveness of transactional leadership was reflected by the way the leader transacts with their followers through a clear exchange relationship of achieving organisational objectives for rewarding and benefits (Bass et al., 2003). Moreover, transactional leaders also take prompt corrective actions in the case of failures (Bass et al., 2003).

Transactional leadership, together with transformational leadership, has been well recognised as the two leadership styles that impacted organisational outcomes, particularly organisational innovation (Cheung & Wong, 2011; Gong et al., 2009; Gumusluoglu & Ilsev, 2009; Jung, 2001; Kassotaki, 2019; Pieterse et al., 2010; Si & Wei, 2012; Tung, 2016; Xie et al., 2018). The relationship between transactional leadership and innovation has been investigated by several research (Pieters et al., 2010). Morever, arguments on whether transactional leadership positively or negatively influences organisational innovation have been recorded in the literature by leadership researchers (Pieterse et al., 2010).

There exists two opposite points of view on the relationship between transactional leadership and organisational innovation. From the side of opposers, studies by Howell and Higgins (1990) and Church and Waclawski (1998) showed that transformational leadership, compared to transactional leadership, emphasises more on organisational innovation. In addition, transactional leadership was predicted to negatively influence innovative behaviour and organisational performance (Jansen et al., 2009; Kang, Solomon & Choi, 2015; Kassotaki, 2019; Wei, Yuan, & Di, 2010; Xie et al., 2018). The rationale for this finding was explained by the authors that the transactional leader focuses on following well established rules and standards in the organisation, business practices, organisational methods as well as external relations. Moreover, the transactional leader prefers a stable and predictable working environment, thereby expects their employees to achieve the required performance, and assigns tasks which was similar to what they have done (Elrehail et al., 2018; Kang et al., 2015; Wei et al., 2010; Xie et al., 2018).

Similar findings were suggested by Moss and Ritossa (2007) when the authors conducted their study on 263 employees working in 38 Australian government organisations specialising in health and welfare sectors. Accordingly, results indicated that transactional leadership had no relationship with innovation in the organisation. Simultaneously, an empirical study by Boerner, Eisenbeiss, and Griesser (2007) surveying 91 leaders working in various functional department in 91 Germany enterprises of diversified businesses ranging from engineering, insurance, telecommunication to banks. Findings of that study revealed that no association between transactional leadership and innovation as well as follower performance was found. Moreover, another field research proceeded on 230 employees working in a government agency in the Netherlands pointed out that transactional leadership negatively associated with organisational innovation in large and mature organisations (Pieterse et al., 2010).

On the other hand, from the side of supporter, one study conducted by Vera and Crossan (2004) have revealed an indirect relationship between transactional leadership and organisational innovation. Specifically, through organisational learning, the transactional leader provides their subordinates with realistic goals, clear expectation and rewards, which positively relates to the organisational innovation (Jansen et al., 2009; Xie et al., 2018). Furthermore, data collected from a survey of 297 European firms showed that transactional leadership promoted organisational innovation. However, a lower effect was

reported compared to other leadership styles because the transactional leader puts more emphasis on rules and standards (Elenkov & Manev, 2005). In another research on 369 strategic business alliances, Schweitzer (2014) found that transactional leadership proved to contribute to developing the organisational innovation capabilities in addition to associating with operational capabilities development. Despite equivocal findings for the relationship between transactional leadership and organisational innovation, this study selects to adopt the proposition of the negative linkage between transactional leadership and organisational innovation based on the above-mentioned evidences.

Prasad and Junnie (2016) indicated that dimensions of transactional leadership was supposed to enhance organisational innovation. Yukl (2002) once stated that organisational innovation was influenced by contingent reward and management by exception through inducing compliance. That was expressed by the situation that subordinates meet the leader's expectations in exchange for rewards and avoid punishment (Bass et al., 2003). Kickul and Gundry (2001) also posited that contingent reward and management by exception depend on open communication, which was considered the significant motive for organisational innovation.

By using contingent reward, transactional leaders build up explicit goals and clarify their expectation and rewards regarding organisational innovation (Brymer & Gray, 2006; Bycio, Hackett, & Allen, 1995; Nguni et al., 2006; Waldman et al., 1990; Yulk, 2012). Then, leaders help subordinates commit themselves to accomplish their assigned tasks relating to innovative activities in the organisation concerning business practices, workplace organisation and external relations, which refers to the concentration on task completion (Eisenberger et al., 1998). By management by exception active, transactional leaders regularly and closely monitor what organisational members perform to ascertain that organisational objectives are achieved (Pearce and Sim, 2002). These actions by transactional leaders help ensure immediate rectifications of problems relating to innovative activities occurring in business practices, relationships with external parties or workplace organisation that appear to depart from expected performance and organisational goals. Bass and Avolio (1993) also clarified that regular supervision and feedback will help the transactional leader identify organisational perspectives that need to be addressed and innovated. On the other hand, the dimension regarding management by exception passive will not be investigated in this study because it was explicitly found to have no correlation with organisational innovation (Prasad & Junni, 2016).

In response to this, the study aims to determine whether each dimension of transactional leadership is indeed uniquely associated with dimensions of organisational innovation. Therefore, it is argued that there might exist a correlation between transactional leadership and organisational innovation. Accordingly,

H1b: Transactional leadership negatively influences the dimensions of organisational innovation.

$H1b_1$: Contingent reward negatively influences the dimensions of organisational innovation.

$H1b_2$: Management by exception active negatively influences the dimensions of organisational innovation.

3.8.2 Relationship between leadership styles and employee creativity

Predictors including organisational culture, organisational structure, organisational climate and leadership styles have been explored by different researchers to foster creativity, especially employee creativity in the working environment (Andriopoulos, 2001; Cheung & Wong, 2011). Moreover, personality traits, psychological empowerment and intrinsic motivation have also been affirmed by Baer et al. (2010), George and Zhou (2001) and Zhang and Bartol (2010) as valuable sources of creativity to help employees generate and implement novel ideas. Therefore, Jung, Chow and Wu (2003) summarised that a diversified set of factors ranging from individual, group to organisational level all impact creativity, particularly employee creativity.

Because of intense competitions among enterprises in the global business environment, fast-changing customer demands and work process, Dess and Picken (2000), Jung (2001) and Hermann and Felfe (2014) ascertained that leadership style, one of the contextual factors (Gupta et al., 2012; Shalley & Gilson, 2004; Wang et al., 2013), is an increasingly important determinant of employee creativity. Employee creativity in this context is not only limited to manufacturing or research and development sector but also exhibits in service industry. Thus, it proves that employee creativity is important for all types of businesses and positions (Cheung & Wong, 2011).

The relationship between specific leadership styles and employee creativity in the organisation has been well-researched by organisational researchers, which was evidenced by a number of research findings (Munford et al., 2002). Specifically, researchers posited that leadership styles may enhance the level of employee creativity in the organisation (George & Zhou, 2007; To et al., 2012; Williams, & Foti, 2011). Jung et al. (2003) claimed that the impact of leadership on employee creativity may be shown in a direct and indirect relationship. A direct effect of leadership on employee creativity occurs when the leader focuses on the intrinsic motivation of the followers as well as their needs and desires, which influences employee creativity (Jung et al., 2003). On the other hand, an indirect effect is reflected by the leader's support for employee creativity by creating a dynamic working environment that stimulates employees to come up with new ideas, accept risk and try out new methods (Jung et al., 2003).

The componential theory of creativity by Amabile (1997) was much helpful in describing employee perception of the working environment for creativity. Particularly, the active role of the leader was reflected by setting suitable organisational objectives, supporting and encouraging employees to brainstorm new ideas, providing constructive feedbacks as well as recognising their contributions to the organisation. Leadership styles, specifically, transformational and transactional leadership were studied as one of the

most influential factors on employee creativity in the organisation (Deichmann & Stann, 2015; Yukl, 1999). Accordingly, the following two sub-sections of this study will focus on examining the associations between transformational, transactional leadership and employee creativity in the organisation.

3.8.2.1 The empirical relationship between transformational leadership and employee creativity

Transformational leadership has been investigated by numerous scholars and various meta-analytic reviews to be effective in enhancing performance expectations of followers and transforming their individual self-concepts and values to a higher level of aspirations and needs (Kearney & Gebert, 2009). Particularly, transformational leadership was found to be tightly associated with different organisational outcomes such as employee satisfaction and performance, organisational citizenship behaviour, employee turnover, organisational commitment and followers' creativity (Cheung & Wong, 2011). Employee creativity, out of individual outcomes, proved to have strong impact on the competitive force and organisational innovation of all enterprises (Mittal & Dhar, 2015).

Prior studies, from both theoretical and practical perspective, have strongly supported the expectation that transformational leadership would enhance employee creativity (Ebrahimi, Moosavi, & Chirani, 2016; Jaussie & Dionne, 2003; Jung, Chow, & Wu, 2003; Kassotaki, 2019). García-Morales et al. (2012) argued that transformational leaders focus on creating emotional links with their employees and inspiring higher values, which nourishes employee creativity (Bushra, Usman, & Naveed, 2011; Chi & Pan, 2012; Wang & Cheng, 2010). Moreover, employees tend to produce creative ideas when they work under the supervision of the leader who displays supportive and non-controlling behaviour (Tierney et al., 1999) as well as builds up a supportive climate for creativity (Henker et al., 2015).

Jung and Avolio (2000) affirmed that leaders who demonstrate inspirational motivation, intellectual stimulation, idealised influence and individualised consideration are capable of promoting personal and organisational changes. Moreover, they challenge followers to try out new approaches (Kark & Van Dijk, 2007; Podsakoff et al., 1990; Shin and Zhou, 2003; Zacher et al., 2016), realigning followers' norms and values and helping them achieve beyond expected performance with clear and ambitious vision. Those characteristics of transformational leaders considerably contribute to motivating employees intrinsically, which acts as a valuable source for enhancing their creativity (Mittal & Dhar, 2015).

Findings of a variety of studies have supported the significant and direct relationship between transformational leadership and employee creativity (Hammond et al., 2011; Henker, Sonnentag, & Unger, 2015; Kassotaki, 2019; Pieterse et al., 2010; Rosing, Frese & Bausch, 2011; Wang & Rode, 2010; Zacher et al., 2016). For example, one study by Shin and Zhou (2003) surveyed 290 employees and their supervisors working in 46 different Korean firms in diversified industries such as cable, software, electronics and information technology. Findings of that study revealed that transformational leadership positively related to employee creativity (Shin & Zhou, 2003). Similarly, a survey of 98 employees and

managers working in a Chinese high-tech ceramics manufacturing firm conducted by Wu, McMullen, Neubert, and Yi (2008) reported that employee creativity was positively associated with transformational leadership.

In addition, Gong et al. (2009) pointed out that there was a positive relationship between employee learning orientation, transformational leadership and employee creativity after doing a survey of 277 insurance agents working in a Taiwanese insurance company. Another research conducted on a sample of 973 employees working in 12 diverse Chinese enterprises showed that transformational leadership related positively with employee creativity (Zhang et al., 2011). Besides, results of a study on 241 undergraduate students studying in a German university supported the positive relationship between transformational leadership and employee creativity (Hermann & Felfe, 2013).

Four dimensions of transformational leadership were suggested by researchers to have relationships with employee creativity (Cheung & Wong, 2011; Owens & Hekman, 2016; Kassotaki, 2019). Intellectual stimulation has been regarded as a key driver of employee creativity (Mumford et al., 2002). By providing intellectual stimulation, the transformational leader challenges and encourages their employees to question assumptions, approach existing problems from a creative perspective and employ critical thinking skills and problem-solving skills to figure out how solve problem effectively (Avolio et al., 1990; Bass, 1990; Reiter-Palmon & Illies, 2004). In such a situation, employees will have the feeling of confidence in doing their work without the fear of failures or threats from external work environment. Therefore, employees appear to be more interested in solving problems creatively as well as brainstorming new and useful ideas in their work, which leads to higher level of employee creativity (Chen, Li & Tang, 2009).

Providing individualised consideration, transformational leaders focus on recognising, understanding and addressing individually developmental needs of the followers (Zhang et al., 2011). Additionally, they assign them with tasks to complete and appreciate what employees have achieved, which encourages their learning experience (Hater & Bass, 1988; Zhang et al., 2011). Moreover, employees are allowed to fulfil their own satisfaction for developmental needs and provided with learning opportunities by the transformational leaders. Thus, employees are expected to contribute more time to work, which stimulates employees to accomplish higher level of creativity (Herrmann & Felfe, 2013; Zhang et al., 2011).

Shamir, House and Arthur (1993) argued that the two remaining dimensions of transformational leadership: inspirational motivation and idealised influence are supposed to give employees an inspirational and intrinsically motivating objective. Amabile (1983) and Baer (2012) stressed that intrinsic motivation was a critically important driver of creativity, particularly employee creativity. Therefore, inspirational motivation and idealised influence are conducive to employee creativity (Herrmann & Felfe, 2013). Using inspirational motivation, transformational leaders concentrate on the efforts and contributions created by group members, envision a clear and ambitious future for employees and believe in what they can achieve

(Bass et al., 2003; Keller & Weibler, 2015; Zhang et al., 2011). That is supposed to promote them to attain much more than what they could upon their self-interest (Bass et al., 2003; Keller & Weibler, 2015). Thus, being encouraged by the leader in the process of generating creative ideas, employees tend to remove themselves from boundary constraints of creative thinking and are willing to implement creative ideas in their work (Vera & Crossan, 2004).

By using idealised influence, the transformational leaders serve as moral models, building trust and respect among subordinates, sacrificing their own needs and desires for the interests of employees and collective goals (Avolio et al., 1999; Barling et al., 2011; Bass, 1985; Nusair et al., 2012). Those are said to influence the commitment and satisfaction of their employees and motivates subordinates to perform beyond expectations to reach higher work objectives (Amabile et al., 2004). As a result of that, transformational leaders influence employee creativity by challenging and energising employees to brainstorm novel ideas for their work.

Although most research were found to empirically support the positive relationship between transformational leadership and employee creativity, there have been some exceptional studies that produced inconsistent findings. For example, Jaussie and Dionne (2003) found out that transformational leadership had no relationship with employee creativity after conducting an experimental study on 364 students at a large public university located in north eastern USA. Simultaneously, a study by Kahai, Sosik and Avolio (2003) on 154 undergraduate and graduate students at a USA public university showed that transformational leadership was negatively related to followers' creativity compared to transactional leadership. Similar findings have been reported in a study on 225 pairs of leaders and followers working in a Fortune 500 manufacturing plant (Basu & Green, 1997). Moreover, transformational leadership and employee creativity were found positively related only when the level of psychological empowerment was high in a field study of 230 staff working in a Netherland government agency (Pieterse et al., 2010). Possible reasons to explain for the inconsistency found in studies are due to the difference in research design, dissimilar contexts, different sample sizes and other objective conditions (Gumusluoglu & Ilsev, 2009).

Transformational leadership was supposed to tightly correlate with leader support behaviour, particularly, social-emotional or relationship-oriented supports (Amabile et al., 2004). That leader support behaviour referred to the maintenance and improvement of leader-follower relationship built upon trust and loyalty. Transformational leaders, accordingly, recognise the individual needs and desires, inspire and motivate them to achieve beyond the expected performance (Kassotaki, 2019; Owens & Hekman, 2016; Zacher et al., 2016). Therefore, concerning the research background and research objectives, this study aims to test the following hypotheses:

H2a: Transformational leadership positively influences employee creativity.

H2a_1: Idealised influence positively influences employee creativity.

$H2a_2$: Inspirational motivation positively influences employee creativity.

$H2a_3$: Intellectual stimulation positively influences employee creativity.

$H2a_4$: Individualised consideration positively influences employee creativity.

3.8.2.2 The empirical relationship between transactional leadership and employee creativity

Whittington et al. (2009) postulated that the behaviours of the transactional leader was positively related to follower outcomes while there was no relationship between transformational leadership and subordinates performance. Bass (1985) affirmed that transactional leadership basically represented the effective leadership style, which was characterised by the concept of mutual exchange between the transactional leader and employees. Nevertheless, Bass (1985) added that when transactional leadership was augmented by transformational leadership, the level of employee satisfaction as well as employee performance would increase. Research practices revealed that the effect of transactional leadership on employee creativity has not received much attention by scholars, which was evidenced by a limited number of studies (Kim & Lee, 2011; Kassotaki, 2019). Additionally, transactional leadership has been reported by previous research positively and negatively influenced employee creativity (Herrmann & Felfe, 2013).

Bass (1999) and House (1971) depicted transactional leadership as an exchange relationship in which transactional leaders clarified their expectations for employees to achieve and simultaneously accommodated the immediate self-interests of both leaders and followers. Amabile et al. (2004) argued that there was a correlation between transactional leadership and leader support behaviours, especially instrumental or task-oriented behaviours. That correlation exists when the transactional leaders support the employee creativity by clarifying the performance standards and expected outcomes, providing employees with effective resources to achieve the organisational goals in exchange for rewards and beneficial policies.

Supporters of transactional leadership argued that activities relating to idea-structuring proved to be significant for employee creativity including providing expectations of outcomes and feedbacks for satisfying expectations (Mumford et al., 2002). On the other hand, Kahai et al. (2003) recognised different effects of transformational and transactional leadership styles on employee creativity. In particular, employees appeared to generate more creative ideas and innovative solutions under transactional leadership compared to transformational leadership as cash rewards were employed within the organisation.

Additionally, the two dimensions of transactional leadership including contingent reward and management by exception active were proposed to positively relate to employee creativity (Kim & Lee, 2011; Waldman, Bass & Yammarino, 1990). Specifically, using contingent reward, the transactional leaders explicitly clarify what employees are expected to perform and explain to them about how to satisfy the requirements in order to achieve organisational goals. Moreover, transactional leaders provide clear criteria for evaluating employee performance, constructive feedback as well as rewards and punishments on what employees have performed (Waldman et al., 1990). Kim and Lee (2011) considered the contingent

reward component as an active and positive transaction between the leader and followers whereby followers are clarified on how to achieve the expected performance in exchange for rewards. In this context, employees are motivated to generate new ideas and perform their jobs well in order to get rewards and benefits, which may increase employee creativity performance (Eisenberger & Rhoades, 2001; Gong et al., 2009).

However, critics of transactional leadership expressed their suspicion about the strong relationship between this leadership style and employee creativity (Herrmann & Felfe, 2013). For instance, a survey was conducted on 194 undergraduate students studying in a large public university to examine the effects of leadership styles on employee creativity (Jung, 2001). Results showed that transactional leadership, compared to transformational leadership, was less likely to lead to brainstorming ideas and tasks (Jung, 2001). Similarly, the relationship between transactional leadership and employee creativity was found to be negative in research by Boerner, Eisenbeiss and Griesse (2007) and Moss and Ritossa (2007). Additionally, a survey of 615 employees working in five different Chinese pharmaceutical companies reported that transactional leadership had negative influence on followers' creative performance, satisfaction and effectiveness (Lee, 2008). Moreover, a study of 161 pairs of supervisors and their employees working in diverse departments in 24 different German enterprises showed that transactional leadership influenced creative behaviours of employees negatively (Rank et al., 2009). Likewise, a study conducted by Moriano et al. (2014) on 186 employees working in several public and private organisations in Spain showed that there was a negative relationship between transactional leadership and employee creativity.

Transactional leaders normally display effectiveness as problems are well-defined in predictable circumstances while creativity refers to the situation when people confront with ill-defined problems as well as brainstorm new ideas and approaches to solve them (Kang et al., 2015; Pieterse et al., 2010; Si & Wei, 2012). Therefore, that is one of the rationales supporting those arguments against the positive relationship between transactional leadership and employee creativity. In such a situation, transactional leaders influence established systems and culture, prefer stable working environment and avoid taking risks as well as focus on the efficiency and time limitation to achieve organisational goals (Si & Wei, 2012). Pieterse et al. (2010) argued that transactional leadership may influence employee creativity negatively because transactional leaders pay less attention to encourage creativity and innovation. Moreover, they focus more on supporting employees to achieve the expected performance instead, which suppresses the motivation to engage in creative behaviour of followers (Kim & Lee, 2011).

Pittman, Boggiano and Ruble (1983) claimed that contingent reward signalised a shift from intrinsic motivation to extrinsic motivation, which opposes to the theory of intrinsic motivation that supports employee creativity. Baer (2012) and Wei et al. (2010) suggested that the creative performance of followers

not only required external promotion force but also intrinsic motivation. Particularly, Eisenberger and Shanock (2003) indicated that contingent reward negatively influenced the creative performance of employees. Moreover, Amabile (1983), Amabile, Hennessey and Grossman (1986) and Kruglanski, Friedman and Zeevi (1971) added that extrinsic motivation appeared to weaken employee creativity in the organisation.

Furthermore, management by exception active attribute displayed by the transactional leaders was reflected by the leader's control and monitoring, which also contributes to undermining employee creativity (Amabile, 1983). In addition, Ford (1996) and Jung (2001) argued that creativity has been considered to depart from the established rules and standards. Thus, using management by exception active, the transactional leaders tend to regularly monitor employee performance, intervene and take corrective action as determining that any non-routine circumstance occurs. Finally, it was worth mentioning by Shalley (2008) that self-determination and cognitive effort are two important determinants of creativity, especially employee creativity that transactional leaders failed to promote.

Overall, employees working under the supervision of transactional leaders are not motivated to try out new approaches and creative solutions for business practices, workplace organisation and external relations but achieve expected performance (Jung, 2001; Jansen et al., 2009; Kang et al., 2015). As followers are extrinsically motivated to complete their jobs with expectations from transactional leaders, the level of employee creativity was minimally promoted.

On the basis of the above-mentioned arguments as well as empirical evidences regarding transactional leadership and employee creativity, this study formulates the following hypotheses:

H2b: Transactional leadership negatively influences employee creativity.

$H2b_1$: Contingent reward negatively influences employee creativity.

$H2b_2$: Management by exception active negatively influences employee creativity.

3.8.3 The empirical relationship between employee creativity and organisational innovation

Distinguishing between creativity and innovation plays an important role in the academic literature as these two concepts affect how their antecedents are developed and investigated in relation to other organisational contexts (Hughes et al., 2018; Khalili, 2018; Mumford & McIntosh, 2017; Shalley et al., 2004). Although there remains several arguments about the broad extent of creativity and innovation concepts, it has been widely accepted that creativity is the process of generating new ideas and concepts (Baer, 2012; Shalley & Zhou, 2008; West & Farr, 1990). Innovation, subsequently, focuses on implementing ideas in an attempt to bring about better products, services or process (Anderson et al., 2014; Bessley & Copper, 2008; Robinson & Bessley, 2010). Anderson et al. (2014) argued that creativity usually occurred at individual or group level, while innovation mainly took place at organisational level. Therefore,

it builds up an important foundation for this study to investigate the two variables of employee creativity and organisational innovation.

Theoretically considered as a basic source of innovation, employee creativity occurs when employees generate new and potentially useful ideas (Olham & Cummings, 1996). On the other hand, innovation just takes place when those ideas are successfully and commercially implemented at the organisation level, which underlines the processes and outcomes (Olham & Cummings, 1996). In the context of this study, organisational innovation is the introduction of novel organisational methods that supports the business management in the working environment or in the firm-external agent relation regarding business practices, workplace organisation and external relations (Camisón & Villar-López, 2014). It, therefore, can be inferred that creative employees are those who identify opportunities for improvement, brainstorm novel ideas or suggest solutions to problems. Particularly, such problems relate to organisational methods that better work for business practices, working environment and external relations in the organisation. Moreover, creative employees transfer their new and useful ideas to other colleagues in the organisation and also considerably contribute to developing effective plans for implementing suggested new ideas.

As a whole process, organisational innovation is supposed to develop through the process of ideas generation proposed by employee creativity, ideas implementation and commercialisation. (Gumusluoglu & Ilsev, 2009). No matter which level of creativity and innovation was studied, its consistent and positive outcomes to the benefits of individuals, groups and organisations were explicitly identified (Rubera & Kirca, 2012). Specifically, those benefits regard better performance for employees and stronger competitive advantages for businesses (Rubera & Kirca, 2012).

The relationship between employee creativity and organisational innovation has been well documented by a number of both conceptual and empirical research (Jaiswal & Dhar, 2015; Müceldili et al., 2013). Kunz, Schmitt and Meyer (2011) argued that employee creativity was an important part of organisational innovation featured by two key aspects: novelty and meaningfulness. Specifically, novelty refers to the originality, divergence or difference of ideas while meaningfulness reflected the usefulness, appropriateness and relevance of ideas generated by employees to the organisation (Moreau & Dahl, 2005; Smith et al., 2007). Tung and Yu (2016) added to the literature that employee creativity was considered as the enterprise's core competency, which helps the organisation to foster organisational innovation and maintain its competitive advantages.

Regarding outcomes of empirical studies, Yuan and Woodman (2010) revealed that employee creativity was underlined as an important component of innovation after surveying 238 pairs of employees and their direct supervisors working at four different USA companies including information technology, chemical instruments, computer system development and furniture design industries. That study also aimed to investigate how employee creativity was explained by outcome expectations to influence job

performance (Yuan & Woodman, 2010). Another research about examining the relationship between employee creativity and organisational innovation was conducted on 216 employees and their supervisors working at different departments ranging from finance, accounting, processing and R&D in a globally agricultural processing enterprise by Baer (2012). That study found out that employee creativity was perceived as the first stage of organisational innovation and served as the foundation for organisational innovation to develop (Baer, 2012; Hughes, 2018; Hughes et al., 2018; Smith & Smith, 2017). The research results of Baer (2012) has also been consistent with other studies (Amabile, 1996; Mumford & Gustafson, 1988; West, 2002; Shalley & Gilson, 2004).

Moreover, doing a national survey of 330 employees working at international airports and harbors in Taiwan Customs Bureau, Hirst et al. (2011) indicated that creative employees tended to perform innovatively and employee creativity played a significant role in organisational innovation. Another study concerning a particular hotel industry on the relation between the role of knowledge-based resources and innovation in hospitality firms was conducted on 109 different Spanish hotels by Nieves, Quintana and Osorio (2014). Findings showed that employee creativity and organisational innovation were tightly correlated in order to develop an effective business framework in the way that creative behaviour of employees must be promoted by organisational innovation (Nieves et al., 2014). Similarly, in the tourism and hospitality industry, one study was implemented by Robinson and Bessley (2010) to examine the positive relationship between creativity, job and occupational satisfaction on surveying chefs working in Queensland community clubs. Accordingly, the intrinsic relationship between employee creativity and organisational innovation was also found (Robinson & Bessley, 2010).

It seems to be better to investigate leadership styles and employee creativity separately in the prediction of organisational innovation as a result of the conceptual distinctions between these constructs. As leadership and employee creativity are likely distinguishable from each other and in their associations with organisational innovation, this study attempts to clarify the relationship between employee creativity and organisational innovation. Moreover, there exists arguments about the specific role of employee creativity in predicting organisational innovation. Therefore, this study comes up with the following proposition:

H3: Employee creativity positively influences the dimensions of organisational innovation.

3.8.4 The empirical relationship between leadership styles, employee creativity and organisational innovation

The motive for this study to examine the relationship among leadership styles, employee creativity and organisational innovation originated from the fact that there still exists an implicit mechanism in the linkage between leadership and organisational innovation despite a number of prior studies (Crossan &

Apaydin, 2010). There will be certain underlying factors in the organisation that unintentionally influence, facilitate or hamper the relationship between leadership styles and organisational innovation in a negative or positive way (Smith, 1997). Therefore, Makri and Scandura (2010) argued that processes that play the role of mediator in the relationship between leadership and innovation should be investigated in order to identify the direct and indirect effect of leadership styles on organisational innovation. For example, mediators of transformational leadership and organisational innovation including psychological empowerment, perceived support for innovation and organisational learning have been determined (Garcia-Morales et al., 2012; Gumusluoglu, 2009).

Regardless of service or manufacturing industry, employee creativity in the organisation was influenced by the leadership to develop efficiently and bring about innovative outcomes (Shalley & Gilson, 2004). However, research practice shows that there are very few studies analysing the employee creativity variable as a mediator in the leadership styles-organisational innovation relationships (Gumusluoglu & Ilsev, 2009). There are two possible rationales that can explain for the scarcity of studies investigating the mediating role of employee creativity in the relationship between these two variables. First, the concept between creativity and innovation are interchangeably employed in the literature by researchers (Baer, 2012; de Sousa, Pellissier, & Monteiro, 2012; McLean, 2005; Waples & Friedrich, 2011). De Sousa et al. (2012) claimed that the mixed usage of creativity and innovation concept was attributable to the difference in research backgrounds of scholars such as pure science or behavioural sciences. Subsequently, this leads to the failure of producing the necessarily convergent distinction between creativity and innovation. Creativity and innovation, accordingly, all refer to the process of adopting what is considered new, useful compared to existing and available things in the particular setting. As a result, the subsequent antecedents of creativity and innovation, namely, employee creativity and organisational innovation are also influenced by the determination of research approach to examine its relation to other organisational variables such as leadership style in this context.

Moreover, due to the ambiguous distinction between creativity and innovation, leadership styles have been studied by previous researchers either in direct relation to employee creativity or organisational innovation. In more complicated contexts, studies focused on the relationship between leadership styles with different versions of creativity and innovation such as innovativeness (Im & Workman, 2004), organisational innovativeness (Kunz et al., 2011), organisational creativity (Woodman et al., 1993), employee innovation (Khalili, 2016) or individual innovation (Scott & Bruce, 1994). Additionally, in the case of examining mediating variables between leadership styles and organisational innovation, popular organisational contexts that attract the attention of scholars are climate for innovation, organisational learning (Sattayaraksa & Boon-itt, 2016), support for innovation (Gumusluoğlu & Ilsev, 2009) and organisational culture (Chen et al., 2012).

Section 3.8.1, 3.8.2 and 3.8.3 above already clarified the impact of leadership styles on organisational innovation, the relationship between leadership styles and employee creativity and the linkage between employee creativity and organisational innovation respectively. In this section of the study, employee creativity will be investigated as a potential mediator in the relationship between transformational leadership and organisational innovation as well as between transactional leadership and organisational innovation in the specific context of Vietnamese public coffee enterprises.

3.8.4.1 The empirical relationship between transformational leadership, employee creativity and organisational innovation

Employee creativity has been studied not only as an outcome variable in relation to transformational leadership (Bai, Lin & Li, 2016; Cheung & Wong, 2011; Henker, Sonnentag & Unger, 2015; Li, Zhao & Begley, 2015; Mittal & Dhar, 2015; Müceldili, Turan, Erdil, 2013; Wang & Rode, 2010; Wang & Zhu, 2010), but also as a predictor variable in tandem with organisational innovation (Chen & Huang, 2010; Sohn & Jung, 2010; Somech & Zahavy, 2011). Nevertheless, previous studies demonstrated weak support for investigating the mediating role of employee creativity in the leadership style-organisational innovation relationship, which was evidenced by the contribution of very few studies (Gumusluoglu & Ilse, 2009).

Conceptual and empirical research have reported that transformational leadership positively related to employee creativity (Ebrahimi et al., 2016; Garcia-Morales et al., 2012; Henker et al., 2015; Rosing et al., 2011) and to organisational innovation (Garcia-Morales, 2008; Gumuslouglu & Ilsev, 2009; Jung et al., 2003; Matzler et al., 2008; Mokhber et al., 2015; Nusair et al., 2012). Therefore, it can be inferred that leadership is a common predictor of both employee creativity and organisational innovation through a direct and indirect relationship that fosters creativity and innovation in the organisation (Garcia-Morales, 2008). Moreover, prior empirical studies have also highlighted the direct relationship between employee creativity and organisational innovation (Baer, 2012; Jaiswal & Dhar, 2015; Müceldili et al., 2013; Shalley & Gilson, 2004; Tung & Yu, 2016; Yuan & Woodman, 2010). The perception that employee creativity was also affected by transformational leadership and its dimensions led to the suggestion that employee creativity potentially mediates the transformational leadership-organisational innovation relationship.

Nemanich and Keller (2007) postulated that transformational leadership proved to effectively improve organisational performance to gain competitive advantages in a unpredictable working environment. Arguments on the positive relationship between transformational leadership and employee creativity are supported by a number of authors (Gong et al., 2009; Hermann & Felfe, 2013; Shin & Zhou, 2003; Zhang et al., 2011). Accordingly, they point out that employees in an organisation tend to perform their jobs and interact with each other to achieve the common goals in the specific context defined by leaders, particularly transformational leaders (Jung et al., 2003).

Using idealised influence, inspirational motivation, individualised consideration and intellectual stimulation, transformational leaders inspire their employees to achieve beyond expected performance, transforming personal values and self-concepts of followers to elevate their aspirations and needs (Hu et al., 2003; Lindsey, 2016). Moreover, as employees trust their transformational leaders, they become more confident in their job performances and are inspired to take risks and face challenges as well as involving themselves in creative processes in the organisation (Khalili, 2016). Those characteristics of transformational behaviour were found related to uncertain situations, which associated with increasing the level of motivation to achieve higher levels of employee performance (Sarros et al., 2008), employee creativity (Shin & Zhou, 2003) and innovation (Gumusluoglu & Ilsev, 2009).

The theory of transformational leadership also revealed that certain behaviours displayed by transformational leaders may promote innovative thinking level of employees through improving followers' performance, organisational performance and organisational innovation (İşcan, Ersarı, & Naktiyok, 2014). Being characterised as charismatic, individually considerate, intellectually stimulating and inspirational, transformational leadership may directly or indirectly influence organisational innovation (Bass & Riggo, 2006; Sarros et al., 2008). Particularly, through a clear and ambitious vision, challenging traditional working practices, transformational leaders encourage employees to accept risk-taking and think creatively (Bushra et al., 2011; Henker, 2015; Wang & Cheng, 2010). Accordingly, the leaders motivate employees to approach new methods to solve existing problems, provide necessary supports and constructive feedbacks to improve employee performance (Yunus & Anura, 2012). As a result, employees recognise potential opportunities to contribute novel and useful ideas to organisational methods for business practices, workplace organisation and external relations in the organisation (Tafvelin, Armelius, & Westerberg, 2011).

Those above arguments are explicit evidences to prove that employee creativity did account for variance in dimensions of organisational innovation in addition to what have been explained by transformational leadership. Shalley and Gilson (2004) posited that employee creativity was fundamentally regarded as a source of organisational innovation and theoretically fostered innovation in the organisation (Oldham and Cummings, 1996). Additionally, the theory about the intersection model of creativity and innovation by Amabile (1988) also stated that individual creativity and organisational innovation process are explicitly interdependent. Primarily driven by transformational leadership, employee creativity is expected to foster, which in turn, leads to enhancing organisational innovation (Jyoti & Dev, 2015).

Employee creativity was perceived as a core competency that fostered organisational innovation and maintained its competitive advantages (Tung & Yu, 2016). Moreover, transformational leadership was reported to have positive relationship with employee creativity as well as directly and indirectly influence the organisational innovation (Hu, Gu, & Chen, 2013). Thus, employee creativity is expected to mediate the transformational leadership-organisational innovation relationship. With reference to the literature on

transformational leadership, employee creativity and organisational innovation, and on the basis of above-mentioned arguments and empirical evidences, this study proposes that organisational innovation is enhanced by transformational leadership through the level of employee creativity. Therefore, this study hypothesises that employee creativity mediates the relationship between transformational leadership and organisational innovation. Thus, the following hypothesis is presented:

H4a: Employee creativity mediates the relationship between transformational leadership and organisational innovation.

3.8.4.2 The empirical relationship between transactional leadership, employee creativity and organisational innovation

As clarified in the above section in this study, transactional leadership and its organisational contexts attract less attention from the researchers compared to transformational leadership. Similar situations are also proven in the context of this study in examining the relationship between transactional leadership, employee creativity and organisational innovation (Afshari & Gibson, 2016). Moreover, research practices reported that the majority of studies supported the positive relationship between transformational leadership, employee creativity and organisational innovation. However, contrasting findings were found in the interrelationships between transactional leadership, employee creativity and organisational innovation (Boerner et al., 2007; Pieterse et al., 2010; Schweitzer, 2014; Wei et al., 2010).

Arguments for the mediating role of employee creativity in the relationship between transactional leadership and organisational innovation are basically developed in section 3.8.4 and 3.8.4.1. According to Boehnke, Bontis, DiStefano, and DiStefano (2003), the theory of transactional leadership highlighted that transactional leaders clarify the negotiated expected performance for their employees to achieve and ascertain a clear understanding of subordinates so as to attain the overall organisational goals. Furthermore, transactional leaders establish well-organised rules and standards, remove potential constraints within the organisational system (Bass, 1985). Additionally, they motivate their subordinates to reach desired objectives and endeavour to satisfy social needs of employees by an exchange mechanism for rewards and benefits as well as punishments based on what subordinates have performed (Boehnke et al., 2003).

Transactional leadership was supposed to positively and indirectly influence organisational innovation (Elenov & Maney, 2005; Vera & Crossan, 2004) as well as negatively affect organisational innovation (Church & Waclawski, 1998; Pieterse et al., 2010; Wei et al., 2010). In addition, findings of empirical studies suggested that transactional leadership negatively correlated with employee creativity (Boerner et al., 2007; Jung et al., 2001; Lee, 2008; Moss & Ritossa, 2007). Previous research also revealed both positive and negative relationship between dimensions of transactional leadership and employee

creativity (Eisenberger & Shanock, 2003; Jung, 2001; Shalley, 2008) as well as organisational innovation (Bass & Avolio, 1993; Pearce and Sim, 2002).

Possible rationales have been given by scholars to explain conflicting findings on the relationship between transactional leadership, employee creativity and organisational innovation (Craig & Lopez, 2016). Accordingly, one of the attentive explanations supporting the positive relations among the three variables was that employees were discouraged by creative initiatives if they were not clarified of their roles and performance objectives as well as priorities by the leader (Ford, 1996). Therefore, a transactional leader, by clear expectations of employee performance, was believed to positively influence employee creativity which, in turn, affects organisational innovation (Craig & Lopez, 2016; Ford, 1996). Moreover, the explicit requirements for creative performance by the transactional leader are likely to increase employee creativity. As followers would perceive that coming up with novel and useful ideas and solutions to problems was an integrated part of their work responsibilities, that directly impacts and benefits their job in exchange for rewards (Craig & Lopez, 2016).

On the contrary, arguments against the positive effects of transactional leadership, employee creativity and organisational innovation pointed out that the transactional leader prefers the stable working environment with established rules and standards and tends to avoid risk-taking (Jung, 2001; Shalley, 2008). However, the creativity and innovation are risk-related activities and are not likely to develop with boundary constraints (Jung, 2001). Moreover, Ensley et al. (2006) and Shalley (2008) added that transactional leader extrinsically motivated employees to achieve the expected performance while employee creativity developed well with intrinsic motivation.

Overall, it was understandable that transactional leadership, in several particular situations, strongly correlated with employee outcomes compared to transformational leadership. In contrast, in other contexts, the association was negative. In terms of the relationship between employee creativity and organisational innovation, prior studies have reported that employee creativity directly influenced organisational innovation (Hirst et al., 2011; Kunz, 2011; Nieves et al., 2014; Yuan & Woodman, 2010). Additionally, the theory about the intersection model of creativity and innovation by Amabile (1988) stated that individual creativity and organisational innovation process are explicitly interdependent. Moreover, section 3.8.3 in this study provided a critical review of the existing relation between two variables.

Referring to the innovation and creativity model of Amabile (1988), Houghton and DiLiello (2010) pointed out that creativity and innovation were supported by a combination of three factors, namely, organisational motivation, organisational resources and supportive management practices. Specifically, leadership style was considered one of the representatives relating to those factors that support creativity and innovation (Houghton & DiLiello, 2010). Therefore, employee creativity potentially plays the role of a mediator in the transactional leadership-organisational innovation relationship.

It is worth remembering that employee creativity refers to the creative ability of employees to put extra efforts in brainstorming new, useful ideas and creative solutions by motivation after considering potential risks and failures to contribute to the organisational development (Anderson et al., 2014). Concerning the context of this study, it can be inferred that employee creativity may be influenced by transactional leadership and its dimensions. This, in turn, affects organisational innovation in introducing new organisational methods for business practices, workplace organisation and external relations. A negative or positive relationship between employee creativity and transactional leadership will lead to undermining or strengthening the creative ability of employees. As a consequence, it impacts negatively or positively the outcomes of organisational innovation and more importantly, the overall organisational goals.

Specific role of employee creativity in the relationship between transactional leadership and organisational innovation was suggested to be imperative to understand. In case employee creativity is found to have direct relationship with organisational innovation and recognised as a mediator in the relationship between transactional leadership and organisational innovation, the management team of the organisation will foster organisational innovation by addressing employee creativity.

Based on the above arguments and the previous literature about transactional leadership, employee creativity and organisational innovation, this study formally states the following hypothesis:

H4b: Employee creativity mediates the relationship between transactional leadership and organisational innovation.

3.9. Proposed conceptual model of the study

The proposed conceptual framework as illustrated in Figure 3.8 aims to measure the perception of non-managerial employees working in public coffee enterprises in the Vietnamese coffee sector about the leadership style that their current leader reflects and how this leadership style influences employee creativity (at the individual level) and organisational innovation (at the organisational level). Based on the well-studied literature and previous empirical research, this study presents potential interrelationships between transformational leadership, transactional leadership and its dimensions, employee creativity as well as organisational innovation and its dimensions in the specific context of Vietnamese public coffee enterprises. Specifically, this study will look into the transformational leadership and its four dimensions: idealised influence, individualised consideration, inspirational motivation and intellectual stimulation; transactional leadership and its two dimensions: contingent reward and management by exception active. The organisational innovation construct refers to the process of implementing new organisational methods in three aspects: business practices, workplace organisations and external relations. Transformational leadership and transactional leadership demonstrated in the model are two out of three styles in the Full Range Leadership Theory (FRLT) that primarily elaborates how leadership styles affect subordinates'

performance and organisational outcomes. Accordingly, the outcomes in this conceptual framework of the study refer to employee creativity and organisational innovation.

The current study also adopted and modified the model so as to suit research objectives and research questions. Accordingly, the hypothesised model (Figure 3.8) demonstrates that transformational leadership, transactional leadership and its dimensions determine their influence on employee creativity and organisational innovation respectively in public coffee enterprises. Additionally, the above-mentioned determinants are presumed in the proposed model to have both directly and indirectly significant impact on organisational innovation that is potentially mediated by employee creativity. This is based on the literature revealing that less research has been conducted to examine the mediating effect in the leadership styles – organisational innovation relationships, given the importance of the mediating factor that motivates the positive effect or reduce the negative effect of leadership styles on organisational innovation. Numbered hypotheses and respective arrows are utilised to indicate relationships between independent and dependent variables in the hypothesised model.

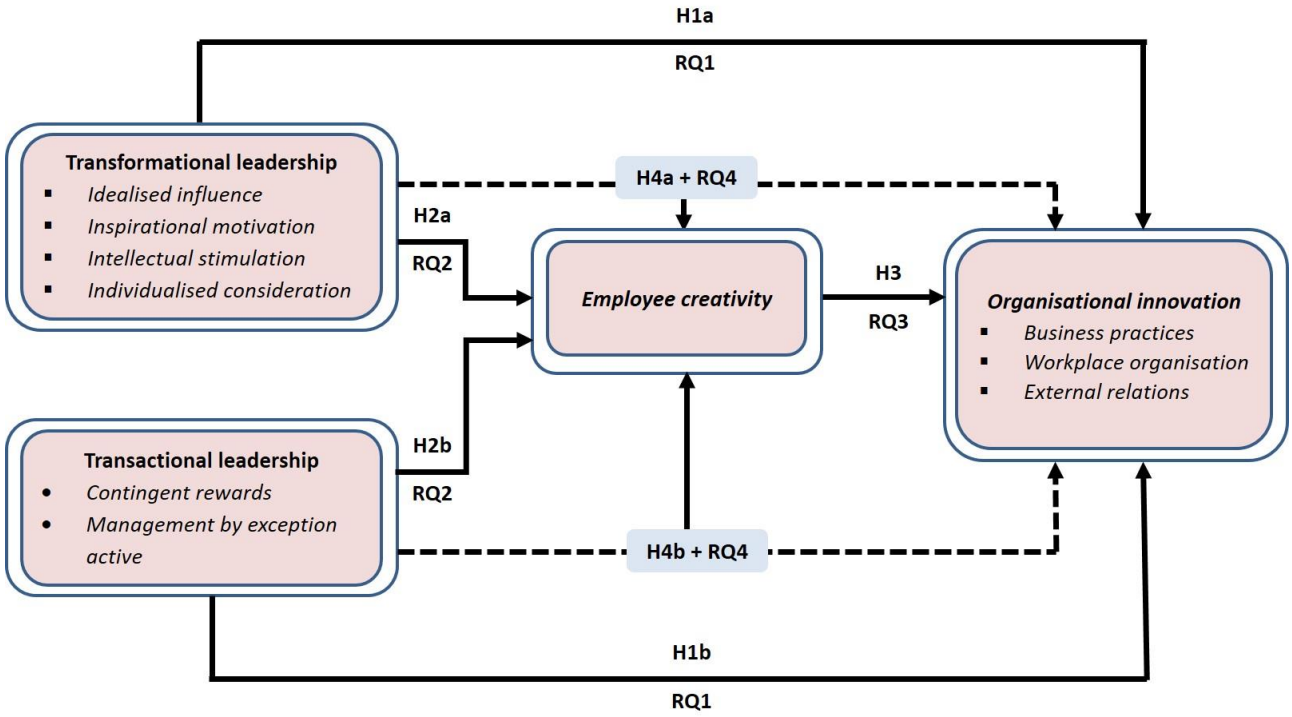


Figure 3.8. Proposed conceptual model of the study

H1a: Transformational leadership positively influences the dimensions of organisational innovation.

H1b: Transactional leadership positively influences the dimensions of organisational innovation.

H2a: Transformational leadership positively influences employee creativity.

H2b: Transactional leadership negatively influences employee creativity.

H3: Employee creativity positively influences the dimensions of organisational innovation.

H4a: Employee creativity mediates the relationship between transformational leadership and organisational innovation.

H4b: Employee creativity mediates the relationship between transactional leadership and organisational innovation.

3.10 Research on leadership, creativity and innovation in public enterprises

This section will focus on providing a critical view on leadership, creativity and innovation in public enterprises. The section begins by introducing the important contributions of public organisations to the national economic development followed by discussion on the importance of creativity and innovation in public firms compared to private enterprises. Simultaneously, factors that support and hinder creativity and innovation in public enterprises will also be analysed. Subsequently, the reality of what creativity and innovation occur in public enterprises will be generalised by previous studies. Finally, the impact of leadership on creativity and innovation will be debated, which serves as the solid foundation in order to develop the theoretical arguments in this study. Overall, the purpose of this section is to highlight the importance of investigating the relationship between leadership styles, employee creativity and organisational innovation in public enterprises as a result of inconclusive findings of studies on the influence of transformational leadership, transactional leadership on employee creativity and organisational innovation.

3.10.1 Creativity and innovation in public enterprises

3.10.1.1 The importance of creativity and innovation in public enterprises

It is worth noting that public enterprises are an integral part of the national economy of worldwide countries regardless of developed or developing ones that together with private sectors contribute to the economic growth of each nation including Vietnam. According to Potts and Kastelle (2010), public sectors contributed approximately 20-50 percent to GDP among OECD countries, which marks a significant component of the macro-economy. Specifically, public enterprises constituted 5 percent of GDP in OECD nations and 10 percent of the global GDP (Budiman, Lin, & Singham, 2009; Stan et al., 2014). Moreover, public enterprises also represent 80 percent of the stock market capitalisation in China while the number for Russia and Brazil is 62 percent and 38 percent respectively (Stan et al., 2014; Whittington, 2012). As a developing country, Vietnamese public enterprises play a major role both in doing businesses and boosting the overall economic development of the country (Hai, 2016). Agolla and Lill (2013) indicated that developed nations have long recognised the strategic significance of creativity and innovation towards the competitiveness of the country by reinforcing the innovative capacity of public sectors. However, this situation in developing countries was left behind and showed slow progress.

When discussing the important role of creativity and innovation in public enterprises, scholars tend to compare and contrast with private businesses to find out differences on why these two types of business emphasise on creativity and innovation (Sørensen & Torfing, 2012). For private companies, creativity and innovation contribute to improving products and services, approaching and broadening new and potential markets, generating profits, increasing competitive forces and securing sustainable development (Daglio, Gerson, & Kitchen, 2014; Rosenblatt, 2011). Similarly, public enterprises foster creativity and innovation for the sake of reinforcing business performance and sustaining economic growth (Khilji, Mroczkowski, & Assudani, 2012; Potts & Kastelle, 2010). Therefore, public firms need to stay active and proactive to adopt creative approaches in the provision of better goods and services to the public market as well as in the improvement of organisational performance (Agolla & van Lill, 2014). However, the creativity and innovation of public companies not only meet market changes, technological advancement or current business practices (Agolla & Lill, 2014; Potts, 2009). In fact, they have to keep up with public expectation concerning efficiency, cost-effectiveness and managerial accountability, which constitutes the stark difference between private and public sectors (Agolla & Lill, 2014; Potts, 2009).

Overall, Daglio et al. (2014) concluded that objectives were one of the key differences between private and public firms. Daglio et al. (2014) and Halvorsen et al. (2005) argued that the main objective that public firms pursue was stability in their performance. Creativity and innovation, accordingly, are expected to bring about novel and useful implementations for public enterprises, and also focus on creating the public value for the society (Lee, Hwang, & Choi, 2012).

3.10.1.2 Supports and obstacles for creativity and innovation in public enterprises

Regarding the drivers of creativity and innovation in public enterprises, prior studies have pointed out such factors as tangible and non-tangible organisational resources including talented and skilful workforce, knowledge and expertise (Adams, Bessant, & Phelps, 2006), organisational structure, organisational strategy, behaviour and communication as well as support for mechanism (Martins, & Terblanche, 2003; Murray, Caulier-Grice, & Mulgan, 2010). Specifically, leadership turns out to be a strategic factor that drives creativity and innovation in public enterprises (Agbor, 2008). The role and impact of leadership on creativity and innovation will be further clarified in sub-section 3.10.2 below in this study.

The co-existence of obstacles with favourable conditions for the creativity and innovation in public enterprises was unarguable (Windrun & Koch, 2008). Accordingly, potential hindrances are categorised into external and internal factors. It has been widely acknowledged that public enterprises are characterised by the multi-layered and hierarchical structure, rigid and bureaucratic procedure, a large number of formal

rules, poor economic incentives and inactive mechanism and policy for innovative activities (Halvorsen et al., 2005; Rosenblatt, 2011; Windrun & Koch, 2008).

Although some of these internal factors were good to protect public interest, ensure the ethical use of resource, promote managerial accountability and build consistent and efficient operating procedures, their unexpected effects may hamper creativity and innovation (Daglio et al., 2014). For example, scholars all agreed that employee creativity was not only promoted and inspired by intrinsic motivation, but also by extrinsic motivation (Baer, 2012; Borins, 2001; Eisenberger et al., 1998; Eisenberger & Rhoades, 2001) that was represented by balanced rewards, monetary and reputational benefits (Baer, 2012; Rainey & Chun, 2007). Due to the inadequate and asymmetric rewards compared to private enterprises, creativity and innovation in public firms are also affected (Rosenblatt, 2011). Explicitly, employees deserve rewards that are compatible with what they have endeavoured to achieve. Insufficient recognition will ascertain the reduction in their motivation to be creative and innovative (Borins, 2001). More importantly, Borins (2001) claimed that if employees were not sufficiently rewarded, they would tend to think of moving their jobs to another better organisation.

In addition, poor skills by the leader and employees in actively dealing with changes or risks and inadequate rewards are other internal barriers that impact creativity and innovation in public firms (Potts & Kastelle, 2010; Sørensen & Torfing, 2012). Especially, there has been an existing perception among public enterprises that the public sector will not be seriously affected and challenged due to the increasing demand for creativity and innovation, which makes public organisations hesitate to innovate (Potts & Kastelle, 2010; Sørensen & Torfing, 2012). On the other hand, Halvorsen et al (2005) argued that external factors such as the interference of political leadership that was divided in the top management, political factors including governmental policies and legislation also profoundly influence creativity and innovation of public organisations (Agolla & Lii, 2014).

Besides, the nature of innovation process is fastened with risks and errors (Rosenblatt, 2011). Through trials, experiments and evaluations, innovation will be finally implemented (Rosenblatt, 2011). While public enterprises are operating under the supervision of the public, any failures occurring in creativity and innovation activities will face media exposure or opposition criticism (Borins, 2001; Rosenblatt, 2011). As a consequence, it potentially affects the performances of employees working in public firms (Borins, 2001; Rosenblatt, 2011). Moreover, employees tend to become risk-aversed and attempt to avoid mistakes by avoiding creative activities (Borins, 2001).

3.10.1.3 The reality of creativity and innovation in public enterprises

Creativity and innovation in public enterprises were accidental and episodic, unsystematic and short-term achievements focus, which occurs in case of an urgent need required by new law for adjustments, the

nomination of a new elected manager and leader or access to a special funding (Silva, 2016; Sørensen & Torfing, 2012). Moreover, in order to implement innovations, a variety of steps must be taken. Such steps are examining the suitability of creativity and innovation compared to established rules and standards, available resources and budgets, legal framework as well as considering how bureaucratic processes support and encourage creativity and innovation (Silva, 2016; Sørensen & Torfing, 2012). Specifically, the management practice in public firms shows that creative and innovative activities occur in a disconnected phase. Particularly, there is an authorisation from political entrepreneurship passing towards the public enterprises to implement and develop, which appears quite different from the nature of creativity and innovation (Potts & Kastelle, 2010).

On the other hand, creative and innovative ideas are exclusively initiated by the top management in public enterprises (Borins, 2002). In this situation, Potts and Kastelle (2010) clarified that employees working in public organisations seemed to work on the innovative idea without excitement and desires. Instead, they felt stressfully overloaded with work and just tried their best to avoid any mistakes, which negatively affect the process of creativity and innovation. Additionally, in order to enhance efficiency, Borins (2001) recognised that rewards and incentives for creativity and innovation in public enterprises were usually extracted from the cost savings and allocated fund which were limited and inadequate. Therefore, the capacity of creativity and innovation of organisations, services and policies in public enterprises was reported to be slow in terms of dynamic level and change adaptation compared to private ones (Sørensen & Torfing, 2012).

Nevertheless, Sørensen and Torfing (2012) also affirmed that there have been recognised changes in the level of creativity and innovation in public companies compared to the previous three decades. Specifically, it was evidenced by the fact that contemporary public enterprises, in addition to restructuring and simplifying process, come out with more stable procedures for creativity and innovation. Accordingly, public enterprises also focused on exploring and exploiting novel ideas and useful solutions as well as well-planned budgets for innovative failures.

3.10.2 The impact of leadership on creativity and innovation in public enterprises

Reports by studies on leadership in public enterprises have long confirmed the important role of leaders towards establishing competitive and adaptive organisations (Alsalami et al., 2014; Muchiri, Cooksey, & Walumbwa, 2012; Sethibe, 2016). Particularly, in the current economic and social situation, primary concerns focus on how to promote leadership behaviours of the leaders in an endeavour to change the existing bureaucratic procedures in the public enterprises (Andersen, 2010; Fernandez, Cho, & Perry, 2010). Moreover, it highlights the necessity to reform managerial and organisational practices as well as improve public organisational performance (Andersen, 2010; Fernandez, Cho, & Perry, 2010).

Leadership was found to have strong influence on organisational outcomes, particularly employee creativity and organisational innovation in both public and private enterprises (Agolla & van Lill, 2014; Alsalami et al., 2014; Nusair et al., 2012; Redmond et al., 1993; Sethibe, 2016). Particularly, leadership style was also considered as one of the crucial factors that positively or negatively promotes employee creativity and organisational innovation in public enterprises (Borins, 2002; Nusair et al., 2012). Studies by Sarros et al. (2008) revealed that leadership was expected to produce an organisational culture and climate that may support employees to create new and useful ideas and reward them for what they have performed, which leads to effective organisational innovation. Agolla and Lill (2014) found that divergent and critical thinking of leaders correlated with innovation and suggested the establishment of an appropriate leadership structure in all types of organisations to utilise the leader's ability, power and strategy to promote creativity and innovation. More importantly, in the context of globalisation, the leader in public firms not only focuses on improving organisational performance in terms of economic growth, but also confronts social and political matters that require leadership skills and experience for quick adaptation and customisation (Harley, 2010).

Holten and Brenner (2015) and Alsalami (2014) reported that transformational and transactional leadership style were commonly found in studies relating to public enterprises and organisational outcomes. However, Judge and Piccolo (2004) and Sethibe (2016) argued that transformational leadership appeared to be more effective compared to transactional leadership in both public and private enterprises. Mohabbat Khan and Shahriar Islam (2014) also supported this argument by indicating that due to the current trend of contemporary leadership featured by obsolete top-down management approach, the leader in public organisations tend to build a good rapport with their subordinates and pay more attention to their desires and psychology. As a result, that was considered as the key aspect to encourage them to be creative and led to organisational innovation.

However, employees are also extrinsically motivated to be creative (Baer, 2012; Rosenblatt, 2011). Accordingly, characteristics of transactional leadership demonstrated that the leader may uses contingent reward to inspire employees to come up with novel ideas and solutions in an exchange for rewards to recognise their accomplishments, which contributes to organisational innovation (Sethibe, 2016). Thus, transactional leadership also had an influence on employee creativity and organisational innovation in public enterprises (Sethibe, 2016).

3.11 Summary

Overall, this chapter has provided a thorough review of related literature in leadership styles - organisational innovation relationship. The exhaustive literature review presented in this chapter was critically significant in developing the research questions and formulating the respective hypotheses.

Initially, this chapter has begun by reviewing two leadership styles: transformational and transactional leadership, employee creativity and organisational innovation in terms of definitions, dimensions and studies on each construct. Moreover, leadership definition, creativity definition and studies on leadership styles, the linkages between transformational leadership and transactional leadership were demonstrated to strengthen the theoretical foundation of related variables. The next part of this chapter presented related theories to leadership, employee creativity and organisational innovation. Particularly, important leadership theories such as complexity leadership, full range leadership or path-goal theory, the componential theory of creativity and the model of organisational innovation formed the basic understanding of how each separate variable in this study and its relations to other constructs were developed.

Additionally, prior studies also emphasised on the link between employee creativity, leadership styles and organisational innovation, which leads to the final part of this study on examining the relationships between these variables in details. Furthermore, this part also investigated the mediating role of employee creativity in the leadership styles-organisational innovation relationship, which helps enrich the comprehension of leadership-innovation models in the organisation. Eventually, this chapter provided a general view of previous research on leadership, creativity and innovation in public enterprises that supports in justifying the research object mentioned in Chapter 1 and 2. The deep understanding of the various relationships among variables will assist the management team in the organisation to take proper actions to improve overall organisational performance, which enhances managerial effectiveness. In general, organisational innovation will be sustained if organisations promote the appropriate leadership style that can improve employee creativity.

In the next chapter, details of the research methodology will be discussed so as to investigate the combined relationship between leadership styles, employee creativity and organisational innovation.

CHAPTER 4: METHODOLOGY

4.1 Introduction

In line with the conceptual framework of this study developed in the previous chapter, appropriate research methodology is accordingly designed to fulfil the required analysis. This chapter begins with presenting the philosophical position of the researcher in the current study and a suitable research approach adopted to address the specific research questions in Chapter One. It then proceeds with research design and justifications, elaborating on the type of investigation, research interference, topical scope, study setting, unit of analysis and time horizon. Next, sampling design that involves defining population, sampling procedures and sample size will be discussed, which is followed by data collection design, measurement of variables, instruments and questionnaires design and pilot testing. Subsequently, data analysis and interpretation are addressed, comprising justification for adopting Structural Equation Modeling (SEM), the procedure for conducting exploratory and confirmatory factor analysis, assessment of model fit and assessing measurement and structural model validity. Finally, the chapter focuses on delineating the mediation analysis and research ethics consideration during the research process.

4.2 Philosophical perspective of the research

Research philosophy technically refers to the development of knowledge, including a system of beliefs and assumptions (Saunders, Lewis & Thornhill, 2016). Creswell (2014) also used "worldviews" as an alternative term for philosophy that a research holds a general orientation about the world as well as the nature of the research, which has also been agreed by Trochim and Donnelly (2007). Accordingly, any research philosophy that researchers adopt in a particular study reflects significant assumptions about how they view the world. Further asserted by the researchers, these assumptions supposedly underpin the research strategy and the chosen research method. Saunders et al. (2016) added that a specific chosen philosophy was influenced by a particular view of the researcher on the relationship between knowledge and how knowledge was developed. Overall, it can be inferred that how well the philosophical choice made by the researcher is reflected plays a critical role in the research (Johnson & Onwuegbuzie, 2004).

4.2.1 Research paradigm

The broad consensus on how research philosophy is classified among research scholars is still questionable. While ontology, epistemology, theoretical perspective and axiology were argued by Guba and Lincoln (1994) and Saunders et al. (2016) as philosophical continuums and major views that are complementary, Scotland (2012) claimed that research philosophy comprises ontology, epistemology, methodology and methods. Conceptualised by Collis and Hussey (2009) as a philosophical guideline on how a particular research is conducted, research paradigm consists of ontology and epistemology that are

interrelated. Therefore, this study will focus on analysis of the two shared views that received much attention: ontological and epistemological paradigms to highlight key differences and consider the appropriate application for the current research.

From the ontological view, ontology is defined as assumptions made by a researcher that are concerned with what the nature of reality is and shape how the researcher perceives and studies research objects (Saunders et al., 2016). Specifically, regarding business and management area, this study focuses on examining such research objects as public coffee corporations, leadership, employee creativity and organisational innovation. Ontological assumptions have been made concentrating on how leadership styles will predict and influence organisational innovation through the mediating role of employee creativity. Therefore, the relationship between leadership styles, employee creativity and organisational innovation in Vietnamese public coffee enterprises will be investigated.

From the epistemological view, epistemology is defined as assumptions that are concerned with how knowledge can be created, interpreted and constituted (Saunders et al., 2016; Scotland, 2012). By adopting this view, compared to ontology, researchers can utilise various types of knowledge such as available data (including numerical, textual or visual one), stories and narratives that are legitimately accepted (Saunders et al., 2016). Specifically, acceptable knowledge can be either facts constituted by a factual researcher who separately studies social entities or feelings developed by an emotive researcher who closely interacts with social realities (Bryman & Bell, 2015; Collis & Hussey, 2003). Accordingly, the role of researchers falls into the continuum between positivist and interpretivist approach. Concerning the main purpose of this current study to generalise findings to other settings, this epistemological view will not be taken into consideration.

4.2.2 Philosophical positions

With respect to ontology and epistemology, there exists four main positions – positivist, interpretivist, realist and pragmatist that are thought to impact on how the researcher perceives the research process. The following discussion on different philosophical positions will clarify the appropriateness of choosing research methodologies in this current study.

***Positivism*.** According to Bryman and Bell (2015), researchers defined positivism in a variety of ways. Within the positivistic framework, positivism concerns the objectivist epistemological position that utilises the natural science method to study social reality (Bryman & Bell, 2015; Hussey & Hussey, 1997). Specifically, the extent to which researchers influence how their study is carried out will be minimised, which also means researchers are independent of observation and the reality as well as researchers are separable (Trochim & Donnelly, 2007). What can be observed and measured in each particular study will

constitute the objectivity and replicability of research findings. Therefore, Scotland (2012) argued that quantitative method is likely to be applied by researchers taking this position.

Interpretivism. Interpretivism, developed from a subjectivist perspective, concerns the natural environment where the phenomena is studied (Alomiri, 2015; Saunders et al., 2016). Therefore, it is suggested by interpretivists that reality can be only fully understood through subjective interpretation and intervention (Scotland, 2012). Physically contrast to positivistic position, there remains an inseparable link between reality and observers who conduct the study from the perspective of interpretivism. Moreover, it involves the participation of the researcher as part of the observation object, purposefully create novel knowledge and understanding with reference to social contexts (Saunders et al., 2016). Accordingly, researchers taking this position are likely to adopt qualitative method in their research process.

Realism. Another scientific approach assumption for developing knowledge is realistic position, which is also considered similar to positivism (Furlong & Marsh, 2010; Saunders et al., 2016). This epistemological branch assumes that reality comes from what our senses have experienced and exists independently to our mind (Saunders et al., 2016). Accordingly, Saunders et al. (2012) argued that there are two contrasting types of realism - direct realism and critical realism. While direct realism reflects exactly what individuals get through what they actually see using their senses, critical realism considers what has been seen just reflects a sensation of reality (Saunders et al., 2016). In general, realistic view plays an important role in business and management research area represented by the existence of external reality and accessibility to scientific investigation in collecting and interpreting data (Bryman & Bell, 2015; Saunders et al., 2016).

Pragmatism. As a philosophical tradition, pragmatism concerns the linkage between practice and theory in conducting a particular research (Creswell, 2014). As a result, Johnson and Onwuegbuzie (2004) claimed that pragmatism specifically justifies the proper combination between quantitative and qualitative methods in which both positivism and interpretivism view are not contrasting philosophies but supplementary with each other. Particularly, pragmatism focuses on how to clearly understand and solve research problems instead of emphasising on which specific method should be adopted (Creswell, 2014). Therefore, utilising pluralistic research methods and techniques to address research problems and questions are considered acceptable, represented by the mixed adopted position of the researcher as positivist and interpretivist (Tashakkori & Teddlie, 2003).

4.2.3 Rationale for adopting positivistic position

Due to remaining arguments among such research paradigms as ontology, epistemology and axiology that are closely related to shaping the research philosophical choices between either positivist, interpretivist, realist or pragmatist (Saunders et al., 2016), adopting a particular position will usually rely on several

critical factors. Specifically, research purposes and research questions, the feasibility of fulfilling different philosophical roles in the contemporary research context and characteristics of the related philosophical position are those influencing the choice of the researcher in conducting a particular study. In general, this research contributes to knowledge by adopting a positivist ontological position that is supported by related supporting arguments.

Basically, the current study aims to investigate the impact of two leadership styles, that is, transformational leadership and transactional leadership on organisational innovation, and the potential mediating role of employee creativity on these relationships. Based on the comprehensive literature review chapter, the study hypothesised that there exists a positive or negative relationship influence of each leadership style on organisational innovation which successively affects the overall organisational growth. Moreover, employee creativity is considered to potentially facilitate and improve the leadership style-organisational innovation linkage that fosters organisational innovation. In order to secure the objectivity of research findings, gathering facts and evidences from the field study should be separate from the research observation. Therefore, a positivist philosophy is deemed suitable for this research.

Prominent characteristics of positivism reveal that research concepts should be well-defined and measurable, followed by a comprehensive conceptual framework that demonstrates potential research hypotheses. Moreover, the number of samples must be large enough to produce generalisation of research results through statistical probability. As for this study, based on the research philosophy and objectives, observation is undertaken independently and structured survey questionnaire will be used to gather primary data on how the respondents, that is the employees in this situation perceived their leadership styles. Besides, perceptions of employees on the leadership style of their leader, data on employee creativity and organisational innovation will also be collected. The generalisation of research findings is evidenced by surveying a large number of samples that are sufficient to be representative. The study will apply diverse statistical approaches including descriptive statistics, exploratory and confirmatory factor analysis as well as structural equation modelling to analyse the data. Overall, research validity and credibility will be maintained and well-addressed, which matches the positivistic approach.

Despite a positivistic stance for this study, the feasibility of interpretivism as a complement has been considered. It will involve conducting minor interviews with selective managers in the public coffee enterprises to gain deeper insights into the problems. However, prior to finalising the conceptual framework that included leadership styles, employee creativity and organisational innovation as well as the potential interrelationships between them, observations were made on the real practice of leadership, creativity, innovation and related existing problems in public coffee enterprises. In addition, practical challenges in getting interviewing opportunities with important people working in the public coffee sector also prevents

collecting data through official interviews. Therefore, findings of this study will be basically discussed and drawn from data survey using structured questionnaires.

Despite not playing a major role in shaping the philosophical position, the critical realist view also properly works in the current study. Specifically, it focuses on the importance of multi-level research that operates at the individual, group or organisational level. Moreover, by emphasising on continuous changes in the social world, critical realist view is supposed to be in accordance with the management research purposes.

4.3 Methodological concerns of the study

In this section, the study focuses on critically reviewing various methodologies applied in previous research that were closely related to the research area on leadership, creativity and innovation. Specifically, these methodologies ranging from qualitative, quantitative to mixed methods (Creswell, 2014; Saunders et al., 2016) are used in accordance with the philosophical position of the researcher in conducting a particular research process. Subsequently, an appropriately chosen methodology for the current study with appropriate justifications will be discussed. This serves as a guide to develop the research design, sampling design, instruments and questionnaire design as well as data collection design.

4.3.1 A review of methodologies used in previous research

Philosophical assumptions adopted by the researcher are basically associated with methodological choices that will be applied in a particular study (Creswell, 2014). Saunders et al. (2016) added that informed methodological concerns also relate to research approaches and strategies, which assists the researcher in determining the most appropriate procedure to address research questions. Therefore, within the same research area, it is understandable that methodological choices vary among studies to best suit specific contexts. Based on the comprehensive literature review described in the previous chapter, a list of distinct research on leadership, creativity and innovation have been deliberately chosen and presented in Table 4.1 below. Accordingly, this table aims to illustrate methodological variances and choices by different authors regarding applicable methods, sample sizes and research focus.

From the broad perspective, regardless of research contexts, it is highly noticeable in Table 4.1 that apart from a few conceptual papers, the majority of studies focusing on leadership, creativity and innovation utilised quantitative methods while several studies adopted mixed methods approach. Statistics of around 40 studies have demonstrated how research in that particular area can be implemented using both quantitative and qualitative methodologies. In addition, it was evidenced that the adoption of diverse research strategies such as structured questionnaires, in-depth interview, experimental sessions have been successfully validated.

Quantitative research is normally associated with collecting and analysing numerical data that are predetermined and highly structured (Creswell, 2014; Saunders et al., 2016) as well as relatively large-scale representatives (Brannen, 2005). Moreover, quantitative studies are generally used within positivist paradigm, and in several situations, even including realist and pragmatist philosophies (Saunders et al., 2016). Using statistical techniques, this method of operation attempts to investigate relationships between variables and draw key findings by measuring and analysing collected data. Applying quantitative methods to reach research aims, the researcher focuses on ensuring the reliability and generalisability of data and remains independent from the respondents (Saunders et al., 2016). Additionally, in the specific research aspect of business and management, researchers tend to adopt the survey research strategy compared to experimental strategies applied in educational management (Table 4.1). As shown in Table 4.1, most studies covering the examination of relationships among leadership styles, creativity and innovation variables in business enterprises are concerned with quantitative survey that aims at firms, individual employees, dyads, groups and leaders.

As for qualitative research, it can be seen in Table 4.1 that there are very few studies adopting a single qualitative method compared to a quantitative one. Instead, the qualitative method complements the quantitative method to examine the linkage between organisational variables in the business and management area, which is known as mixed methods or triangular methods. There are no obvious rationales to support for the limitation of applying single qualitative research in these selected studies. It is worth remembering that qualitative research highlights the collection, interpretation and analysis of non-numerical data such as judgement, feelings and experiences from the participants who are directly involved in a natural setting or research context under investigation (Saunders et al., 2016). Specifically, according to Creswell (2014), those research strategies that are generally used in qualitative studies are ethnography, case studies, grounded theory, narrative research and phenomenological research. Therefore, qualitative research is primarily concerned with interpretivism philosophy in addition to realist and pragmatism philosophies that are similar to quantitative research (Denzin & Lincoln, 2005). Due to the subjectivity of data collection procedure, qualitative research findings aim not to focus on generalisability and representativeness of data.

Out of 44 selected studies in Table 4.1, three research applied mixed methods or triangular methods were recognised. Mix methods are recommended for researchers conducting a single study as they combine advantageous features as well as compensate for weaknesses of both quantitative and qualitative methods (Oppenheim, 2000). Multiple methods are also encouraged to improve the research quality as they investigate the research problem from various perspectives (Denscombe, 2014). Mix methods research design are associated with pragmatism philosophies as discussed in the philosophical position section (Creswell, 2014; Saunders et al., 2016) when researchers utilise different approaches in collecting and

analysing data instead of subscribing to a single method. Furthermore, Harton (2007) argued that the pragmatic view may be suitably adopted in leadership studies to come up with a suitable framework to explore certain relationships among related variables. Nevertheless, it is important to realise the big challenge of adopting mixed methods in the integration of findings as well as available time and resources to accommodate the whole process (Brannen, 2005).

Table 4.1.

Summary of methodological variances on leadership, creativity and innovation studies.

Authors	Year	Applied methodology	Sample	Research area focus
Jung	2001	Quantitative experimental sessions (MANCOVA, ANOVA)	194 undergraduate from a U.S public university	investigate the effect of transformational, transactional leadership and brainstorming conditions on group members' divergent thinking
Jung, Chow & Wu	2003	Quantitative survey Partial least squares structural equation modelling (SEM)	32 Taiwanese companies in the electronics/telecommunications industry	Study on how top managers' leadership styles influence organisation innovation through empowerment and organisational climate
Kahai, Sosik & Avolio	2003	Quantitative laboratory experiment (MANOVA, MANCOVA, correlation test)	Undergraduate and graduate students from a USA university	Study the effects of transactional, transformational leadership, anonymity and rewards on creativity-relevant group processes
Elenkov & Manev	2005	Quantitative survey (confirmatory factor analysis)	297 European firms	Study the influence of top management on innovation
Moss & Ritossa	2007	Quantitative survey (regression analysis)	263 leader–follower dyads from Australian government organisations	Study the interrelationships among goal orientation, transformational leadership, employee performance, creativity and work attitudes
Boerner, Eisenbeiss, & Griesser	2007	Quantitative survey (confirmatory factor analysis)	91 leaders from German companies	Study the mediating role of follower behaviour in the relationship between transformational leadership, follower performance and follower innovation
Aragon-Correa, Garcia-Morales & Pozo	2007	Quantitative survey (SEM)	408 CEOs from large firms in Spain	Relationship between leadership style, an individual feature, and organisational learning, a collective process and firm innovation
Sarros, Cooper & Santora	2008	Quantitative survey Latent variable Structural equation modelling (SEM)	1,158 managers from Australian private sector organisations	Relationship between transformational leadership and climate for organisational innovation, the mediating role of organisational culture
Matzler, Schwarz, Deutinger & Harms	2008	Quantitative survey Structural equation model (SEM)	300 innovative SMEs from Austria	The impact of transformational leadership on innovations, growth and profitability
C. Wu, McMullen,	2008	Quantitative survey (hierarchical regression analyses)	98 employees from a Chinese firm	Investigate the impact of leaders on employee creativity through the socio-cognitive principle

Neubert, & Yi				of regulatory focus
Lee	2008	Quantitative survey (Confirmatory factor analysis, Pearson product-moment correlation, Hierarchical regression analysis)	201 R&D professionals from Singapore	Examine the applicability of leadership theory in influencing followers' innovativeness
Gumusluoglu & Ilsev	2009	Quantitative survey (plus fieldwork: interview)	163 R&D personnel and managers from Turkish companies	The impact of transformational leadership on followers' creativity and organisational innovation
Rank, Nelson, Allen & Xu	2009	Quantitative survey (multiple hierarchical regression analyses)	161 pairs of employees and supervisors from German firms	Investigate the moderating role of subordinate variables in the supervisors' leadership behaviours-subordinates' innovative behaviour and task performance relationship
Wei, Yuan, & Yang	2010	Quantitative survey (hierarchical linear model)	497 team members and 101 team leaders from a Chinese firm	Study the relationship between transactional leadership, empowerment and followers' creative performance
Pieterse, Van Knippenberg, Schippers, & Stam	2010	Quantitative survey (hierarchical regression analysis)	230 employees from Netherlands governmental agencies	Examine the moderating role of follower psychological empowerment in the relationship between transformational, transactional leadership and follower innovative behavioUr
Wang, Rode, Shi, Luo & Chen	2013	Quantitative survey (ordinary least squares (OLS) regression)	172 employees from Chinese organisations	Study the effects of transformational leadership, workgroup climate on employee creativity
Wang & Cheng	2010	Quantitative survey (hierarchical linear modeling (HLM) and confirmatory factor analysis)	167 dyads of supervisor and subordinate	Study the moderating roles of creative role identity and job autonomy in the relationship between benevolent leadership and creativity
Robinson & Bessley	2010	Quantitative survey (regression analyses)	196 Clubs in Queensland	Investigate the relationship between creativity and job and occupational satisfaction
Zhang, Tsui & Wang	2011	Quantitative survey (Structural equation model (SEM))	163 work groups from Chinese companies	Investigate the effects of transformational and authoritarian leadership and group creativity through internal group processes
Bushra, Usman, & Naveed	2011	Quantitative survey (Regression analysis)	133 employees from Pakistan bank	Study the link between transformational leadership, job satisfaction and organisational commitment
Hammond, Neff, Farr, Schwall, & Zhao	2011	Quantitative review (meta-analysis)	Review past articles on creativity and innovation	Study the relationships between job characteristics, contextual influences, individual differences, motivation and individual innovation
Hirst, Knippenberg, Chen & Sacramento	2011	Quantitative survey (hierarchical linear modeling (HLM))	330 employees from Taiwan Customs Bureau	Study the impact of levels of centralisation on individuals' creativity

Kim & Lee	2011	Quantitative survey (Structural equation model (SEM))	559 employees from South Korea semiconductor firm	Study the influence of transformational and transactional leadership on employees' creative behaviour, the mediating role of work motivation and job satisfaction
To, Fisher, Ashkanas& Rowe	2012	Quantitative survey (Hierarchical linear modelling)	60 students from an Australian university	Examine the effects of mood valence and activation on individual creative process engagement (CPE) and the moderating effects of individual differences on individual mood–creativity relationships.
Garcia-Morales, Jiménez-Barrionuevo & Gutiérrez-Gutiérrez	2012	Quantitative survey Structural equation model (SEM)	168 CEO from Spanish firms	Study the impact of transformational leadership on organisational performance through the dynamic capabilities (organisational learning and organisational innovation)
Chi & Pan	2012	Quantitative survey (hierarchical linear modeling (HLM))	85 leaders and 343 followers from Taiwan bank	Study the mediating role of follower perceived job fit in the relationships between transformational leadership and follower task performance
Baer	2012	Quantitative survey (regression analysis)	216 employees and their supervisors from an agricultural processing firm	Study the linkage between creativity and implementation and individuals' motivation
Hermann & Felfe	2013	Quantitative experimental setting (t-test, ANCOVA)	241 undergraduate students from a German university	Examine the moderating effects of task novelty as well as personal initiative in the relationship between transformational, transactional leadership and creativity
Nieves, Quintana & Osorio	2014	Quantitative survey (multiple linear regression analyses)	109 hotel companies from Spain	Study the role of knowledge-based resources and innovation activity
Moriano, Molero, Topa & Mangin	2014	Quantitative survey (Partial Least Squares modelling)	186 employees from Spanish public and private organisations	Study the impact of manager leadership styles on employee intrapreneurial behaviour, the mediating role of organisational identification
Mokhber, bin Wan Ismail & Vakilbashi	2015	Quantitative survey (PLS-SEM)	219 managers from Iranian companies	Relationship between transformational leadership and organisational innovation
Henker, Sonnentag, & Unger	2015	Quantitative survey (longitudinal study, path modelling approach)	279 employees from Germany	Study the underlying relationship between transformational leadership, employee creativity, promotion focus and creative process
Ebrahimi, Moosavi, & Chirani	2016	Quantitative survey Structural equation model (SEM)	401 managers in manufacturing firms from Guilan	Test the relationship between transformational, transactional leadership and exploratory and exploitative innovation
Tung & Yu	2016	Quantitative survey (Structural equation model (SEM))	103 employees and supervisors from Taiwan's high-tech industry	Examine the effect of innovation leadership on supervisory-rated employee creativity, employee regulatory focus

Elrehail, Emeagwali, Alsaad & Alzghoul	2018	Quantitative survey (Structural equation model (SEM))	173 academic staff in private universities in the north of Jordan	Study the impact of transformational and authentic leadership on innovation in higher education as well as the contingent role of knowledge sharing
Xie, Xue, Li, Wang, Chen, Zheng ... & Li	2018	Quantitative survey (Hierarchical regression and adjustment regression analyses)	294 respondents in China	Leadership style and innovation atmosphere in enterprises: An empirical study
Shin & Zhou	2003	Mixed methods (Quantitative survey: hierarchical regression analyses, and Qualitative semi-structured interviews)	290 employees, supervisors from Korean firms	Examine the role of followers' values in transformational leadership-follower creativity relationship
Gong, Huang, & Farh	2009	Mixed methods (Quantitative survey: hierarchical linear modeling (HLM), and Qualitative Focus group interviews)	178 sales agents from Taiwan insurance firms	Investigate the relationship between transformational leadership, employee creative self-efficacy, employee creativity and job performance
Schweitzer	2014	Mixed methods (Quantitative survey: partial least squares path modeling (PLS-SEM) and Qualitative in-depth expert interviews)	369 strategic business alliances	The influence of transformational leadership and transactional leadership behaviours on innovation (dynamic) capabilities
Mumford, Scott, Gaddis & Strange	2002	Conceptual paper	Review previous literature	The influence of leadership behaviours on creativity and organisational innovation
Vera and Crossan	2004	Conceptual paper	Review current theories and framework	Build up a theoretical model displaying the influence of CEO and top manager leadership styles and practices on organisational learning
Oke, Munshi & Walumbwa	2009	Conceptual paper	Review past papers	The underlying linkages between transformational-transactional leadership theory, innovation processes and activities
Williams, & Foti	2011	Conceptual paper	Review the established linkages between innovation and creativity, and how developing a creative leadership potentially Drives organisational innovation	Propose critical skills that are integral to develop creative organisational leaders to foster organisational innovation
Rosing, Frese & Bausch	2011	Conceptual paper	Review, integrate meta-analytically the existing literature on leadership and innovation	Propose an ambidexterity theory of leadership for innovation

4.3.2 Chosen methodology for the current study

This quantitative non-experimental study aims to investigate the effect of two leadership styles, namely, transformational and transactional leadership on employee creativity and organisational innovation in Vietnamese public coffee enterprises. Specifically, the significance of each leadership style on employee

creativity and organisational innovation, together with the potential mediating role of employee creativity in the leadership style-organisational innovation linkage will be examined. Distinct features of each methodological type discussed above shows that it would not be suitable to apply a qualitative methodology in this study as it is used to describe and understand a phenomenon deeply (Trochim & Donnelly, 2007). Moreover, the important role of qualitative research is demonstrated in the exploratory phases of a particular study when it is complicated to investigate the phenomenon or little is known about the topic and variables (Conger, 1998; Johnson & Onwuegbuzie, 2004; Trochim & Donnelly, 2007). Furthermore, qualitative studies focus on collecting detailed information from relatively small samples (Baruah, 2015; Cozby & Bates, 2015).

Although mixed methods are recommended to examine research problems from diverse approaches to strengthen the validity of research findings (Branner, 2005), applying these in this study would not be appropriate. According to Padgett (2009), a mixed methodology is considered useful in cases where it is insufficient to best address and understand a research problem by applying either qualitative or quantitative method itself. Moreover, conducting a study using mixed methods normally requires more time and resources to collect and analyse the data (Padgett, 2009).

Applying quantitative methodology in this current study best suits the research purpose to address the research questions. Vogt (2007) argued that quantitative method is appropriately utilised to assess and validate a theory in empirical research. In addition, regarding those studies that are designed to identify the best predictor of outcome variables or in this current study, organisational outcomes, a quantitative approach is deemed optimal (Vogt, 2007). Furthermore, this methodological type also supports hypothesis testing efficiently and generalises research findings from various studies conducted in different settings (Johnson & Onwuegbuzie, 2004). As for leadership studies, Ekaterini (2010) claimed that it is popular to apply quantitative method to investigate the relationships between leadership-related variables and organisational variables. Hence, the quantitative method is used to test the linkage between two different leadership styles, employee creativity and organisational innovation in this study.

4.4 Research design and justifications

Research design focuses on the procedure to gather and analyse required data in order to reach conclusions (Sekaran, 2003). Specifically, it covers various rational decisions that are integrally related to the study purpose, study setting, type of investigation, extent of research interference, time horizon and unit of analysis. Key factors that influence how a particular research is designed are problem definition, research objectives, available time and resources and cost consideration.

This quantitative study will involve two phases in which the first phase is to refine the questionnaire based on feedback from the pilot study. Specifically, the main aim is to address any potential ambiguity or

misunderstanding of the questions. Accordingly, unclear, confused or unrelated statements will be modified or discarded. Subsequently, the revised questionnaire will be officially delivered to the participants who are currently working in different public coffee enterprises in Vietnam. Their responses will provide additional insights on how they perceive the leadership style of their leaders and its influence on organisational innovation and employee creativity.

4.4.1 Type of investigation

According to Sekaran and Bougie (2013), based on the types of research questions along with the defined problem statement, a causal study is essential to demonstrate a definitive relationship between cause and effect of problems in a research while a correlational one will be suitable to identify significant factors that are associated with the research problem (Johnson & Christensen, 2012; Lenell & Boissoneau, 1996; Sekaran & Bougie, 2013). In this research, a correlational study serves the purpose of hypothetical testing in which the variances in organisational innovation will be explained and the predictors of organisational innovation are identified. Conjectured relationships that are formulated among variables will be investigated and substantiated in order to obtain necessary answers for the research questions. Specifically, relationships between two leadership styles, employee creativity and organisational innovation will be examined. Moreover, the mediating role of employee creativity in the leadership style-organisational innovation is considered.

4.4.2 Extent of research interference

Concerning the nature of this study, by developing a theoretical framework that formulates potential relationships between leadership styles, employee creativity and organisational innovation, the study aims to study influential factors of organisational innovation in public coffee enterprises in Vietnam. Sekaran and Bougie (2013) argued that the degree on how the researcher interferes with the normal workflow in the organisation directly relates to the type of investigation undertaken by the study. Basically, by adopting a correlational study, the researcher is minimally involved in the natural working environment of the setting (Sekaran & Bougie, 2013). Particularly, applying quantitative methods, the author will administer the delivery and collection of questionnaires from respondents working in organisations through the support of human resource departments in public coffee enterprises, which minimally impacts on the normal workflow occurring in the setting under investigation.

4.4.3 Topical scope

According to Cooper and Schindler (2014), the topical scope of a particular study reflects whether that research is statistical-based or case study-based. In designing a statistical study, the researcher aims to make inferences from characteristics of samples that are proportionally calculated based on the given

population. Moreover, those research that are statistical tend to conduct hypotheses testing quantitatively, which serves as a basis to generalise findings from the sample representativeness and design validity. In contrast, by emphasising on fully contextual analysis, case studies utilise valuable insight from details that are collected from multiple sources of information in order to achieve research objectives. Simultaneously, case studies are argued to verify evidences and avoid the problem of missing data, which plays a significant role in scientific study (Kerlinger & Lee, 1999) although the reliant level of collected qualitative data does not remain strong for supporting research findings. From the well-formulated arguments in previous chapters, it is obvious that this current study is statistical-based, utilising quantitative method to test potentially existing hypotheses between leadership styles, employee creativity and organisational innovation by collecting data from employees working in public coffee enterprises.

4.4.4 Research scope

The scope of this study is to focus on investigating whether the two leadership styles, namely, transformational and transactional leadership improve organisational innovation in public coffee enterprises operating in the specific coffee industry through the role of employee creativity, which in turn leads to enhanced overall organisational development and competitiveness. Accordingly, rationales that support the research scope were justified in the previous chapters.

As one of the major industries that contributes to the national economic development, the coffee industry which focuses on coffee producing and exporting activities involves the participation of diverse business types and covers wide geographical areas in Vietnam. However, the scope of this research concerns public enterprises under Vinacafe that are categorised into namely limited liability companies, joint-stock companies and associate companies. In addition, the majority of those enterprises are located in the highland areas including Dak Lak, Gia Lai, Kon Tum, Dak Nong, Lam Dong provinces… Specifically, the highland region is selected because it is the place where most of the coffee plantations and production activities occurred due to the suitable weather condition and soil features. Moreover, a large number of coffee enterprises based their primary operations there and recruit employees living in those areas.

4.4.5 Study setting

The study setting concerns the nature of the setting where a particular study is conducted, either non-contrived or contrived (Sekaran & Bougie, 2013). Specifically, a non-contrived setting is featured by the natural working environment in the organisation and the normal procedure of workflow. Contrived setting, conversely, is depicted as artificial workplace where external factors are under the strict control of the researcher, referring to lab experiments (Sekaran & Bougie, 2013). In this study, a non-contrived setting is adopted to analyse the relationship between each leadership style, employee creativity and organisational

innovation in public coffee enterprises. The study uses a set of questionnaire to survey employees working in those organisations concerning related organisational variables without interfering their daily work procedures.

4.4.6 Unit of analysis

Deciding on the unit of analysis is argued by Sekaran and Bougie (2013) as the next significant step in the research design to guide and determine the data collection methods, population and sample size as well as operating variables related to the developed theoretical framework. Specifically, the unit of analysis varies from individual, dyads to groups, departments, organisations or firms, or even at the country level depending on the problems that the research questions address. Due to the differences in the unit level of analysis, variations in the gathered information regarding behaviours, attitudes or perceptions about a particular phenomenon among units exist.

In this study, the research problem focuses on how to foster organisational innovation through promoting employee creativity with the perceived leadership style in public coffee enterprises in Vietnam. Hence, individual employees working in those types of organisation are most appropriate to respond to how they perceive the leadership style of their leaders as well as its influence on employee creativity and organisational innovation. Additionally, the study focuses on the individual level because innovation in the organisation will not be successfully executed at the organisational level without the creativity of individual employees working in that setting. Therefore, as this study focuses on examining organisational innovation, the unit of analysis is the individuals (indirect employees or officers) working in the public coffee enterprises in Vietnam.

Previous research have adopted such choice of unit of analysis that individuals working across departments within the same organisation were invited to respond to delivered questionnaires. Representatives of past papers utilising the same approaches are presented as follows. Pieterse et al. (2010) examined the relationship between transformational and transactional leadership and follower innovative behaviour through psychological empowerment in the Netherlands. The study utilised data gathered from 230 employees working in the Netherlands government agencies. Kim and Lee (2011) investigated the influence of transformational and transactional leadership on creative behaviour of employees through work motivation and job satisfaction in the South Korean semiconductor industry. This investigation was based on responses returned by 559 employees who work in a major South Korean firm. Shi, Luo and Chen (2013) measured the effects of transformational leadership and workgroup climate on employee creativity. The study was conducted based on analysing responses of 172 employees working in Chinese organisations. Moriano et al. (2014) undertook an analysis concerning the impact of manager leadership styles on employee intrapreneurial behaviour through organisational identification. This study, accordingly, was

based on surveying 186 employees working in both public and private organisations located in Spain. Similarly, Henker, Sonnentag and Unger (2015) attempted to study the underlying linkage between transformational leadership, employee creativity along with promotion focus and creative process in Germany firms. Particularly, their study was based on 279 responses received from employees working in project-based organisations.

4.4.7 Time horizon

Depending on the research objectives, research questions and variables, cross-sectional or longitudinal studies are considered for a particular research (Cooper &Schindler, 2014; Sekaran & Bougie, 2013). Cross-sectional studies refer to those in which the data are collected once over a determined period of time so as to address research questions (Sekaran & Bougie, 2013). On the other hand, in longitudinal studies, data are repeatedly gathered at different points of time to track changes (Sekaran & Bougie, 2013). In this study, taking budget and time constraints into consideration, a cross-sectional study is appropriate to collect data within an estimated three months.

4.4.8 Sampling design

4.4.8.1 Defining the population

According to Sekaran (2007), population concerns the entire things of interests or inclusion of groups of people or events under investigation. Respectively, the population of this study covers employees as unit of analysis working in enterprises of all kinds in the Vietnamese coffee industry. Following the research purpose, managerial staff will not be involved in this study to avoid potentially biased responses and distorted results. The total number of coffee enterprises that participated in coffee exporting activities to more than 60 countries worldwide was 153 in 2010 (Y5cafe, 2010). Statistics from the Vietnam Coffee - Cocoa Association (VICOFA) revealed that there were 159 business units (13 foreign direct investment (FDI) enterprises) dealing with coffee procurement, processing and exporting activities in Vietnam (Thuc, 2011). By 2014, VICOFA estimated that 500 Vietnamese coffee enterprises including businesses of all types in the coffee industry were involved in the manufacture and export of coffee (Vietrade, 2014). Specifically, more than 150 out of 500 enterprises were fully qualified to be capable of participating in coffee exporting (Vietrade, 2014). With reference to the research scope, research objectives and research questions, only Vietnamese public coffee enterprises will be contacted, which serves as an estimated sampling frame for this study. Reasons for focusing on employees in public coffee firms in Vietnam were well-articulated in Chapter One above.

There is no specific and full list of public coffee enterprises in the Vietnamese coffee industry. However, this study endeavours to cover as many firms as possible. Accordingly, an updated list of public

coffee enterprises in Vietnam was gathered from several relevant corporations, associations and government websites. These include the information page of enterprises that are in the Socialist Republic of Vietnam - government portal, internal reports and information by *the Vietnam National Coffee Corporation,* The *Ministry of Agriculture and Rural Development* of Vietnam as well as the VICOFA.

The overall number of employees working in those 57 public enterprises reached approximately 30,000 people including 28,563 direct employees, 1,149 indirect employees and 2,888 ethnic people (Vinacafe, 2016). However, only 39 out of 57 suitable and contactable coffee settings are shortlisted based on business types and operating areas to conduct the surveys. Specifically, the majority of the public coffee enterprises focus on coffee plantation, production and processing while the remaining companies deal with additional trading activities such as coffee importing and exporting activities, farming products exporting, sugar cane production, mechanical techniques as well as fertilising trading. Based on the scope of this study, public enterprises that operate closely in the coffee production and trading will be mainly addressed. Therefore, those companies that are currently operating out of the main business category of coffee production and trading will not be the main interest of this study.

4.4.8.2 Establishing sampling frame

As the population is clearly identified, the sampling process is conducted to select sufficient numbers of elements from the given population to possibly generalise the characteristics that the population displayed (Hair et al., 2017; Sekaran, 2007; Wolf et al., 2013). In other words, in the sampling process, a subset (sample) is selected from the population (Bhattacherjee, 2012; Field, 2011; Hair et al., 2017), which is subsequently utilised for estimating or predicting an outcome concerning that population under investigation (Kumar, 1999). According to Zainudin (2012), sample is conceptualised as the portion of elements that is selected to reflect the population of interest. Particularly, selecting a sample that truly represents the whole population under study is considered critically important (Bhattacherjee, 2012; Hair et al., 2017). Moreover, as data collected from the sample is used to make statistical inferences from the population (Field, 2011; Hair et al., 2017), a proper sampling technique will be necessary to ensure the generalisability as well as to prevent divergent and erroneous inferences from occurring (Bhattacherjee, 2012). To be more specific, the population size and the variation of variables will influence the determination of the required sample size in the sampling process (Hair et al., 2017).

In this study, the samples are employees working in different public enterprises located in various parts of Vietnam, specifically focusing on the highland areas in the Vietnamese coffee industry that represent the whole population under investigation. Specifically, data collected from the samples is said to represent the entire population of employees working in the Vietnamese coffee industry. In order to approach the targeted employees as respondents for the survey in this study, an indirect channel has been

utilised through contacting Vietnam public enterprises that are currently operating in the coffee industry. Next, employees working in selected firms are contacted to participate in the survey, which shapes the right samples in this research. Specifically, all indirect employees of the identified public coffee enterprises that were sampled is the sampling frame for this study.

4.4.8.3 Determining the sample size

Collecting the data from the entire population to some extent is supposed to be practically impossible due to the time-costing and the availability of human resources (Sekaran, 2007). Instead, using samples that are drawn from the population proves to be more suitable for producing likely reliable results (Sekaran, 2007). However, the problem lies in how to determine the right sample size that is sufficient for a research investigation, which plays a significant role in a particular quantitative study (Jackson et al., 2013; MacCallum, 1999). Moreover, the sample size will affect how adequate and robust that statistical method reflects (Prajapati et al., 2010; Wolf et al., 2013), specifically SEM in this study (Hair et al., 2017). Diversified approaches have been recorded in the literature of quantitative methods regarding how big the sample size should be for serving the ultimate objective of generalising results findings (Comfrey & Lee, 1992; Krejcie & Morgan, 1970). According to Comfrey and Lee (1992), the generalisability of findings will increase if larger sample size is determined, which is followed by minimising the probability of errors as well as maximising accurate population estimates (Wolf et al., 2013). Moreover, Krejcie and Morgan (1970) added that the sample size increases in proportion with the increase of population at a diminishing rate, then stays relatively constant at around 380 cases.

Field (2009) and Wolf et al. (2013) also stated that conducting a statistic power analysis was critical to determine the required sample sizes. In order to calculate power analysis, necessary determining inputs are estimate of the effect size (based on theories or previous empirical research), error probability, power or number of groups and predictors (Field, 2009; Prajapati et al., 2010; Wolf et al., 2013). Particularly, G*Power software is argued by Faul et al. (2007) to be commonly utilised to specify the minimum sample size in social and behavioural studies. Furthermore, this power analysis programme provides the precise calculation method of required sample sizes with minimal errors (Faul et al., 2007). Taking the context of this study into consideration, transformational leadership and transactional leadership are two predictors of the endogenous variable, organisational innovation. Moreover, the proposed conceptual framework also hypothesises employee creativity as a mediator in the leadership styles-organisational innovation relationships, which indicates employee creativity an additional predictor to organisational innovation. Therefore, three predictors are identified, which constitutes one of the determinants of minimum sample sizes. Subsequently, parameters involving the medium effect size of 0.15 (Cohen, 1992) and statistical power of 80% (Kock & Hadaya, 2018) are normally employed to define the minimum requirement of

sample sizes. Respectively concerning this study, by applying the G*Power software, a minimum sample size of 77 respondents is determined to achieve a statistical power of 80% at the effect size of 0.15 (with 5% as error probability) along with the largest number of three predictors. However, it is noteworthy that power analyses can be implemented on univariate and multivariate analyses except for advanced statistical analyses such as confirmatory factor analysis (CFA) and structural equation modelling (SEM) (Howell, 2010).

Additionally, there also remains other prevailing recommendations for identifying the minimum sample size by previous researchers and authors. According to Tabacknick and Fidell (2013), at least 300 observations are required to conduct factor analysis while Wolf et al. (2013) mentions the minimum sample size for factor analysis model ranges between 30 and 460 cases. However, this depends on a variety of such factors as the extent of missing data, number of factors, number of indicators per each factor, the average correlation between indicators and factors as well as the magnitude of factor correlations (Kline, 2016; Wolf et al., 2013). In contrast, Howell (2010) suggested a 10:1 ratio, which means 10 observations for each predictor. Particularly, this estimation of minimum sample size is based on the number of predictors or independent variables to cases.

According to Barrett (2007), a minimum sample size of 200 is recommended for conducting SEM providing that normal continuous data are satisfied (Boomsma, 1985; Jackson, 2013; Kline, 2016; Willaby et al., 2015). In addition, a ratio of observations to parameter 10:1 is recommended by Benter and Chou (1987) while the ratio of 20:1 is suggested by Jackson (2003) regarding the minimum sample size to run SEM with the usage of maximum likelihood (ML) estimation method. This is basically the N:q rule by Jackson (2003) concerning the linkage between sample size and model complexity, where N represents cases or observations and q refers to the number of model parameters for statistical estimates (Jackson, 2003; Kim & Bentler, 2006). Basically, normality, path coefficients strength or missing data are not considered using that rule of ratios (Jacksons, 2013; Wolf et al., 2013). Another perspective to consider is the required minimum sample size to investigate the mediating model in the research, which specifically focuses on observing the size and significance of the indirect effect between the independent variables (transformational and transactional leadership) and dependent variable (organisational innovation) through the mediating variable (employee creativity) (Wolf et al., 2013). With regard to this particular research, there will be 19 counted free parameters after the completion of confirmatory factor analysis (CFA) for the model, which includes parameters for factor loadings and for the correlations among the latent factors (Schreiber et al., 2006). Following the agreed-on value of 20 participants for every free parameter estimated to secure the sufficient sample size for SEM analysis, an equivalency of around 380 samples to 19 parameters (20:1) is possibly required in this study (Schreiber et al., 2006).

The total number of available employees working in 39 identifiable enterprises was 550, which constituted the final sample size in this research. Based on the estimated required minimum sample size of 200 (as mentioned in section 4.4.8.3 above), this study aims to achieve around 380 responses from participants by planning to deliver 550 sets of questionnaires to respondents. The majority of public enterprises under investigation in this study bears resemblance in the organisational structure as well as organisational culture, which shows the uniformity in sampling and helps secure the equivalency between those firms in conducting surveys on employees. Regarding the specific sector of coffee production and trading, companies are recognised to differ in terms of the organisational size due to the nature of business. Specifically, it is noticeable that employees working in the unit that specialises in coffee plantation, production and coffee trading definitely outnumber compared to those focusing on coffee trading because it involves a large number of direct employees (Vinacafe, 2016). Therefore, the number of questionnaires delivered to employees in different enterprises also vary.

4.4.8.4 Specifying sampling method

According to Bhattacherjee (2012) and Kumar et al. (2013), choosing a sample from the identified sampling frame by using a well-defined sampling technique is the final and important step in the sampling procedure. Basically, there are two broad categories of sampling techniques including probability or random sampling and non-probability sampling (Bhattacherjee, 2012; Kumar et al., 2013). Particularly, probability sampling technique is characterised by the way that every unit of population has an equal chance to be selected in the sample for the study, which is known as random sample selection. Moreover, that chance is possibly and accurately determined as each element in the population has a known non-zero probability of being sampled. Therefore, probability sampling is important for the study by reflecting the generalisability of results as well as good estimation and representation of the population. Different types of probability sampling techniques are recognised and common ones are simple random sampling, systematic sampling, stratified sampling, cluster sampling and multi-stages sampling.

On the other hand, non-probability sampling can be justified for usage in several unique circumstances when probability sampling is not possibly utilised. Specifically, it can be applied in those research that inferences to the whole population or results generalisation are not necessarily made (Bhattacherjee, 2012). In non-probability sampling, some elements of the population do not have an equal chance to be selected, which leads to the inability in accurately determining the probability of selection. Therefore, limitations of this sampling technique can be ascribed to the generalisation to the whole population based on the information obtained from the sample due to the non-random selection (Bhattacherjee, 2012). Moreover, the allowance of estimating sampling errors can not be executed, which

triggers the potential of sampling bias selection. Typical types of non-probability sampling are listed as convenience sampling, quota sampling or snowball sampling.

Regarding this study, sampling process will undergo various stages of sampling techniques. Initially, from identifying a list of public coffee enterprises, cluster sampling is applied. Specifically, cluster sampling refers to the probability sampling technique that the defined population is divided into groups (clusters) (Kumar, 1999) and a subset of the cluster as a primary sampling unit is chosen (Kumar, 2013). In the context of this study, the population is clustered based on business segments including public, private and FDI enterprises. Respectively, the public coffee enterprises in Vietnam are selected due to its significant contributions to the national coffee industry and overall economic growth.

Subsequently, selected representatives of employees from each of the firms are contacted using purposive sampling (Bhattacherjee, 2012). Although the sample included all employees working in different public coffee enterprises in the coffee industry, only employees with at least one year working experience were selected to investigate the relationship between employee perceptions of leadership style, employee creativity and organisational innovation. This purposive sampling technique instead of simple random sampling may ascertain that employees have sufficient working time to better understand their leaders and organisations and provide reasonable assessment on how the leadership style of their leader affected their creativity and organisational innovation. Moreover, the author is not allowed to access employees who are currently working in those organisations in order to collect responses directly. Alternatively, surveying employees working across public coffee enterprises must be conducted with the support of human resource departments in each of the selected enterprises. Specifically, the survey form is indirectly delivered to each employee through the human resource deparment based on the given criteria that was raised by the researcher. Additionally, those survey forms will also be collected by that department after the employees have completed it. Figure 4.1 below clarifies the sampling procedure for this study including defining the population of the study, identifying sampling frame, determining the required sample size and specifying sampling method.

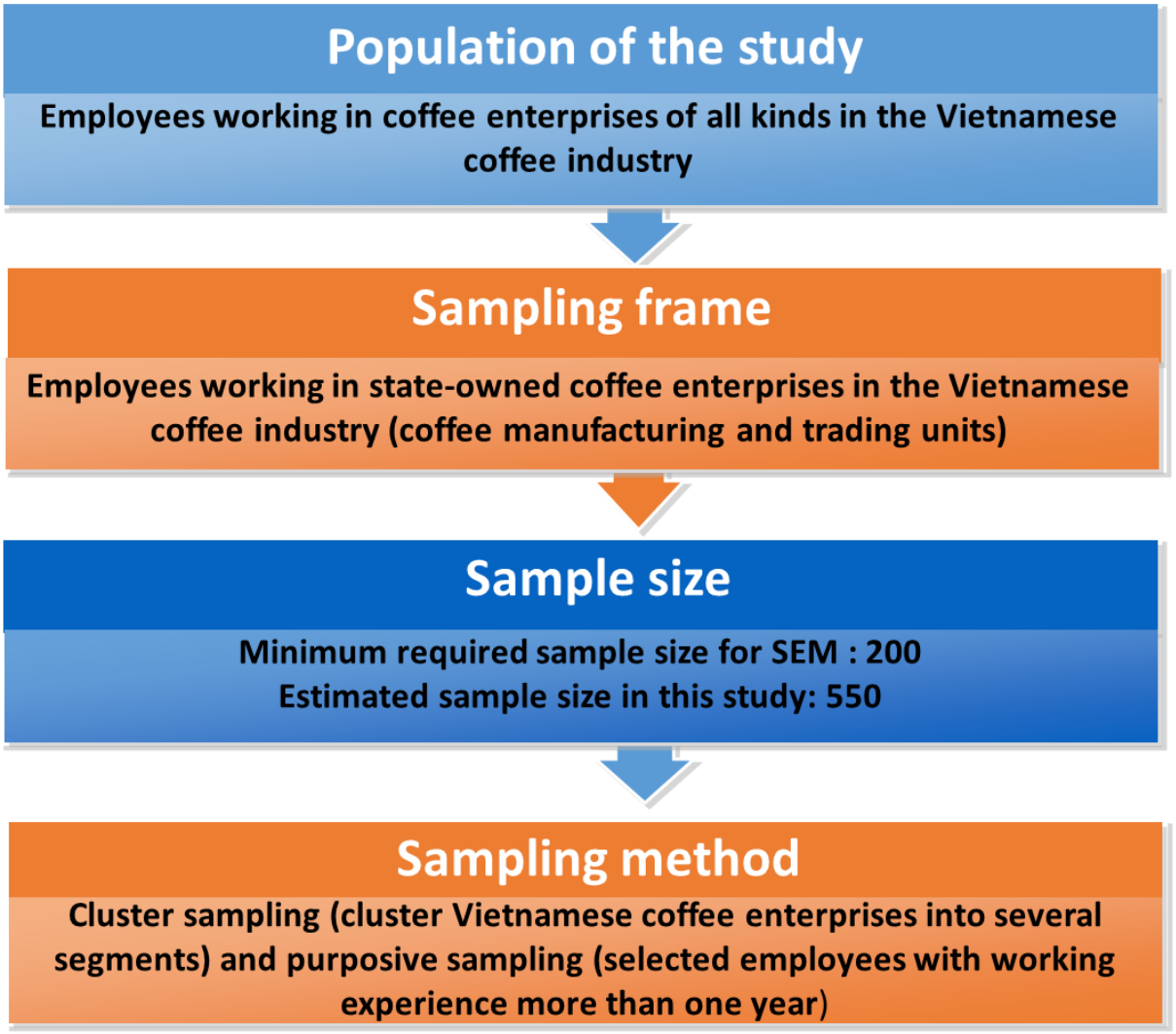


Figure 4.1 Summary of sampling procedure in this study

4.4.9 Data collection design

Data for the study were collected using questionnaire survey, which is considered a primary means of investigating relationships among variables and helps the researcher draw conclusion of an identified population by addressing a particular sample. Moreover, the questionnaire survey design is also useful to test the validity and reliability of the instruments used in this study and recommends necessary modifications of instrument that supports further research.

Questionnaires will be delivered to employees across identified public coffee enterprises in different departments in hard copies to guarantee the convenience for all participants and the sufficient numbers of samples. Importantly, internal research ethics approval must be obtained from the Nottingham University Business School (NUBS) following the official formality of PhD course stated in the NUBS PhD Handbook prior to the data collection procedure, which aims to further clarify the research objectives to participants.

Generally, in order to reach the step of finalising and distributing questionnaires to respondents for official data collection, other significant steps must be fulfilled. From a proposed theoretical framework, sampling design was accordingly implemented including defining the population, determining sample through establishing sampling frame, determining sample size and specifying sampling method. Subsequently, the expected number of respondents were selected for the study and instruments as well as questionnaires were simultaneously designed before sending out to several participants for pilot testing. Figure 4.2 below demonstrates the chart clarifying the data collection procedure that utilises questionnaires in this research.

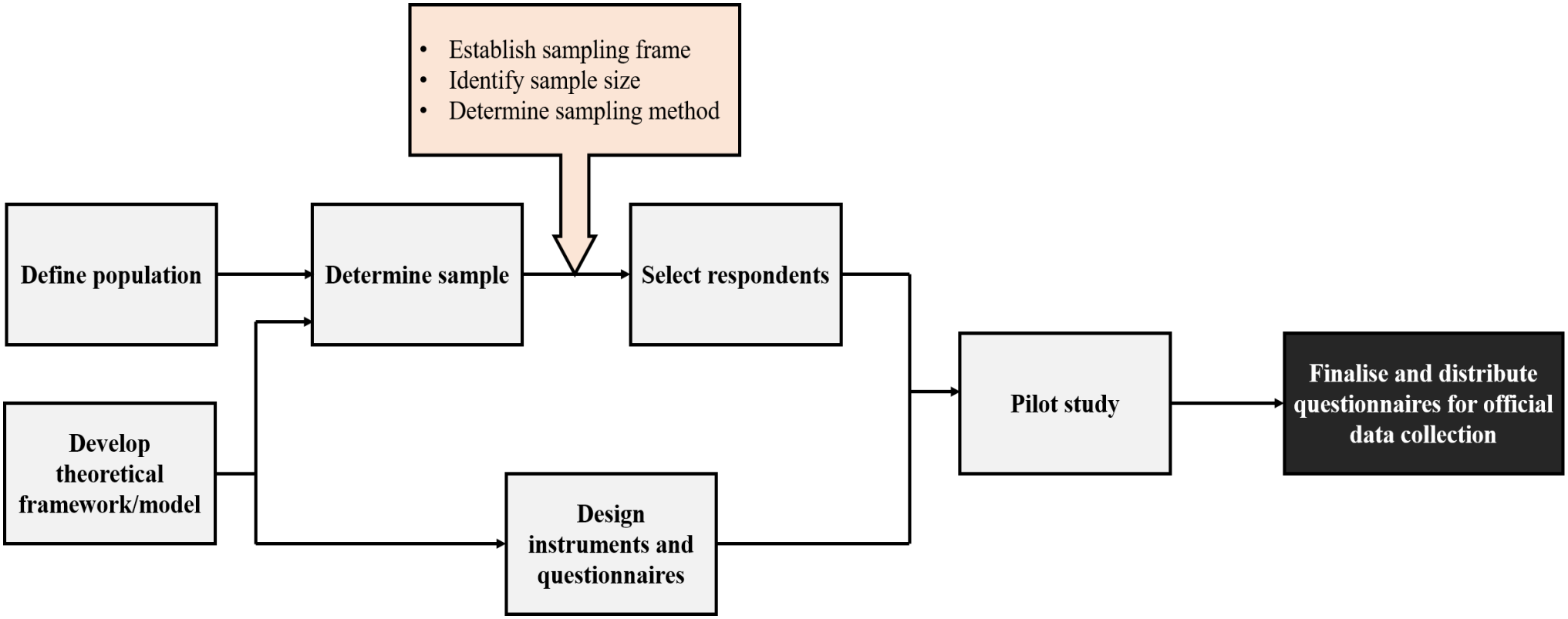


Figure 4.2 Summary of data collection process using questionnaires

4.4.10 Instruments and Questionnaire design

Questionnaires were designed based on the research objectives to collect attitudinal and behavioural data as well as to test formulated hypotheses under consideration in this study. In addition, the questionnaires also provide the researcher with standardised information collected from the respondents, which contributes to the success of data collection and the facilitation of data processing (Hague, 1993). Demographic data such as age, sex, education level, position, working experience and length of service of employees working in the organisation was collected using single direct questions. Multi-item scales were adopted from prior studies to apply in this study and interval scales with a range of provided response options were applied for the majority of the questions. Hair et al. (2010) argued that while the accuracy of measuring abstract constructs was expected to improve utilising multi-item scales, it also helped reduce measurement error during data analysis. Basically, adapted instruments from the literature has been well validated in terms of reliability and validity (Kitchenham & Pfleeger, 2002). Moreover, Kitchenham and Pfleeger (2002) added that based on the same applied measures among studies, it was possible to make comparisons between findings of this research and outcomes of previous ones.

In order to finalise measures for each construct in this study, in addition to being guided and supported by the comprehensive literature, careful consideration was also taken into regarding the suitability of applying those measures in the specific context of Vietnamese public enterprises that matched the research objectives (DeVellis, 2016). Accordingly, a set of 51 statements (see Table 4.2 below) tapped on a five-point scale data was used to measure all variables in the research model, namely, transformational leadership and its dimensions, transactional leadership and its dimensions, employee creativity and organisational innovation and its dimensions. Apart from employee creativity variable that was measured as a first-order construct, the remaining variables were assessed as second-order constructs through reflective items. Importantly, clear identification on whether the construct was depicted by items (reflective indicators) or formulated and built up by items (formative indicators) will definitely affect the selection between Covariance-Based-Structural Equation Modeling (CB-SEM) or Partial Least Square – Structural Equation Modeling (PLS-SEM). Particularly, justification on selecting suitable multivariate analysis will be presented in the data analysis section in this chapter.

Brace (2004) argued that the five-point rating scale was recommended to be used in survey settings that typically showed sufficient discrimination and was easily understandable to respondents. Accordingly, a five-point scale measurement ranging from *1 = Not at all, 2 = Once in a while, 3 = Sometimes, 4 = Fairly often, 5 = Frequently, if not always* was used on leadership styles. Transformational leadership which comprises of 20 questions includes idealised influence (eight questions), inspirational motivation (four questions), intellectual stimulation (four questions) and individualised consideration (four questions). Transactional leadership has eight questions, four questions for contingent reward and four questions for

management by exception active. A five-point scale data ranging from *1 = Not at all characteristic, 2 = Slightly characteristic, 3 = Fairly characteristic, 4 = Characteristic, 5 = Very characteristic* was utilised for employee creativity (13 questions). A five-point scale data varying from *1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Often, 5 = Very often* was used to measure organisational innovation (10 questions). This includes business practices (four questions), workplace organisation (three questions) and external relations (three questions).

Table 4.2.

Summary of adapted instruments to measure variables.

Variables	Number of items	Adapted source
Transformational leadership	**20**	(Bass and Avolio, 1995; Avolio and Bass, 2004)
• Idealised Influence	8	
• Inspirational Motivation	4	
• Intellectual Stimulation	4	
• Individualised Consideration	4	
Transactional leadership	**8**	(Bass and Avolio, 1995; Avolio and Bass, 2004)
• Contingent Reward	4	
• Management by exception – Active	4	
Employee creativity	**13**	(Scott and Bruce, 1994; Zhou and George, 2001)
Organisational innovation	**10**	Camisón and Villar-López (2010)
• Business practices	4	
• Workplace organisation	3	
• External relations	3	

According to Hair et al. (2010), designing instruments and questionnaires is critical for quantitative research. Specifically, such issues as poorly worded questions, misunderstanding and ambiguous items, inappropriate scaling approach in the questionnaires all lead to potential measurement error (Hair et al., 2010). While Frazer and Lawley (2000) suggested that the overall length of questionnaire should be kept within the maximum of 12 pages for effective reading and answering of survey questions, Brace (2013) recommended that the number of words in each question or statement should not exceed 20. Those useful guidelines help improve the efficiency of instruments and questionnaire design in the research.

The set of questionnaires was presented based on the following order. The cover page of the questionnaire relates to information of the study and an invitation to participate. The title and research purpose were clearly indicated to ensure that the respondents understand the study. In addition, it mentioned the estimated time to complete the survey, commitments regarding confidentiality and anonymity of collected responses. Simultaneously, detailed contact of the in-charge supervisor and the principal

researcher were included for communicating process during the survey. Overall, the questionnaire comprises four separate sections namely 1, 2, 3, 4. Particularly, Section 1 elaborates on organisational innovation. Subsequently, Section 2 focuses on employee creativity construct. The next section (Section 3) captures leadership styles which is further divided into two sub-sections that categorise transformational leadership (Section 3A) and transactional leadership (Section 3B), which is followed by Section 4 covers respondents' demographic profiles such as gender, age group, position at the current organisation, length of service and highest educational level. At the beginning of all sections, clear instructions along with relevant definition of each variable in the study were provided to assist participants in understanding briefly about the concept and facilitating their assessment on items. Remarkably, given definitions of each construct were also kept simple and understandable to prevent respondents from potentially misinterpreting. As data was collected from a single source through self-reported questionnaires, different types of scales were also utilised for measuring various constructs in the study as well as the anonymity and confidentiality of information collected from respondents was guaranteed to help reduce common method bias (Chang et al., 2010; Dul et al., 2011; Mackenzie & Podsakoff, 2012; Podsakoff et al., 2003).

As already mentioned, questionnaires are utilised to measure all four constructs presented in the conceptual model of the study. Jaussie and Dionne (2003) argued that transformational and transactional leadership can be differently perceived by each employee. Therefore, this study measured all constructs at the subordinate level. Initially, a set of questionnaires was prepared in English. However, short conversations with the employees revealed that the level of English comprehension of the employees was limited. Therefore, in order to secure the right comprehension of the items in the questionnaire and help reflect exactly the practical situation occurring inside the settings that employees are performing, the English questionnaire version was translated into local (Vietnamese). Basically, the standard method of back-translation was conducted simultaneously by academia in two universities located in Vietnam. Particularly, back-translation procedure refers to translating the text that has been translated into another language back to the original language (Hahn et al., 2015). According to Brislin (1980) and Harkenss (2003), by comparing and contrasting the back-translation with the original language, the uniformity and consistency regarding both the format and the meaning of these two bilingual back-translation questionnaires versions are ensured.

4.4.10.1 Measures reflecting leadership style

To assess transformational, transactional leadership and its dimensions, this study employed the current version of the Multifactor Leadership Questionnaire (MLQ)-5X Short Rater Form that was developed by Avolio and Bass (2004). The purpose of this set of questionnaire was to identify transformational leadership and transactional leadership behaviours (Ugwu & Okojie, 2016). Compared to

the old version of this instrument, the new one has been developed in terms of item wording and divergent validity addressing certain leadership factors (Ugwu & Okojie, 2016). According to Kirkbride (2006), MLQ was regarded as the most widely used instrument to assess leadership styles. Moreover, this was also considered as the best validated instrument to measure transformational and transactional leadership (Ozaralli, 2003). Thus, those rationales supported the adoption of MLQ-5X for questionnaire design in this study.

The short and new version of this MLQ (5X) basically contained 45 items that covered nine conceptually separate leadership factors along with three leadership outcomes (Avolio & Bass, 2004; Muenjohn & Armstrong, 2008). Particularly, five leadership factors were recognised as characteristic of transformational leadership included idealised influence (attributes and behavior), inspirational motivation, individualised consideration and intellectual stimulation. Additionally, three scales identified as characteristic of transactional leadership were contingent reward, management by exception-active and management by exception-passive. Finally, one scale was defined as non-leadership (laissez-faire).

As the scope of this study focused on two leadership styles, namely, transformational leadership and transactional leadership, the laissez-faire leadership will not be considered. Similarly, for transactional leadership, management by exception-passive which negatively affects employee creativity and organisational innovation (Brymer & Gray, 2006; Howell & Avolio, 1993) will not be involved in the study. Additionally, the three leadership outcomes of job satisfaction, leadership effectiveness and employee extra efforts will also not be addressed.

In general, only 28 out of 45 items in the MLQ (5X) were selected to measure transformational and transactional leadership (Avolio & Bass, 2004). Specifically, 20 items tapped the four dimensions of transformational leadership, namely, idealised influence (eight questions), inspirational motivation (four questions), intellectual stimulation (four questions) and individualised consideration (four questions). Eight items measured two dimensions of transactional leadership, that is, contingent reward (four questions) and management by exception active (four questions). Following the purpose of this study to investigate how employees perceive the leadership style of their leaders and its impact on employee creativity and organisational innovation, employees are required to assess their immediate leaders using that rater form of MLQ-5X.

A five-point Likert scale ranging from 0 (*not at all*) to 4 (*frequently, if not always*) suggested by the instrument developers was used in the MLQ-5X short form to acquire responses from those 28 questions to measure perceived transformational and transactional leadership behaviours of employees about their immediate leaders (Avolio & Bass, 2004). Due to the simple administration method, the Likert scale was extremely popular for doing research relating to measure attitudes (Zikmund, 2003). In this particular study, in order to ensure the standardisation for the whole survey that comprises a set of questionnaires covering

leadership style, employee creativity and organisational innovation, the researcher selects to assign a five-point response scale ranging from 1 (*not at all*) to 5 (*frequently, if not always*) to each of the MLQ-5X items, which was contrary to the normal 0 to 4 range of the MLQ-5X was used. Nevertheless, the content of the scales was maintained as the source.

The MLQ-5X has been utilised by a number of researchers since 1995 (Avolio & Bass, 2004) and different translated version of this set of questionnaires from the original English version were recorded such as German, French, Japanese, Hebrew and others (Bass & Riggio, 2006). Moreover, Antonakis et al. (2003) revealed that the MLQ-5X validity was established and its psychometric properties was evaluated through surveying more than 3,000 subjects in the United States. Bollen (1989) argued that different goodness of fit indices can be utilised to assess the relative fit of a proposed model such as the goodness of fit index (GFI), the adjust goodness of fit index (AGFI), the comparative fit index (CFI) and the root mean square error of approximation (RMSEA). According to Avolio and Bass (2004), by surveying 3,786 respondents, the validity of the MLQ-5X was assessed by analysing the four above-mentioned indices that showed reasonable fit indices (CFI=.91, GFI=.92, AGFI=.91, RMSEA=.05). Similarly, by conducting confirmatory factor analysis, Lee et al. (2011) and Gellis (2001) established construct validity of the sacle with factor loading values ranging from .62 to .91.

It was noticeable that the majority of research using the validated MLQ (5X) were conducted in Western societies (Ugwu & Okojie, 2016). Nonetheless, this study will utilise this developed foreign measure to revalidate the instrument in a different context to make it fit to the new population defined in this research that is Vietnamese public enterprises. Furthermore, standardising and adapting the well-developed instrument for the particular sample of Vietnam context will boost the confidence of researchers who intend to use this instrument as a research tool to investigate the area of leadership, creativity and innovation in a non-Western context. Additionally, it will bring about positive changes and contribute to research development in the Vietnamese context.

In addition, the reliability of MLQ-5X was also validated by a number of studies using Cronbach's alpha coefficient value. Generally, the MLQ 5X short form was reported to have a highly reliable scale (Cronbach's alpha value above .70) in both the original English version and those translated into other languages (Alsayed, 2012). Specifically, the Cronbach's alpha for different dimensions of leadership styles ranged from .87 (idealised influence attributed) to .72 (laissez-faire) (Tejeda et al., 2001). In addition, a study on 27,285 samples showed Cronbach alpha scores for all variables ranged from .69 to .83 (Avolio & Bass, 2004). As for the reliabilities of transformational and transactional leadership scales, a study by Pillai et al. (1999) reported alpha values of .96 and .89 respectively. Another research by Vigoda-Gadot (2007) noted values of .95 and .83 respectively, while another study by Garcia-Rivera et al. (2013) recorded reliabilities value of .98 and .89. Moreover, other research conducted in various countries also supported

the reliability and validity of the MLQ-5X such as in Southern United States (Pillai et al., 1999), in Taiwan (Chen & Baron, 2006), in London and Europe (Chen et al., 2005), in Germany (Rowold, 2006), in Malaysia (Ho et al., 2009), in Australia and Thailand (Muenjohn, 2009) and in Mexico (Garcia-Rivera et al., 2013).

4.4.10.2 Measure of employee creativity

The 13-item scale developed and validated by Zhou and George (2001) was adapted to measure the employees' perception of their creativity that leads to the organisational innovation. According to Geroge and Zhou (2007) and Shin and Zhou (2003), the 13-item scale was the commonly used measurement for employee creativity. Basically, previous studies relating to employee creativity research adapt this instrument to self-reported creativity by employees and supervisor ratings of their employees. Particularly, those studies adopting supervisor ratings such as George and Zhou (2001), Jiang and Gu (2015), Madjar et al. (2002) and Oldham and Cummings (1996) indicated that the supervisor of each employee was very familiar with and clear about his or her subordinates creativity ability. In this case, it was appropriate to utilise the supervisor rating. On the contrary, studies by Amundsen and Martinsen (2015), Gu et al. (2016) Kim et al. (2009), Kim et al. (2010) and Semedo et al. (2016) were reported to apply the self-reported creativity scale. Janssen (2000) and Shalley et al. (2009) argued that employees are well conscious of what makes them perform creatively in their workplace. Therefore, the self-report creativity was proved to best suit employee creativity construct (Janssen, 2000; Shalley et al., 2009).

For this particular research, respondents are asked to assess the extent to which they agree that each of the 13 behaviours characterises their work behaviour using 5 point Likert-type scale ranging from 1(*not at all characteristic*) to 5 (*very characteristic*). Based on the literature, the Cronbach's alpha coefficient value of this instrument recorded high reliability ($\alpha = .95$), which proved good internal consistency between items in the scale. Moreover, data about creativity also revealed the factorial validity of this measure ranging from .59 to .70, which was considered significant (Hair et al., 1992). Previous studies that adopted this scale by George and Zhou (2001) also produced similar values of Cronbach's alpha such as $\alpha = .94$ (Amundsen & Martinsen, 2015; George & Zhou, 2007; Kim et al., 2009), $\alpha = .88$ (Semedo et al., 2016), $\alpha = .90$ (Jiang & Gu, 2015), $\alpha = .97$ (Kim et al., 2010), $\alpha = .84$ (Gu et al., 2016).

4.4.10.3 Measure of organisational innovation

To measure organisation innovation derived from the OECD (2005) definition, this study used 10 items adapted from Camisón and Villar-López (2010) and Armbruster et al. (2008), representing three dimensions. Each dimension was measured through particular reflective items: business practices (4 items), workplace organisation (3 items) and external relations (3 items). Employees are asked to assess the extent to which their organisation has recently used for the first time the organisational instruments in business

practices, workplace organisation and external relations on a seven-point Likert-type scale ranging from 1 (Never) to 7 (very often). However, for the purpose of this study, a five-point Likert-type scale was used in order to assure standardisation of the whole set of questionnaires in this study while maintaining the unchanged meaning of all items.

While developing this measurement scale to evaluate organisational innovation, Camisón and Villar-López (2010) hypothesised the potentially mediating effect of organisational innovation in the relationship between two variables that is manufacturing flexibility and firm performance. Accordingly, organisational innovation was considered as a potential mediating variable in their research model rather than an outcome variable unlike in this study. Moreover, the individual reliability of those items of each dimension in the organisational innovation construct was not reported in their research, which was replaced by calculating weights to reflect how each indicator contributed to the respective construct (Camisón & Villar-López, 2010; Camisón & Villar-López, 2014).

In this particular study, organisational innovation was considered as an outcome variable that is hypothesised to be influenced by leadership style and the leadership style-organisational innovation is expected to be mediated by employee creativity. Referring to the organisational innovation scale by Camisón & Villar-López (2010), it was conceivable that the three dimensions reflecting organisational innovation related with each other and first-order factors or dimensions were indicators of the second-order factor (Chin, 2010; Chin and Gopal, 1995). Therefore, the calculation and test of item reliability, construct reliability, convergent validity and discriminant validity were feasibly conducted.

4.4.11 Pilot testing

According to Leon et al. (2011), pilot study is regarded as a basic phase in the research process that focuses on investigating how feasible and acceptable a proposed approach would seem prior to being intentionally used in a larger scale study on the target sample. The pilot study is highly recommended because through collecting feedbacks and responses from respondents, shortcomings of questionnaires can be avoidable during the designing process to fulfil the identifiable research purposes (Cooper & Schindler, 2014; Saunders et al., 2016). Particularly, methods and procedures of the study, the length of questionnaires and time commitment required by respondents will be initially tested on a small-scale, which can be applied to research of all types (Porta, 2008). Subsequently, necessary modifications will be identified based on results of pilot testing as useful guidelines regarding the design and implementation of a larger hypothesis testing research, which effectively supports the main study (Leon et al., 2011).

In this specific research, two separates steps were implemented in the process of pilot study. First, the translated questionnaire in Vietnamese version will be simultaneously delivered to three employees working in public coffee enterprises in Ho Chi Minh city to collect feedbacks on questionnaire design,

comprehensibility, errors and mismatch identification if any in the survey statements before conducting pilot testing. Following this, the adjusted version of the questionnaire was given to 30 participants using the convenience method approach for pilot testing to verify the reliability for all constructs in the study. Based on the collected data, the reliability test of questionnaire items will be conducted to assess the quality of the instruments (Churchill, 1979).

Cronbach's alpha value was considered the most commonly used statistical value to assess the internal consistency of all the individual items in reliability analysis (Kline, 1999). The calculation of alpha value is based on the assumption of unidimensional scale that is investigated by factor analysis technique. The size of Cronbach's alpha is identified by the number of items in the same scale as well as the mean inter-item correlations (Kline, 1999). Specifically, Cronbach's alpha coefficient value normally ranges between 0 and 1. Accordingly, the alpha value approaching closer to 1.0 indicates greater internal consistency of all items in the scale. As the rule of thumb stated by Kline (1999), the coefficient value above .7 is acceptable to ensure internal consistency reliabilities for the scale and subscales (Lewicki & Hill, 2006; DeVellis, 2012). Furthermore, the corrected item-total correlation value of single item should be at least .400 (Gliem & Gliem, 2003).

It is worth noticing that continuous adjustment relating to questionnaire items will also be made so as to prepare well for the official data collection of the study on larger sample afterwards. Apart from comprehensively understanding survey items, it was obvious that statements on assessing attitudes and behaviours towards organisational practices remain challenging due to the problem of confidentiality assurance for some employees, especially those who are working in Vietnamese public enterprises. Therefore, it is the responsibility of the researcher to secure the private and secret information collected from participants in order to facilitate the data collection procedure.

After receiving comments from employees, respective modifications on the questionnaire items have been implemented. First, regarding the dimension: Idealised influence (II) of transformational leadership variable. It was found out that item II4 "Articulates a compelling vision of the future" seemed irrelevant to the idealised influence dimension. Upon checking this feedback, it was conceivable that the content of the item II4 has been misplaced. The right statement should be "Displays a sense of power and confidence" instead. Second, there existed the same statement "Directs my attention towards failures to meet standard" in both item IM3 (Inspirational motivation) of transformational leadership and item MBEA4 that belongs to transactional leadership, which caused confusion to the participants. After re-considering these two items, alteration was made on item IM3 by changing the statement content into "Articulates a compelling vision of the future", while the item MBEA4 remained the same. Additionally, item WO2 stating "Implemented an anonymous incident reporting system to encourage the reporting of errors or hazards in order to identify their causes and reduce their frequency" was lengthy (more than 20 words in the item) (Brace, 2004) and

reduced the focus of the respondent. Therefore, this was modified and properly revised into "Implemented an anonymous incident reporting system to encourage the reporting of errors or hazards", which produced a better scale while maintaining the core meaning. Additionally, minor errors relating to typing, formatting and consistently coding items in the questionnaire were addressed so as not to impact the objectivity of further data collection procedure.

In general, positive feedbacks were recorded during the pre-test process, which was reflected by the sufficient length of the overall questionnaire (six pages and one cover letter page) (Frazer & Lawley, 2001; Hoinville & Jowell, 1978), and the understandable, simple and focused items that were clearly divided into separate and listed sections. Moreover, respondents also perceived that the scale was well-developed and left space for them to reflect their opinion. The results of the pilot study shown in Table 4.3 revealed generally high reliability. The Cronbach's alpha coefficient values indicated good internal consistency and reliability of the instruments.

Table 4.3.

Summary of Cronbach's alpha values of variables in the pilot study.

Variables	Adapted source	Cronbach's alpha (α) (Recorded literature)	Cronbach's alpha (α) (Pilot study)
Transformational leadership	(Bass and Avolio, 1995; Avolio and Bass, 2004)		
• Idealised influence		.86	.92
• Inspirational motivation		.91	.90
• Intellectual stimulation		.90	.86
• Individualised consideration		.90	.84
Transactional leadership	(Bass and Avolio, 1995; Avolio and Bass, 2004)		
• Contingent reward		.85	.81
• Management by exception – Active		.74	.92
Employee creativity	(Scott and Bruce, 1994; Zhou and George, 2001)	.96	.87
Organisational innovation	Camisón and Villar-López (2010)	Not reported	
• Business practices			.86
• Workplace organisation			.93
• External relations			.92

4.5 Data analysis and Interpretation

4.5.1. Structural Equation Modelling approach and justifications

In order to test the proposed theoretical model followed by the formulated hypotheses, structural equation modelling (SEM) was used. Particularly, SEM is flexibly applicable to various data types, examine complex associations between variables and compare across alternative models (Wolf, 2013). Moreover, SEM is commonly employed in the operations management literature to investigate relationships among multiple variables (Hair et al., 2012; Lee at al., 2011). As transformational and transactional leadership were supposed to have different impacts on the dimensions of organisational

innovation, this study examined the correlation between each dimension of the two constructs. Furthermore, this study assumed that leadership styles would have an influence on employee creativity that subsequently impacts on organisational innovation. Moreover, each dimension of leadership style was hypothesised to have varying degree of impact on organisational innovation and employee creativity. Therefore, SEM was considered the appropriate statistical approach to investigate the structure of interrelationships.

Hair et al. (2017) argued that both partial least squares structural equation modelling (PLS-SEM) or variance-based SEM and covariance-based structural equation modelling (CB-SEM) differ in terms of statistical view. However, it can not be concluded which method or technique will appear superior to each other because neither of them is deemed suitable for adoption in all situations (Willaby et al., 2015). Therefore, there are certain criteria to select second generation multivariate analysis between PLS-SEM and CB-SEM to be adopted in this particular research. Specifically, research objectives, model type, model complexity and sample sizes should be addressed.

As far as research objectives are concerned, this study aims to investigate the impacts of two different leadership styles on organisational innovation. In addition, relationships between leadership styles and employee creativity, employee creativity and organisational innovation are also examined. Moreover, the mediating role of employee creativity in the leadership styles-organisational innovation is assessed. According to Hair et al. (2011), there remains straightforward philosophical distinction between PLS-SEM and CB-SEM. Looking through the above research objectives, CB-SEM, compared to PLS-SEM, is more suitable as this study aims to test specific theories including leadership styles, employee creativity and organisational innovation rather than develop or building existing theories in the literature. In other words, the analytic focus of CB-SEM is to confirm theoretically assumed hypotheses between predictor (exogenous) variables and dependent (endogenous) variables that were formulated in the research instead of predicting or identifying relationships between constructs (Steenkamp & Baumgartner; 2000; Willably, 2015). Moreover, concerning the theory treatment, CB-SEM is properly applied when theories under examination were strong and questionnaires were well-established.

In terms of the sample size, this study targets at collecting data from 300 respondents who are employees working in public coffee enterprises in Vietnam. According to Chin and Newsted (1999) and Reinartz et al. (2009), while PLS-SEM can accommodate a small sample size ranging from 30 to 100, CB-SEM requires bigger sample size of at least 200 in order to run the data (Willaby et al., 2015). As this study targets at surveying employees on how they perceive the leadership style of their leaders and its impact on employee creativity and organisational innovation, collecting sufficient responses for adopting CB-SEM seems feasible. Therefore, CB-SEM seems more suitable for this research than PLS-SEM.

With reference to the complexity of the research model, while PLS-SEM can deal with large models that are characterised by more than 100 indicators or items, that will be problematic in the case of CB-SEM

(Willaby et al., 2015). Accordingly, the particular model in this study employs 51 items of 4 main variables including three second-order factors and one first-order factor. Transformational leadership is featured by four dimensions, transactional leadership – two dimensions and organisational innovation – three dimensions. Moreover, based on construct-item relationship, CB-SEM supports constructs with three items and above while PLS-SEM can address constructs with single item. Referring to the questionnaires designed in this study, all variables contain three items and above such as transformational leadership (20 items), transactional leadership (8 items), employee creativity (13 items) and organisational innovation (10 items). Therefore, CB-SEM has been adopted for this study.

Additionally, another critical aspect that should also be addressed to decide between PLS-SEM and CB-SEM is type of research model. Basically, CB-SEM works well with reflective models only while PLS-SEM can suit both reflective and constructive models that are more complicated (Hair et al., 2017; Willaby et al., 2015). Particularly, those concepts of reflective and formative constructs as well as reflective and formative models need to be well-understood to avoid respective errors relating to a chosen approach for the research. The measurement theory will help describe how a latent variable (construct) is measured on the basis that there exists a directional relationship between the construct and the indicators. Basically, a construct depicted or reflected by a number of indicators (items) is considered a reflective measurement (Willaby et al., 2015). On the contrary, a construct built or formed by several items is conceptualised as a formative measurement (Willaby et al., 2015). Therefore, it can be inferred that a reflective measurement model is characterised by arrows from the latent variable to the indicators, which assumes that the latent variable causes the measurement of the indicators (Willaby et al., 2015). In other words, as a directional relationship, any change in the latent variable will cause a change in the indicators. In contrast, a formative measurement model is demonstrated by arrows from indicators to the latent variable, which assumes that indicators causes the measurement of the latent variable (Willaby et al., 2015). As a directional relationship, it also means that any change in at least one indicator will cause a change in the latent variable.

Looking back to this particular research, following previous studies in the literature on leadership styles (transformational and transactional leadership), employee creativity and organisational innovation, it can be concluded that all latent variables (constructs) were made up of reflective indicators including first-order and second-order indicators (Avolio and Bass, 2004; Bass and Avolio, 1995; Camisón and Villar-López, 2010; Zhou and George, 2001). Specifically, each construct causes the measurement of its indicators regarding leadership styles and organisational innovation, which formulates reflective measurement model. Therefore, as the hypothesised model incorporates reflective measures, CB-SEM proves to be predominantly appropriate as a primary approach for this study. Justifications for choosing CB-SEM following the rule of thumbs that are proposed by Hair et al. (2012), Lee at al. (2011) and Willably (2015) are also summarised in Table 4.4.

Table 4.4.

Summary of justifications for adopting CB-SEM approach

Criteria	Features of SEM approach	Applicability of adopting SEM to this study
Research area	• Commonly employed in the operations management literature to investigate relationships among multiple variables	• Transformational leadership and transactional leadership were supposed to differently affect employee creativity and dimensions of organisational innovation • Leadership styles were assumed to influence employee creativity that subsequently impacts organisational innovation
Research objectives	• CB-SEM is to confirm theoretically assumed hypotheses between predictor (exogenous) variables and dependent (endogenous) variables instead of predicting or identifying relationships between constructs	• This study aims to test specific theories including leadership styles, employee creativity and organisational innovation rather than building or developing existing theories in the literature • Theories under examination were strong and questionnaires were well-established.
Sample size	• CB-SEM requires bigger sample size of at least 200 in order to run the data	• This study targets at collecting data from 369 respondents who are employees working in public coffee enterprises in Vietnam
Model complexity	• CB-SEM can deal with less complicated and fewer indicators or items (<100) • CB-SEM supports constructs with three items and above	• The particular model in this study employs 51 items of 4 main variables including three second-order factors and one first-order factor • All variables contain three items and above such as transformational leadership (20 items), transactional leadership (8 items), employee creativity (13 items) and organisational innovation (10 items)
Model type	• CB-SEM works well with reflective models	• All latent variables (constructs) in this study were made up of reflective indicators, which formulates reflective measurement model.

Note: Sources incorporated from Hair et al. (2012), Lee at al. (2011) and Willably (2015).

4.5.2. Structural Equation Modeling Requirements and Assumptions

Adopting CB-SEM requires certain assumptions in order to conduct data running properly and avoid potential errors. For example, CB-SEM needs to address missing value and multicollinearity before proceeding with data analysis, and data must be normally distributed (Bentler & Bonett, 1980; Browne, 1984; Nicolaou & Masoner, 2013; Wolf et al., 2013). Moreover, compared to other multivariate approaches, SEM requires a relative large sample, which serves as a basis for estimating sampling error (Bentler & Bonett, 1980; Browne, 1984; Willably, 2015). However, identifying how large a sample size should be sufficient to produce reliable research results and minimise sampling error remains controversial due to potential problems regarding time constraints and costing (Hershberger, 2003; Martens, 2005; Tremblay & Gardner, 1996; Wolf et al., 2013). Therefore, Hair et al. (2010) suggested several influential factors to the sample size requirements in SEM including multivariate normality of the data, estimation technique, model complexity, amount of missing data and average error variance among reflective indicators (Nicolaou & Masoner, 2013; Willably, 2015).

In the first place, concerning multivariate normality, it is necessary that the ratio of respondents to parameters increases as data tends to deviate more from the assumption of multivariate normality (Nicolaou & Masoner, 2013). Accordingly, a generally accepted ratio of 15 respondents for each parameter estimated in the model is recommended to minimise problems with deviations from normality (Hair et al., 2010; Viladrich et al., 2017). In addition, maximum likelihood estimation (MLE) is also considered the most common SEM estimation procedure (Hair et al., 2010; Viladrich et al., 2017). In order to ensure stable solutions by MLE in dealing with sampling error, a sound basis for estimation is provided with a suggested sample size of 200 or within the range of 100 and 400 (Boomsma. 1985; Hair et al., 2010; Willably, 2015). Moreover, deciding the sample size in SEM also depends on the model complexity factor. Specifically, more indicator variables will require a larger sample to produce more information and greater stability. There are several situations relating to model complexity that requires larger sample size such as more constructs that need more parameters to be estimated, constructs having fewer than three measured or indicator variables or multigroup analysis (Hair et al., 2010). With regards to missing data, it causes the sample size to reduce compared to the original number of cases due to remedying of that problem. Based on the adopted missing data approach that taken into consideration, type of issues as well as the anticipated extent of missing data, increasing sample size may be considered to offset any problems of missing data. Finally, another relevant perspective to approach the problem of sample size is the communality (Hair et al., 2010). Specifically, communalities refers to the average amount of variation among the indicator variables that are accounted for by the measurement model. Accordingly, large sample size is recommended to enhance convergence and model stability with models containing multiple constructs with small communalities value of less than .5 (Bollen, 2002).

Overall, referring to the model complexity and basic measurement model characteristics, minimum sample sizes are suggested regarding particular situations (Hair et al., 2010). For models with five or fewer constructs, each construct containing more than three items (measured variables), high value of communalities (.6 or greater), the minimum requirement of sample size is 100. On the other hand, models comprising seven or fewer constructs with modest communalities of .5 and no underidentified constructs, each construct containing more than three items (measured variables), the minimum sample size of 150 is required. With regards to this study, the proposed sample size is 550, which exceeds the minimum number recommended by Hair et al. (2010).

4.5.3. Exploratory and Confirmatory Factor Analysis

4.5.3.1. Exploratory Factor Analysis

Exploratory factor analysis (EFA), in the first place, is employed to assess the measurement scale, specifically individual scales to test construct unidimensionality, which serves as a basis for testing reliability of each construct using Cronbach's alpha (discussed in section 4.4.11). Subsequently, EFA is repeated on all measurement scales to investigate the general correlation pattern among all items. Particularly, by conducting EFA, potential constructs, the minimum number or the nature of factors that accounted for the maximum co-variations among original variables will be determined through exploring the data (Harrington, 2009). Moreover, according to Hair et al. (2010), using EFA, the information contained in a number of original variables is grouped into a smaller sets of variables with maintaining loss of information at the minimum level. Therefore, sets of variables that were highly interrelated are defined.

Basically, there are several tests associated with conducting EFA including Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, *Bartlett's test* for *sphericity* for all variables and communalities assessment of all items for each variable. Accordingly, factor analysis is considered appropriate when KMO ranges from 0 to 1, and *Bartlett's test* is significant (p-value is smaller than .05). Moreover, total variance explained should be more than 50 percent (Gerbing & Anderson, 1988); the Eigen value of each factor above 1 is accepted; all factor loadings representing the underlying construct (convergent validity) should be equal to or higher than .50 (see Section 4.5.5); no single item should load higher than .40 or .50 on more than one factor (discriminant validity) and the difference between cross-loading value of any certain item must be equal to or larger than .30 (Jabnoun & Al-Tamimi, 2003).

It is remarkable that while conducting EFA, Principal component extraction combined with Varimax rotation are suitably applied for factoring all measurement items of individual scale to determine the maximum variance extracted from variables that are correlated. On the contrary, Principal axis factoring combined with Promax rotation are appropriate to employ for factoring a whole set of data to examine the relationship between factors (Anderson & Gerbing, 1988). Furthermore, by utilising this technique, weak

correlations between factors are explored and eliminated to generate common variance accounted for by the least number of variables. Moreover, Principal axis factoring is also highly recommended in association with applying SEM to investigate linear correlations among factors.

4.5.3.2. Confirmatory Factor Analysis

By using maximum likelihood CFA, the confirmation of the hypothesised model structure will be assessed to determine how well the measurement model fits its data (Bollen, 1989; Viladrich et al., 2017). Each measure in a data set within CFA model is considered an observed indicator of one or more underlying latent constructs. In conducting CFA to evaluate the factor structure of a set of observed variables within a measurement model (Bollen, 1989), two sources of variations are assumed in response to observed indicators. By conducting CFA, hypotheses on relationships between observed variables and their underlying latent constructs will be tested. Particularly, the CFA model assumed that observed indicators are influenced by latent underlying factors and by unique measurement error (unmeasured variables) (Ugwu, 2017). Moreover, it is noticeable that predicting the interrelationships between the latent and observed variables in one or more models built in CFA is given prior to the analysis. Based on the difference between each of those predicted interrelationships and the actual interrelationships, the "fitted residual" value or "goodness of fit" is assessed, which serves as the basis for evaluating how well the model fits its data (Muenjohn & Armstrong, 2008). If these fitted residual values are closer to zero, the model fits the data better and vice versa (Muenjohn & Armstrong, 2008). Therefore, the researcher can define acceptable fit as a comparative fit index (CFI) (Ugwu, 2017).

Basically, the whole procedure of conducting CFA is depicted as follows. In the first step, CFA will be jointly applied on dependent and independent constructs, which aims to examine the construct uni-dimensionality and convergent validity. The subsequent step is to test discriminant validity for each pair of scale that measures independent constructs. There are a number of essential statistical tests required to investigate the linkage between latent variables and observed variables. Specifically, apart from sufficient sample size (more than 200), the normality of variables, fit indices and construct validity should be satisfied. For testing the normality of variables, skewness value less than 10 and kurtosis value less than 3 are considered acceptable. Fit indices including Chi-squared test, RMSEA, CFI, TLI used to determine how well a priori model fits the sample data (Hooper et al., 2008) will be further clarified in Section 4.5.4 below. In addition, construct validity is estimated based on convergent validity and discriminant validity. For convergent validity, attention is paid to overall model fit represented by fit indices, factor loading of each item larger than 0.5, the value of composite reliability (CR) more than .70 and extracted variance more than 50 percent of total. Similarly, concerning discriminant validity, overall fit model demonstrated by fit indices, correlation value (β) different from 1 at 95% confidence interval and square regression correlation estimate

(β^2) between two constructs smaller than both variance extracted estimates value of each construct (see further section 4.5.5).

In conducting CFA for the research model, one of the major concerns is placed on how the sample size affects the goodness of fit indices (clarified in Section 4.7.5) (Muenjohn & Armstrong, 2008). For example, the Chi-square statistic is sensitively influenced by the sample size in terms of power to detect the model fitness (Bentler & Bonett, 1980; Bryan & Yarnold, 1995) and data non-normality (Browne, 1984). Particularly, if the sample size is small, it provides less power to figure out the true lack of fit of the given model (Bentler & Bonett, 1980). As far as the appropriateness of determining sample size is concerned, as discussed in Section 4.4.8.3, there remains indefinite recommendations and unclear agreements on obtaining reliable results (Bentler & Chou, 1987; Bryan & Yarnold, 1995; MacCallum et al., 1999; Tabachnick & Fidell, 2013). Therefore, while assessing the model fit, estimators of fit indices such as Chi-square and Goodness-of-Fit Index should be considered (Pillai et al., 1999).

4.5.4. Assessment of Model Fit by estimators

According to Bollen (1989), different estimators or goodness of fit indices can be used to assess the relative fit of a proposed research model (La Du & Tanaka, 1989) such as Chi-Square (χ^2) Goodness-of-Fit (Hoelter, 1983), Goodness-of-Fit Index (GFI) (Joreskog & Sorbom, 2007; Tanaka & Huba, 1985), Root Mean Square Error of Approximation (RMSEA) (Browne & Cudeck, 1993), Comparative Fit Index (CFI) (Bentler, 1990) and Tucker Lewis Index (TLI). Table 4.5 below summarises key model fit indices with their acceptable thresholds in determining how well a priori model fits the data.

Table 4.5.

Summary of key model fit indices.

Fit indices	Acceptable threshold levels	Remarks
Chi-Square (χ^2) - CMIN	p value less than .05 low χ^2 relative to degrees of freedom with an insignificant *p* value (p > .05)	sensitive to sample size
Relative χ^2 (χ^2/df) – CMIN/df	• CMIN/df < 2 (Tabachnik & Fidell, 2013) • CMIN/df < 3 (sample size < 200) (Kline, 2016) • CMIN/df < 5 (sample size > 200) (Wheaton et al., 1977)	Alternative for Chi-Square (χ^2)
Goodness-of-Fit Index (GFI): 0 - 1	Value larger than .90	sensitive to number of parameters and sample size
Comparative Fit Index (CFI): 0 - 1	Value larger than .90 (fit) (Bentler, 1990)	
Tucker Lewis Index (TLI): 0 - 1	Value larger than .90 (fit)	
Root Mean Square Error of Approximation (RMSEA)	Value less than .08 (Browne & Cudeck, 1993)	sensitive to number of estimated parameters in the model

4.5.4.1 Chi-Square (χ^2) Goodness-of-Fit

Chi-Square (χ^2) is the fundamental statistical measure in assessing the Goodness-of-Fit (GOF) of any particular SEM model that quantifies the differences between the observed (**S**) and estimated covariance matrices ($\sum_k$) (Hair et al., 2010). The equation below demonstrates the chi-Square (χ^2) statistical test of the difference between matrices in SEM:

χ^2 = (N – 1) (Observed sample covariance matrix – SEM estimated covariance matrix) (N is the overall sample size) or

$$\chi^2 = (N - 1)\ (\mathbf{S} - \sum_k)\ \text{(N is the overall sample size)}$$

The χ^2 value depends on the sample size, such that χ^2 increases as sample size increases given constant differences in covariance matrices. Hoekter (1983) affirmed that the fit of the model improves as the ratio of chi-square to the degrees of freedom **(χ^2/df)** decreases and approaches zero. In other words, the model fits perfectly as the discrepancy between the observed sample and SEM estimated covariance matrices reaches zero value.

4.5.4.2 Goodness-of-Fit Index (GFI)

The GFI is one of the alternative goodness-of-fit measures used to assess the model fit in addition to χ^2. Moreover, Gogineni et al. (1995) argued that although the GFI is also less sensitive to sample size compare to χ^2 value, it is influenced by sample size due to the effect of N on sampling distribution. The GFI value ranges between 0 and 1 where higher value indicates better fit of the model (Hair et al., 2010). If the value of GFI is greater than .90 and adjusted goodness-of-Fit (AGFI) is greater than .80, it indicates a good fit of the model.

4.5.4.3 Root Mean Square Error of Approximation (RMSEA)

The Root Mean Square Error of Approximation (RMSEA) is considered as one of the most widely used measure to assess the model fit in SEM (Hair et al., 2010). Particularly, this measure rectifies both model complexity and the tendency to reject models with a large sample or a large number of observed variables using χ^2 GOF test statistics. Accordingly, RMSEA demonstrates how well a model fits a population rather than a sample that was used for estimation (Hair et al., 2010; Nicolaou & Masoner, 2013). According to Browne and Cudeck (1993), a RMSEA value of .05 or less or below .10 (between .03 and .08) with 95% confidence suggests a close fit between data and the model. In other words, lower RMSEA value indicates better fit for the model.

4.5.4.4 Comparative Fit Index (CFI)

The Comparative Fit Index (TLI) is one of the most widely used incremental fit indices that represents the improvement in fit by specifying related multi-item constructs and is insensible to the model complexity. As an improved version of the Norm Fit Index (NFI) (Babin & Griffin, 1998), this value normally ranges between 0 and 1 where higher values indicate better fit for the model. According to Hair et al. (2010), a CFI value above .90 usually indicates models with good fit.

4.5.4.5 Tucker Lewis Index (TLI)

Similar to the CFI, the Tucker Lewis Index (TLI) is an incremental fit index that assesses how well the estimated model fits to the null model (the model that assumes all observed variables are uncorrelated) (Hair et al., 2010). Basically, the TLI looks into the model complexity by comparing the normed chi-squared values for the null and specified model. The TLI values can fall below 0 and above 1, which shows that values are not normed (Hair et al., 2010). According to Hair et al. (2010), a model with a higher TLI value indicates a better fit than a model with a lower TLI value, which also means models with good fit record values that approach 1.

4.5.5 Assessing Measurement Model Validity

Assessing measurement model validity is a part in conducting SEM that relates measured variables to latent variables in addition to the assessment of structural model validity (Hair et al., 2010). Moreover, this step is also within SEM stages for assessing measurement theory validation by using CFA. The purpose of using a measurement theory is to specify how sets of measured items can represent a set of constructs in the research model or how well the theory fits the data. Specifically, key empirical measure of relationships between constructs and measured variables (factor loading estimates) as well as among constructs (construct correlations) will be checked, which supports the empirical examination of the proposed measurement theory to compare the theoretical measurement model against reality represented by the sample data. Accordingly, the validity of measurement model is assessed after the completion of specifying measurement model, collecting sufficient data and determining estimation technique. In addition, it not only depends on establishing acceptable levels of goodness-of-fit for the measurement model but also proving construct validity.

Assessing goodness-of-fit (GOF) was discussed in section 4.5.4.1 above, which focuses on basic GOF estimators used to assess the relative fit of a proposed measurement model. By comparing the estimated covariance matrix based on the theory and covariance matrix based on the sample data, level of fit is identified. Through various empirical measures, all aspects of construct validity are examined using CFA that enables the testing or confirmation of the measurement model validity.

Finding evidences of construct validity also plays a critical role in assessing measurement model validity (Hair et al., 2010). In other words, it demonstrates that measured items taken from a sample represent the actual score existing in the population. Accordingly, construct validity refers to whether a designed set of measured items or indicators actually reflects the theoretical latent construct, which targets at examining the accuracy of measurement. The two most widely accepted forms of validity are convergent and discriminant validity (Baron & Kenny, 1986).

Convergent validity refers to the degree that items or indicators of a specific construct share a high proportion of common variance (Hair et al., 2010). Convergent validity is considered by correlating the instrument with existing measures of the same construct (De Vellis, 2016). Basically, there remains different ways to estimate the relative amount of convergent validity among measured items such as factor loadings, average variance extracted (AVE) and construct reliability (CR). Accordingly, all factor loadings should be statistically significant and standardised loading estimates should be equal to or higher than .5 (ideally equal to or higher than .7) (Anderson & Gerbing, 1988). Particularly, high loadings on a factor indicate high convergent validity of measured items on the latent construct. As for the AVE, calculating AVE for each latent construct in a measurement model is recommended, which is reflected by the mean variance extracted for the measured items loading on a construct. As an indicator of convergence, an AVE value of .5 or higher suggests adequate convergence and more errors exist in the measured items than variance explained by the latent factor structure if the value falls below .5. The following equation illustrated how AVE is computed using standardised loadings:

$$AVE = \frac{\sum_{i=1}^{n} L_i^2}{n}$$

L_i : the standardised factor loading

n: number of items

Another indicator relating to convergent validity, reliability, is also considered. Specifically, construct reliability (CR) seems to be normally used in conjunction with SEM models (Hair et al., 2010). The reliability estimate value of CR is .7 or higher indicates good reliability while that value ranges between .6 and .7 is considered acceptable on the condition that construct validity of other indicators within the model is good. In other words, a high value of CR suggests that there exists internal consistency among measures that represent the same latent construct. As demonstrated by the equation below, CR is calculated from the squared sum of factor loadings (L_i) for each construct and the sum of the error variance terms for particular construct (e_i):

$$CR = \frac{(\sum_{i=1}^{n} L_i)^2}{(\sum_{i=1}^{n} L_i)^2 + (\sum_{i=1}^{n} e_i)}$$

The second widely accepted forms of validity is discriminant validity, which focuses on how one construct is truly distinct from other constructs in the measurement model. Accordingly, the uniqueness and distinction of a construct is evidenced by high discriminant validity value (Hair et al., 2010). Assessing discriminant validity can be conducted in two common ways in CFA. The first approach is comparing the fit of the two-construct model and that of the one-construct model by specifying the correlation between any two constructs as equal to one. Discriminant validity will be supported if there exists a significant difference in the above fit comparison between two models (Anderson & Gerbing, 1988). Another test is comparing values between the average variance-extracted (AVE) for any two constructs and the square of the correlation estimate between these two construct. According to Diamantopoulos and Siguaw (2000) and Hair et al. (2010), AVE refers to the average amount of variance in the indicator variables explained by the underlying latent construct that they represent. Accordingly, good evidence of discriminant validity will be recognised if the test results indicate that the variance-extracted estimates value is greater than the squared correlation estimate (Diamantopoulos & Siguaw, 2000; Hair et al., 2010), which means a latent construct is expected to explain more variances in its measured items compared to those with another construct.

4.5.6 Assessing Structural Model Validity

It is worth remembering that assessing measurement model is a critical step prior to conducting the assessment of structural model validity. Based on the test results regarding reliability and validity and acceptable model fit of a particular measurement model, assessing structural model validity and the respective hypothesised theoretical relationships among constructs, specifically focusing on the estimated parameters for the structural relationships can be proceeded. Basically, testing the validity of a structural model follows similar steps compared to that of a measurement model in which the observed sample covariance matrix represents the observed data. However, the difference lies in the result of the structural relationships demonstrated in the structural model relating to the assumption of potential relationships between constructs between two types of model. Specifically, while the measurement models assume the existence of correlational relationships among all constructs, those relationships between the constructs are assumed zero. In other words, not every construct will be hypothesised to have direct relationship with each other in the structural model, which indicates that the structural model is more constrained than measurement model (Hair et al., 2010).

By using the (χ^2) GOF value to assess the overall fit for both measurement model and structural model validity, conventional SEM models revealed a lower (χ^2) GOF value for the measurement model compared to that of the structural model. Moreover, as the structural model GOF approaches the measurement model GOF, the structural model fit looks better. In addition, the approximately same (χ^2) GOF value and insignificant $\Delta\chi^2$ test between the measurement model and structural model shows that constraints added to formulate the structural model insignificantly influence the (χ^2) GOF value, which supports the proposed theoretical model. Concerning testing structural relationships, individual parameter estimates representing each specific hypothesis must also be considered. Accordingly, as parameter estimates are statistically significant in addition to matching the predicted direction, a theoretical model is valid.

4.5.7 Model Respecification and Modification

Based on the model diagnostic measures such as standardised residuals and modification index from the initial SEM model, a new data set may be required to verify a change if there exists new factors beyond the suggested original measurement theory or respectively more than 20 percent of the measured variables relating to the indicated factor are dropped or changed (Hair et al., 2010). Therefore, model respecification and modification remains a complicated procedure as major changes will be implemented on the proposed research model, which is followed by strong theoretical and empirical supports. The overall purpose of model respecification is to improve model fit based on theoretical justification. Basically, dropping an item out of the measurement model relies on indicators that are related to model fit, model integrity or construct validity (Hair et al., 2010). However, careful consideration must be taken towards changes made to the model because there are supplementary perspectives to influence the decision to retain or delete a particular item such as statistical identification requirements, evidences for construct validity and minimal number of items per factor requirements.

4.5.8 Standardised Residual

Residual is one of the standard outputs produced by SEM, which refers to the individual differences occurring between observed covariance terms and the estimated covariance terms (Hair et al., 2010). Moreover, the residual term is associated with each unique value in the observed covariance matrix. Therefore, a smaller value of the residuals indicates a better fit of the model. Inferably, standardised residuals represents the value that is calculated by dividing residuals by the standard error of the residuals, ideally less than |2.5|. This value, specifically, serves as a basis for researchers to identify whether item pairs used to predict the observed covariance between these two items in the measurement model are not accurate (Hair et al., 2010). Accordingly, referencing values of standardised residuals greater than |4.0| are considered potentially unacceptable degree of error. However, as large standardised residuals are due to

the potential sampling errors, decisions whether to drop items associated with a residual greater than |4.0| should be carefully considered depending on particular situations in the research.

4.5.9 Modification Index (MI)

Similar to standardised residuals, modification index (MI) demonstrates a typical SEM output. Once none of the tested models obtained a particularly good fit to the data, Modification Index (MI) will be taken into consideration as a referencing approach to assess the extent of model misspecification without having to estimate various models (Hair et al., 2010). Particularly, potential cross-loadings that could exist among indicator variables can be diagnosed using modifications (Hair et al., 2010). In the CFA model, by estimating for non-estimated parameters, MI provides diagnostic information relating to error term correlations and correlational relationships between constructs that may not be initially specified. Accordingly, MI indicates that the fit of the tested model could be improved by the correlation of selected parameters within the models as long as recorded values are approximately 4.0 or greater. Particularly, the fit measures and the chi-square tests also improve, which helps increase the overall structural validity without altering the original factor models (Muenjohn & Armstrong, 2008).

4.6 Mediation Analysis

This study also aims to investigate the mediating role of employee creativity in the leadership style (IV)-organisational innovation (DV) relationship. Particularly, employee creativity is expected to play a significant role and contributes to the linkage between leadership styles and organisational innovation. Theoretically, a complete mediation is recognised in case there exists no relationship between IV and DV (Baron & Kenny, 1986). On the other hand, a partial mediation may be affirmed if there is a reduced effect of IV on DV. According to Kumar et al. (2013), a mediating variable (MV) strength accounts for the relationship between a predictor variable (IV) and an outcome variable (DV). In other words, IV influences MV which in turns impacts on DV in the model. A simple mediating model is satisfied with three met conditions: there exists the relationship or impact of IV on MV, the influence of MV on DV as well as IV on DV (Baron & Kenny, 1986). For those constructs or latent variables with multiple indicators, SEM appears to suitably perform the investigation of mediating effect among variables (Holmbeck, 1997; Hayes, 2009). Accordingly, based on the outcome of testing a set of proposed hypotheses, SEM can identify the role of the mediating variable in the relationship between IV and DV in the research model. Figure 4.3 shows the diagram that theoretically demonstrates the potential mediating role of employee creativity (MV) in the relationship between leadership styles (IV) and organisational innovation (DV), which was built on the basis of literature review in the previous chapter.

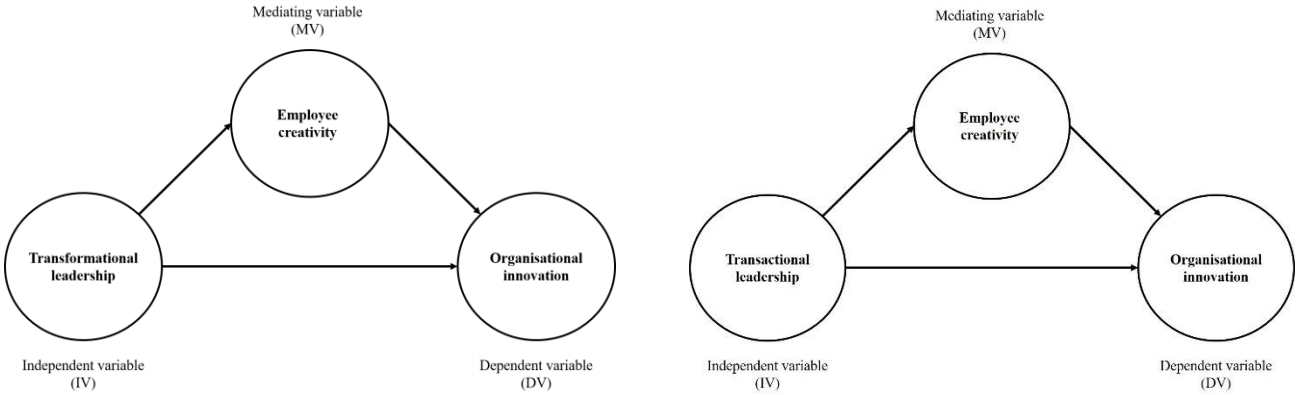


Figure 4.3. Illustration of relationship between IV, DV and MV

Mediation relationship are basically one of the two relationships variations incorporated into the existing structural model (Hair et al., 2010). Accordingly, in a structural model, a mediating effect is demonstrated by the intervention of a third variable or construct into the relationship between the other two constructs, specifically, independent (exogenous) and dependent (endogenous) variable (Baron & Kenny, 1986). Contrasting direct effects between two constructs that are presented by single arrow (A → B), indirect effects encompasses a sequence of relationships among constructs (at least one intervening variables) with two or more direct effects signalised by multiple arrows (A → M → B) that represents the mediating effect of construct M on the relationship between A and B (Figure 4.4 below).

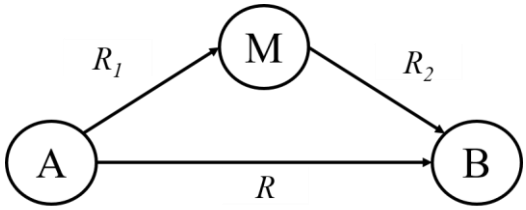


Figure 4.4 Illustration of a mediating effect among constructs

The role of mediating construct is to help clarify and explain the relationship between the two original constructs by the intervening process (Hair et al., 2010). Baron and Kenny (1986) argued that the mediating role of a specific variable is tested and determined depending on satisfying following conditions: levels of variations in the independent variable (IV) significantly account for variations in the presumed mediator; variations in the mediator significantly explain variations in the dependent variable (DV); and the prior significant relationship between IV and DV becomes insignificant as well as the mediating role strongly demonstrates when a direct relationship between independent and dependent variable gets zero. In addition, a mediating construct can either play the role of complete mediation or partial mediation in the relationship between two other related constructs. Particularly, complete mediation occurs when the mediating construct entirely explains the relationship between the two original constructs while partial mediation occurs as the

mediator does not fully explain that relationship. Based on the nature of relationship between two original constructs, partial or complete mediation can be determined.

Evaluating mediation focuses on two basic steps that involve estimating significant relationships between the constructs and estimating the mediated model as well as assessing mediation level. Particularly, statistically significant correlations among the three constructs are required in the mediation testing including relations between two original constructs (A and B), mediator and input construct (A and M) as well as mediator and output construct (M and B). Subsequently, if a direct relationship between A and B is insignificant (path R is expected to be zero) after M is included as a mediating construct, complete mediation is recognised. Contrastingly, partial correlation exists if the addition of path R significantly improves fit measured by $\Delta\chi^2$ or path R reduces but still remains significant when M is added as a predictor. In this case, the Chi-square value is utilised as a relative indicator to assess the comparative fitness of the model. However, as the value of χ^2 is rather sensitive to sample size (Hoekter, 1983; Gogineni et al., 1995), the inevitability and adequacy of mediated relationships in the research model will also be based on assessing multiple fit indexes (GFI, TLI, CFI and RMSEA). Therefore, the mediating role of M construct will be additionally supported if the sequence A → M → B suggested by the estimated model produces good fit. Finally, the mediation is not determined if statistical significance and no change are identified in the relationship between A and B reflected by path R.

4.7 Research Ethics Consideration

Ethical behaviour plays an important role in the research process that influence every step ranging from data collection, data analysis and findings, report write-up to publications (Sekaran, 2003). Moreover, ethical conduct broadly involves not only the researcher but also the organisation under investigation, and the respondents who will participate in the survey and provide researchers with the necessary data. In this particular study, the survey was conducted with the participation of employees working in Vietnamese public coffee enterprises, which is closely related to human subjects. Therefore, it was significant to comply with all research ethical standards to protect respondents. Particularly, the survey focused on asking employees about how they perceived the leadership style their leader reflected and its influence on organisational innovation that was potentially mediated by employee creativity. Accordingly, personal information from respondents were not required as well as the name of their organisation was not presented in the questionnaires. Moreover, collected responses after the survey will be strictly kept anonymous and confidential.

As already stated in the questionnaire, an informed consent letter was also included on the first page of the questionnaire to help briefly clarify the nature and research purpose. In this letter, it also clearly mentioned that the participation in this survey was totally voluntary, which means that they have the right

to withdraw without having to justify. Moreover, employees were rest assured to be free from any harm on health, safety or stress when participating in the survey.

Prior to conducting this survey, the completed research ethics form was submitted together with informed consent sample, and samples of questionnaires to Nottingham University Business School's Research Ethics Committee (NUBS REC) for approval. Specifically, in the research ethics review form, the project goals and the research methods to be employed was summarised. Moreover, regulations relating to the level of anonymity of participants and organisations information in the research output was also clearly indicated.

4.8 Summary

This chapter discussed the applied methodology for this study and the logical arguments for the chosen method. By analysing a variety of research paradigm and philosophical positions in addition to reviewing methodologies used in previous research relating to similar research areas, quantitative method was employed to address the research problem and answer the research questions. The research design for this study covers research scope, sampling design, data collection procedure, instruments and questionnaires. Specifically, surveys will be utilised to collect data from employees working in public coffee enterprises in Vietnam. Following the completion of data collections, methods of data analysis and interpretation are identified, which employs CB-SEM approach to assess the measurement model and structural model to test the proposed hypotheses that investigate relationships between two different leadership styles and employee creativity and organisational innovation. Lastly, steps on how to assess the mediation model illustrating the mediating role of employee creativity in leadership style-organisational innovation linkage and research ethics consideration are discussed.

CHAPTER 5: DATA ANALYSIS AND INTERPRETATION

5.1. Introduction

This chapter presents the results of the preliminary data analysis based on the valid cases in the official data collection procedure and interpretation of the research findings on hypothesised relationships among variables. The first section in this chapter provides the sampling results covering insights into data collection and data entry, demographic data of enterprises and demographic data of respondents. The next step will focus on screening the data to detect missing data, outliers and errors in data presentation. Subsequently, it proceeds with reliability test of measured scales based on Cronbach's alpha value to assess the internal consistency of measurement scales. Next, results of exploratory factor analysis utilising the principal axis factoring with Promax rotation method are discussed to identify the latent dimensions or constructs represented by the original variables of the conceptual model. Then, confirmatory factor analysis is carried out to validate the measurement model, involving the assessment of unidimensionality, convergent validity, discriminant validity and construct validity. Additionally, construct reliabilities are also examined along with making measurement model comparison. Following this, the conformity with SEM assumptions is checked for whether the data satisfied the basic assumptions of sample size, normality and multicollinearity. The next section delineates the summary of findings on hypothesised relationships among leadership styles, employee creativity and organisational innovation. Specifically, relationships between leadership styles and organisational innovation, leadership styles and employee creativity as well as employee creativity and organisational innovation are investigated. Finally, mediation analysis is performed, testing whether employee creativity plays the mediating role in the leadership styles – organisational innovation relationship and addressing respectively formulated hypotheses.

5.2. Sampling results

5.2.1. Data collection procedure and data entry

Utilising cluster sampling technique, public coffee enterprises in the Vietnamese coffee industry were selected from the population of coffee enterprises of all kinds as a primary source for official data collection. Specifically, a list of 57 identified public coffee enterprises was obtained based on the integrated information from government portal, internal reports by *the Vietnam National Coffee Corporation*, The *Ministry of Agriculture and Rural Development* of Vietnam and the VICOFA. Only suitable and contactable coffee settings were shortlisted based on business types and operating areas, which were those with operations closely related to coffee production and trading.

Once the sampling criteria was clearly identified, subsequent steps were completed including obtaining permission from those companies to conduct the survey and approval from the director of each

public coffee enterprise. As employees working in selected firms will only be indirectly contacted through the HR department, interacting with that department with full explanations about the purpose, methodology and general outline of this study was another important step in the data collection procedure. Although the sample included all employees working in different public coffee enterprises in the coffee industry, only employees with at least one year working experience were selected to participate in the survey. On the other hand, due to different characteristics of coffee enterprises that might include indirect or direct employees who are working in the office or in the coffee plantation farm respectively, the sampling frame of this study only focused on indirect employees to investigate the relationship between employee perceptions of leadership style, employee creativity and organisational innovation. Therefore, selected employees from each of the firms were contacted using purposive sampling with the support from the HR department based on these recommended criteria by the researcher. Additionally, those survey forms will also be distributed and returned by the HR department after the employees completed.

The number of questionnaires distributed to each public coffee enterprises out of a total number of 550 sets varied due to the different size of the coffee enterprises that specialised in coffee trading and coffee production. The finally recorded response rate was 67.09 percent, which was equivalent to 369 usable responses. It can be inferred that this response rate was quite above the acceptable level of 30 percent for mail questionnaires (Sekaran, 2003). It also potentially avoids the self-selection bias concern and tends to provide relatively stable results (Shin & Zhou, 2003). Moreover, the ratio of approximately 20:1 (≈19.5:1) with regards to the number of subjects to the number of model parameters estimated was considered acceptable and desirable in this study (Jack, 2003; Kline, 2016; Schreiber, 2006). It is also noticeable that a ratio of 10:1 is deemed a realistic goal while a ratio less than 5:1 will cause the estimates to be unstable (Kline, 2016). Additionally, the collected sample of well above 300 participants also indicates an acceptable level of establishing evidences (Saunders et al., 2012).

5.2.2. Demographic data of enterprises

Although the initially targeted number of public coffee enterprises was 57 as listed, only 39 out of 57 firms were reachable to conduct the surveys. As shown in Table 5.1, in terms of business category, the majority of the public coffee enterprises, namely 32 specialised in coffee production (82.4%). Six were coffee trading enterprises (16.5%) and another company dealt with coffee processing and trading services (1.1%). As far as the type of public enterprises is concerned, the majority of public enterprises 37 (93.5%) were limited liability companies while the rest, two (6.5%) were joint stock companies.

Table 5.1.

Demographic data of enterprises

Characteristics	No. of companies	No. of respondents	Percent	Cum. Percent
Business category				
Coffee production	32	304	82.4	82.4
Coffee trading	6	61	16.5	98.9
Coffee processing and trading services	1	4	1.1	100.0
Total	39	369	100.0	
Type of public enterprise				
Limited liability company	37	345	93.5	93.5
Joint stock company	2	24	6.5	100
Total	39	369	100.0	

5.2.3. Demographic data of respondents

The demographic data section demonstrates the actual sample of 369 respondents for data analysis in this study, which covers gender, age, position, length of service and education as presented in Table 5.2 below. Regarding gender, the number of male respondents were 256 (69.4%), which exceeds that of female respondents 113 (30.6%). This ratio portrays the expected current working ratio between men and women in the coffee industry where the majority of public coffee enterprises (82.4%) focused on production as presented in Table 5.1 above. Moreover, this ratio also indicates an obvious difference in the number of male and female employees (38.8%) whereby male respondents accounted for more than two thirds of the total respondents in this research.

Similarly, in terms of age range, participants between 35 and 44 years of age constituted the largest percentage of the total respondents, namely 147 (39.9%). 96 (26%) respondents represent the 25-34 age group. Generally, the majority of the respondents 243 (65.9%) aged between 25 and 44, which accounted for nearly two thirds of the total participants. Respondents aged between 45 and 54 represented 79 (21.4%) among participants of all age groups. The remaining two groups aged between 18 and 24 years as well as 55 years and above totaled 47 (12.7%) of all respondents. Specifically, 20 (5.4%) participants were between 18 and 24 years of age and 27 (7.3%) were 55 and above. The variation in the presented sample also indicated well representation of the working population in public coffee enterprises within the specific coffee industry. Moreover, it could be inferred that the majority of employees could well perceive the leadership style of their leaders and were able to assess its influence on employee creativity and organisational innovation.

Table 5.2.

Demographic data of respondents

Characteristics	Category	Frequency	Percent	Cum. Percent
Gender	Female	113	30.6	30.6
	Male	256	69.4	100.0
	Total	369	100.0	
Age	18-24	20	5.4	5.4
	25-34	96	26.0	31.4
	35-44	147	39.9	71.3
	45-54	79	21.4	92.7
	55 and above	27	7.3	100.0
	Total	369	100.0	
Position	Vice captain	46	12.5	12.5
	Captain	59	16.0	28.5
	Officer	190	51.5	80.0
	Deputy of Department	44	11.9	91.9
	Head of Department	30	8.1	100.0
	Total	369	100.0	
Length of Service	1-5 years	103	27.9	27.9
	6-10 years	175	47.4	75.3
	11-15 years	43	11.7	87.0
	more than 15 years	48	13.0	100.0
	Total	369	100.0	
Education	Vocation	44	11.9	11.9
	Associate/College	198	53.7	53.7
	Undergraduate	115	31.2	31.2
	Postgraduate	12	3.3	3.3
	Total	369	100.0	

Approximately 295 (80%) of the total respondents were employees and the rest 74 (20%) were Deputy and Head of Department. Particularly, more than half of the participants 190 (51.5%) were officers while vice captain (who is entrusted with the responsibility of supporting the captain in directly supervising the manufacturing performance of the workers and keep the captain informed about their work progress for the sake of increasing work efficiency) and captain (who is responsible for regular supervision of the progress of workers and reminding them of errors in their work for prompt remedies to maximise their productivity and efficiency) accounted for 46 (12.5%) and 59 (16%) respectively. 44 (11.9%) of the respondents were working as Deputy of Department while 30 (8.1%) were employed as Head of

Department. In general, there existed observed variance in the number of respondents taking different positions in the surveyed enterprises.

With regard to length of service, more than two thirds 266 (72.1%) of the respondents have been working in their organisations for more than 5 years while 103 (27.9%) have less than 5 years of working experience. Specifically, the majority of the participants 175 (47.4%) have been with their enterprises between 6 and 10 years. 43 (11.7%) of the total respondents have 11-15 years of working experience and 48 (13%) of the respondents have more than 15 years of service with their current organisations. A recorded percentage of 72.1 of the total participants with more than 5 years of working experience indicates that employees working in the organisations have sufficient time to better perceive and understand their leaders, especially the leadership style that their leaders displayed. Additionally, employees might have reasonable assessment on how the leadership style of their leader affected their creativity and organisational innovation. Therefore, it could be conclusive that responses of the majority of the participants were deemed relatively appropriate in terms of reliability and validity for this study.

It can be observable from Table 5.2 that the majority of the respondents (198; 53.7%) held associate/college degree as their highest education level. The next largest group was Undergraduate degree holders (115; 31.2%). Another 44 (11.9%) of the respondents achieved vocation qualifications in their relevant fields. Only a few respondents 12 (3.3%) had postgraduate qualifications. These statistics also show that all respondents at least had tertiary education qualifications.

5.3. Screening the data

5.3.1. Detection of missing data and data presentation

The collected data was entered into Microsoft Excel utilising a self-designed template and subsequently transferred to SPSS software version 23 for further analysis. Data screening process and data input were simultaneously conducted using frequencies for checking data discrepancy arising out of individual cases and variable cases to avoid biased statistic inferences and distortion of the results (Desimone et al., 2015; Karami & Ismail, 2012; Pallant, 2013). In terms of checking for individual cases, there were no unanswered items, particularly items with multiple selections and unengaged responses detected. With regard to checking for variable cases, the calculation of frequencies of the entire data set also showed that no missing values were listed. Generally, results of data entry and data screening indicated that 369 cases were usable for the next analytical phases. Moreover, this sample size was satisfactory for studies that adopted questionnaires from previous research as well as fulfilled the requirements for using statistical techniques in EFA, CFA and SEM analysis (Desimone et al., 2015; Hair et al., 2010; Osborne & Costello, 2004).

5.3.2. Detection of outliers

Assessing and treating outliers are all an important part of data screening as well as a prerequisite for inferential statistical techniques (Field, 2013; Hair et al., 2010). Accordingly, checking for both univariate and multivariate outliers were executed for the entire data set in this study. Tabachnick and Fidell (2013) and Ghasemi and Zahediasl (2012) highlighted that outliers distort parameters and statistical estimates as well as affect the generalisability of statistical results. Additionally, outliers may lead to misspecification of SEM model results (Hair et al., 2010). Van den Broeck et al. (2005) argued that outliers do not really exist in Likert-scales, specifically in a five point Likert scale where responding at the extreme (either 1 or 5) does not represent outlier behaviours.

For univariate outliers testing, scatter plots and descriptive statistics were used to detect cases with extreme values (Pallant, 2013). Hair et al. (2010) stressed that values of extreme cases might significantly influence the outcome of statistical analysis across several variables in a negative way. Moreover, Schumacker and Lomax (2010) added that extreme values also impacted the mean, standard deviation as well as correlation coefficient values. Generally, there was no major problem of univariate outliers in the data as no extreme value was identified in the results.

Similarly, the data was examined for multivariate outliers to identify outliers across all variables in the study. Specifically, Mahalanobis D-squared test through regression analysis based on a Chi-square distribution was applied, which measures each observation's distance in multidimensional space from the sample mean (centroid) of all observations and provides a single value for each observation no matter how many variables are considered (Algur & Biradar, 2017; Hair et al., 2010). High D-squared value represents an observation that stands distinctly from the general distribution of other observations in this multidimensional space, which indicates the possibility of an outlier (Byrne, 2016). Additionally, any value of D-squared divided by degree of freedom exceeding 3 or 4 in a large sample ($n > 100$) is also considered as a potential outlier (Byrne, 2016; Hair et al., 2010). Kline (2016) stated that a relatively high D-squared with a low p-value in the respective Chi-square distribution ($p < .001$) potentially becomes an outlier. An extract of results on testing multivariate outliers using Mahalanobis D-squared test of 20 out of 369 cases was presented in Table 5.3 below. Accordingly, it clearly indicated that there was no potential outliers detected in the data set as all p-value were larger than .001.

Table 5.3.

An extract of results of Mahalanobis D-squared test for the first 20 cases

Respondent	MAH	pvalueD
1	56.60206	0.88532
2	47.86232	0.29792
3	42.55754	0.71495
4	46.79629	0.47303
5	48.02207	0.60109
6	36.38234	0.18364
7	31.39476	0.69843
8	41.36309	0.18057
9	27.87573	0.95747
10	37.19625	0.99053
11	31.86056	0.68038
12	29.70152	0.6994
13	30.79354	0.37172
14	28.81483	0.25404
15	28.85268	0.25166
16	21.84361	0.61965
17	29.77604	0.20173
18	26.54470	0.88701
19	29.20488	0.92798
20	27.61718	0.42995
……	……	……

Note: MAH – Mahalanobis D-squared value

5.4. Reliability test of measured scales

Refining measurement scales of the study requires the computation of reliability coefficients, known as Cronbach's alpha values, to assess the internal consistency of all the individual items used to measure variables based on responses of participants (Churchill, 1979; Kline, 1999). Accordingly, Cronbach's alphas were computed for all individual items to ascertain the level of reflection that items making up variables shared common aspects. Final results of the reliability test using Cronbach's alpha values in Table 5.4 show that alpha coefficients of all variables surpassed the suggested threshold value of 0.7 after deleting several items and ranged from 0.819 to 0.933 (Devillis, 2012; Lewicki & Hill, 2006; McAllister & Bigley, 2002; Schilling, 2002; Spector et al., 2002).

Specifically, 8 out of 51 items in the questionnaires were deleted, which belonged to such variables as Idealised influence (01 item – II8 'Emphasises the importance of having a collective sense of mission'), Inspirational motivation (01 item – IM3 'Articulates a compelling vision of the future'), Individualised considersation (01 item – IC3 'Considers me as having different needs, abilities, and aspirations from

others') and Employee creativity (05 items – EC2 'I come up with practical ideas to improve performance.', EC4 'I suggest new ways to increase quality.', EC6 'I am not afraid to take risks.', EC7 'I promote and champion ideas to others.', EC8 'I exhibit creativity on the job when given the opportunity to.'). Items were deleted due to their low reliability and the deletion of items increased the overall value of Cronbach's alpha for specific variables. Additionally, all the corrected item-total correlation value of single item were higher than 0.400 (Gliem & Gliem, 2003) and the Cronbach's alpha value if item deleted was lower than that of Cronbach's alpha in each respective variable. The reliability scores of all variables did not exceed 0.95, which indicates that there was no significant multicollinearity (Bland & Altman, 1977).

Generally, high Cronbach's alpha values of all variables demonstrated well-designed and trustworthy measurement scales adopted in this study (Rothbard & Edwards, 2003; Schilling, 2002; Spector et al., 2002). It can be inferred from the result of the reliability test that respondents consistently understood and interpreted each of the remaining items in the scale. Therefore, 43 items covering four main variables that presented adequate reliabilities were retained for further analysis (Nunnally & Bernstein, 1994).

Table 5.4.

Cronbach's alpha values of all variables

Variables	Number of items	Cronbach's alpha
Transformational leadership		
Idealised influence	7	.933
Inspirational motivation	3	.819
Intellectual stimulation	4	.875
Individualised consideration	3	.884
Transactional leadership		
Contingent reward	4	.872
Management by exception – Active	4	.843
Employee creativity	8	.898
Organisational innovation		
Business practices	4	.854
Workplace organisation	3	.853
External relations	3	.922

5.5. Exploratory Factor Analysis

Factor analysis generally aims to group inter-correlated variables under more general, underlying latent factors and explain the variances in the observed variables that represent those respective factors (Habing, 2003; Hancock & Mueller, 2013). Specifically, EFA determines the number of common factors that influence a set of measures as well as the strength of the relationship between each factor and its observed measures (Field, 2009; Habing, 2003). Accordingly, although well-established measurement scales constituting the dimensions and variables in this research were adopted from a number of scholarly

authors, EFA was carried out to uncover the underlying structure of a relatively large set of variables as well as test the dimensionality of those scales (Field, 2009; Hancock & Mueller, 2013; Kelloway, 1995). Moreover, a rule of thumb suggested by Tabachnick and Fidell (2013) states that a minimum sample size of 300 is required for factor analysis. Therefore, based on this rule, 369 available cases in this study were acceptable for EFA.

Prior tests including Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were conducted before extracting factors to determine the suitability of the data set for EFA. Accordingly, the result of Bartlett's Test of Sphericity presented in Table 5.5 was statistically significant (Approx. $\chi 2 = 9892.497$, $df = 903$, $p < .001$), rejecting the null hypothesis that there was no relationship between items. Therefore, it suggested that there really existed a patterned relationship among variables. Subsequently, the obtained KMO value was 0.887, which was higher than the minimum value of 0.50 (Frohlich & Westbrook, 2001) and above the acceptable standard of 0.7 (Yong & Pearce, 2013) indicating the factorability of the correlation matrix as a whole and the data set was deemed suitable for EFA.

Table 5.5.

Results of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**.887**
Bartlett's Test of Sphericity	Approx. Chi-Square	9892.497
	df	903
	Sig.	**.000**

The Principal Axis Factoring (PAF) with Promax rotation method to conduct EFA was performed on 43 measurement items of all variables that were qualified in the reliability test. Anderson and Gerbing (1988) argued that PAF with Promax rotation method might extract the correct model by factoring a whole set of data and is more commonly applied in social and behavioural science research than Principal component extraction with Varimax rotation. Moreover, common factor analysis, specifically PAF, fits the primary objective in this study to identify the latent dimensions or constructs that are represented by the original variables of the conceptual model (Hair et al., 2010). Table 5.6 presents total variance explained for the extracted factors. As can be observed from this table, the results of factor extraction revealed the presence of ten factors with the Eigen value of each factor above 1, which explained 64.5 percent of the total variance in variables. The suggested value of total variance explained by Anderson and Gerbing (1988) is more than 50 percent while that value needs to be higher than 60 percent for an unguided measurement model as recommended by Gaskin (2012), which implies that the value attained in the current study was acceptable.

Table 5.6.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	10.195	23.708	23.708	9.821	22.840	22.840	4.887
2	5.030	11.698	35.406	4.720	10.978	33.818	7.162
3	2.960	6.884	42.291	2.647	6.156	39.974	4.275
4	2.683	6.238	48.529	2.384	5.545	45.519	4.950
5	2.447	5.690	54.219	2.119	4.929	50.448	2.653
6	2.108	4.903	59.122	1.699	3.951	54.399	4.289
7	1.759	4.091	63.213	1.437	3.341	57.740	6.538
8	1.442	3.354	66.567	1.107	2.574	60.314	4.688
9	1.379	3.206	69.773	1.007	2.342	62.656	4.761
10	1.126	2.620	72.393	.784	1.823	**64.479**	5.734
11	.704	1.636	74.029				
12	.648	1.507	75.536				
13	.631	1.467	77.003				
14	.588	1.367	78.371				
15	.563	1.309	79.680				
16	.527	1.225	80.905				
17	.513	1.194	82.099				
18	.468	1.089	83.188				
19	.458	1.066	84.254				
20	.450	1.046	85.300				
21	.429	.997	86.297				
22	.413	.960	87.257				
23	.403	.938	88.195				
24	.372	.865	89.060				
25	.356	.829	89.889				
26	.349	.811	90.700				
27	.328	.762	91.462				
28	.323	.752	92.214				
29	.301	.700	92.914				
30	.291	.676	93.590				
31	.284	.659	94.249				
32	.270	.629	94.878				
33	.268	.623	95.502				
34	.258	.599	96.101				
35	.245	.570	96.671				
36	.242	.563	97.234				
37	.219	.510	97.744				
38	.213	.496	98.241				
39	.199	.464	98.704				
40	.163	.379	99.084				
41	.155	.361	99.445				
42	.123	.287	99.732				
43	.115	.268	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 5.7.

Pattern Matrix

	Factor									
	1	2	3	4	5	6	7	8	9	10
II2	.889									
II1	.877									
II6	.808									
II5	.805									
II7	.798									
II4	.793									
II3	.747									
EC1		.769								
EC11		.768								
EC13		.758								
EC12		.752								
EC9		.718								
EC5		.705								
EC3		.629								
EC10		.621								
IS4			.844							
IS3			.812							
IS1			.803							
IS2			.723							
CRW4				.854						
CRW1				.774						
CRW2				.770						
CRW3				.759						
ER3					.927					
ER2					.884					
ER1					.874					
MBEA1						.819				
MBEA4						.781				
MBEA2						.729				
MBEA3						.705				
BP2							.807			
BP1							.776			
BP4							.739			
BP3							.654			
IC1								.879		
IC4								.831		
IC2								.822		
IM4									.823	
IM1									.787	
IM2									.692	
WO3										.852
WO2										.767
WO1										.680

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalisation.[a]

a. Rotation converged in 6 iterations.

Table 5.7 above demonstrates the pattern matrix of factor analysis for all variables in the study. Specifically, all factor loadings representing the underlying constructs were above 0.5, which indicates that all items were retained for the next phase of CFA. The ten factors extracted from 43 observed variables in the table was consistent with the original number of factors in the initial research model. After a satisfactory factor solution was achieved, the labelling of each factor was proceeded by assigning the meaning to the factor structure. As the variables were loaded onto specific factors as originally construed, accurately labelling the factors was not too complicated. Accordingly, seven items (II1, II2, II3, II4, II5, II6, II7) were grouped under Factor 1, Idealised influence in the conceptual model. Similarly, eight items (EC1, EC3, EC5, EC9, EC10, EC11, EC12, EC13) were grouped under Factor 2, Employee creativity. Four items (IS1, IS2, IS3, IS4) were grouped under Factor 3, Intellectual stimulation. Four items (CRW1, CRW2, CRW3, CRW4) were loaded onto Factor 4, Contingent reward. Three items (ER1, ER2, ER3) were grouped under Factor 5, External relations. Four items (MBEA1, MBEA2, MBEA3, MBEA4) were respectively loaded onto Factor 6, Management by exceptional – Active. Four items (BP1, BP2, BP3, BP4) were grouped under Factor 7, Business practices. Three items (IC1, IC2, IC4) were relevantly loaded onto Factor 8, Individualised consideration. Three items (IM1, IM2, IM4) were loaded onto Factor 9, Inspirational motivation. Finally, Three items (WO1, WO2, WO3) were grouped under Factor 10, Workplace organisation.

Table 5.8 clearly presents regrouped items loading onto factors and respective main constructs that were stated in the research model to facilitate the observation and comparison. Specifically, transformational leadership was conceptualised as four separate dimensions. Therefore, Factor 1 - Idealised influence, Factor 9 - Inspirational motivation, Factor 3 - Intellectual stimulation and Factor 8 - Individualised consideration were regrouped under Transformational leadership construct. Similarly, transactional leadership was reflected by two separate dimensions. Hence, Factor 4 - Contingent reward, Factor 6 - Management by exceptional – active constituted Transactional leadership construct. Factor 2 - Employee creativity represented itself in the same underlying construct of Employee creativity. Finally, Organisational innovation was depicted by three separate dimensions. Consequently, Factor 7 - Business practices, Factor 10 - Workplace organisation and Factor 5 - External relations were regrouped under Organisational innovation construct.

Table 5.8.

Regrouped items loading onto respective factors

Main construct	Factor	Item Coding	Item	Factor loading
Transformational leadership	Factor 1: Idealised influence	II1	Instills pride in me for being associated with him/her	.889
		II2	Goes beyond self-interest for the good of the group	.877
		II3	Acts in ways that builds my respect	.747
		II4	Displays a sense of power and confidence	.793
		II5	Talks about his/her most important values and beliefs	.808
		II6	Specifies the importance of having a strong sense of purpose	.805
		II7	Considers the moral and ethical consequences of decisions	.798
	Factor 9: Inspirational motivation	IM1	Talks optimistically about the future	.787
		IM2	Talks enthusiastically about what needs to be accomplished	.692
		IM4	Expresses confidence that goals will be achieved	.823
	Factor 3: Intellectual stimulation	IS1	Re-examines critical assumptions to question whether they are appropriate	.803
		IS2	Seeks differing perspectives when solving problems	.723
		IS3	Gets me to look at problems from many different angles	.812
		IS4	Suggests new ways of looking at how to complete assignments	.844
	Factor 8: Individualised consideration	IC1	Spends time teaching and coaching	.879
		IC2	Treats me as an individual rather than just as a member of a group	.822
		IC4	Helps me to develop my strengths	.831
Transactional leadership	Factor 4: Contingent reward	CRW1	Provides me with assistance in exchange for my efforts	.774
		CRW2	Discusses in specific terms who is responsible for achieving performance targets	.770
		CRW3	Makes clear what one can expect to receive when performance goals are achieved	.759
		CRW4	Expresses satisfaction when I meet expectations	.854
	Factor 6: Management by exception – Active	MBEA1	Focuses attention on irregularities, mistakes, exceptions, and deviations from standards	.819
		MBEA2	Concentrates his/her full attention on dealing with mistakes, complaints, and failures	.729
		MBEA3	Keeps track of all mistakes	.705
		MBEA4	Directs my attention toward failures to meet standards	.781

Employee creativity	Factor 2: Employee creativity	EC1	I suggest new ways to achieve goals or objectives.	.768
		EC3	I search out new technologies, processes, techniques, and/or product ideas.	.621
		EC5	I am a good source of creative ideas.	.705
		EC9	I develop adequate plans or schedules for the implementation of new ideas.	.718
		EC10	I often have innovative ideas.	.629
		EC11	I come up with creative solutions to problems.	.769
		EC12	I often have a fresh approach to problems.	.752
		EC13	I suggest new ways of performing work tasks.	.758
Organisational innovation	Factor 7: Business practices	BP1	Used databases of best practices, lessons, and other knowledge.	.776
		BP2	Implemented training programmes for employee development *to* create efficient *and* functional teams	.807
		BP3	Used an integrated monitoring system for firm activities	.654
		BP4	Used quality-management systems for general production or supply operations	.739
	Factor 10: Workplace organisation	WO1	Implemented decentralisation in job responsibility for workers in the organisation	.680
		WO2	Established formal or informal work teams to improve the access and sharing of knowledge from different departments	.767
		WO3	Implemented an anonymous incident reporting system to encourage the reporting of errors or hazards	.852
	Factor 5: External relations	ER1	Collaborated with customers and other organisations	.874
		ER2	Used methods of integration with suppliers	.884
		ER3	Outsourced business activities	.927

5.6. Validating the measurement model: Confirmatory Factor Analysis

After the EFA step has been completed, its results provided a basis for specifying a CFA model (Fabrigar et al., 1999). Once each construct has already been specified, identified and defined, the CFA procedure was subsequently applied to assess and modify the measurement model of latent constructs (Bagozzi & Foxall, 1996). Specifically, the unidimensionality, validity and reliability of latent constructs were gauged prior to modelling their interrelationships in SEM. Moreover, how the priori theoretical pattern of loadings on pre-specified constructs represented the data was also tested (Tavakoli, 2012). Accordingly, pooled CFA procedure was performed for all latent constructs involved in the research model using IBM AMOS version 23.

5.6.1. Unidimensionality assessment

Testing unidimensionality using CFA was based on evaluating the value of factor loadings of measured items onto the respective latent constructs (Zainudin, 2012), which was critically important for the measurement model with more than one construct. Accordingly, the overall measurement model consisting of all constructs was assessed. Kline (2016) argued that CFA may not produce the best result as the number of variables per factor is fewer than three. As observed from Figure 5.1, all factors in the CFA model of this study had at least three items per each factor, which satisfied the above requirement. Hair et al. (2010) argued that unidimensionality will be achieved when all items have acceptable factor loadings that are above 0.5 for newly developed items, above 0.6 for established items and non-existing cross-loading of error terms. Following this criteria, all factor loadings of measured items adopted from well-established scales surpassed the acceptable threshold value of 0.6 (ranging between 0.679 and 0.922) as illustrated by Figure 5.1 and Table 5.9. Therefore, it indicated that particular constructs in this study really consisted of the underlying indicators.

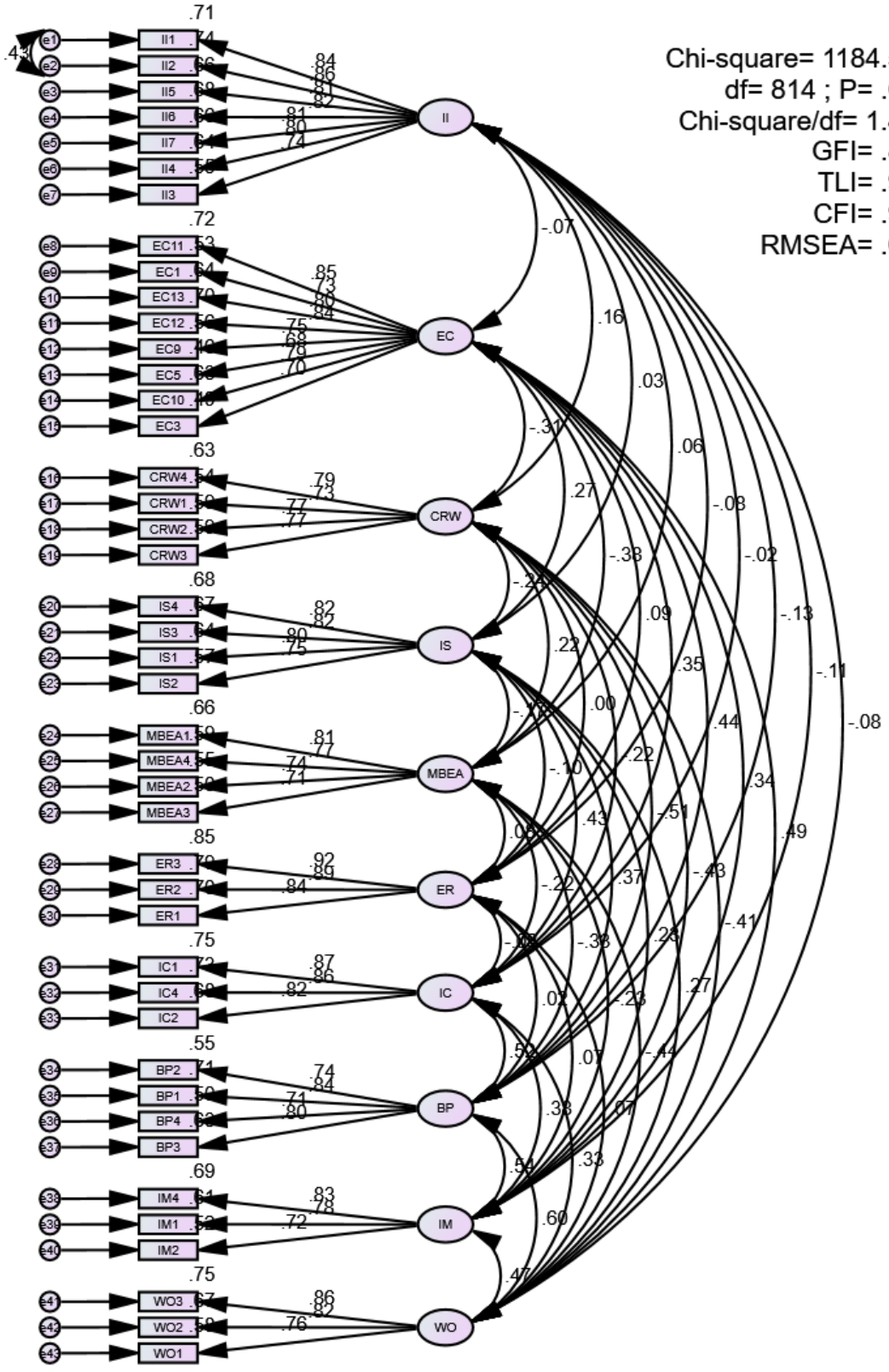


Figure 5.1. CFA results of all observed variables

Table 5.9.

Standardised Factor loadings of all observed variables

			Std. Loading	Squared Multiple Correlations (R^2)	S.E.	C.R.	P
II1	<---	Idealised influence	.843	.711			
II2	<---	Idealised influence	.858	.735	.035	27.371	***
II3	<---	Idealised influence	.742	.550	.048	16.526	***
II4	<---	Idealised influence	.797	.636	.045	18.359	***
II5	<---	Idealised influence	.810	.657	.052	18.570	***
II6	<---	Idealised influence	.822	.676	.049	18.782	***
II7	<---	Idealised influence	.811	.658	.051	18.637	***
IM1	<---	Inspirational motivation	.781	.610	.070	14.583	***
IM2	<---	Inspirational motivation	.722	.522	.059	13.641	***
IM4	<---	Inspirational motivation	.833	.693			
IS1	<---	Intellectual stimulation	.800	.639	.062	16.229	***
IS2	<---	Intellectual stimulation	.752	.565	.061	15.615	***
IS3	<---	Intellectual stimulation	.820	.672	.058	17.064	***
IS4	<---	Intellectual stimulation	.823	.677			
IC1	<---	Individualised consideration	.865	.749			
IC2	<---	Individualised consideration	.823	.678	.053	18.659	***
IC4	<---	Individualised consideration	.856	.732	.049	19.408	***
CRW1	<---	Contingent reward	.732	.536	.072	13.895	***
CRW2	<---	Contingent reward	.767	.588	.071	14.760	***
CRW3	<---	Contingent reward	.766	.586	.070	14.292	***
CRW4	<---	Contingent reward	.791	.625			
MBEA1	<---	Management by exception active	.811	.658			
MBEA2	<---	Management by exception active	.745	.554	.060	14.254	***
MBEA3	<---	Management by exception active	.706	.499	.063	13.405	***
MBEA4	<---	Management by exception active	.770	.594	.058	14.965	***
EC11	<---	Employee creativity	.847	.717			
EC1	<---	Employee creativity	.726	.527	.057	16.010	***
EC3	<---	Employee creativity	.700	.491	.052	15.257	***
EC5	<---	Employee creativity	.679	.461	.054	14.576	***
EC9	<---	Employee creativity	.750	.562	.051	16.856	***
EC10	<---	Employee creativity	.791	.626	.051	18.373	***
EC12	<---	Employee creativity	.839	.704	.050	20.109	***
EC13	<---	Employee creativity	.798	.636	.054	18.314	***
BP2	<---	Business practices	.743	.552			

BP1	<---	Business practices	.841	.707	.072	15.461	***
BP3	<---	Business practices	.796	.633	.070	14.661	***
BP4	<---	Business practices	.706	.498	.074	13.165	***
WO1	<---	Workplace organisation	.761	.578	.052	15.883	***
WO2	<---	Workplace organisation	.817	.668	.054	17.586	***
WO3	<---	Workplace organisation	.864	.746			
ER1	<---	External relations	.839	.704	.047	22.089	***
ER2	<---	External relations	.887	.786	.041	24.122	***
ER3	<---	External relations	.922	.850			

5.6.2. Validity assessment

Validity assessment utilising CFA technique covers three types of validity that were required for the measurement model, namely, convergent validity, construct validity and discriminant validity. The aim of validity test is to check the degree that the survey item can measure what it is supposed to measure for a particular construct, which serves as a basis to determine the suitability of the items employed (Alreck & Settle, 1994; Vannette & Krosnick, 2018). Section 5.6.2.1 - 5.6.2.3 below elaborates the results of validity check.

5.6.2.1. Convergent validity

Convergent validity refers to the extent which the items of the survey converge to measure their respective construct (Al-Hamadi et al., 2007; Ary et al., 2018; Byrne, 2016). In other words, measures of the same construct should share a large common variance or high correlations between two measures of the same construct indicate that the scales measures the intended concept (Bagozzi & Phillips, 1982; Hair et al., 2010; Sekaran, 2003). Accordingly, convergent validity for every construct in the CFA model was achieved because factor loadings of all items were statistically significant ($p < .001$) (Anderson & Gerbing, 1998; Hershberger, 2003; Schreiber, 2006). In other words, each construct had significant effect on all of its respective items ($p < .001$). Additionally, standardised factor loadings of all items were higher than 0.5 (Table 5.9), which revealed that convergent validity was confirmed (Hershberger, 2003; Schreiber, 2006). High loadings on a factor also indicated high convergent validity of measured items on the latent construct. Moreover, values of average variance extracted (AVE) of latent constructs higher than 0.5 demonstrated adequate convergence as shown in Table 5.10 (Fornell & Larcker, 1981; Hair et al., 2010).

5.6.2.2. Discriminant validity

Discriminant validity refers to the degree that a construct is strictly distinct from others (Bagozzi & Phillips, 1982; Hair et al., 2010). Accordingly, discriminant validity for all constructs in the model were

confirmed upon satisfying several common caveats. Specifically, Maximum shared variance (MSV) for each construct were lower than its Average variance extracted (AVE) (Table 5.10). Moreover, the square root value of AVE for each construct were higher than its correlations value between the respective constructs (Table 5.10) (Fornell & Larcker, 1981). Amick and Walberg (1975) also stated that correlations between measures represented by correlation coefficient value lower than 0.90 indicated that all variables were distinct. Results in Table 5.11 showed that none of the correlation coefficient was higher than 0.90 between measures, which confirmed the discriminant validity. Additionally, the redundant items in the CFA model were constrained as a free parameter as elaborated in section 5.6.2.3 below, which supported the achievement of discriminant validity for all constructs.

5.6.2.3. Construct validity

Construct validity will be achieved providing that all fitness indexes for the model fulfil the required levels as remarked in Table 5.12. Initially, after running the CFA model using AMOS, certain fitness indexes for the CFA model were recognised not to achieve the satisfactory level of fitness. While factor loadings for all items of the respective construct were above 0.6, suspicion was raised in terms of item redundancy in the model. In other words, particular items were redundant of each other in the measurement model, which was evidenced by high Modification Indices (MI) (Zainudin, 2012). Specifically, by inspecting MI of a pair of correlated measurement errors between e1 and e2, the recorded value was 29.778, which was higher than 15.0 and led to unsatisfactory level of fitness (Zainudin, 2012). Therefore, the modification of the measurement model was carried out by setting correlated errors (e1 and e2) of redundant items as a free parameter and re-specifying the model (Figure 5.1). Generally, the final result of fitness indexes improved after constraining the two redundant items in the CFA model as shown in Table 5.12. Accordingly, fitness indices represented by $\chi^2 = 1184.524$; $p < .05$; GFI = 0.872; TLI = 0.957; CFI = 0.961; and RMSEA = 0.035 implied an acceptable fitting model.

Additionally, assessing convergent validity and discriminant validity were two measures taken to confirm construct validity (Branine & Pollard, 2010). Results of convergent validity (Section 5.6.2.1) and discriminant validity (Section 5.6.2.2) both indicated satisfactory level. Moreover, good fitness indexes were also achieved for the measurement model as clarified above. Therefore, it could be concluded that construct validity of the scales was confirmed in the CFA model.

Table 5.10.

Scores of validity test for all variables

	CR	AVE	MSV	MaxR(H)	IM	II	EC	CRW	IS	MBEA	ER	IC	BP	WO
IM	0.823	0.608	0.289	0.831	**0.780**									
II	0.931	0.661	0.027	0.934	-0.111	**0.813**								
EC	0.892	0.512	0.359	0.902	0.429	-0.064	**0.715**							
CRW	0.873	0.632	0.309	0.874	0.425	-0.163	0.320	**0.795**						
IS	0.876	0.638	0.186	0.878	0.228	0.026	0.319	0.234	**0.799**					
MBEA	0.844	0.576	0.198	0.849	0.226	-0.062	0.417	0.246	0.173	**0.759**				
ER	0.921	0.796	0.025	0.928	-0.035	-0.023	-0.089	-0.094	-0.158	-0.118	**0.892**			
IC	0.884	0.718	0.279	0.886	0.381	-0.022	0.366	0.297	0.431	0.225	-0.124	**0.848**		
BP	0.852	0.590	0.358	0.861	0.538	-0.122	0.536	0.556	0.368	0.334	-0.069	0.528	**0.768**	
WO	0.855	0.664	0.359	0.863	0.474	-0.081	0.599	0.426	0.272	0.445	-0.078	0.327	0.598	**0.815**

Note. Values below the diagonal are correlation estimates among constructs, diagonal elements are squared root of the Average variance extracted (AVE) for individual construct.

Table 5.11.

Correlation results for all variables

Variable	II	IM	IS	IC	CRW	MBEA	EC	BP	WO	ER
II	1.000									
IM	-.111	1.000								
IS	.026	.229***	1.000							
IC	-.019	.383***	.431***	1.000						
CRW	.165**	-.426***	-.235***	-.223***	1.000					
MBEA	.062	-.227***	-.173**	-.224***	.224***	1.000				
EC	-.072	.335***	.270***	.353***	-.307***	-.378***	1.000			
BP	.126*	.544***	.372***	.515***	-.505***	-.332***	.440***	1.000		
WO	-.080	.473***	.271***	.326***	-.407***	-.445***	.488***	.598***	1.000	
ER	-.081	.066	-.104	-.075	.005	.062	.081	.025	.065	1.000

Note. *p < .05 (2-tailed); **p < .01 (2-tailed); ***p < .001 (2-tailed)

Table 5.12.

Summary of key model fit indices assessment.

Fit indices	Acceptable threshold levels	Scores	Remarks
Chi-Square (χ^2) - CMIN	p value less than .05 low χ^2 relative to degrees of freedom with an insignificant *p* value (p > .05)	1184.524	Acceptable
Relative χ^2 (χ^2/df) – CMIN/df	• CMIN/df < 2 (Tabachnik & Fidell, 2013) • CMIN/df < 3 (sample size < 200) (Kline, 2016) • CMIN/df < 5 (sample size > 200) (Wheaton et al., 1977)	1.455	Acceptable
Goodness-of-Fit Index (GFI): 0 - 1	Value larger than .90	.872	Satisfactory
Comparative Fit Index (CFI): 0 - 1	Value larger than .90 (fit) (Bentler, 1990), Hair et al. (2010)	.961	Acceptable
Tucker Lewis Index (TLI): 0 - 1	Value larger than .90 (fit)	.957	Acceptable
Root Mean Square Error of Approximation (RMSEA)	Value less than .08 (Browne & Cudeck, 1993)	.035	Acceptable

5.6.3. Reliability assessment

Reliability assessment, specifically composite reliability (CR), aims to measure the reliability and internal consistency for each latent construct (Elosua Oliden & Zumbo, 2008; Gadermann et al., 2012; Kline, 2016; Lukas et al., 2004; McDonald, 1999; Raykov, 1997; Zikmund et al., 2008). Computing CR to assess internal consistency is another important step prior to analysing SEM models in which high construct reliability shows that the measures all consistently measure the same underlying construct (Peterson & Kim, 2013; Viladrich et al., 2017; Yang & Green, 2010). As presented in Table 5.10, all CR value surpassed 0.7 (ranging between 0.823 and 0.931) (Bagozzi & Yi, 1988; Hair et al., 2010). Therefore, it indicated good reliability and internal consistency among measures that represented the same latent construct (Elosua Oliden & Zumbo; 2008; Gadermann et al., 2012; Viladrich et al., 2017).

5.6.4. Measurement model comparison

The overall measurement model comprising of all constructs was assessed in terms of its validity for the next phase of SEM analysis (Zabkar, 2000). Specifically, after specifying the measurement relationships between indicators and respective constructs, correlational relationships between constructs and error terms for the items, all variables for the structural model were analysed (Raykov, 2012; Viladrich et al., 2017). Moreover, the analysis was based on the assumption that all variables correlated with each

other. Accordingly, four main constructs including transformational leadership, transactional leadership, employee creativity and organisational innovation constituted the hypothesised model, which serves as the conceptual framework of this study.

Results of the CFA as presented in Figure 5.2 supported the validity of four-construct measurement model that included three second-order constructs: transformational leadership, transactional leadership and organisational innovation and one first-order construct: employee creativity. Particularly, the results of fitness indexes indicated a well-fitting model with χ^2 (843) = 1200.208, $p < .05$, GFI = 0.871, TLI = 0.959, CFI = 0.962 and RMSEA = 0.034. Additionally, the standardised regression weights revealed that all the items were significantly loaded onto the intended construct and sub-constructs with standard loadings above the recommended value of 0.5 (Kline, 2016). Therefore, no empirical or theoretical justification was needed to modify or re-specify any of the existing relationships among constructs in the hypothesised model (Abad et al., 2011; Hoyle, 2012; Viladrich et al., 2017).

The purpose of model comparison is to identify whether the hypothesised model represents the data better and more reasonably than alternative models (Abad et al., 2011; Hoyle, 2012; Knoke et al., 1980). Moreover, the model comparison based on the results for the Chi-square difference test in the measurement and structural model is also an indicator of assessing discriminant validity (Bagozzi & Phillips, 1982). Accordingly, the four nested models were compared. Specifically, the four-construct measurement model was specified in which all constructs including transformational leadership, transactional leadership, employee creativity and organisational innovation were treated as independent variables. Subsequently, the model was nested into a three-construct model where transformational leadership and transactional leadership were loaded into one construct. Following this, a two-construct model where transformational leadership, transactional leadership and employee creativity were loaded into one construct was specified. Finally, only one latent construct measurement model was specified in which four main variables were simultaneously loaded onto the same construct.

The three-construct, two-construct and one-construct model was then alternately examined in terms of fitness indexes compared to those values of the initial four-construct model (Viladrich et al., 2017). Results on CFA comparison of the measurement models shown in Table 5.13 demonstrated that the model fits were significantly different, suggesting that all items represented four separate constructs. Specifically, statistical significance in the Chi-square value's difference between the initial model and modified model ($\Delta\chi^2$) was recognised across the cases ($\Delta\chi^2 > 3.84$, df = 1, $p < .05$) (Schumacker & Lomax; 2010; Viladrich et al., 2017). Therefore, it indicated that the models were different and discriminant validity was supported. Generally, it could be concluded that the theoretical measurement model has achieved the criterion of distinctiveness. Once the adequacy of the measurement model has been confirmed, all of the items were retained for testing hypothesised structural relationships in the next phase.

Table 5.13.

CFA comparison of the measurement models

Model	χ^2	df	GFI	TLI	CFI	RMSEA
4-Factor model	1200.208	843	.871	.959	.962	.034
3-Factor model	1220.009	846	.869	.957	.960	.035
2-Factor model	1359.860	848	.853	.941	.945	.040
1-Factor model	1404.908	849	.846	.936	.940	.042

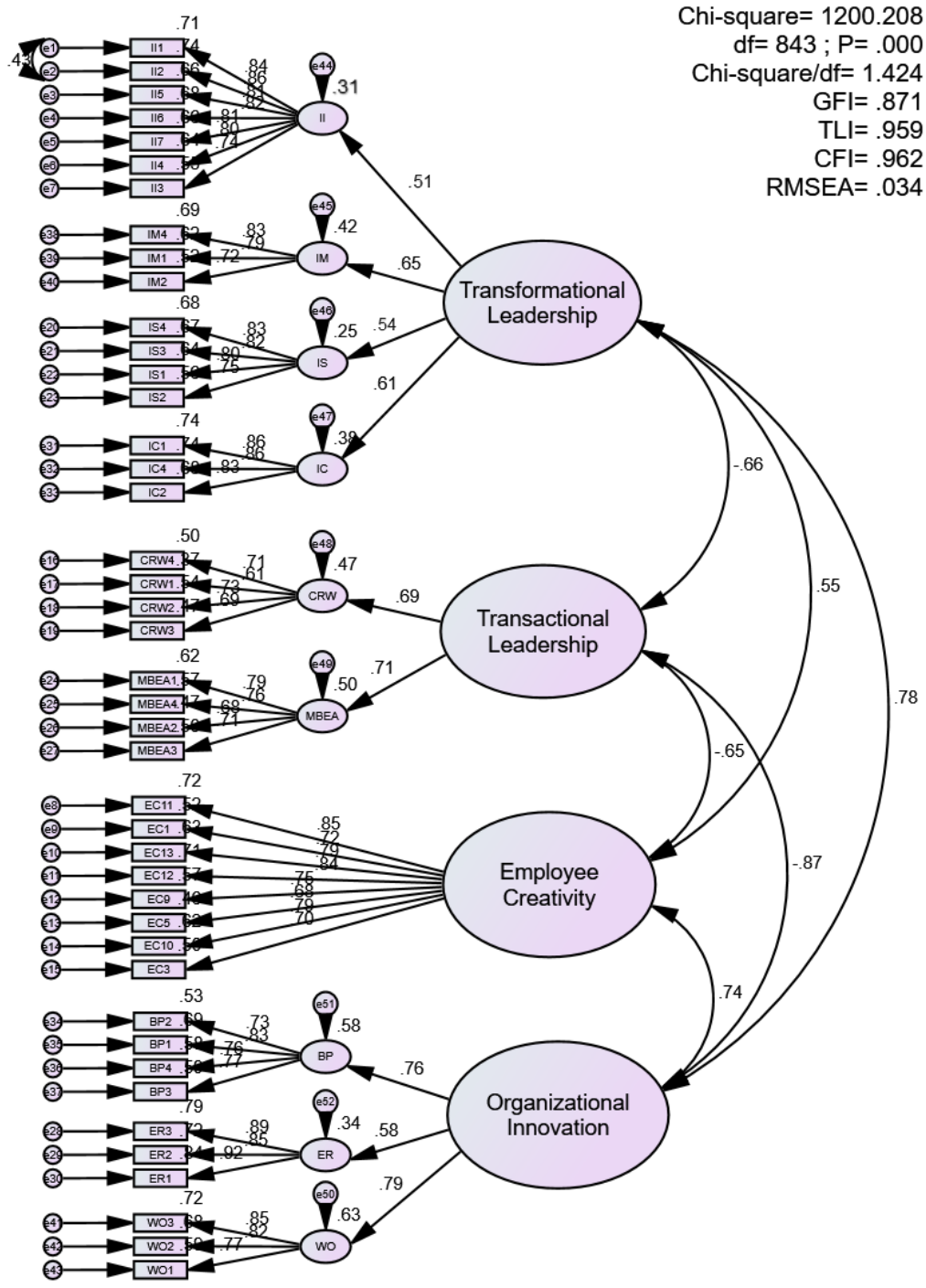


Figure 5.2. Final guided four-construct measurement model

5.7. Assessment of conformity with SEM assumptions

As regression analysis is basically utilised in SEM, certain assumptions need to be satisfied before proceeding to structural equation analysis. Specifically, checking for the assumption of sufficient sample size, normality of data and outliers as well as multicollinearity will be carried out in order to ensure that no SEM assumption is violated. This procedure will be done after the completion of confirming the validity and reliability of measures of each construct in the research model through EFA and CFA techniques. Section 5.7.1 – 5.7.3 below elaborated the examination of assumptions for SEM analysis where sufficient sample size, normality of data and absence of multicollinearity issues have been verified.

5.7.1. Sample size

Identifying sample size that both satisfies the proportionate representation of the studied population and the fundamental requirement for conducting SEM was well-discussed in Section 4.4.8.3 and Section 4.5.2. After the completion of CFA for the model, there were 19 recognised **free** parameters including parameters for factor loadings and for the correlations among the four main latent constructs and its respective dimensions (Schreiber et al., 2006). Particularly, thirteen free parameters for factor loadings were observed from transformational leadership (three parameters), transactional leadership (one parameter), employee creativity (seven parameters) and organisational innovation (two parameters) as well as six free parameters for the correlations among the four main constructs (Figure 5.2). This calculation of estimated free parameters was argued to improve the ratio of variables to sample size (Bagozzi & Edwards, 1998). Moreover, reliability and validity of measures, unidimensionality of items were checked and confirmed in terms of factor loadings, correlations or cross-loadings through EFA and CFA to fulfil the requirement of respondent – parameter ratio in SEM. A sample size of 369 from the official data collection and 19 counted free parameters in this study satisfied a ratio of 10:1 concerning 10 observations for each parameter stated by Benter and Chou (1987). Moreover, a recommended ratio of 15:1 by Hair et al. (2010) with 15 respondents for each estimated parameter as well as a suggested ratio of 20:1 by Jackson (2003) was also respectively fulfilled. A sufficient sample size not only ensured the generalisability of research findings but also facilitated data running, especially using SEM with MLE method that required multivariate normality of data to minimise the impact of sampling errors on results of data analysis (Altman & Bland, 1996; Hair et al., 2010).

As sample size is also influenced by the model complexity, determining a sufficient number of cases will ensure the stability and enhance the accuracy of SEM results (Hair et al., 2010). A suggestion by Hair et al. (2010) stated that the minimum sample size of 100 is required for models with five or fewer constructs, more than three items per each construct and item communalities of 0.6 or higher. Regarding this study, the research model contained four main constructs as stated above and communalities for all of the items

were above 0.5. Nevertheless, not all four main constructs consist of more than three items per dimension, which triggered the requirement of a larger sample size than 100. Accordingly, while there were still arguments about how large enough the sample size should be, a valid number of 369 cases was deemed appropriate to conduct analysis in this study.

5.7.2. Normality of data

Hair et al. (2010) argued that normally distributed data was the fundamental assumption in multivariate analysis as large variation from normal distribution would cause invalid results of statistical tests. Checking for normality of data is considered as a next critical step prior to analysing structural models after the fitness indexes of the measurement model have been confirmed (Zainudin, 2012). Specifically, assessing the measure of skewness and kurtosis for all variables was carried out employing both graphical and statistical analyses (Altman & Bland, 1996; Ghasemi & Zahediasl, 2012). Results of statistical tests on skewness and kurtosis presented in Table 5.14 below demonstrated visual inspection for all variables in the research model. Accordingly, statistical values of skewness were lower than the specified critical value of 3 (ranging between -0.903 and 1.702), which indicates the normal distribution of data (Kline, 2016). Moreover, Zainudin (2012) also stated that SEM analysis utilising MLE method was fairly robust to skewness value of greater than 1 in case of a large sample size. Similarly, kurtosis values for all variables were within the threshold of +10 (ranging between -0.904 and 1.685), which supported the conformity of data to normality (Kline, 2016). Additionally, multivariate normality was also proceeded with Mahalanobis distance test as shown in Section 5.3.2 to detect potential outliers. Although this test will only be used in case of the non-normality of data, no potential outliers were found in the result of Mahalanobis test strengthened the multivariate normality of data in this study. Therefore, all variables were retained for SEM analysis.

Table 5.14.

Results of normality distribution assessment for all variables

Variable	min	max	skew	c.r.	kurtosis	c.r.
II1	1.000	5.000	**-.416**	-3.263	-.904	-3.546
II2	1.000	5.000	**-.591**	-4.637	-.384	-1.507
II3	1.000	5.000	**-.383**	-3.001	-.620	-2.432
II4	1.000	5.000	**-.130**	-1.016	-.418	-1.639
II5	1.000	5.000	**-.429**	-3.362	-.836	-3.279
II6	1.000	5.000	**-.492**	-3.856	-.692	-2.715
II7	1.000	5.000	**-.649**	-5.090	-.583	-2.287
IM1	1.000	5.000	**-.281**	-2.207	-.175	-.688

IM2	1.000	5.000	**-.528**	-4.144	.530	2.079
IM4	1.000	5.000	**-.686**	-5.378	.727	2.849
IS1	1.000	5.000	**.108**	.850	-.446	-1.750
IS2	1.000	5.000	**-.184**	-1.441	-.504	-1.976
IS3	1.000	5.000	**.215**	1.684	-.337	-1.322
IS4	1.000	5.000	**-.028**	-.220	-.416	-1.631
IC1	1.000	5.000	**-.903**	-7.080	.885	3.472
IC2	1.000	5.000	**-.885**	-6.938	.567	2.223
IC4	1.000	5.000	**-.827**	-6.489	.920	3.609
CRW1	1.000	5.000	**.901**	7.070	.649	2.544
CRW2	1.000	5.000	**.794**	6.229	.231	.905
CRW3	1.000	5.000	**1.072**	8.407	1.135	4.452
CRW4	1.000	5.000	**.945**	7.411	.934	3.663
MBEA1	1.000	5.000	**.454**	3.559	-.081	-.319
MBEA2	1.000	4.000	**.094**	.738	-.402	-1.576
MBEA3	1.000	5.000	**.449**	3.525	.080	.313
MBEA4	1.000	4.000	**.383**	3.002	-.138	-.540
EC1	1.000	5.000	**-.410**	-3.214	.403	1.580
EC3	1.000	5.000	**-.791**	-6.201	1.685	6.605
EC5	1.000	5.000	**-.343**	-2.692	.312	1.225
EC9	1.000	5.000	**-.599**	-4.698	1.117	4.379
EC10	1.000	5.000	**-.363**	-2.850	.463	1.815
EC11	1.000	5.000	**-.461**	-3.618	.606	2.375
EC12	1.000	5.000	**-.497**	-3.900	.688	2.699
EC13	1.000	5.000	**-.389**	-3.051	.515	2.019
BP1	1.000	5.000	**-.668**	-5.238	.730	2.864
BP2	1.000	5.000	**-.292**	-2.293	-.240	-.940
BP3	1.000	5.000	**-.483**	-3.792	-.040	-.155
BP4	1.000	5.000	**-.502**	-3.933	-.067	-.262
WO1	1.000	5.000	**-.641**	-5.024	.237	.928
WO2	1.000	5.000	**-.601**	-4.716	-.174	-.683
WO3	1.000	5.000	**-.614**	-4.818	-.228	-.892
ER1	1.000	5.000	**-.074**	-.578	-.542	-2.125
ER2	1.000	5.000	**-.376**	-2.948	.311	1.220
ER3	1.000	5.000	**-.118**	-.929	.151	.593
Multivariate					**29.160**	4.502

5.7.3. Multicollinearity

Multicollinearity is another problem that needs to be addressed while doing multivariate analysis because the efficacy of statistical analysis will be adversely affected (Lafi & Kaneene, 1992). Accordingly, there remains two possible methods to identify the multicollinearity problem of the data (Belsley et al., 2004). Specifically, the first method focuses on examining correlation analysis between independent variables (Alibuhtto, 2016; Belsley et al., 2004; Kaplan, 1994). Multicollinearity is signalised by a high correlation coefficient between any single independent variable and others (Alibuhtto, 2016; Kline, 2016; Sawyer, 2008). In other words, there exists two separate variables measuring the same construct, which causes redundancy in the research model (Kline, 2016) and precludes the accurate assessment of the individual effects of correlated factors (Mason & Perreault, 1991; Lafi & Kaneene, 1992; Wang, 1996). Results of the correlation matrix presented in Table 5.11 revealed that there was no correlation value higher than 0.90, which indicated non-existing multicollinearity in the data (Hair et al., 2010; Kennedy, 2003). Therefore, data analysis and interpretation could be proceeded to the next step.

Another method to detect multicollinearity is to investigate the tolerance and its inverse – the variance inflation factor (VIF) through multiple regression analysis (Cohen et al., 2003; Kaplan, 1994; Kutner et al., 2005). Particularly, tolerance refers to the unexplained proportion of total standardised variances by all other variables (Cohen et al., 2003; Kutner et al., 2005). On the other hand, VIF indicates the ratio of total standardised variances over unique variance (tolerance), which measures how much variance of an estimated regression coefficient is increased due to multicollinearity (Alibuhtto, 2016; Cohen et al., 2003; Kutner et al., 2005). Accordingly, an extreme multivariate collinearity exists if tolerance value is lower than 0.1 while the variable in the question will be considered redundant in case of VIF higher than 10 (Cohen et al., 2003; Kline, 2016; Montgomery et al., 2012). Results of collinearity statistics shown in Table 5.15 indicated that multicollinearity assumption was not violated, which was evidenced by the fact that tolerance values were higher than 0.10 and VIF values were lower than 10 for all variables (Kline, 2016).

Table 5.15.

Collinearity statistics

Variables	Tolerance	VIF
Idealised influence	.970	1.031
Inspirational motivation	.775	1.290
Intellectual stimulation	.822	1.216
Individualised consideration	.756	1.322
Contingent reward	.810	1.234
Management by exception – Active	.873	1.146
Employee creativity	.781	1.281

5.8. Summary of findings on hypothesised relationships

The summary of findings on hypothesised relationships were categorised into four groups. Apart from hypothesis Group 4 dealing with mediation analysis which was discussed in a separate Section 5.9 below, all other hypothesis groups were elaborated in this section of the study. Specifically, hypothesis Group 1 summarised findings on the relationship between leadership styles (transformational leadership and transactional leadership) and organisational innovation in sub-section 5.8.1. Subsequently, hypothesis Group 2 presented results of investigation on the relationship between leadership styles (transformational leadership and transactional leadership) and employee creativity in sub-section 5.8.2. Finally, hypothesis Group 3 addressed the relationship between employee creativity and organisational innovation in sub-section 5.8.3.

5.8.1. Hypothesis Group 1: Leadership styles – Organisational innovation relationship

There were two separate sets of hypothesised relationships discussed in this sub-section, which focused on testing the relationship between transformational leadership and organisational innovation as well as transactional leadership and organisational innovation in Vietnamese public coffee enterprises. Additionally, dimensions of transformational leadership were also examined in relation to dimensions of organisational innovation. Similarly, relationships between dimensions of transactional leadership and those of organisational innovation were gauged.

5.8.1.1. Hypothesis H1a: Transformational leadership – Organisational innovation

The main hypotheses linking transformational leadership to the dimensions of organisational innovation were partially supported as summarised in Table 5.16. Specifically, results of this table showed that idealised influence negatively affected business practices and its effect was significant ($p < .05$). Inspirational motivation positively impacted on all dimensions of organisational innovation namely business practices, workplace organisation as well as external relations and all effects were significant ($p < .001$). On the other hand, intellectual stimulation had a significant positive effect on business practices ($p < .01$) and workplace organisation ($p < .01$). Individualised consideration had a significantly positive impact on business practices ($p < .001$) and workplace organisation ($p < .01$). Finally, hypothesis on the relationship between main variables indicated that transformational leadership had a significantly positive effect on organisational innovation ($p < .001$).

Table 5.16.

Transformational leadership – Organisational innovation relationship

Factors/items			Std. loading	S.E.	C.R.	*P*
Business practices	<---	Idealised influence	-.102	.030	-1.870	**.042**
Workplace organisation	<---	Idealised influence	-.055	.042	-1.025	.305
External relations	<---	Idealised influence	-.071	.037	-1.307	.191
Business practices	<---	Inspirational motivation	.370	.050	5.579	***
Workplace organisation	<---	Inspirational motivation	.450	.070	6.781	***
External relations	<---	Inspirational motivation	.338	.058	5.298	***
Business practices	<---	Intellectual stimulation	.174	.042	2.849	**.004**
Workplace organisation	<---	Intellectual stimulation	.186	.058	3.099	**.002**
External relations	<---	Intellectual stimulation	.031	.051	.505	.613
Business practices	<---	Individualised consideration	.225	.044	3.523	***
Workplace organisation	<---	Individualised consideration	.167	.059	2.671	**.008**
External relations	<---	Individualised consideration	.088	.052	1.401	.161
Organisational innovation	<---	Transformational leadership	.778	.177	5.982	***

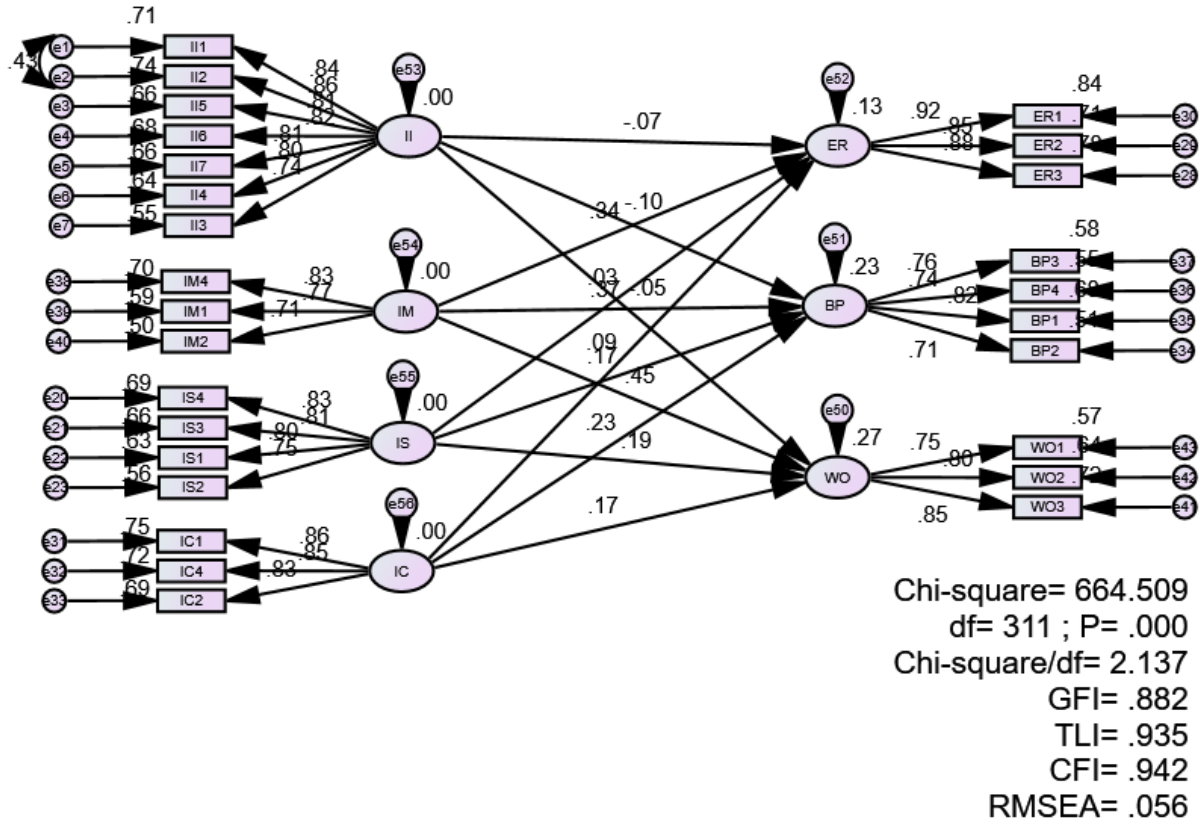


Figure 5.3. Dimensions of transformational leadership – dimensions of organisational innovation

Comparatively, inspirational motivation had a more significant effect on workplace organisation (β = 0.450) than on external relations (β = 0.338) or business practices (β = 0.370). Moreover, the impact of inspirational motivation was significantly stronger on business practices (β = 0.370) than that of idealised influence (β = 0.102), intellectual stimulation (β = 0.174) and individualised consideration β = 0.225).

Additionally, inspirational motivation was more significant on workplace organisation (β = 0.450) as compared to intellectual stimulation (β = 0.186) and individualised consideration (β = 0.167). Table 5.17 below revealed that hypotheses H1a, $H1a_3$, $H1a_4$ were partially supported, hypothesis $H1a_2$ was fully supported and hypothesis $H1a_1$ was not supported. Figure 5.3 and Figure 5.4 demonstrated the structural models for the transformational leadership – organisational innovation relationship.

Table 5.17.

Hypotheses on Transformational leadership – Organisational innovation

Hypotheses		Findings
H1a	Transformational leadership positively influences the dimensions of organisational innovation.	Partially supported
$H1a_1$	Idealised influence positively influences the dimensions of organisational innovation.	Not supported
$H1a_2$	Inspirational motivation positively influences the dimensions of organisational innovation.	Fully supported
$H1a_3$	Intellectual stimulation positively influences the dimensions of organisational innovation.	Partially supported
$H1a_4$	Individualised consideration positively influences the dimensions of organisational innovation.	Partially supported

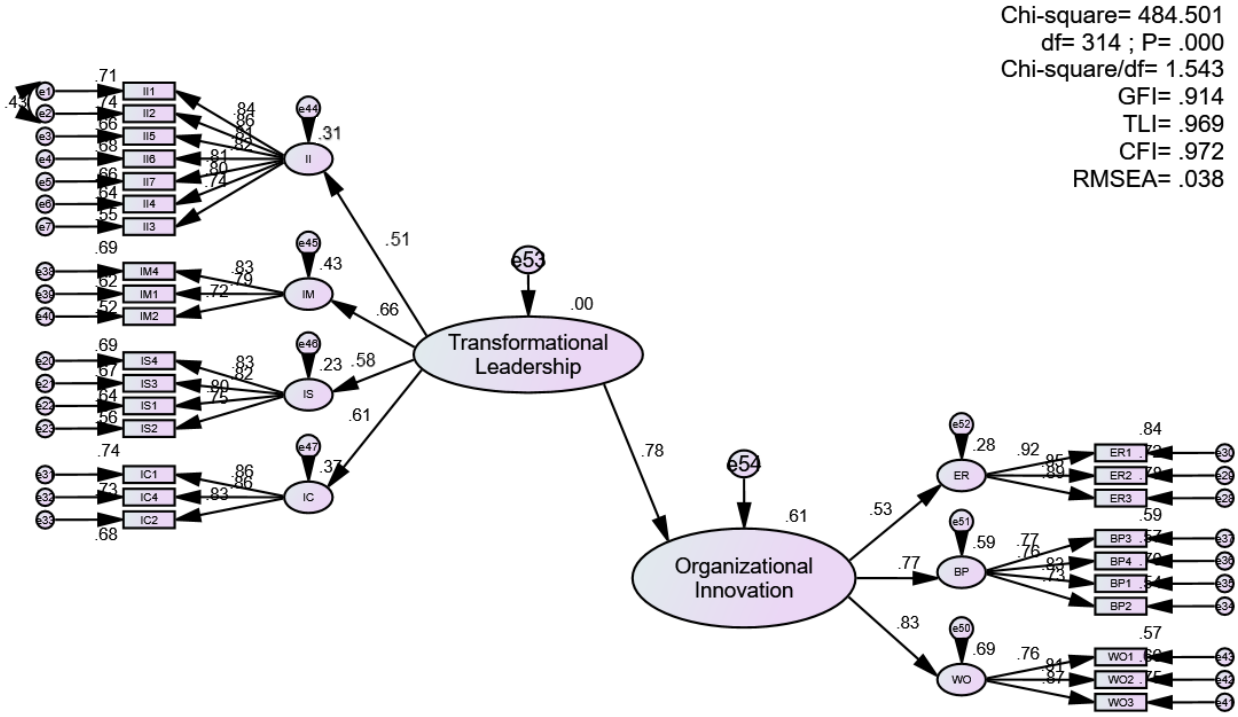


Figure 5.4. Transformational leadership – Organisational innovation

5.8.1.2. Hypothesis H1b: Transactional leadership – Organisational innovation

The main hypotheses linking transactional leadership to dimensions of organisational innovation were fully supported as summarised in Table 5.18. Specifically, results of this table showed that contingent reward negatively influenced all dimensions of organisational innovation, namely, business practices,

workplace organisation as well as external relations and all effects were significant ($p < .001$). Similarly, management by exception active negatively impacted all dimensions of organisational innovation and all effects were also significant ($p < .001$). Finally, hypothesis on the relationship between main variables indicated that transactional leadership had a significantly negative effect on organisational innovation ($p < .001$).

Table 5.18.

Transactional leadership – Organisational innovation relationship

Factors/items			**Std. loading**	**S.E.**	**C.R.**	***P***
External relations	<---	Contingent reward	-.338	.087	-4.916	***
Business practices	<---	Contingent reward	-.313	.077	-4.402	***
Workplace organisation	<---	Contingent reward	-.399	.104	-5.579	***
External relations	<---	Management by exception active	-.265	.070	-4.177	***
Business practices	<---	Management by exception active	-.419	.065	-6.099	***
Workplace organisation	<---	Management by exception active	-.428	.084	-6.546	***
Organisational innovation	<---	Transactional leadership	-.928	.232	-6.726	***

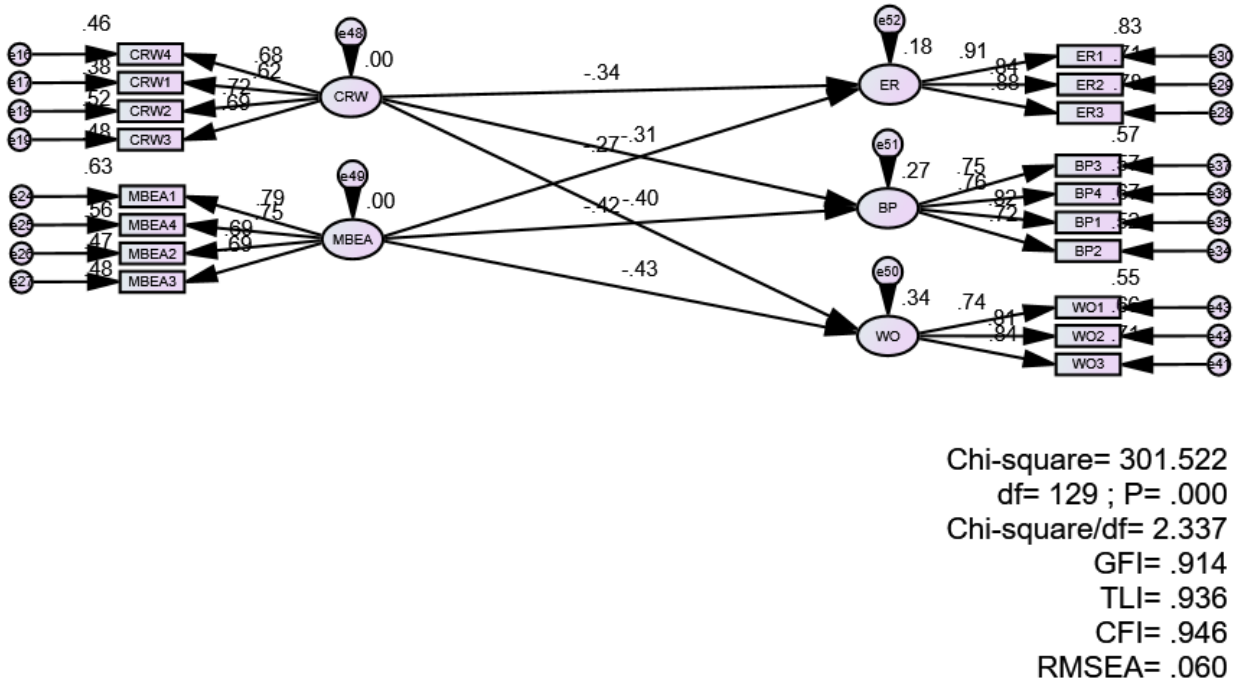


Figure 5.5. Dimensions of transactional leadership – dimensions of organisational innovation

Comparatively, management by exception active had a more significant effect on workplace organisation (β = -.428) than on contingent reward (β = -.399). Moreover, the impact of management by exception active was significantly stronger on business practices (β = -.419) than that of contingent reward (β = -.313). Additionally, contingent reward was more significant on external relations (β = -.338)

compared to management by exception active (β = -.265). Table 5.19 below revealed that hypotheses H1b, $H1b_1$ and $H1b_2$ were fully supported. Figure 5.5 and Figure 5.6 demonstrated the structural models for the transactional leadership – organisational innovation relationship.

Table 5.19.

Hypotheses on Transactional leadership – Organisational innovation

Hypotheses		Findings
H1b	Transactional leadership negatively influences the dimensions of organisational innovation.	Fully supported
$H1b_1$	Contingent reward negatively influences the dimensions of organisational innovation.	Fully supported
$H1b_2$	Management by exception active negatively influences the dimensions of organisational innovation.	Fully supported

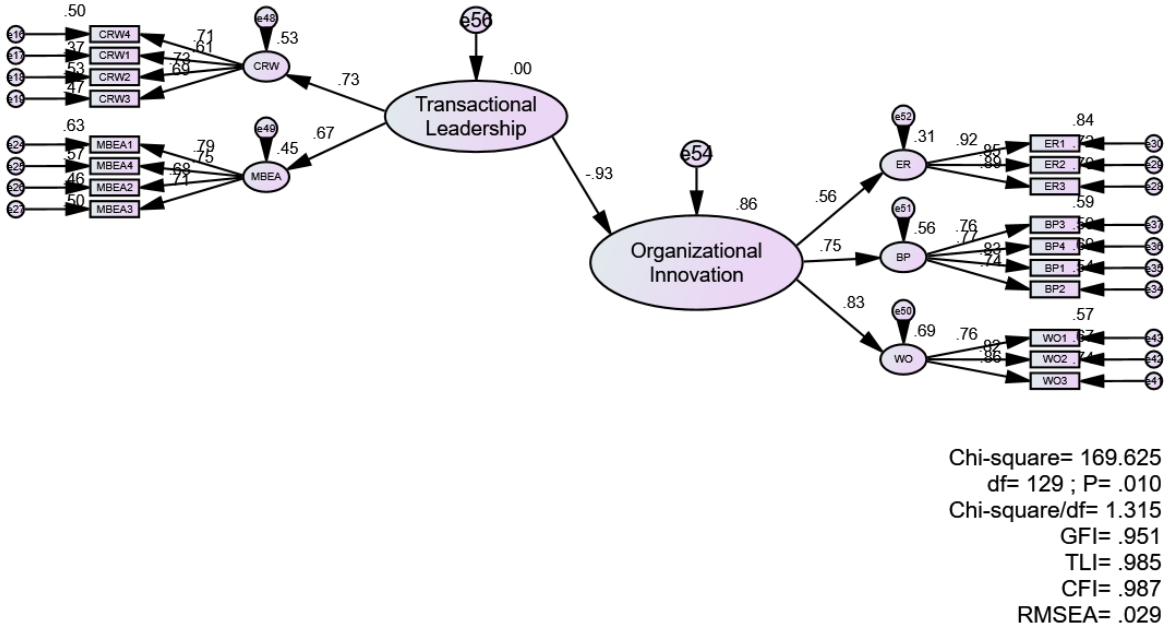


Figure 5.6. Transactional leadership – Organisational innovation

5.8.2. Hypothesis Group 2: Leadership styles – Employee creativity relationship

This sub-section of the study verified whether the relationship between leadership styles and employee creativity in Vietnamese public coffee enterprises supported the results of previous studies. Accordingly, there were two separate sets of hypothesised relationships discussed including the investigation of the relationship between transformational leadership and employee creativity as well as that of transactional leadership and employee creativity in public enterprises in the Vietnamese coffee industry. Additionally, dimensions of transformational leadership were also examined in relation to employee creativity. Simultaneously, relationships between dimensions of transactional leadership and employee creativity were addressed.

5.8.2.1. Hypothesis H2a: Transformational leadership – Employee creativity

Results of Table 5.20, Figure 5.7 and Figure 5.8 indicated that inspirational motivation, intellectual stimulation and individualised consideration positively influenced employee creativity except for idealised influence. Additionally, inspirational motivation, intellectual stimulation and individualised consideration were significantly related to employee creativity. Moreover, transformational leadership had a significantly positive effect on employee creativity ($p < .001$). Out of three dimensions of transformational leadership, individualised consideration had a greater influence on employee creativity ($\beta = .234$) than inspirational motivation ($\beta = .231$) and intellectual stimulation ($\beta = .148$). Apart from hypothesis $H2a_1$, findings summarised in Table 5.21 supported hypotheses H2a, $H2a_2$, $H2a_3$ and $H2a_4$.

Table 5.20.

Transformational leadership – Employee creativity relationship

Factors/items			**Std. loading**	**S.E.**	**C.R.**	***P***
Employee creativity	<---	Idealised influence	-.053	.034	-.985	.324
Employee creativity	<---	Inspirational motivation	.231	.053	3.374	*******
Employee creativity	<---	Intellectual stimulation	.148	.048	2.462	**.014**
Employee creativity	<---	Individualised consideration	.234	.048	3.748	***
Employee creativity	<---	Transformational leadership	.514	.102	5.504	***

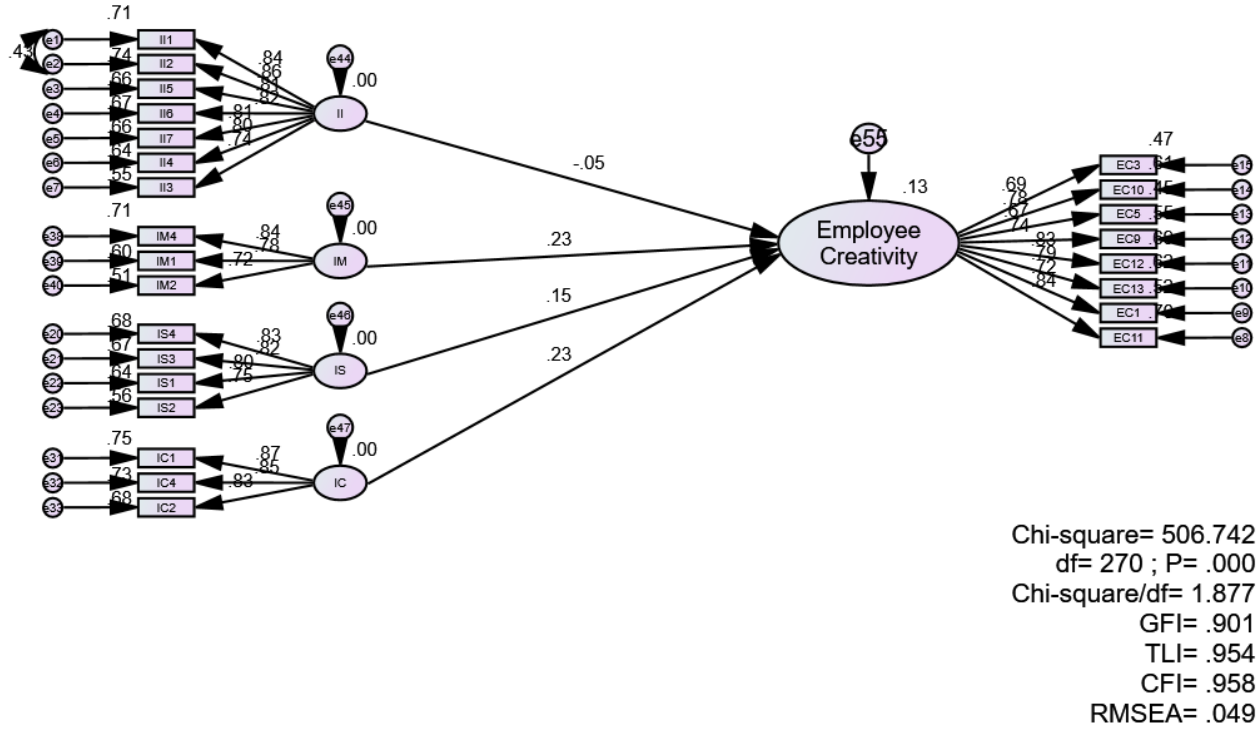


Figure 5.7. Dimensions of transformational leadership – employee creativity

Table 5.21.

Hypotheses on Transformational leadership – Employee creativity

Hypotheses		Findings
H2a	Transformational leadership positively influences employee creativity.	Partially supported
$H2a_1$	Idealised influence positively influences employee creativity.	Not supported
$H2a_2$	Inspirational motivation positively influences employee creativity.	Supported
$H2a_3$	Intellectual stimulation positively influences employee creativity.	Supported
$H2a_4$	Individualised consideration positively influences employee creativity.	Supported

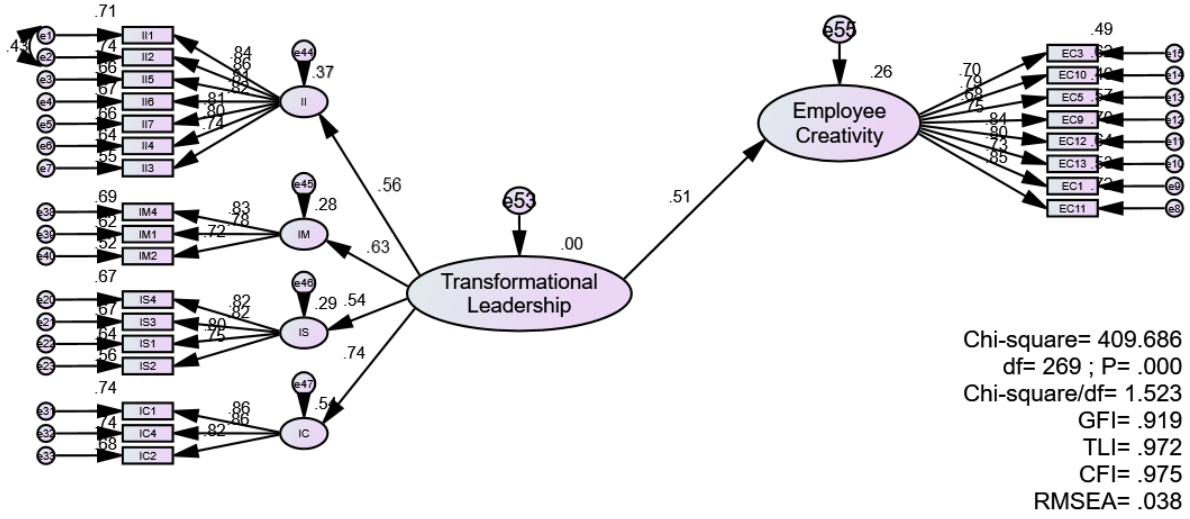


Figure 5.8. Transformational leadership – Employee creativity

5.8.2.2. Hypothesis H2b: Transactional leadership – Employee creativity

Table 5.22, Figure 5.9 and Figure 5.10 below demonstrated the findings for the hypotheses that link transactional leadership to employee creativity. Accordingly, both contingent reward and management by exception active negatively influenced employee creativity. Moreover, these two dimensions of transactional leadership were significantly related to employee creativity ($p < .001$). Additionally, transactional leadership had a significantly negative effect on employee creativity ($p < .001$). In terms of the strength of the effects, management by exception active had a greater influence on employee creativity ($\beta = -.336$) than contingent reward ($\beta = -.246$). As observed from Table 5.23, all the hypotheses were supported.

Table 5.22.

Transactional leadership – Employee creativity relationship

Factors/items			Std. loading	S.E.	C.R.	*P*
Employee creativity	<---	Contingent reward	-.246	.051	-4.259	***
Employee creativity	<---	Management by exception active	-.336	.057	-5.710	***
Employee creativity	<---	Transactional leadership	-.648	.144	-7.341	***

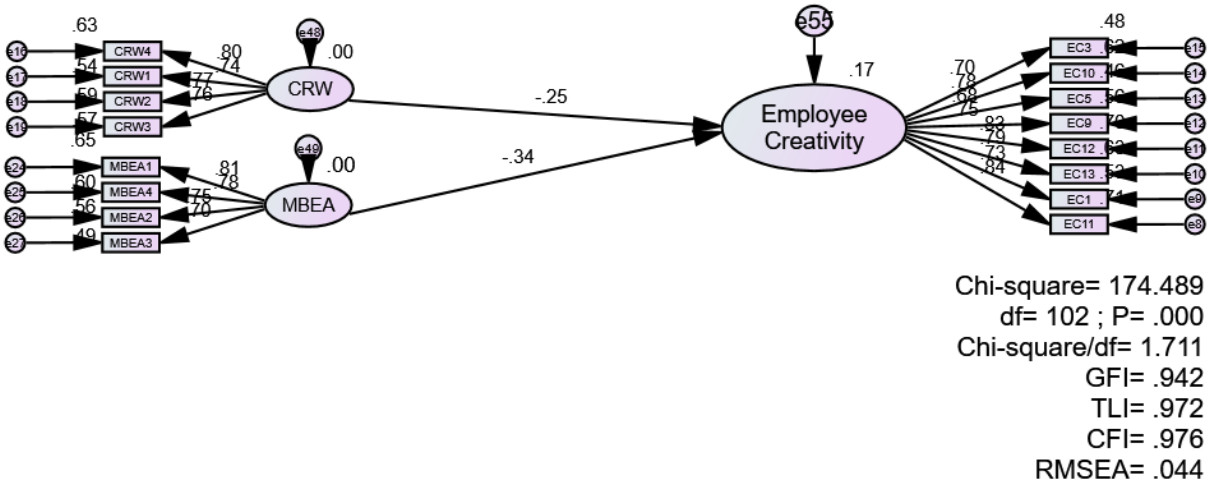


Figure 5.9. Dimensions of transactional leadership – employee creativity

Table 5.23.

Hypotheses on Transactional leadership – Employee creativity

Hypotheses		Findings
H2b	Transactional leadership negatively influences employee creativity.	Supported
$H2b_1$	Contingent reward negatively influences employee creativity.	Supported
$H2b_2$	Management by exception active negatively influences employee creativity.	Supported

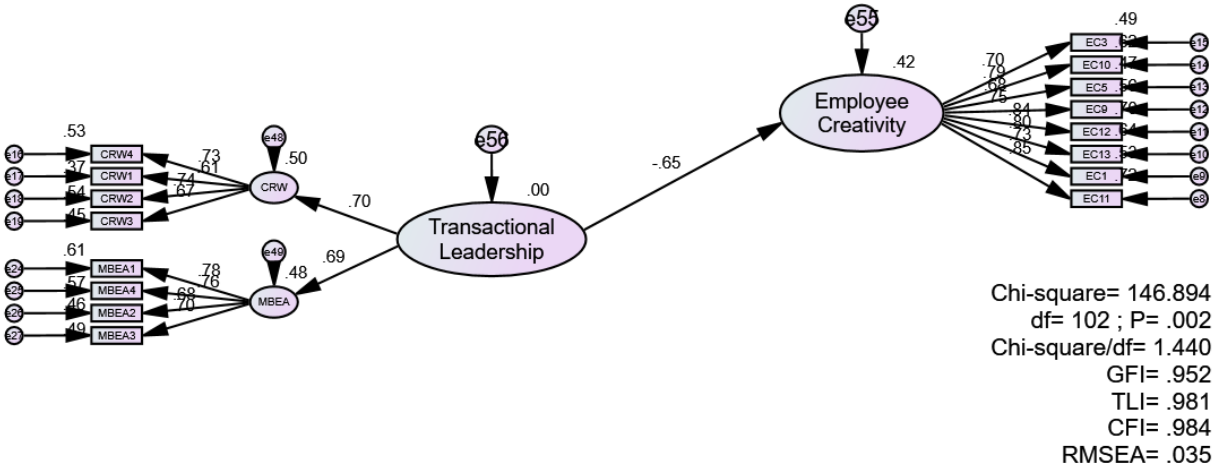


Figure 5.10. Transactional leadership – Employee creativity

5.8.3. Hypothesis Group 3: Employee creativity – Organisational innovation relationship

Findings of hypothesis on the relationship between employee creativity and organisational innovation were presented in Table 5.24 and Figure 5.11. Accordingly, employee creativity positively influenced all dimensions of organisational innovation, namely, business practices, workplace organisation and external relations. Moreover, the effect of employee creativity on all dimensions of organisational innovation was significant ($p < .001$). Generally, hypothesis H3 showing that there existed a positive linkage between employee creativity and organisational innovation was substantiated, as summarised in Table 5.25.

Table 5.24.

Employee creativity – Organisational innovation relationship

Factors/items			Std. loading	S.E.	C.R.	*P*
Organisational innovation	<---	Employee creativity	.751	.065	10.950	***

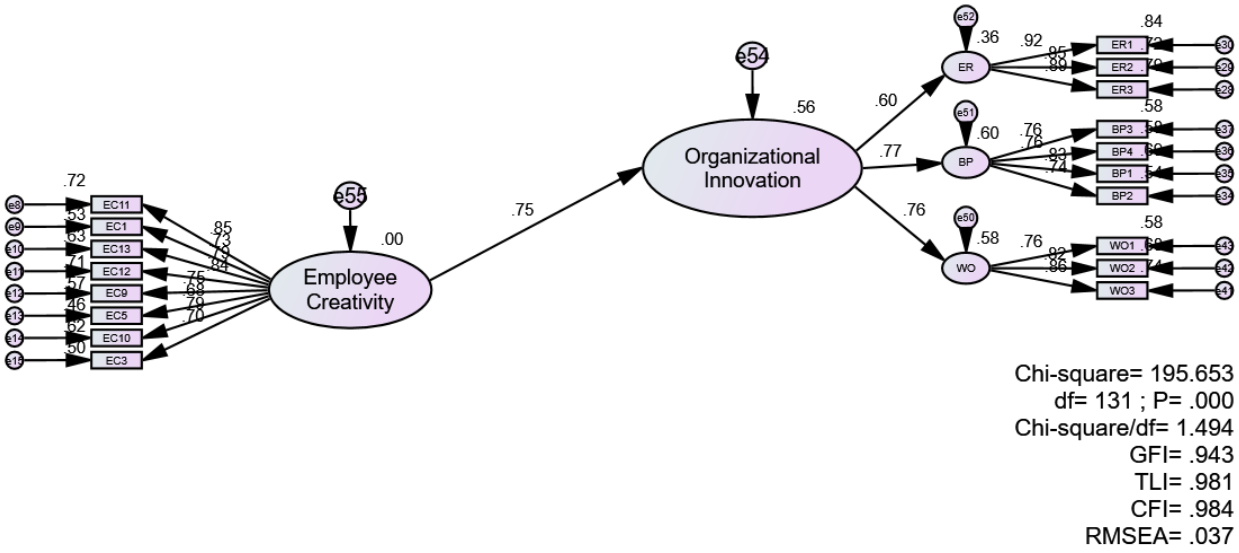


Figure 5.11. Employee creativity – Organisational innovation

Table 5.25.

Hypotheses on Employee creativity – Organisational innovation

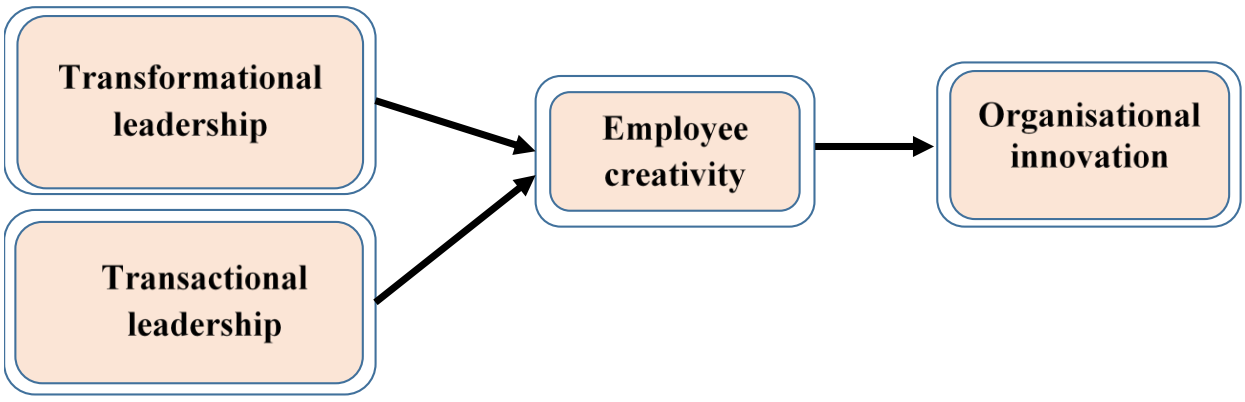
Hypothesis		Findings
H3	Employee creativity positively influences the dimensions of organisational innovation.	Supported

5.9. Mediation analysis

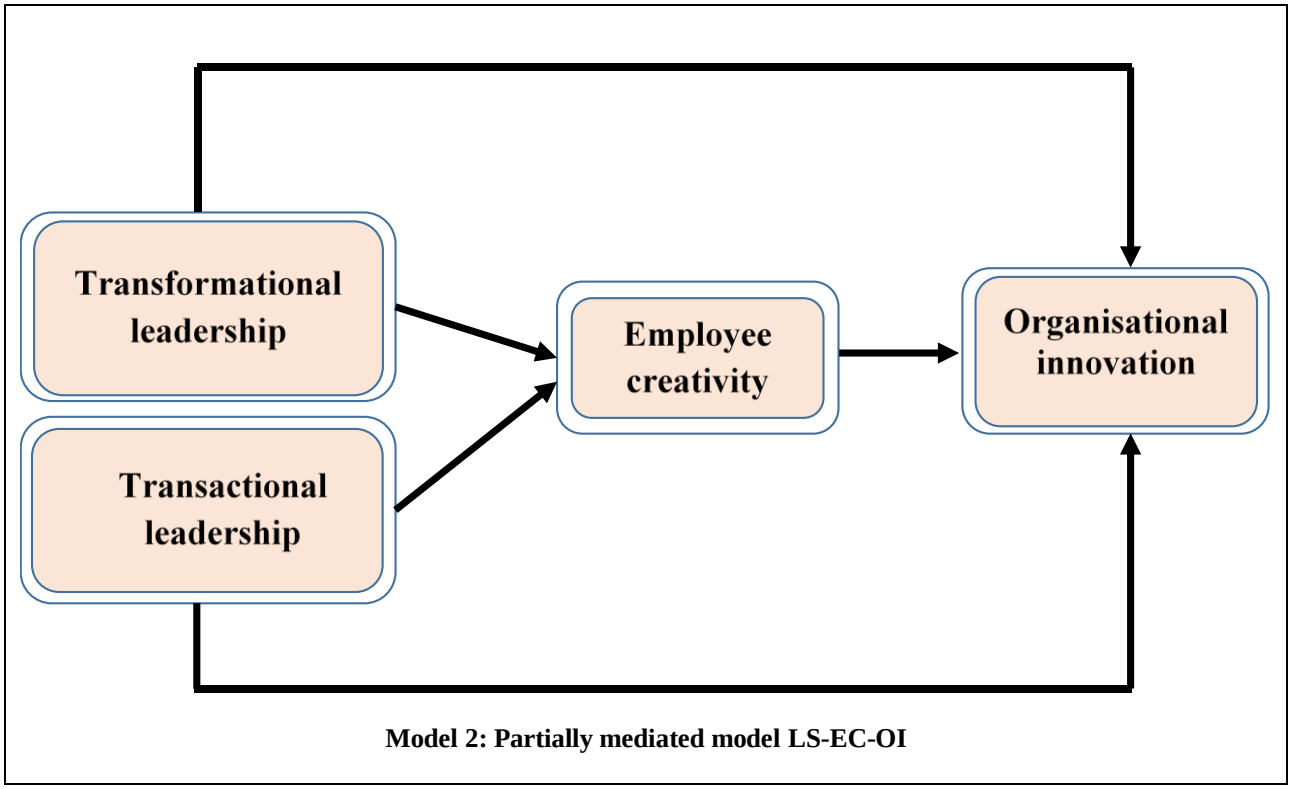
The purpose of performing a mediation test is to confirm the significant paths among variables that best explained the whole research model upon the completion of assessing validity and reliability of the measurement model. Additionally, functioned as a mediator, a variable serves to clarify the nature of the

relationship between the predictor and criterion variables (MacKinnon, 2008). A mediation effect occurs when a third construct intervenes into the relationship between two other constructs (Hair et al., 2010). Regarding this particular study, the mediating effect of employee creativity (EC) on the leadership styles (LS)-organisational innovation (OI) relationships was tested by adopting the procedure suggested by Hair et al. (2010). Basic steps on evaluating mediation were well elaborated in Section 4.6 of the research methodology chapter. Accordingly, the existence of the linkages between leadership styles and dimensions of organisational innovation is accounted for by the employee creativity mediator (Baron & Kenny, 1986). Moreover, the direct and indirect effects of the structural model were also estimated to understand the impacting level of the mediator. Specifically, a direct effect is represented by a single arrow that links leadership styles and organisational innovation in the study. On the other hand, indirect effects involve a sequence of direct relationships that are reflected by multiple arrows linking leadership styles and employee creativity as well as employee creativity and organisational innovation (Hair et al., 2010). In other words, the indirect effect represents the mediating effect of employee creativity on the leadership styles – organisational innovation relationships in this research.

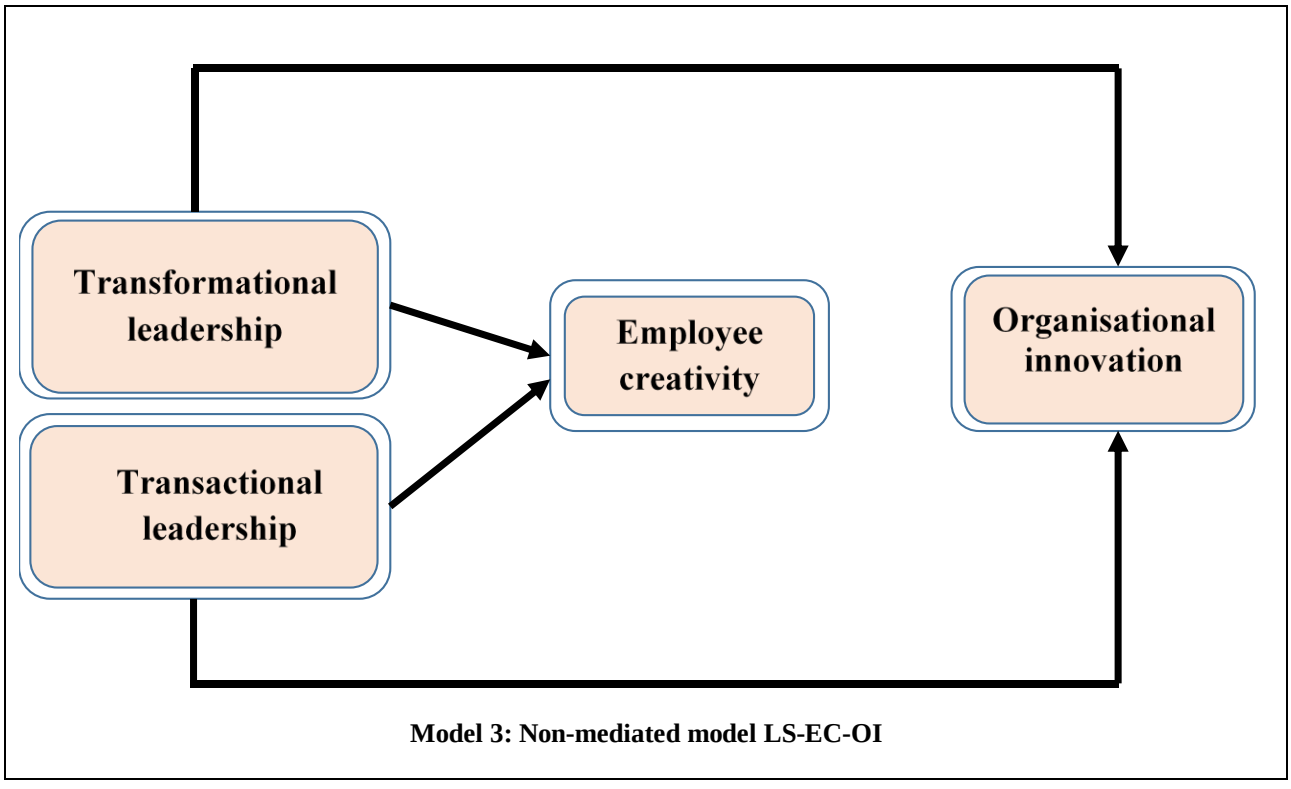
The graphical mediation models were presented in Figure 5.12 below, depicting how fully mediated, partially mediated and non-mediated models were developed for the mediation analysis. Specifically, as observed in the fully mediated model, the direct path from leadership styles to organisational innovation is restricted to zero, which indicates that the mediating role of employee creativity completely explains the relationship between the two main constructs. Inversely, the particular linkages between leadership styles and organisational innovation that are not totally explained by the mediator denotes partial mediation. Accordingly, the direct path from leadership styles to organisational innovation is not constrained to zero in the partially mediated model. Finally, regarding the non-mediated model, the direct path from the mediating construct to organisational innovation is set to zero.



Model 1: Fully mediated model LS-EC-OI



Model 2: Partially mediated model LS-EC-OI



Model 3: Non-mediated model LS-EC-OI

Figure 5.12. Simplified models of mediation test comparison

5.9.1. Employee creativity as a mediator

This section examined the potentially mediating role of employee creativity in two respective models, namely, Transformational leadership – Employee creativity – Organisational innovation (TFL-EC-OI) and Transactional leadership – Employee creativity – Organisational innovation (TSL-EC-OI). A particular approach of mediation testing by Hair et al. (2010) was primarily utilised to analyse the mediated models. Accordingly, the partially mediated models were confirmed upon satisfying the significant correlations between constructs, significance of estimated parameters in direct and indirect effects as well as multiple fit indexes.

5.9.1.1. Transformational leadership – Employee creativity – Organisational innovation model

Analysing the potential mediator of employee creativity in the transformational leadership – organisational innovation relationship followed two steps as depicted in Section 4.6. Specifically, statistically significant correlations among the three constructs are required. Accordingly, Table 5.26 presented correlations between transformational leadership, employee creativity and organisational innovation in the CFA model after standardisation. Results of this table showed that the inter-construct correlations were significant for all the main constructs. Specifically, transformational leadership was significantly related to organisational innovation (r = .783), ascertaining that the direct and unmediated linkage was significant. Transformational leadership was also significantly related to employee creativity (r = .544), indicating the established relationship between exogenous variable and potential mediating variable. Finally, organisational innovation was significantly related to employee creativity (r = .746), establishing the relationship between the potential mediator and endogenous variable.

Table 5.26.

Inter-construct (TFL – EC – OI) correlation matrix (standardised)

	Transformational leadership	Employee creativity	Organisational innovation
Transformational leadership	1.000	0.296	0.613
Employee creativity	.544***	1.000	0.557
Organisational innovation	.783***	.746***	1.000

Note. Values below the diagonal are correlation estimates among constructs, diagonal elements are construct variances, and values above the diagonal are squared correlations. *p < .05 (2-tailed); **p < .01 (2-tailed); ***p < .001 (2-tailed)

Additionally, the subsequently important step focuses on estimating the mediated model and assessing the mediation level. As the direct and indirect effects are also estimated, two different structural models are formulated including an original model and a revised model. Specifically, in an original model, the direct effect from transformational leadership to organisational innovation was not estimated (Figure 5.13). Inversely, in a revised model, an added direct path linking transformational leadership and

organisational innovation was estimated (Figure 5.14). Based on the results of estimating the direct and indirect effects, changes in the level of model fit were assessed. Results presented in Table 5.27, Figure 5.13 and Figure 5.14 demonstrated that the value of Chi-square in the revised model with the additional direct relationship reduced substantially ($\Delta\chi^2$ = 36.287, df = 1, p = .000), which improved fitness of the model.

Table 5.27.

Summary of results on testing the mediating effects in the TFL – OI relationship

Model assessment criteria	Model element	Original model (only indirect effects)	Revised model (indirect and direct effects)
Model fit	Chi square (χ^2)	871.409	835.122
	Degrees of freedom	549	548
	Probability	0.000	0.000
	CMINDF	1.587	1.524
	GFI	0.885	0.888
	CFI	0.960	0.965
	TLI	0.957	0.962
	RMSEA	0.040	0.038
Standardised parameter estimates	Employee creativity <--- Transformational leadership	0.550***	0.544***
	Organisational innovation <--- Employee creativity	0.764***	0.454***
	Organisational innovation <--- Transformational leadership	0.000	0.537***

Note. *p < .05 (2-tailed); **p < .01 (2-tailed); ***p < .001 (2-tailed)

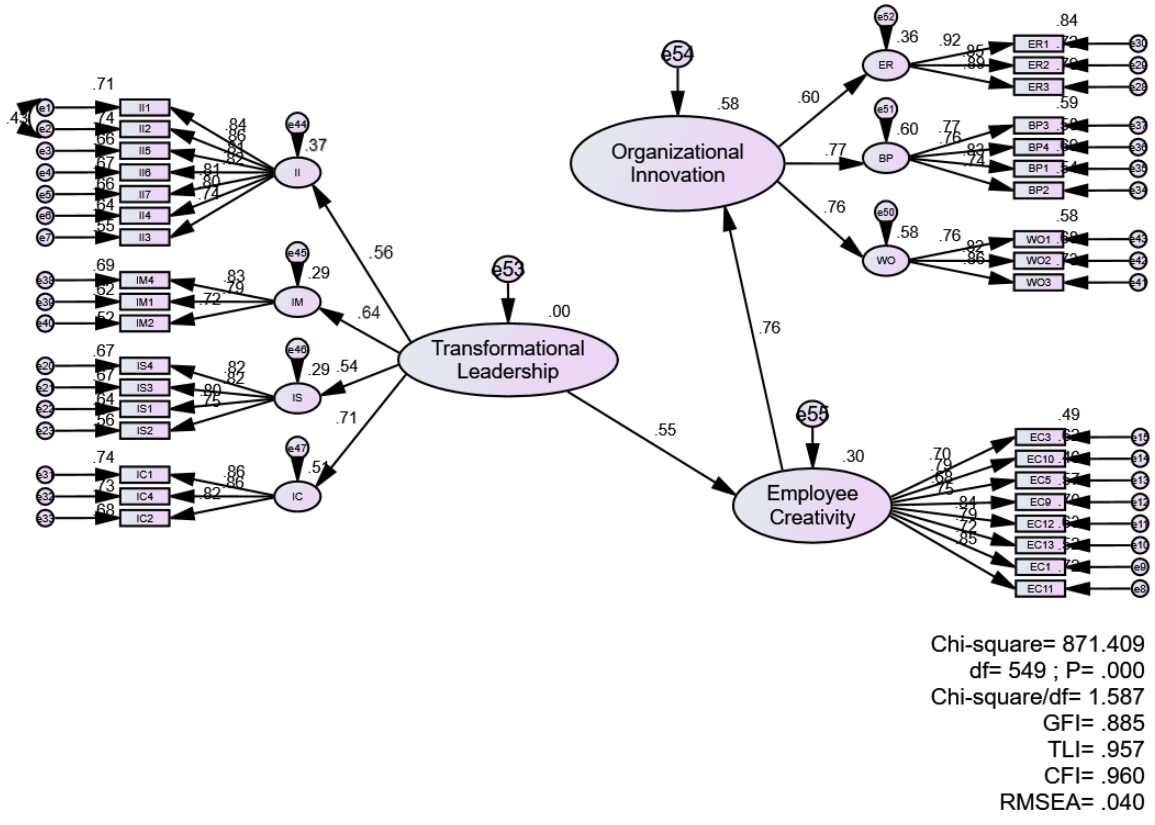


Figure 5.13. Testing mediating effects in Transformational leadership – Organisational innovation

The added direct path between transformational leadership and organisational innovation in the revised model was significant and positive (β = 0.537, p < .001). Additionally, there was a statistically significant direct and positive relationship between transformational leadership and organisational innovation in the TFL – OI model (β = 0.778, p < .001), which was evidenced by results presented in Table 5.16 and Figure 5.4. Comparatively, the standardised beta value of the direct effect linking transformational leadership and organisational innovation was observed to reduce from 0.778 to 0.537 as employee creativity was entered. Moreover, paths reflecting indirect causal mediated effects TFL → EC → OI were all significant (Table 5.27). Specifically, the direct path estimates between transformational leadership and employee creativity was significantly positive (p < .001) and employee creativity had a direct and significantly positive relationship with organisational innovation (p < .001) (Table 5.27). Therefore, the existence of partial mediation was supported. In essence, employee creativity acted as a mediator, which was indicated by a significant indirect effect through employee creativity in the transformational leadership – organisational innovation relationship.

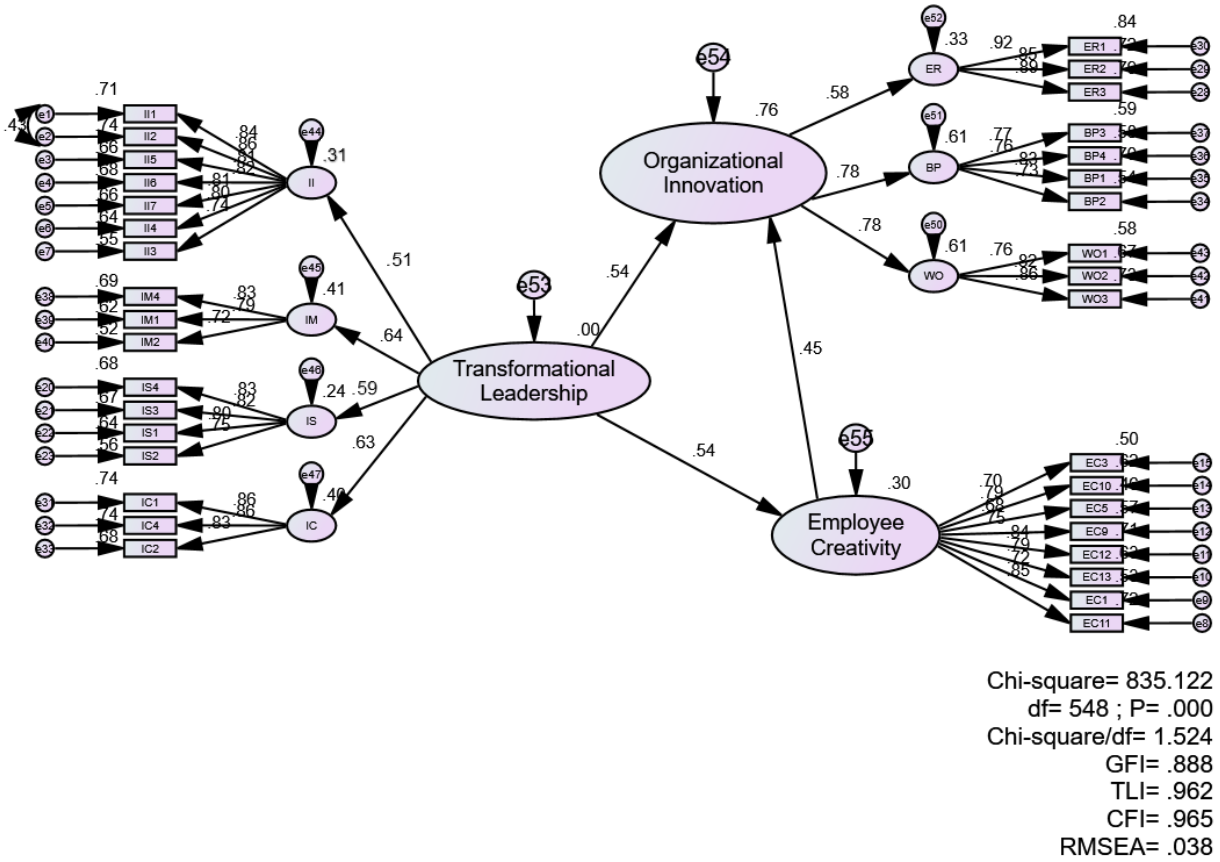


Figure 5.14. Adding direct path in testing the mediating effect in the TFL – OI relationship

In terms of assessing the magnitude of the mediating effects, total effects of TFL → OI were split into direct effects and indirect effects in both the original model (absent direct path from TFL → OI) and

the revised model (added direct path from TFL → OI). Results of Table 5.28 confirmed the existence of mediating effect of employee creativity in the original model, which was supported by the presence of substantial indirect effects. Additionally, the diminished indirect effects of TFL → OI from 0.420 to 0.246 and the significant direct effects of TFL → OI indicated partially mediated model.

Table 5.28.

Assessing direct and indirect effects in a mediated model TFL-EC-OI

Standardised effects of TFL – OI	Original model (only indirect effects)	Revised model (indirect and direct effects)
Total effects	0.420	0.783
Direct effects	0.000	0.537
Indirect effects	0.420	0.246

5.9.1.2. Transactional leadership – Employee creativity – Organisational innovation model

Analysing the potential mediator of employee creativity in the transactional leadership – organisational innovation relationship similarly followed two steps as described in Section 4.6. Accordingly, Table 5.29 presented correlations between transactional leadership, employee creativity and organisational innovation in the CFA model after standardisation. Results of this table satisfied the requirement that the inter-construct correlations were significant for all the main constructs. Specifically, transactional leadership was significantly related to organisational innovation (r = -.896), ascertaining that the direct and unmediated linkage was significant. Transactional leadership was also significantly related to employee creativity (r = -.649), indicating the established relationship between exogenous variable and potential mediating variable. Finally, organisational innovation was significantly related to employee creativity (r = .750), establishing the relationship between the potential mediator and endogenous variable.

Table 5.29.

Inter-construct (TSL – EC – OI) correlation matrix (standardised)

	Transactional leadership	Employee creativity	Organisational innovation
Transactional leadership	1.000	0.421	0.803
Employee creativity	-.649***	1.000	0.563
Organisational innovation	-.896***	.750*	1.000

Note. Values below the diagonal are correlation estimates among constructs, diagonal elements are construct variances, and values above the diagonal are squared correlations. *p < .05 (2-tailed); **p < .01 (2-tailed); ***p < .001 (2-tailed)

Subsequently, estimating the mediated model and assessing the mediation level were proceeded. Accordingly, two different structural models are developed including an original model and a revised model to assess the direct and indirect effects. Specifically, in an original model, the direct effect from transactional leadership to organisational innovation was not estimated (Figure 5.15). Conversely, in a revised model, an added direct path linking transactional leadership and organisational innovation was

estimated (Figure 5.16). Based on the outcomes of estimating the direct and indirect effects, changes in the level of model fit were assessed. Results presented in Table 5.30, Figure 5.15 and Figure 5.16 demonstrated that the value of Chi-square in the revised model with the additional direct relationship reduced substantially ($\Delta\chi^2 = 34.056$, df = 1, $p = .000$), which improved fitness of the model.

Table 5.30.

Summary of results on testing the mediating effects in the TSL – OI relationship

Model assessment criteria	Model element	Original model (only indirect effects)	Revised model (indirect and direct effects)
Model fit	Chi square (χ^2)	435.618	401.562
	Degrees of freedom	292	291
	Probability	0.000	0.000
	CMINDF	1.492	1.380
	GFI	0.916	0.922
	CFI	0.972	0.979
	TLI	0.969	0.976
	RMSEA	0.037	0.032
Standardised parameter estimates	Employee creativity <--- Transactional leadership	-0.716***	-0.649***
	Organisational innovation <--- Employee creativity	0.767***	0.291*
	Organisational innovation <--- Transactional leadership	0.000	-0.707***

Note. *p < .05 (2-tailed); **p < .01 (2-tailed); ***p < .001 (2-tailed)

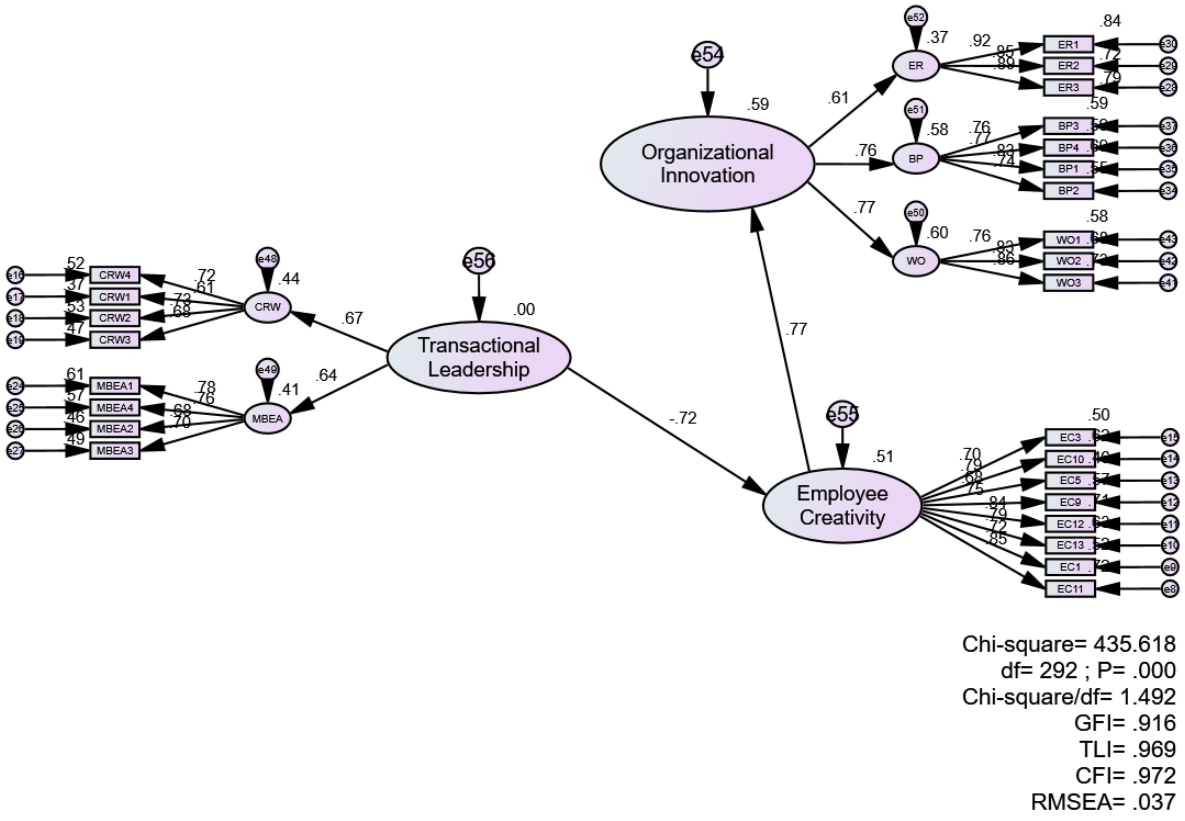


Figure 5.15. Testing mediating effects in Transactional leadership – Organisational innovation

The added direct path between transactional leadership and organisational innovation in the revised model was significant and negative (β = -0.707, p < .001). Additionally, there was a statistically significant direct and negative relationship between transactional leadership and organisational innovation in the TSL – OI model (β = -0.928, p < .001), which was evidenced by results presented in Table 5.18 and Figure 5.6. Comparatively, the standardised beta value of the direct effect linking transactional leadership and organisational innovation was observed to reduce from 0.928 to 0.707 as employee creativity was entered. Moreover, paths reflecting indirect causal mediated effects TSL → EC → OI were all significant (Table 5.30). Specifically, the direct path estimates between transactional leadership and employee creativity was significantly negative ($p < .001$) and employee creativity had a direct and significantly positive relationship with organisational innovation ($p < .001$) (Table 5.30). Therefore, the existence of partial mediation was supported. In essence, employee creativity acted as a mediator, which was indicated by a significant indirect effect through employee creativity in the transactional leadership – organisational innovation relationship.

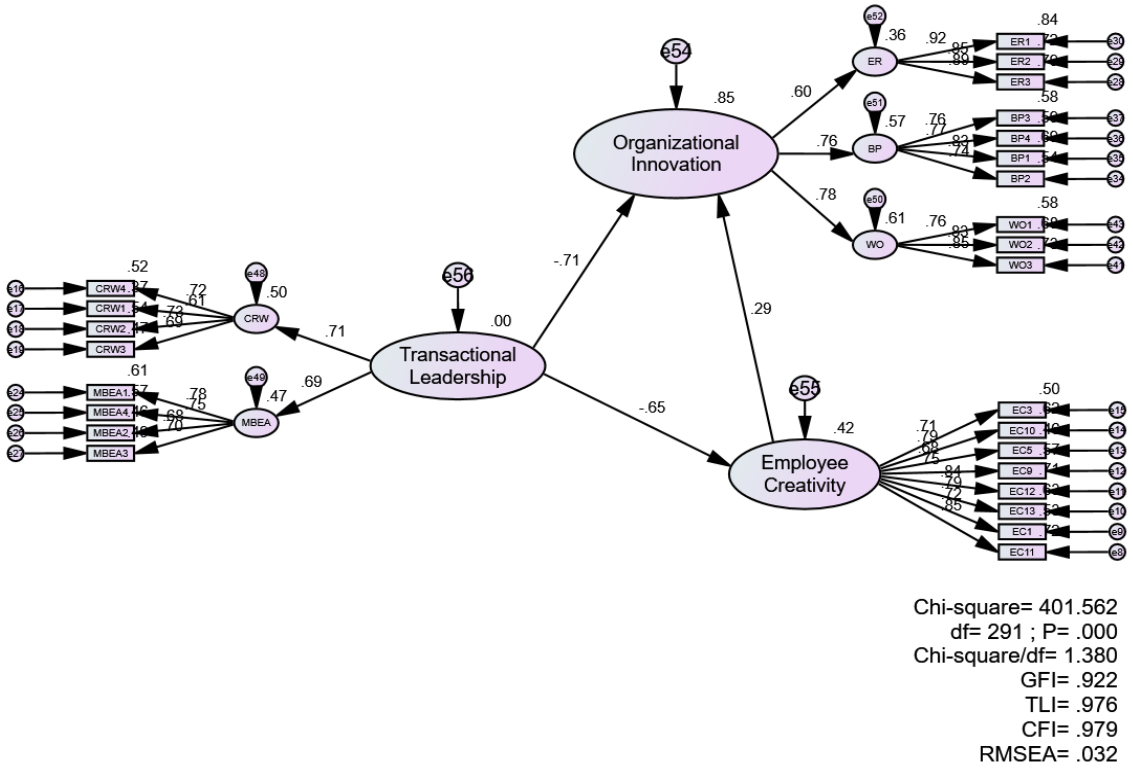


Figure 5.16. Adding direct path in testing the mediating effect in the TSL – OI relationship

In terms of assessing the magnitude of the mediating effects, total effects of TSL → OI were separated into direct effects and indirect effects in both the original model (absent direct path from TSL → OI) and the revised model (added direct path from TSL → OI). Results of Table 5.31 confirmed the presence of mediating effect of employee creativity in the original model, which was supported by the existence of

substantial indirect effects. Additionally, the decreased indirect effects of TSL → OI from 0.549 to 0.189 and the significant direct effects of TSL → OI indicated partially mediated model.

Table 5.31.

Assessing direct and indirect effects in a mediated model TSL-EC-OI

Standardised effects of TSL – OI	Original model (only indirect effects)	Revised model (indirect and direct effects)
Total effects	-0.549	-0.896
Direct effects	0.000	-0.707
Indirect effects	-0.549	-0.189

5.9.2. Hypothesis Group 4: Mediated Leadership styles – Organisational innovation relationships

Following the analysis of mediation test in section 5.9.1, this section summarised findings on hypotheses testing the mediating role of employee creativity in the leadership styles – organisational innovation relationships in the particular context of the Vietnamese public coffee enterprises. Accordingly, there were two separate hypothesised relationships discussed including investigating the potential mediator of employee creativity in the relationship between transformational leadership and organisational innovation as well as examining whether employee creativity mediated the transactional leadership – organisational innovation relationship in the Vietnamese public coffee firms. Generally, results of analyses supported the hypothesis on mediated leadership styles – organisational innovation relationships.

5.9.2.1. Hypothesis H4a: Mediated Transformational leadership – Organisational innovation

Results presented in Table 5.32 supported hypothesis H4a indicating that employee creativity mediated the relationship between transformational leadership and organisational innovation. Moreover, findings illustrated in Table 5.32 also implied that employee creativity partially mediated the linkage between transformational leadership and organisational innovation in the TFL – EC – OI nested model. Accordingly, transformational leadership had a significantly direct and positive effect on organisational innovation and the magnitude of that effect reduced as employee creativity was entered. Additionally, the direct path estimates between transformational leadership and employee creativity, employee creativity and organisational innovation were all significant.

Table 5.32.

Results of hypothesis on the mediating effects in the TFL – OI relationship

Hypothesis		**Findings**
H4a	Employee creativity mediates the relationship between transformational leadership and organisational innovation	Supported – Partial mediation

5.9.2.2. Hypothesis H4b: Mediated Transactional leadership – Organisational innovation

Results shown in Table 5.33 supported hypothesis H4b indicating that employee creativity mediated the relationship between transactional leadership and organisational innovation. Moreover, findings illustrated in Table 5.33 also implied that employee creativity partially mediated the linkage between transactional leadership and organisational innovation in the TSL – EC – OI nested model. Accordingly, transactional leadership had a significantly direct and negative effect on organisational innovation and the magnitude of that effect reduced as employee creativity was entered. Additionally, the direct path estimates between transactional leadership and employee creativity, employee creativity and organisational innovation were all significant.

Table 5.33.

Results of hypothesis on the mediating effects in the TSL – OI relationship

Hypotheses		Findings
H4b	Employee creativity mediates the relationship between transactional leadership and organisational innovation	Supported – Partial mediation

5.10. Summary

This study aimed to investigate the relationship between two different leadership styles and organisational innovation as well as the mediating role of employee creativity in the leadership styles – organisational innovation relationships in the Vietnamese public coffee enterprises. Specifically, this was achieved by addressing research questions and examining hypothesised relationships developed in chapter 3. By utilising statistical techniques, this chapter provided results of preliminary data analysis and interpretation of the research findings on hypothesised relationships among variables. Accordingly, in the first section of this chapter, sampling results relating to data collection and entry as well as demography of enterprises and respondents were discussed. Subsequently, regarding the data screening step, no major outliers and missing data were recognised. Moreover, data presentation was properly done in accordance with the requirements for proceeding statistical analyses. Next, results of reliability test of measured scales based on Cronbach's alpha value supported the internal consistency of measurement scales. Then, results of exploratory factor analysis revealed that ten factors were extracted utilising the principal axis factoring with Promax rotation method, which matched the representation by the original variables of the conceptual model. In terms of confirmatory factor analysis for the measurement model, robust evidences were disclosed upon the assessment of unidimensionality, convergent validity, discriminant validity and construct validity, which satisfied the suggested threshold values and estimated requirements.

With regard to assessing the conformity with SEM assumptions, the adequacy of data was confirmed. Additionally, no violations of the normality of data and multicollinearity were identified, which facilitated

the development of structural models with hypothesised path relationships between constructs of interests. In the next section, the summary of findings on hypothesised relationships among leadership styles, employee creativity and organisational innovation was expounded. Specifically, statistically significant relationships between leadership styles and organisational innovation were partially supported. Similarly, linkages between leadership styles and employee creativity were significantly verified. Moreover, there existed significant effects of employee creativity on dimensions of organisational innovation. Finally, results of mediation analysis confirmed that employee creativity played a partially mediating role in the leadership styles – organisational innovation relationship. The next chapter provides a thorough discussion of the results of hypotheses testing, theoretical and practical implications of the findings as well as limitations and recommendations for future research.

CHAPTER 6: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction

The final chapter of this study covers various aspects including an overview of the study, a summary of research findings, a thorough discussion of the findings on proposed hypotheses, theoretical contributions, managerial implications and contributions, limitations of the study as well as recommendations for future research. Accordingly, findings and recognised contributions to the current literature and practice inferred from empirical analyses are delineated. More importantly, findings, relevant literature and research gaps are well established throughout the study regarding the context of Vietnamese public coffee enterprises. Specifically, the chapter begins by providing an overview section that encapsulates the whole study. Next, a summary of research findings is systematically presented. Subsequently, a meticulous discussion of findings on investigating proposed hypotheses that demonstrate interrelationships between transformational leadership, transactional leadership and its respective dimensions, employee creativity and components of organisational innovation is presented. Additionally, results of the hypothesised mediating role of employee creativity in the relationship between leadership styles and organisational innovation are also discoursed. Following this, the theoretical contributions and managerial contributions as well as practical implications of the study are elaborately discussed. Besides, limitations of the study and recommendations for future research are shown. Finally, the conclusion part summarises valuable contributions made by the study to existing knowledge in the leadership, creativity and innovation domain. Particularly, the study found out the effects of each dimension of transformational leadership and transactional leadership on components of organisational innovation by integrating the analysis of leadership styles – organisational innovation relationships. Moreover, the study also includes examining the mediating role of employee creativity to provide a thorough perspective of the associations between leadership styles and organisational innovation. As revealed from findings of the study, employee creativity mediates the leadership styles – organisational innovation relationships, which is supposed to increase the positive influence of transformational leadership on organisational innovation as well as modify the negative impact of transactional leadership on organisational innovation.

6.2. An overview of the study

This study investigated the relationships between different leadership styles and organisational innovation by taking into account the mediating effect of employee creativity in the Vietnamese public coffee enterprises. Accordingly, the study provided an overview of the performance, growth and contribution of the coffee industry, especially Vietnamese public coffee enterprises to the national economic and social development. This partially helps highlight the importance of focusing on studying

public enterprises in the Vietnamese coffee industry regarding the practice of leadership, creativity and innovation. Particularly, the significance of examining leadership styles – organisational innovation relationships in Vietnamese public coffee firms was elaborated. A comprehensive literature review of the main constructs in the study was subsequently discussed, which concentrated on the relevant literature that expounded the associations between leadership styles, employee creativity and organisational innovation. Based on the exhausting literature review, research gaps were identified within the general research arena as well as the specific research context in which those constructs were studied. Research problems, research questions, research objectives specific to the study and hypothesised relationships between constructs were respectively established. Data collection was then proceeded in line with the research design that utilised quantitative method. Next, a thorough data analysis procedure was done to figure out the relationships among various constructs of this study.

A critical discussion in the literature review stressed the importance of innovation, specifically non-technical innovation in the long-term survival and sustainable growth of the organisations of all types with regard to the current business environment. However, non-technical innovation, referred to as organisational innovation still remains inadequately researched. Moreover, as an organisational outcome, innovation at the organisational level was impacted by one of the primary factors – leadership styles in which transformational and transactional leadership exerted different effects on. While the majority of leadership studies focused on transformational leadership style in examining its effects on innovation, research on transactional leadership was scarce. Additionally, although prior studies indicated significant correlations between leadership styles and innovation, findings were inconclusive in terms of the negative and positive effects of transformational leadership and transactional leadership on innovation. Moreover, it would be imperative to recognise which dimension of transformational and transactional leadership precisely promotes or hinders innovation in the organisation, which affects organisational effectiveness. However, a limited number of studies or speculative research if any, investigated the significance of each dimension of transformational leadership and transactional leadership on innovation to figure out how its effect differs from each other. Therefore, this study desires to bridge the gap in the existing literature as well as enhance knowledge by studying the relationship between each dimension of transformational and transactional leadership on components of organisational innovation, specifically conducted in Vietnamese public coffee enterprises.

Employee creativity definitely appears to be the foundation as well as the core contributor for organisational innovation to be implemented. Accordingly, the ability of employees to generate novel, useful ideas and solutions to the problems for organisational innovation process indirectly leads to organisational development and competitiveness. Moreover, leadership styles are believed to be one of the most influential predictors of employee creativity. An appropriate leadership style will help promote the

level of employee creativity that enhances organisational innovation and collectively organisational effectiveness. Therefore, the effect of each dimension of transformational leadership and transactional leadership on employee creativity as well as the effect of employee creativity on dimensions of organisational innovation was examined. In previous studies, employee creativity was separately investigated either as a predicting variable or as an outcome variable in tandem with leadership styles and innovation as well as other contextual behaviours. By observing the interrelationships among leadership styles, employee creativity and organisational innovation, this study looked into the potentially mediating role of employee creativity in the leadership styles – organisational innovation relationships, which very few research attempted to do. This helps identify certain underlying factors that indirectly influence, facilitate or hinder the relationships between leadership styles and organisational innovation, specifically in Vietnamese public coffee enterprises.

Four hypothesis groups were formulated following the research questions that were in accordance with the research objectives of this study. Specifically, the first hypothesis group focused on examining leadership styles – organisational innovation relationships to find out the effect of each dimension of transformational and transactional leadership on components of organisational innovation. Subsequently, the second hypothesis group analysed the linkage between leadership styles and employee creativity as employee creativity was added as a mediator in this study. Accordingly, the purpose was to determine how each dimension of transformational and transactional leadership affected employee creativity. Next, the direct effect of the mediator on dimensions of organisational innovation was studied in the third hypothesis group to verify whether employee creativity significantly influenced dimensions of organisational innovation. In the final hypothesis group, the study observed how employee creativity mediated the relationship between leadership styles and organisation innovation.

Developed hypotheses in this study were investigated based on data collected from surveying 369 employees who are currently working at 39 identified public coffee enterprises in Vietnam specialising in coffee production and trading. The results of exploratory factor analysis revealed that transformational leadership was accounted for by idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. Similarly, transactional leadership was represented by contingent reward and management by exceptional – active. Likewise, organisational innovation was explained by business practices, workplace organisation and external relations. By utilising structural equation modelling, relationships among constructs based on the proposed hypotheses in the study were established. Specifically, results showed that hypothesis on the positive relationship between transformational leadership and organisational innovation was partially supported. Similarly, the hypothesis stating that transactional leadership negatively influenced organisational innovation was fully substantiated. On the other hand, findings partially supported the positive relationship between transformational leadership and

employee creativity while the negative linkage between transactional leadership and employee creativity was fully confirmed. Additionally, employee creativity was found to significantly and positively impact dimensions of organisational innovation. Regarding the mediation testing, results of the study demonstrated that employee creativity partially mediated the leadership styles – organisational innovation relationships.

6.3. Summary of research findings

This study aimed to investigate the relationships between two different leadership styles and organisational innovation conducted in Vietnamese public coffee enterprises by adopting the cross-sectional, quantitative and non-experimental correlation design. Accordingly, there were four main variables involved in the study, namely, transformational leadership and its four dimensions, transactional leadership and its two dimensions, employee creativity, organisational innovation and its three dimensions. All variables were measured utilising scales adopted from previous studies with high reliabilities. Based on the research conceptual framework, a direct positive relationship was proposed between transformational leadership and organisational innovation, transformational leadership and employee creativity as well as employee creativity and organisational innovation. On the contrary, a direct negative relationship was hypothesised between transactional leadership and organisational innovation as well as transactional leadership and employee creativity. Additionally, a hypothesis on the mediating role of employee creativity between leadership styles and organisational innovation was also established. Following the completion of developing hypothesised relationships, the proposed theoretical framework was assessed using structural equation modelling that graphically demonstrated and verified the relationships among constructs in the study. Research gaps, research objectives and research findings of the study were further summarised in Table 6.1.

Findings of hypotheses testing presented mixed results on relationships among variables in this study. Specifically, regarding the relationship between transformational leadership and organisational innovation, all dimensions of transformational leadership were found to significantly influence certain dimensions of organisational innovation except for idealised influence and these effects were positive. Accordingly, idealised influence negatively influenced business practices and its effect was significant. Conversely, business practices was positively related to three remaining dimensions of transformational leadership. Similarly, apart from idealised influence, workplace organisation had a linear relationship with remaining dimensions of transformational leadership. On the contrary, external relations was only significantly correlated with inspirational motivation. Therefore, hypothesis H1a stating that transformational leadership positively influenced the dimensions of organisational innovation was partially confirmed. The analysis of the relationship between transactional leadership and organisational innovation revealed that two dimensions of transactional leadership, namely contingent rewards and management by exception active

had a significantly negative effect on three dimensions of organisational innovation, namely, business practices, workplace organisation and external relations. Thus, hypothesis H1b indicating that transactional leadership negatively influenced the dimensions of organisational innovation was fully affirmed.

With regard to the relationship between transformational leadership and employee creativity, findings partially supported the significantly positive effect of all dimensions of transformational leadership on employee creativity except for idealised influence. Additionally, individualised consideration had a stronger correlation with employee creativity than inspirational motivation and intellectual stimulation. Therefore, hypothesis H2a proposing that transformational leadership positively influenced employee creativity was partially substantiated. Similarly, the analysis of the relationship between transactional leadership and employee creativity showed that two dimensions of transactional leadership, namely, contingent rewards and management by exception active had a significantly negative impact on employee creativity. Accordingly, employee creativity was more dependent on management by exception active than contingent rewards. Hence, hypothesis H2b illustrating that transactional leadership negatively influenced employee creativity was fully supported.

In terms of testing the linkage between employee creativity and dimensions of organisational innovation, employee creativity was found to significantly affect all dimensions of organisational innovation, namely, business practices, workplace organisation as well as external relations and its effect was positive. Thus, hypothesis H3 stating that employee creativity positively influenced dimensions of organisational innovation was fully affirmed.

Regarding the assessment of the mediating role of employee creativity in the leadership styles – organisational innovation relationships, findings of the study demonstrated that there was a statistically significant direct and positive relationship between transformational leadership and organisational innovation (TFL → OI) when employee creativity was added as a mediator. Additionally, the magnitude of the direct effect linking transformational leadership and organisational innovation reduced with the presence of employee creativity. Moreover, the indirect path estimates in the TFL → EC → OI model were significant. Therefore, it was conclusive that employee creativity partially mediated the relationship between transformational leadership and organisational innovation. Similarly, results of the mediation test also supported the statistically significant direct and negative relationship between transactional leadership and organisational innovation (TSL → OI) when employee creativity was added as a mediator. Moreover, the magnitude of the direct effect linking transactional leadership and organisational innovation reduced with the presence of employee creativity. Additionally, the indirect path estimates in the TSL → EC → OI model were significant. Hence, it could be concluded that that employee creativity partially mediated the relationship between transactional leadership and organisational innovation.

Table 6.1.

Summary of research gaps, research objectives and research findings

Research gaps	Research objectives	Research findings
While innovation occurs in various aspects in the organisation, research attention was mostly paid to technical and marketing innovation that focus on technological, product and services innovation, another type of non-technical innovation, organisational innovation that regards organisational methods, still remains understudied (Camisón & Vilar-López, 2011, 2014; Hervas-Oliver & Sempere-Ripoll, 2015). Although leadership styles were found to have strong influence on innovation, studies on relationship between leadership styles and organisational innovation in Vietnamese public coffee enterprises are scarce. Specifically, the effect of each dimension of transformational and transactional leadership on each component of organisational innovation has not been exhaustively investigated.	To investigate the relationship between leadership styles and organisational innovation at public enterprises operating in the Vietnamese coffee sector	The direct linkage between transformational leadership and organisational innovation was partially supported. Idealised influence negatively influenced business practices; inspirational motivation positively impacted on all dimensions of organisational innovation, namely, business practices, workplace organisation and external relations; intellectual stimulation had a significant positive effect on business practices and workplace organisation; individualised consideration positively affected business practices and workplace organisation. The findings partially confirmed the significantly negative effect of transactional leadership on organisational innovation. Contingent rewards negatively influenced all dimensions of organisational innovation, namely, business practices, workplace organisation and external relations; Management by exception active negatively impacted all dimensions of organisational innovation.
Employee creativity is supposed to be influenced by leadership styles, which impacts organisational innovation. While findings on relationship between transformational leadership and employee creativity are inconsistent, studies on the transactional leadership – employee creativity linkage are limited.	To determine whether leadership styles influence the employee creativity at public enterprises operating in the Vietnamese coffee sector	Findings partially supported the significantly positive effect of transformational leadership on employee creativity. Inspirational motivation, intellectual stimulation and individualised consideration significantly related to employee creativity. The negative relationship between transactional leadership and employee creativity was fully

		supported. Contingent rewards and management by exception active had a significantly negative impact on employee creativity.
Employee creativity is the key determinant and core contributor to the success in implementing innovation in the organisation. Although the linkage between creativity and innovation has long been examined, it remains ambiguous. Specifically, the direct relationship between employee creativity and dimensions of organisational innovation has been unidentified (Damanpour & Aravind, 2012), specifically in Vietnamese public coffee enterprises.	To examine whether employee creativity affects organisational innovation at public enterprises operating in the Vietnamese coffee sector	The positive linkage between employee creativity and organisational innovation was substantiated. Specifically, employee creativity positively influenced all dimensions of organisational innovation, namely, business practices, workplace organisation and external relations.
The interrelationships between leadership styles, employee creativity and organisational innovation are not unveiled in Vietnamese public coffee enterprises. Moreover, employee creativity was investigated either as a predicting variable or as an outcome variable in tandem with leadership styles and innovation as well as other contextual behaviours. However, there was hardly any study carried out to examine employee creativity as a mediating variable in the leadership styles - organisational innovation relationships (Makri & Scandura, 2010; Yoshida et al., 2014; Dominguez Escrig et al., 2016; Prasad & Junni, 2016). As innovation, specifically organisational innovation, is one of the pivotal drivers of organisational adaptation	To assess whether employee creativity mediates the relationship between leadership styles and organisational innovation at public enterprises operating in the Vietnamese coffee sector	Employee creativity partially mediated the relationship between transformational leadership and organisational innovation. Similarly, the transactional leadership – organisational innovation relationship was also partially mediated by employee creativity.

to rapid changes in the current global business market, an extensive understanding and investigation of influential factors on organisational innovation is essential in addition to testing the direct relationship between leadership styles and organisational innovation.	

6.4. Discussion of the findings

6.4.1. Leadership styles – Organisational innovation relationships

6.4.1.1. Transformational leadership – Organisational innovation relationship

A summary of findings of hypotheses on figuring out the proposed relationship between transformational leadership and organisational innovation was presented in Table 6.2, which addressed the research question 1a. Accordingly, results partially supported the positive relationship between transformational leadership and organisational innovation in Vietnamese public coffee enterprises. Theoretically, transformational leadership was associated with organisational climates and cultures that facilitate risk-taking activities and promote innovation (Bass & Avolio, 1993). Moreover, the transformational leader creates visions, formulates strategies, addresses intrinsic motivation and sets basic conditions for works in the organisations as well as looks forward to an appealing future (Aragon-Correa et al., 2007; Matzler, 2008). In other words, the transformational leader promotes the tendency of organisations to innovate by disseminating new visions and creative ideas (Gumusluoglu & Ilsev, 2009). Thus, these above mentioned theoretical arguments were supported based on the results of this study.

Empirically, findings of this study relevantly corresponded to those of previous research that confirmed the positive impact of transformational leadership on different types of innovation (Alsalami et al., 2014; Aragon-Correa et al., 2007; Czarnitzki & Kraft, 2004; Dess & Picken, 2000; Garcia-Morales, & Cordon-Pozo, 2007; Gumusluoglu & Ilsev, 2009; Jung et al., 2003; Hsiao & Chang, 2011; Hult et al., 2000; Lee, 2007; Matzler et al., 2008; Mokhber et al., 2015; Moriano et al., 2014; Noruzy et al., 2013; Schweitzer, 2014). Specifically, a study by Jung et al. (2003) affirmed the existence of direct and positive relationship between transformational leadership and organisational innovation. It was noticeable that the concept of organisational innovation in this study was measured by R&D intensity, R&D expenditures and a number of obtained patents by the organisation. Additionally, Gumusluoglu and Ilsev (2009) reported that transformational leadership significantly associated with organisational innovation and the effect was positive. It implies that the increase in transformational behaviours of the leader leads to the enhancement in organisational innovation in terms of the tendency to innovate and the market success of innovation or equivalently incremental innovation. Therefore, this is possibly similar to the concept of organisational innovation on organisational methods to some extent.

The significance of transformational leadership in generating innovative outcomes in the organisation was also supported by a study by Aragon-Correa et al. (2007). Additionally, Schweitzer (2014) found out that transformational leadership increased innovation in the organisation and performance, which was manifested by a significant increase in the development of dynamic and operational capabilities in alliances. In another study on 248 personnel working in different functional areas across multiple public and private

organisations in Dubai, Alsalami et al. (2014) showed that transformational leadership positively correlated with organisational innovation relating to developing ideas and modifying these ideas to promote long-term survival of the organisation. However, a study by Sethibe (2016) investigating 231 employees working in South African retail banking sector revealed the contrary findings. Specifically, transformational leadership only had indirect influence on organisational innovation regarding radical and incremental innovation through organisational climate.

Table 6.2.

Summary of findings on hypotheses and research question 1a

Research question	Hypotheses		Findings
What is the relationship between transformational leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector?	H1a	Transformational leadership positively influences the dimensions of organisational innovation.	Partially supported
	$H1a_1$	Idealised influence positively influences the dimensions of organisational innovation.	Not supported
	$H1a_2$	Inspirational motivation positively influences the dimensions of organisational innovation.	Fully supported
	$H1a_3$	Intellectual stimulation positively influences the dimensions of organisational innovation.	Partially supported
	$H1a_4$	Individualised consideration positively influences the dimensions of organisational innovation.	Partially supported

In essence, the transformational leader, with collective goals and decisions, envisions the strategic advantages of changes and adaptation referred to as organisational innovation towards the development of the organisation (Dess & Picken, 2000). This contrasts the traditional leadership reflected by top-down decisions and standardised procedures focus (Aragon-Correa et al., 2007). Therefore, the leader significantly focuses on creating an organisational climate that supports a communicative culture and pays more attention to individual development of employees as well as provides chances for making mistakes (Hult et al., 2000).

The importance of each dimension of transformational leadership on each component of organisational innovation was additionally demonstrated in Table 6.3. Specifically, all dimensions of transformational leadership except for idealised influence were found to significantly influence certain dimensions of organisational innovation and these effects were positive, which was consistent with results of a study by Alsalami et al. (2014). Idealised influence, out of four dimensions of transformational leadership, was found to relate negatively to organisational innovation in terms of business practices, which was contrary to the hypothesised direction. This negative relationship was aligned with that of Mokhber et al (2015) albeit the difference of organisational innovation scale, which focused on two ratios, namely, the innovativeness tendency and the success of product innovation. The inverse correlation indicates employees' perception about their leader that when idealised influence of the transformational leader

increases, organisational innovation in business practices decreases. In other words, perceptions of employees about the idealised influence of their transformational leader reduces the level of organisational innovation in business practices.

Table 6.3.

Significance of transformational leadership on organisational innovation

Dimensions of organisational innovation	Dimensions of transformational leadership	Standardised Beta estimate	Rank
Business practices	Idealised influence	0.102	8
	Inspirational motivation	0.370	2
	Intellectual stimulation	0.174	6
	Individualised consideration	0.225	4
Workplace organisation	Inspirational motivation	0.450	1
	Intellectual stimulation	0.186	5
	Individualised consideration	0.167	7
External relations	Inspirational motivation	0.338	3

Innovation in business practices refer to the implementation of new organisational methods in databases establishment, employee retention improvement and management system, which helps to boost the efficiency in organisational procedures and routines as well as make long-term commitments to employees (Camisón Zornoza, 2001; Nemetz & Fry, 1988). For instance, in terms of securing the long-term commitments of employees to the organisation, Ganter and Hecker (2014) added that innovative practices may involve employee empowerment, job rotation, job enrichment or job enlargement, which produces positive effects of increasing employee discretion and knowledge exchange across departments in the organisations. By displaying idealised influence, the transformational leader acts as a role model with creative behaviours to capture the development and initiation of new organisational practices and structures (Prasad & Junni, 2016), which results in promoting organisational innovation (Howell & Higgins, 1990). However, there may exist exceptional cases that the goals of the transformational leader fail to align with those of the organisation (Mokhber et al., 2015) while the influence of the leader on the organisational performance is strong, which may generate inexorable norms that unfavourably affect the organisational innovation, specifically business practices. This seems to be an appropriate explanation to the particular context of this study.

Specifically, employees working across public coffee enterprises in Vietnam probably perceived that their leader demonstrated idealised influence that overacted the role model, represented by the unwillingness to share power and empower followers (Bass & Riggo, 2006). As a result, the leader strongly

exerts his or her influence on the performance of the organisation, which may lead to the provision of opportunities that are detrimental to organisational innovation. Moreover, characteristics of organisational culture in Vietnamese public enterprises score high on uncertainty avoidance based on Hofstede's dimensions. Accordingly, organisations tend to highly perform rule-oriented activities that are in compliance with established laws and regulations to cut down the level of risk and uncertainty. Thus, acting as a role model, the initiation of new organisational practices by the creative behaviours of the transformational leader, under employee perceptions, may increase the uncertainty level that harms the organisational performance. Generally, the negative consequences of idealised influence on business practices in the study may suggest the mismatch between the leader's goals and missions with those of the organisation as well as the imbalance power sharing of the leader. However, considering the context of the Russian culture, idealised influence effectively affected organisational innovation although the high power distance and low individualism of cultural values in Russian society were likely similar to Vietnamese context (Elenkov & Manev, 2005).

On the contrary, compared to the significantly negative relation between idealised influence and organisational innovation in business practices, the impacts of inspirational motivation, intellectual stimulation and individualised consideration on business practices and workplace organisation were positive in Vietnamese public coffee enterprises. Specifically, organisational innovation in workplace organisation refers to the implementation of new methods regarding responsibility distribution, task division and rotation among employees, decision-making process in the organisation, internal and external trainings, incentive schemes and other activity structuring (Bougrain & Haudeville, 2002; Ganter & Hecker, 2014; Hervas-Oliver & Sempere-Ripoll, 2015; Laursen & Foss, 2003). These positive relationships can be attributable to behaviours of transformational leadership where the leader demonstrates intellectual stimulation by challenging their employees' capacity to question assumptions and introduce innovative suggestions about solving and improving extant problems such as organisational methods in databases establishment, employee retention improvement and management system (Moriano et al., 2014; Moss & Ritossa, 2007; Mumford et al., 2002; Oldham & Cummings, 1996). As a result, the efficiency in organisational procedures and routines is boosted as well as long-term commitments to employee are made (Bass, 1985; Camisón Zornoza, 2001; Jung et al., 2003; Nemetz & Fry, 1988), which contributes to inter-organisational innovation (Armbruster et al., 2008; Battisti & Stoneman, 2010; Camisón & Villar-López, 2014; Mokhber et al., 2015).

Similarly, using individualised consideration, the transformational leader enhances employee capabilities to achieve organisational goals by establishing a one-to-one relationship with subordinates, concerning their own needs and aligning their individual interests with the organisational vision (Bass et

al., 2003; Moriano et al., 2014; Shamir et al., 1993; Waldman & Bass, 1991). Additionally, the leader also considers himself as playing the role of a coordinator rather than commander or controller who encourages employees to learn (Barczak & Wilemon, 1992; Bass et al., 2003; Moriano et al., 2014; Shamir et al., 1993; Waldman & Bass, 1991; Yammarino et al., 1993). Besides, the transformational leader uses inspirational motivation to articulate the future vision, provide their followers challenges and support employees as well as underscore the important meaning of various tasks they are performing (Coad & Berry, 1998; Jung et al., 1995; Martin & Epitropaki, 2001; Nusair et al., 2012; Sarros & Santora, 2001). Generally, these transformational leadership behaviours are instrumental for the promising outcomes of organisational innovation in business practices and workplace organisation. Moreover, a study by Elenkov and Manev (2005) also consistently supported the enhancement of successful innovation triggered by the individualised consideration of the transformational leadership. Specifically, that study was conducted in French social-cultural contexts characterised by high uncertainty avoidance and high power distance, especially in public enterprises, which was similar to the Vietnamese context in this research.

Findings of this study contrasted with Mokhber et al.'s (2015) as pointing out insignificant association between individualised consideration and organisational innovation regarding external relations. A possible reason to accommodate this difference is perceptions of existing inequity and favouritism in the collectivistic culture that emphasised more on organisational rather than individual achievements, which poses potential threats to the performance of employees (Javidan & Dastmalchian, 2003; Vandenberghe, 1999). Additionally, the recognised positive relationship between intellectual stimulation and dimensions of organisational innovation except for external relations in this study was not in line with findings by Sarros et al. (2008). This contrasting result depends on investigated conditions in the working environment regarding both organisational and cultural climate that either encourage or inhibit organisational innovation (Sarros et al., 2008; Yukl, 2012).

By examining how specific behaviours of transformational leadership affect organisational innovation, results also established the strong influence of inspirational motivation on organisational innovation in Vietnamese public coffee enterprises. Specifically, inspirational motivation was the unique dimension of transformational leadership that was significantly related to all components of organisational innovation as shown in Table 6.3. It can be attributable to the feature of inspirational motivation reflected by the transformational leader that highlights the major role of vision (Amabile et al., 1998; Moriano et al., 2014; Mumford et al., 2002; Sarros et al., 2008). Particularly, visionary leaders shape the organisations that facilitate innovative activities represented by the provision of sufficient financial and non-financial resources such as funding, flexible rewards and benefits for employees to contribute their knowledge and skills to organisational innovation. Additionally, visionary leaders strategically plan for future

organisational ambitious goals and set high performance expectations (Sarros et al., 2008), which inspires all members with integrated contributions of extra time and efforts to achieve.

Furthermore, results also demonstrated that only inspirational motivation had a positive effect on innovation in external relations, referred to inter-organisational innovation in the context of public coffee enterprises in Vietnam (Armbruster et al., 2008; Battisti & Stoneman, 2010; Camisón & Villar-López, 2014; Mokhber et al., 2015). It implies that this behaviour of the transformational leader empowers and establishes an innovative climate with necessary resources and supports that is conducive to the external relations of organisational innovation (Jung & Sosik, 2002; Jung et al., 2003). Specifically, by displaying inspirational motivation, the transformational leader develops and helps sustain the organisation through such key indicators as organisational vision, clear communication, challenges and motivation (Boerner et al., 2007; Hater & Bass, 1998; Nusair et al., 2012; Prasad & Junnie, 2016). This, subsequently, enhances organisational innovation in external relations featured by implementing new ways of expanding and maintaining relationships with other enterprises or public firms, dealing and cooperating with customers, integrating or outsourcing with suppliers (Cantner & Schmidt; 2011; Foss et al., 2011; Ganter & Hecker, 2014; Hervas-Oliver & Sempere-Ripoll, 2015; Kremp & Mairesse, 2006; Tomlinson, 2010). In short, inspirational motivation of the transformational leader encourages the adoptive behaviours of the organisation towards more efficient acquirement, integration and usage of knowledge resources to bring about changes in external relations.

Generally, innovation on organisational methods with regards to business practices, workplace organisation and external relations are crucial for effectiveness of the organisation in management system, employment practice and business-related relations improvement within the context of the currently fierce competition among enterprises. While innovation still remains low in terms of quality and frequency as well as little attention is paid to organisational innovation, in particular, organisational methods in public coffee enterprises in the context of a developing country, it is essential for the leader to foster innovation through inspirational motivation that benefits the organisation. Additionally, the positive impact of inspirational motivation on a particular component of organisational innovation also partly contributed to the important role of transformational leadership as an influential factor towards organisational innovation (Alarifi, 2014; Gumusluoglu & Ilsev, 2009).

6.4.1.2.Transactional leadership – Organisational innovation relationship

A summary of findings of hypotheses on exploring the suggested relationship between transactional leadership and organisational innovation was presented in Table 6.4, which addressed the research question 1b. Accordingly, transactional leadership was found to significantly influence certain dimensions of

organisational innovation and these effects were negative in the context of Vietnamese public coffee enterprises. Specifically, the increase in displaying transactional leadership leads to diminishing effects on organisational innovation in terms of business practices, workplace organisation and external relations. The theory of transactional leadership argued that the transactional leader tends to work in well-established systems and acts in his or her self-interest (Howell & Avolio, 1993). Additionally, the leader reacts negatively to mistakes, emphasising on work standards and followers compliance as well as expecting followers to achieve task-oriented and organisational goals (Lee, 2007). In other words, transactional leadership was linked to bureaucratic authority and authenticity in the organisation. Moreover, the leader also substantially relies on rewards and punishments in order to exert influence on performance. Therefore, this style of leadership proved not to be effective compared to transformational leadership in promoting organisational innovation. As a result, it is evident that findings of this study supported theoretical arguments on the negative relationship between transactional leadership and organisational outcomes.

Table 6.4.

Summary of findings on hypotheses and research question 1b

Research question	Hypotheses		Findings
What is the relationship between transactional leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector?	H1b	Transactional leadership negatively influences the dimensions of organisational innovation.	Fully supported
	$H1b_1$	Contingent reward negatively influences the dimensions of organisational innovation.	Fully supported
	$H1b_2$	Management by exception active negatively influences the dimensions of organisational innovation.	Fully supported

Empirical evidences also substantiated the consistency in results of this study with Lee's (2007) as postulating that transactional leaders tend not to nurture and encourage organisational innovation and negatively associated with organisational innovation in large and mature organisations (Pieterse et al., 2010). Similarly, Saad, Shamsuri and Mazzarol (2010) reported that the role of the transactional leadership was minimal in enhancing innovative performance of the organisations in Malaysia. An argument indicating that the higher possibility of successful innovation was associated with transformational leadership compared to transactional leadership was supported by Dess and Picken (2000) and Manz et al. (1989). Likewise, transactional leadership, compared to transformational leadership, emphasises less on organisational innovation (Church & Waclawski, 1998; Howell & Higgins, 1990). Nonetheless, a study by Schweitzer (2014) also confirmed the significant effect of transactional leadership on innovation in the organisation despite its weaker magnitudes.

The discrepancy between self-interests of the transactional leader and those of organisations may explain for the negative association between transactional leadership and organisational innovation (Zhang et al., 2011). Specifically, as the transactional leader guided employees towards achieving the expected goals, it seems that the leader appears to be self-focused and produces negative effects on organisational innovation in case of existing mismatch in the organisational visions and objectives. Regarding the context of this study, another possible reason for the negative transactional leadership – organisational innovation relationship is the low investment of public enterprises into innovative activities, which dampens the transactional leader in monitoring and controlling innovation as well as reduces the commitment to organisational innovation.

On the contrary, this result contradicted with Keller's (1992) when the author suggested that transactional leadership behaviours were necessary in terms of allocating and coordinating tasks for innovation in the organisation, which indicates a positive linkage between transactional leadership and organisational innovation. The difference in findings can be explained by the characteristics of the collectivist cultures shared among Vietnamese employees who participate in this study that they put higher expectation on their leader to demonstrate transformational behaviours that improves organisational innovation (Bass, 1995). In another study by Alsalami et al. (2014), results demonstrated no impact of transactional leadership on organisational innovation regarding radical and incremental innovation. Additionally, it was found that findings of this study were contradictory to Moss and Ritossa's (2007) and Boerner et al.'s (2007) indicating that transactional leadership had no relationship with organisational innovation.

The importance of each dimension of transactional leadership on each component of organisational innovation was demonstrated in Table 6.5. Considering the effects of each dimension of transactional leadership on components of organisational innovation, results showed that both contingent rewards and management by exception active had negative influence on business practices, workplace organisation and external relations. Accordingly, the effectiveness in management system, employment practice and business-related relations improvement in public enterprises was reduced by the increase in active demonstration of contingent rewards and management by exception active of the transactional leader.

Theoretically, by showing contingent rewards, the transactional leader encourages employees to achieve specific targets by providing incentives such as bonus in an exchange for the active participation and cooperation of followers to achieve desirable outcomes of the organisations, which is considered as a significant motive to enhance organisational innovation (Ensley et al., 2006; Kickul & Gundry, 2001; Moss & Ritossa, 2007; Prasad & Junnie, 2016; Schweitzer, 2014). However, regarding the practice of this specific context, the inappropriateness and insufficiency of rewards and incentives transacted by the leader

as perceived by employees working in public enterprises may account for this negative relationship despite the influence of the transactional leader on extrinsic motivation of employees. Thus, this is supposed to undermine the implementation of organisational innovation in business practices regarding management system, database establishment as well as employee retention improvement (Camisón Zornoza, 2001; Nemetz & Fry, 1988). Moreover, new organisational methods in workplace organisation such as responsibility distribution, task division, decision-making process in the organisation, trainings and incentive schemes are less effective (Ganter & Hecker, 2014; Hervas-Oliver & Sempere-Ripoll, 2015). Additionally, new ways of expanding and maintaining relationships with other enterprises or public firms, customers and suppliers, referred to as external relations are negatively affected (Cantner & Schmidt; 2011; Foss et al., 2011; Kremp & Mairesse, 2006; Tomlinson, 2010). On the other hand, results were inconsistent with those of Elenkov and Manev (2005) revealing that the contingent rewards behaviour displayed by the transactional leader promoted organisational innovation in the German culture that is high uncertainty avoidance and low power distance. It can be inferred that the contrasting result may be due to the difference in cultural characteristics of Vietnamese enterprises that are high uncertainty avoidance and high power distance between employees and the leader (Hofstede, 1980).

Table 6.5.

Significance of transactional leadership on organisational innovation

Dimensions of organisational innovation	Dimensions of transactional leadership	Standardised Beta estimate	Rank
Business practices	Contingent rewards	-.313	5
	Management by exception active	-.419	2
Workplace organisation	Contingent rewards	-.399	3
	Management by exception active	-.428	1
External relations	Contingent rewards	-.338	4
	Management by exception active	-.265	6

Additionally, the transactional leader demonstrates active management by exception by proactively striving to identify and deal with errors through positive supervision of performance (Moss & Ritossa, 2007). This behaviour of transactional leadership was detrimental to innovation relating to implementing new organisational methods in business practices, workplace organisation and external relations (Moss & Ritossa, 2007). The negative impact of management by exception active on organisational innovation in this study is probably attributable to the fact that the transactional leader focuses on following well established rules and standards in the organisation and prefers a stable and predictable working environment (Wei et al., 2010). It, thus, is argued not to support the nature of innovation that highlights risk-taking activities and flexible working environments that allow departure from existing regulations,

management practices as well as organisational formality (Hamel, 1999). As a result, it also partly helps justify for the stronger magnitude effect of management by exception active than contingent rewards of the transactional leader on business practices and workplace organisation in Vietnamese public coffee enterprises.

On the other hand, the diminishing effect of management by exception – active displayed by the transactional leader on organisational innovation in the investigated context of this study contrasted with Elenkov and Manev's study (2005). Specifically, regarding the Russian context, active management by exception promotes successful organisational innovation (Elenkov & Manev, 2005) despite potential similarities in the cultural values manifested by high power distance and low individualism between Russian and Vietnamese society. It also implies that whether leadership behaviours prove effective or ineffective relies on the fit with existing cultural characteristics of the studied society (Brodbeck et al., 2000; Elenkov & Manev, 2005; Koopman et al., 1999), specifically in Vietnamese public coffee enterprises.

6.4.2. Leadership styles – Employee creativity relationships

6.4.2.1. Transformational leadership – Employee creativity relationship

A summary of findings of hypotheses on working out the established relationship between transformational leadership and employee creativity was illustrated in Table 6.6, which addressed research question 2a. Accordingly, the positive relationship between transformational leadership and employee creativity was partially supported in Vietnamese public coffee enterprises. Otherwise stated, transformational leadership behaviours tend to enhance employee creativity in the organisations in such a way that the transformational leader maximises intrinsic motivation of the employees and influences their attitudes by cultivating a collective mentality to attain organisational goals (Shin & Zhou, 2003).

Results of this research extended previous studies that stressed the significant positive effect of transformational leadership on employee creativity (Jung, 2001; Gong et al., 2009; Gumusluoglu & Ilsev, 2009; Henker et al., 2015; Hermann & Felfe, 2013; Moriano et al., 2014; Oldham & Cummings, 1996; Shin & Zhou, 2003; Tierney et al., 1999; Wang et al., 2013; Zhang et al., 2011). Specifically, using the same measurement scale for transformational leadership and individual creativity, Gumusluoglu and Ilsev (2009) suggested that transformational leadership had a positive influence on follower's creativity. Similarly, taking the context of Korean societies into consideration, a study by Shin and Zhou (2003) came up with the same results supporting the positive linkages between transformational leadership and employee creativity.

On the contrary, the direct positive relationship between transformational leadership and employee creativity differed from that of Kim and Lee (2011) highlighting that the investigated relationship was not a straightforwardly causal. Alternately, it was mediated by work-related variables such as work motivation and job satisfaction. Analogously, the indirect transformational leadership - employee creativity positive relationship was moderated by task novelty and personal initiative as shown in a study by Hermann and Felfe (2013). However, that study also supported the argument that transformational leadership led to higher level of employee creativity compared to transactional leadership. Moreover, another research by Wang et al. (2013) similarly reported that transformational leadership indirectly and positively related to employee creativity through innovative group climate.

Table 6.6.

Summary of findings on hypotheses and research question 2a

Research question	Hypotheses		Findings
What is the relationship between transformational leadership and employee creativity at public enterprises operating in the Vietnamese coffee sector?	H2a	Transformational leadership positively influences employee creativity.	Partially supported
	$H2a_1$	Idealised influence positively influences employee creativity.	Not supported
	$H2a_2$	Inspirational motivation positively influences employee creativity.	Supported
	$H2a_3$	Intellectual stimulation positively influences employee creativity.	Supported
	$H2a_4$	Individualised consideration positively influences employee creativity.	Supported

Results of testing the effects of specific dimensions of transformational leadership on employee creativity showed that apart from idealised influence, there existed a significantly positive relationship between inspirational motivation, intellectual stimulation as well as individualised consideration and employee creativity. Accordingly, this finding was partially in alignment with that of Sosik et al's (1997), Scott and Bruce's (1994) and Unsworth et al.'s (2005) revealing that inspirational motivation and intellectual stimulation were identified to positively relate to individual creativity. Specifically, these two behaviours of the transformational leader improved the creative performance of employees at the ideation stage as argued by Oke et al. (2009). By providing intellectual stimulation, the transformational leader stimulates employees to utilise their imaginations for ideas and solutions towards reformulating existing problems in the organisation (Avolio et al., 1990; Avolio et al., 1999; Bass, 1990; Moriano et al., 2014; Shin & Zhou, 2003; Zhang et al., 2011). As a result, employees working in such an organisational climate tend to show more interests in their tasks and be more active in brainstorming new and useful ideas rather than feeling worried about external concerns, which is likely to elevate the level of employee creativity (Amabile, 1996; Chen et al., 2009).

Similarly, employees are more interested in their tasks than being afraid of failure as they receive supports, sympathetic understanding and encouragements from the individualised consideration displayed by the transformational leader as well as their needs are addressed (Shin & Zhou, 2003; Moriano et al., 2014; Zhang et al., 2011). Moreover, employees are more active to take risks and come up with new approaches and ideas as their work capacities are developed by their transformational leader together with provided information, resources and discretion (Amabile, 1996; Avolio et al., 1999; Bass, 1985; Hater & Bass, 1988; Shamir et al., 1993). Thus, the intrinsic motivation of employees is boosted, which in turn leads to the enhancement of employee creativity (Amabile, 1996; Baer, 2012; Zhou & Oldham, 2001). Additionally, while there existed a positive influence of individualised consideration on employee creativity in this study, no relationship between these two variables was found in a particular research by Sethibe (2016). Out of four dimensions of transformational leadership, that research also revealed that intellectual stimulation is the most significant component to enhance employee creativity, which was contrary to the individualised consideration behaviour presented in this study.

Finally, employees are energetically fuelled to work so as to achieve higher goals and objectives of the organisation when they are motivated by the transformational leader to perform beyond expectations, known as the behaviour of inspirational motivation (Bass et al., 2003; Keller & Weibler, 2015; Moriano et al., 2014; Shamir et al., 1993; Zhang et al., 2011). Specifically, transformational leaders concentrate on the efforts and contributions created by group members, envisioning a clear and ambitious future for employees and believing in what they can achieve (Bass et al., 2003; Keller & Weibler, 2015; Moriano et al., 2014). In essence, by focusing on particular tasks that belong to their expertise along with excitement and energy, employees tend to perform high level of creativity (Amabile, 1996; Scott & Bruce, 1994; Unsworth et al., 2005).

Additionally, an alternative explanation for the positive effects of inspirational motivation, intellectual stimulation and individualised consideration on employee creativity is the cultural characteristics that employees experience. Specifically, a high power distance might favour an increase in employees' enthusiasm towards demonstrating creative behaviours in their work because they put higher appreciation on the one-to-one established relationship between the leader and his or her subordinates. This might seem appropriate in the Vietnamese context where high power-distance culture is ranked among people including working employees (Hofstede, 1980). As a result, employees are empowered by their leaders to brainstorm creative ideas to the existing business practices, workplace organisation and external relations of the organisation, which enhances organisational innovation. In other words, employees in Vietnamese societies appreciate the maintenance of good relationships with their leader by acting their creative roles to achieve the performance as expected by the leader (Shin & Zhou, 2003).

Conceptually, the behaviour of idealised influence argued by House and Arthur (1993) is supposed to motivate followers intrinsically, which reflects one of the three elements in the componential theory of individual creativity by Amabile's (1988). By showing idealised influence, the transformational leader serves as moral models, building trust and respect among subordinates, sacrificing their own needs and desires for the interests of employees and collective goals (Barling et al., 2011; Bass, 1985; Moriano et al., 2014; Nusair et al., 2012). Those are said to influence the commitment and satisfaction of their employees as well as motivates subordinates to outperform expectations to reach higher work objectives, which leads to a significantly positive effect of idealised influence on employee creativity (Amabile et al., 2004). Nevertheless, the relationship between idealised influence and employee creativity was not significant, which was contrary to the expectation of this study. This finding was similar to results of a study by Jaussi and Dionne (2003) as the authors found no effects of transformational leadership on individual creativity. However, this contrasts with Sethibe's (2016) as the author found out the adverse impact of idealised influence behaviour of the transformational leader on employee creativity.

The absence of significant effect indicated in this study might be ascribed to the perception of employees towards this personality trait of the transformational leader. Specifically, the leader's empowerment to employees to perform creatively through intrinsic motivation should not be sufficient within the context of Vietnamese public coffee enterprises. Instead, employees look forward to extrinsic motivation to energise them to be creative in their work (Baer, 2012; Chang & Teng, 2017), which is featured by the mutual relationship that concentrates on tangible and intangible rewards (Wang, Tsai, & Tsai, 2014). Moreover, the central principle of the componential theory of individual creativity clearly mentioned that the individual was intrinsically motivated to perform creatively because of the intrinsic motivation by the job itself rather than other extrinsic motivators (Amabile, 1996; Shalley & Oldham, 1997). Likewise, employee creativity fosters when employees perceive that activities they undertake and targets they pursue match their intrinsic goals (Moss & Ritossa, 2007). However, Amabile (2012) and Baer (2012) posited that extrinsic motivators such as rewards, monetary and reputational benefits still play a critically significant role in undermining or fostering intrinsic motivation of individual creativity (Amabile, 1993).

Additionally, another possible explanation for the insignificant association between idealised influence and employee creativity may stem from the inner sense of empowerment of employees. As creative performance is perceived as an individual process, employees tend to actively identify constraints and seek out for opportunities to improve their work (Wei et al., 2010). As a result, they feel empowered themselves rather than being passively affected by a particular behaviour of the transformational leader and structural tasks to perform creatively. Moreover, this also indicates that leadership styles appear to be only one of the influential sources on the creative performance of employees. Similarly, this non-significant

effect of idealised influence by the transformational leader on employee creativity may also occur due to the potential self-interest motive of the transformational leader as suggested by Zhang et al. (2011) although transformational leadership appears to be collective-oriented. In other words, the outward behaviours and internal desires of the transformational leader may differ in terms of focusing on satisfying group interests or private interests, which is known as pseudo-transformational leadership (Bass & Steidlmeir, 1999; Fu et al., 2010).

In essence, findings of this study supported the literature for enhancing employee creativity through particular transformational leadership behaviours in the context of Vietnamese public coffee enterprises (Jung & Yammarino, 2001). Additionally, results also matched arguments by Bass (1995) indicating that the positive impact of transformational leadership on employee creativity thrives in such collectivist societies as Vietnamese real settings rather than individualist ones. Moreover, this empirically investigated relationship was conducted in a developing country instead of developed nations, specifically focusing on public enterprises, which amplifies the role of transformational leaders in stimulating employee creativity across contexts.

6.4.2.2.Transactional leadership – Employee creativity relationship

A summary of findings on the proposed relationship between transactional leadership and employee creativity was presented in Table 6.7, which addressed the research question 2b. Specifically, there existed a direct and negative relationship between transactional leadership and employee creativity in Vietnamese public coffee enterprises. Accordingly, employees under the transactional leader are not encouraged to attempt novel ways of solving existing problems in their respective work and in the organisation, which causes employees not to perform creatively (Lee, 2007). Additionally, employees feel reluctant and less confident to exploratory thinking because they are scared of failing to meet expectations and standards required by the transactional leader who tend to react negatively to mistakes (Amabile, 1998). Generally, employees perceived that the behaviours of the transactional leader underline the control and demotivation, which negatively affected employee creativity (Pieterse et al., 2009).

Table 6.7.

Summary of findings on hypotheses and research question 2b

Research question	Hypotheses		Findings
What is the relationship between transactional leadership and employee creativity at public enterprises operating in the Vietnamese coffee sector?	H2b	Transactional leadership negatively influences employee creativity.	Supported
	$H2b_1$	Contingent reward negatively influences employee creativity.	Supported
	$H2b_2$	Management by exception active negatively influences employee creativity.	Supported

Obtained results coincided with Wei et al.'s (2010), Moriano et al.'s (2014) and Pieterse et al.'s (2009) research that transactional leadership, as a passive leadership, was detrimental to the creative performance of subordinates in the organisation. Accordingly, it can be implied that extrinsic motivation through rewards, regular supervisions and due actions of the transactional leader was not the major motive to nurture the creative performance of employees in the context of Vietnamese public coffee enterprises. This may be due to the perception of employees about the nature of creativity that involves risk-related activities while the transactional leadership tends to negotiate the expected level of employee performance in order to achieve organisational goals. As a consequence, employees seem to work in the environment with guided performance and predetermined visions from the transactional leader that restricts their creative ability. This leads to the diminishing creative performance of employees associated with the increasing impact of transactional leadership as indicated in this study. Another possible explanation for the negative impact of transactional leadership on employee creativity can be attributable to the involvement of the transactional leader's commitment in the personal development of followers (Jung & Avolio, 2000; Podsakoff et al., 1990).

The negative association between transactional leadership and employee creativity not only originates from the behaviours of the transactional leader but might also ascribe to the management system characterised by bureaucratic practices that prevail in the public enterprises of all sectors in Vietnam. Although bureaucratic practices may not diminish creative abilities of employees all the time, they hamper employee creativity (Hirst et al., 2011; Bolin & Härenstam, 2008). Specifically, the centralised decision-making and regulated practices in the system may negatively affect the employee perception about creative performance in such a way that their creative abilities are inhibited as goal-directed behaviour of individuals fail to coincide with that of the organisations. Therefore, despite being possibly encouraged by the attractive rewards and proper supervisions from the leader, employee creativity may not be promoted by the management system that does not facilitate employees in contributing their opinions to establishing organisational goals. Additionally, centralisation also associates with power distance as stated by Hofstede et al. (1990) that high power distance cultures in the case of Vietnamese public enterprises are more likely to discourage creativity.

Both dimensions of transactional leadership, contingent rewards and management by exception – active negatively impacted employee creativity. By displaying contingent reward behaviour, the transactional leader influences on extrinsic motivation of employees in a manner that the provision of rewards by the leader will be exchanged for the active participation and cooperation of followers to achieve desirable outcomes of the organisations (Ensley et al., 2006; Schweitzer, 2014). However, it was argued not to suffice in motivating employees to perform creatively but only support established routines in the

organisations (Schweitzer, 2014). Although prior studies posited that the contingent reward behaviour of the transactional leader proved to be effective and positively associated with subordinates' satisfaction and performance (Kim & Lee, 2011; Podsakoff et al., 1990; Sethibe, 2016), it negatively related to employee creativity in the context of this study. The best explanation to accommodate this difference might result from the perceptions of employees about the level of leader support (Amabile et al., 2004). Specifically, a perception of high level of leader support by employees and effective performance enhances employee creativity while a perception of low level of leader support by subordinates along with ineffective performance results in negative form of employee creativity. Therefore, it can be inferred that employees working in Vietnamese public coffee enterprises perceived low level of leader support albeit the possibly positive influence of contingent rewards behaviour of their transactional leader, which reduces their level of creativity.

By employing management-by-exception active behaviour, the transactional leader focuses on specifying standards for compliance and ineffective performance of followers as well as supervising the task completion of employees, addressing arising problems and taking due correction if necessary to maintain expected performance (Schweitzer, 2014). Inferably, mechanistic practices and inflexible control system manifested by transactional leadership in centralised decision-making process and formalised procedures lead to reducing intrinsic motivation that subsequently diminishes employee creativity (Bucic & Gudergan, 2004). Sethibe (2016) suggested that management by exception – active demonstrated no impact on employee creativity, which was probably due to the mismatch between employee performance and the monitoring and action taken by the transactional leader.

Conclusively, a thorough consideration of diverse aspects by the leader, either transformational leadership or transactional leadership, regarding both working environment and employees' individual characteristics such as awareness, capabilities and desires is critical to the enhancement of employee creativity (Kim & Lee, 2011). Moreover, the effect of transactional leadership on employee creativity depends on the contextual factors of specific studies. Therefore, it indicates that the avoidance of "one-size-fits-all approach" argument is supported in fostering employee creativity.

6.4.3. Employee creativity – Organisational innovation relationship

Findings of the hypothesis on investigating the relationship between employee creativity and organisational innovation were summarised in Table 6.8, which addressed research question 3. Specifically, employee creativity was found to positively relate to all dimensions of organisational innovation namely business practices, workplace organisation and external relations in Vietnamese public coffee enterprises. In other words, the higher the level of employee creativity, the more successful the organisational

innovation is likely to be. This supported the widely accepted concept that creativity is the process of generating new ideas and solutions while innovation subsequently focuses on implementing ideas in an attempt to bring about better products, services or process (Anderson et al., 2014; Baer, 2012; Bessley & Copper, 2008; Robinson & Bessley, 2010; Shalley & Zhou, 2008; West & Farr, 1990). Therefore, employee creativity is inferably considered as a basic source of organisational innovation when employees generate new and potentially useful ideas (Gumusluoglu & Ilsev, 2009; Olham & Cummings, 1996). On the other hand, organisational innovation just takes place when those ideas are successfully and commercially implemented at the organisation level, which underlines the processes and outcomes (Gumusluoglu & Ilsev, 2009; Olham & Cummings, 1996). Additionally, creativity usually occurred at the individual or group level while innovation mainly took place at the organisational level (Anderson et al., 2014). Moreover, it was found that both creativity and innovation were crucial for the ultimate organisational success as well as influenced by senior management in the organisation as witnessed in the literature (Amabile, 1998; Alarifi, 2014; Dougherty, 2006; Jung et al., 2003).

Table 6.8.

Summary of findings on hypotheses and research question 3

Research question	Hypotheses		Findings
What is the relationship between employee creativity and organisational innovation at public enterprises operating in the Vietnamese coffee sector?	H3	Employee creativity positively influences the dimensions of organisational innovation.	Supported

Results of this empirical study matched with Alarifi's (2014) revealing that there existed a key and affirmative association between employee creativity and organisational innovation in a developing country, targeting at public sector institutions. Considering this particular context, organisational innovation refers to the implementation of creative and novel ideas relating to processes, products and procedures in the relevant unit of adoption in the organisation, which benefits the organisation as a whole. Additionally, it was in line with Oldham and Cummings' (1996) contending that employee creativity was the core raw material that necessitates organisational innovation when employees contribute novel ideas to existing problems in their organisations and improving plans to implement new ideas (Shalley & Gilson, 2004). Moreover, the important role of employee creativity as a predictor of organisational innovation featured by novelty and meaningfulness was supported by Kunz, Schmitt and Meyer (2011) and Hirst et al. (2011), affirmed by Yuan and Woodman (2010) and substantiated by Müceldili et al. (2013) in different contextual studies. Besides, employee creativity was perceived as the first stage of organisational innovation and served as the foundation for organisational innovation to develop (Amabile, 1996; Baer, 2012; Mumford

& Gustafson, 1988; West, 2002) and as the enterprise's core competency to foster organisational innovation and maintain competitive advantages of the organisations (Tung & Yu, 2016). In short, understanding existing problems within the organisation, employees put more efforts and utilise their knowledge and skills to brainstorm new approaches to address problems, which underpins the implementation of organisational innovation activities. In other words, the role of employee creativity in the organisation is supportive and significant.

The positive association between employee creativity and organisational innovation also supported the theory about the intersection model of creativity and innovation by Amabile (1988) stating that individual creativity and organisational innovation process are explicitly interdependent. Specifically, the three components including resources, techniques and motivation of the creativity intersection model reveals the overlapped area with those of organisational innovation model. This indicates the greater the overall level of individual creativity or organisational innovation, the higher the level of each of the three components displayed. Additionally, the greater the overlap areas of resources, techniques and motivation are, the higher the probability of individual creativity and organisational innovation may thrive.

On the contrary, this result was contradictory to that of Gumusluoglu and Ilsev (2009) reporting that there was no significant relationship between employee creativity and organisational innovation. The difference in the findings might have resulted from lack of collaborative skills among employees in communicating novel ideas to resolve conflicts effectively (Janssen et al., 2004; Taggar, 2002; Woodman et al., 1993). These potentially hinder the significant effect of employee creativity on organisational innovation in specific contexts that measure creativity of employees in the related groups (Janssen et al., 2004; Taggar, 2002; Woodman et al., 1993). Moreover, another reason might originate from the discrepancy regarding the period between measuring innovative data and the length of service of employees. In the context of this study, employee creativity is, inversely, essential for organisational innovation because creative ideas or solutions might be useful for the implementation of organisational innovation (Mumford & Gustafson, 1988).

Generally, results of this study strengthened the positive relationship between employee creativity and organisational innovation with regard to the contradictory results recorded in the literature. Specifically, organisational innovation is developed through the creative performance of employees as a source of new and useful ideas to address existing problems in the organisations (Oldham and Cummings, 1996; Redmond et al., 1993). Finally, the role of employee creativity in the outcomes of organisational innovation was substantiated in the context of a developing country, precisely in public coffee enterprises.

6.4.4. The mediating role of employee creativity in the leadership styles – organisational innovation relationships

6.4.4.1. The mediating role of employee creativity in the transformational leadership – organisational innovation relationship

Findings of the mediating role of employee creativity in the relationship between transformational leadership and organisational innovation were reported in Table 6.9, which addressed the research question 4a. Considering the literature on employee creativity, it has not yet been investigated as a mediating factor for the effects of transformational leadership on organisational innovation. Accordingly, employee creativity was hypothesised to mediate the transformational leadership – organisational innovation relationship in Vietnamese public coffee enterprises in this research. Results of the study strongly proposed a partial mediation for employee creativity, which supported hypothesis H4a.

Table 6.9.

Summary of findings on hypotheses and research question 4a

Research question	Hypotheses		Findings
Does employee creativity mediate the relationship between transformational leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector?	H4a	Employee creativity mediates the relationship between transformational leadership and organisational innovation	Supported – Partial mediation

Specifically, there existed a significant relationship between transformational leadership and employee creativity as well as that of employee creativity and organisational innovation with the added direct path between transformational leadership and organisational innovation. Moreover, the direct path estimates originating from transformational leadership to organisational innovation still remained significant despite the reduced magnitude of the effect, which indicated that employee creativity partially mediated that relationship. Additionally, the partially mediated model demonstrated that transformational leadership enhanced employee creativity, which leads to intensifying organisational innovation. The higher the transformational leadership is, the greater the employee creativity and subsequently the higher organisational innovation will be. In other words, it highlighted the significant role of employee creativity as a predictor that boosts organisational innovation. Therefore, the positively total effects of transformational leadership on organisational innovation indicate that organisational innovation will foster as transformational leadership is supported by the mediating role of employee creativity in public coffee enterprises in Vietnam.

Additionally, findings demonstrated that transformational leadership positively impacted organisational innovation by positively predicting employee creativity, which supported the importance of employee creativity in mediating the relationship between transformational leadership and organisational innovation. Specifically, as leaders show transformational leadership behaviours towards employees, these subordinates feel motivated and confident to contribute creative ideas to the organisations, which in turn positively predicts organisational innovation. In other words, employee creativity helps in underlying the effects of transformational leadership on organisational innovation. Generally, results of this study supported the literature for a developing country and collectivist culture of public coffee enterprises.

6.4.4.2. The mediating role of employee creativity in the transactional leadership – organisational innovation relationship

Findings of the mediating role of employee creativity in the relationship between transactional leadership and organisational innovation were summarised in Table 6.10, which addressed the research question 4b. With regard to the literature on employee creativity, it has not yet been investigated as a mediating factor for the effects of transactional leadership on organisational innovation. Thus, employee creativity was hypothesised to mediate the transactional leadership – organisational innovation relationship in Vietnamese public coffee enterprises in this research. Results of the study strongly proposed a partial mediation for employee creativity, which supported hypothesis H4b.

Table 6.10.

Summary of findings on hypotheses and research question 4b

Research question	Hypotheses		Findings
Does employee creativity mediate the relationship between transactional leadership and organisational innovation at public enterprises operating in the Vietnamese coffee sector?	H4b	Employee creativity mediates the relationship between transactional leadership and organisational innovation	Supported – Partial mediation

Specifically, there existed a significant relationship between transactional leadership and employee creativity as well as that of employee creativity and organisational innovation with the added direct path between transactional leadership and organisational innovation. Moreover, the direct path estimates originated from transactional leadership to organisational innovation still remained significant despite the reduced magnitude of the effect, which indicated that employee creativity partially mediated that relationship. Additionally, the partially mediated model demonstrated that transactional leadership impairs the level of employee creativity as well as that of organisational innovation. On the contrary, higher level of employee creativity will increase the level of organisational innovation, which highlights the significant

role of employee creativity as a predictor that boosts organisational innovation. Moreover, results of the model also empirically clarified the obvious linkage between transactional leadership and employee creativity, which tends to contrast. Therefore, the negative effect of transactional leadership can be modified by employee creativity as shown in the model, which is evidenced by the reduction in the direct effect of transactional leadership on organisational innovation in public coffee enterprises in Vietnam.

Additionally, findings demonstrated that transactional leadership negatively impacted organisational innovation by negatively predicting employee creativity. Specifically, as leaders actively displayed transactional leadership behaviours towards organisational innovation, the negative effect of this relationship reduced when employee creativity was entered, which in turn positively predicts organisational innovation. Therefore, employee creativity helps weaken the disadvantageous effects of transactional leadership on organisational innovation in business practices, workplace organisation and external relations. In essence, the literature was supported by results of this study regarding the specific context of a developing country and collectivist cultures of Vietnamese public coffee enterprises.

6.5 Theoretical contributions

The overall key contribution of this study is to develop a comprehensive theoretical framework and empirically, in a quantitative manner, investigate linkages between two different leadership styles, employee creativity and organisational innovation. This helps identify factors impacting the relationship between leadership styles and organisational innovation regarding organisational methods. Specifically, the role of employee creativity in the relationship between leadership styles and organisational innovation is understood. Moreover, this study also attempted to demonstrate to what extent the transformational and transactional leadership and its respective components affect organisational innovation in Vietnam, more precisely, public enterprises operating in the coffee industry. Thus, empirical objectives were achieved as well as gaps identified in the comprehensive literature review were addressed.

6.5.1 Intensifying extant leadership, creativity and innovation literature

Lack of empirical evidences on figuring out the effects of transformational leadership, transactional leadership and its respective components on organisational innovation regarding organisational methods by considering the mediating role of employee creativity in Vietnamese public coffee enterprises was the main motivation to conduct this study. With respect to leadership theories, empirical findings of this study on relationships between two different leadership styles, employee creativity and organisational innovation enriched behavioural theories of leadership that assumed the effect of the leader's appropriate personal behaviours on creativity and innovation (Amabile at al., 1996; Krause, 2004; Lee, 2008). Specifically, this

study added distinctive supports to the leadership literature by identifying key leadership behaviours that foster or impair employee creativity and organisational innovation through investigating their relationships with two different leadership styles in the same research model (Bledow et al., 2011; Rowold & Heinitz, 2007; Schweitzer, 2014).

A record of studies on organisational innovation on organisational methods revealed that very few conceptual and empirical contributions addressed the investigation of this research matter in terms of its relation to other contextual variables (Battisti & Stoneman, 2010). By expanding the current knowledge on organisational innovation, this empirical study aimed to examine the linkages between two different leadership styles and organisational innovation along with the mediating role of employee creativity. Specifically, as the significance of organisational innovation regarding organisational methods in the current innovation literature remains relatively new, a thorough understanding of that concept is not fully acquired (Camisón & Vilar-López, 2014). Moreover, due to the inconsistencies in the perception and usage of the organisational innovation concept, findings of attempted studies reached inconclusive results (Baer, 2012; Damanpour & Aravind, 2011). Therefore, empirical results presented in this study made important contributions to the literature by having confirmed the significant determinants of transformational leadership, transactional leadership and employee creativity towards organisational innovation. In other words, organisational innovation was on the basis of simultaneous and multiple impacts of individual and collective contextual factors. Accordingly, the apprehension of the effects of leadership styles and employee creativity on organisational innovation is enhanced.

6.5.2 Advancing the knowledge of leadership styles-organisational innovation relationships

By proceeding an empirical study gauging the associations of transformational leadership, transactional leadership, and respective dimensions of each leadership style on organisational innovation and employee creativity, the influence of leadership styles on organisational innovation was investigated in two approaches. Accordingly, a direct linkage between each leadership style and organisational innovation and an indirect relationship between these two constructs through employee creativity were explained, specifically in the Vietnamese public coffee enterprises. While organisational innovation was positively and directly related to transformational leadership, it was negatively and directly correlated with transactional leadership. These evidences highlight the importance of distinguishing between two styles of leadership that influenced organisational innovation differently. Moreover, transformational and transactional leadership were indeed strong predictors of organisational innovation as suggested by extant literature review on the leadership styles – innovation relationship (Jung, 2001; Kim & Lee, 2011; Pieterse et al., 2010). In short, the reported linkages between transformational leadership and organisational

innovation was stronger than that between transactional leadership and organisational innovation. Following this, the current knowledge relating to the associations between leadership styles and organisational innovation is advanced.

Additionally, respective dimensions of transformational and transactional leadership were also observed in relation to dimensions of organisational innovation. Simultaneously, the comparison regarding the magnitude of the effect of each leadership style's dimension on the components of organisational innovation was obtained. Thus, it provides a better understanding of the nature of relationships between these constructs as well as insights into influential factors of leadership styles on organisational innovation in Vietnamese public coffee enterprises. Accordingly, inspirational motivation behaviour of the transformational leader perceived by employees positively and significantly impacted on all dimensions of organisational innovation and had the most influence on organisational innovation. On the other hand, considering transactional leadership, contingent rewards behaviour was more negatively significant on external relations of organisational innovation than management by exception – active. Management by exception – active had more significant effects on workplace organisation and business practices than contingent rewards and these effects were negative. Generally, results of this study revealed that not all dimensions of transformational and transactional leadership reacted similarly in its effects on components of organisational innovation. On top of that, this helps cover the gaps in the scarcity of studies on transactional leadership style and organisational outcomes, specifically organisational innovation.

6.5.3 Enriching the understanding of leadership styles-employee creativity linkages

The linkages between components of transformational leadership and transactional leadership styles and employee creativity were established, which facilitates a better understanding of the impact of each component on employee creativity. Specifically, a noteworthy finding of the current study is that there existed a significantly positive relationship between inspirational motivation, intellectual stimulation and individualised consideration of transformational leadership on employee creativity except for idealised influence. Moreover, individualised consideration is the most significant component that enhances employee creativity. Considering transactional leadership, contingent rewards and management by exception – active negatively impacted employee creativity.

Mumford and Licuanan (2004) reported that findings of previous studies were inconsistent regarding the positive relationship between transformational leadership and employee creativity as well as more research in real settings needed to be conducted to confirm the above-mentioned positive linkage. Therefore, results of this study help enrich the leadership and creativity literature and strongly confirms the positive proposition of the effect of transformational leadership on employee creativity in Vietnamese

public coffee enterprises. Specifically, creative performance of employees was stimulated by intellectual stimulation, inspirational motivation and individualised consideration in terms of employees' efforts in exploring new ideas and solutions to existing problems as well as contributing their knowledge and skills to their organisations. Additionally, this positive relationship also consistently reflects the perception by Bass (1990) stating that transformational leadership behaviours tend to emerge in collectivist-oriented culture compared to individualist one, specifically the Vietnamese context in this study (Hofstede, 1980). Generally, the dynamic capability of transformational leadership was strongly supported in enhancing creative abilities of employees in the organisations.

6.5.4 Unveiling a mediating role of employee creativity

Recent studies on leadership have attempted to identify mechanisms that underpin the effects of transformational leadership as well as transactional leadership on organisational innovation (Boerner et al., 2007; Jung et al., 2003; Hsiao & Chang, 2011; Rank et al., 2009; Sarros et al., 2008). Nevertheless, investigating whether employee creativity mediates the relationships between leadership styles and organisational innovation regarding organisational methods is unexplored and less understood. Moreover, there witnessed a growing concern from academic researchers and policy makers about which factors influence the leadership styles - organisational innovation relationship in the current research context, specifically in public enterprises in developing countries. Thus, this study also goes beyond previous research by investigating employee creativity as a mechanism that mediates the relationship between leadership styles and organisational innovation. This empirically contributes to complementing the existing literature primarily in terms of conceptualisation with regard to the connection between leadership styles and organisational innovation through the mediating effect of employee creativity.

Specifically, results of the study reinforced the assumption that transformational leadership evoked the creativity of employees, which, in turn, fostered the organisational innovation. This supported the partially mediating role of employee creativity in enhancing the transformational leadership - organisational innovation positive relationship. Moreover, employee creativity partially helped modify the negative effect of transactional leadership on organisational innovation. Therefore, employee creativity is critically important providing that public enterprises in the Vietnamese coffee sector aim to foster organisational innovation. Additionally, it indicates more attention to the creative performance of employees should be given.

To our current knowledge, this empirical study is supposed to be the first to examine the role of employee creativity as a mechanism to explain leadership styles – organisational innovation linkages in the context of Vietnamese public coffee enterprises. Results of this study contribute to exploring the

substantive mediator that explicates how the effects of transformational leadership and transactional leadership on organisational innovation are unveiled (Chi & Pan, 2012; Colquitt & Zapata-Phelan, 2007). Specifically, the sophisticated mechanism depicts how organisational innovation was influenced by leadership styles through employee creativity, which jointly affects the innovative outcomes in the organisations. A clear understanding of this mechanism will help the management to generate the most valuable organisational innovation that contributes to the overall organisational performance. In essence, findings of this study reinforced prior research that argued for the impacts of leadership styles and employee creativity on a different approach of the organisational innovation concept (Chen & Hou, 2016; Halbesleben, 2003; Kang, Solomon & Choi, 2015; Kim & Lee, 2011; Lindsey, 2016; Pieterse et al., 2010; Si & Wei, 2012; Tung, 2016; Yoshida et al., 2014).

6.5.5 Methodological aspect

This study pioneers in examining two different leadership styles, employee creativity and organisational innovation in public coffee enterprises in a developing country (Vietnam) that limited studies have been conducted before. Therefore, this contributes to further evaluating the external validity of theories that were developed and investigated in developed countries in the Western region, specifically creativity, leadership and innovation theories. Moreover, it also allows for a broader examination and confirmation of research findings in similar cultures within South East Asian countries. Particularly, employees working across departments in public coffee enterprises under different hierarchies and supervision were investigated on how they perceive the leadership style of their leader and its corresponding impacts on their creativity and organisational innovation. The probably first study conducted in public coffee enterprises in Vietnam is supposed to add diverse data from a perceived different cultural setting, which might be useful in generalising research results based on the examination of these variables. Moreover, a relatively large scale of this study conducted in a variety of provinces in Vietnam further supported trustworthiness of the findings.

6.6 Managerial implications and contributions

In addition to theoretical contributions, results of this research also benefit academic researchers, field experts, the management board and policy makers in terms of practical implications, especially in human resource practices in public enterprises. Particularly, this study is the first attempt to examine the effects of transformational leadership, transactional leadership on employee creativity and organisational innovation in Vietnam. Equally important, it was conducted in public enterprises operating in the coffee industry that significantly contributes to the national economic and social development.

6.6.1 In terms of figuring out the predictors of dimensions of organisational innovation

Despite its important role, innovation in the coffee sector, particularly in public coffee enterprises was low and organisational innovation on organisational methods remained understudied. Therefore, this study significantly looked into and understood the complex effects of leadership styles and employee creativity on specific components of organisational innovation. Specifically, understanding how dimensions of organisational innovation are influenced by certain behaviours of transformational, transactional leadership and employee creativity provides opportunities for the management of organisations to make proper intervention and take appropriate measures to foster organisational innovation in the workplace.

Realising the important role of non-technical innovation, specifically organisational innovation regarding organisational methods towards the survival and growth of enterprises, it is critical for leaders in Vietnamese public coffee enterprises to promote organisational innovation by putting their continuous efforts on utilising their personality traits and skills of strategic planning and supervising (Goldman et al., 1995; Tung & Yu, 2016). Moreover, it is recognisable that investing in organisational capacity for organisational innovation explicitly benefits enterprises of all kinds (Mol & Birkinshaw, 2009). Therefore, by engaging into organisational innovation, leaders must maximise enterprise performance in order to complement and strengthen technological efforts in their organisation (Hervas-Oliver & Sempere-Ripoll, 2015).

The slow innovation in terms of quantity and quality in general public coffee enterprises was due to weak capabilities and limited funds in the manufacturing and process industries as well as inconsistency between leadership roles and innovation management. Moreover, it was also due to the unwieldy mechanisms of public enterprises characterised by the traditional paternalistic culture that might lead to mismatched and ineffective innovative outcomes (Zhang et al., 2006). While transactional leadership behaviours seem to prevail in public enterprises in Vietnam as perceived by working employees, the concurrently vital role of transformational leadership is confirmed as indicated in the findings of the study. Particularly, organisational innovation was fostered by the transformational leader while it was diminished by the transactional leader. In short, findings of this study pointed out the inhibition of transactional leadership towards organisational innovation. However, proposing a more modern organisational structure that stimulates flexibility still remains challenging. Therefore, as a part of nominating leaders for public enterprises, specifically in the Vietnamese coffee sector, the upper-level management should target at appointing leaders that demonstrate essential behaviours to promote organisational innovation.

Accordingly, results of this empirical study suggested that transformational leadership behaviours should be employed by leaders as these will generate significantly positive influence on strengthening

organisational innovation in terms of business practices, workplace organisation and external relations (Jung et al., 2003). This supported evidences on positive gains for organisations brought about by the jointly innovative activities and integrated innovative capabilities (Battisti & Stoneman, 2010; Damanpour et al., 2009; Fagerberg et al., 2012; Hollen et al., 2013). In summary, the success of innovative-related outcomes was the ultimate result of collective efforts made by all members in the organisation in which the leader using his capabilities identified enterprises' potentials to generate innovative outcomes.

6.6.2 In terms of determining the effects of leadership styles on employee creativity

Results clearly indicated that while transformational leaders enhanced employee creativity, transactional leaders did the opposite in the context of Vietnamese public coffee enterprises. By demonstrating transformational leadership behaviours, the transformational leader plays a role of a good guider and mentor in enabling a sharing culture in the working environment, encouraging continuous learning, establishing good communication networks among employees and cultivating a spirit of trust with them (Garcia-Morales et al., 2008). Moreover, the transformational leader helps their subordinates to acquire creativity skills that benefit employees themselves (Shin & Zhou, 2003).

As transformational leadership and transactional leadership possibly co-exist in varying degrees within the same leader (Avolio, 1999; Bass, 1985), it remains possible for the leader to simultaneously demonstrate two different styles of leadership, depending on the requirements of particular situations in the organisations (Fiedler, 1978; Schweitzer, 2014). Additionally, an existing direct relationship between leadership styles and employee creativity indicates that effective leaders should demonstrate appropriate traits extracted from both transformational and transactional leadership, referred to as innovative leadership, to increase the level of creativity among employees (Ebrahimi et al., 2016; Golla & Johnson, 2013; Jung & Yu, 2016). In other words, the positive influence of transformational leadership on the creative performance of employees should be promoted while the negative impact of transactional leadership should be prevented (Wei et al., 2010). Specifically, proper guidance, supervision, intrinsic and extrinsic motivation provided by the leader in addition to available resources and information will help employees generate creative ideas for solving problems relating to business practices, workplace organisation and external relations (Baer, 2012; Reiter-Palmon & Illies, 2004). Moreover, as employees are offered more supports, care and trust by the leader, they become more interactive and confident in sharing new ideas with leaders, which indirectly advances the creative level of employees (Jung et al., 2003).

In the event of transactional leaders, they tend to encourage their subordinates through extrinsic motivation represented by rewards and punishment (Moriano et al., 2014). However, as revealed by results

of this study, employees in Vietnamese public coffee enterprises were not inclined to extrinsic motivation by the behaviours of their transactional leaders to perform creatively. This negative association implies that merely encouraging creative performance of employees by rewards, regular supervisions and due actions of the leader may not be effective and needs to be reconsidered. Instead, several surveys of employees' opinions could be carried out by the organisation to understand what offers employees really need and expect to receive in exchange for their best performance associated with their work. This also helps improve human resource practices within the organisation relating to remuneration packages, benefits and compensations, training and development programs as well as other policies to develop skills and knowledge of employees.

6.6.3 In terms of identifying employee creativity as a mediator

As employee creativity was a mediator in the relationship between leadership styles and organisational innovation, the significant role of employee creativity was highlighted. Particular features of public enterprises in Vietnam manifested by bureaucratic rules and regulation together with highly structured and perceived transactional leadership might have restricted employees in their creative abilities and their impacts on organisational innovation. However, results of this study already pointed out the significant mediating role of employee creativity in supporting the relationship between transformational leadership and organisational innovation as well as modifying the linkage between transactional leadership and organisational innovation. Thus, from a strategic human resource management perspective, this accelerates the needs for the management of public enterprises to employ flexible and reform policies regarding benefits and competitive gains to improve employee creativity. Specifically, this refers to the reduction of centralisation and formalisation in the management system in public enterprises to decentralisation that may attenuate the avoidant tendencies among employees and foster their creative efforts in order to gauge creative benefits (Hirst et al., 2011).

Additionally, it is essential for organisations to establish a favourable and beneficial working environment to promote the creativity of employees as well as to limit possible constraints that may hinder employee creativity since leadership style is only one of the antecedents of employee creativity (Brockner & Higgins, 2001; Wang et al., 2013). Specifically, more involvements and active participations of employees in establishing organisational goals, operational budgets and performance standards could be considered as a part of employee policies in the organisations. It aims to shape an organisational environment that highly promotes employee contribution and considers employees as valuable assets in the organisation (Aragon-Correa et al., 2007). Simultaneously, it also makes employee feel confident in contributing creative ideas, especially taking risk-associated activities (Jung et al., 2003; Moriano et al.,

2014; Wang et al., 2013). Furthermore, an organisational culture where creative ideas of innovating business practices, workplace systems and maintaining external business relations are encouraged should be developed instead of criticism and penalty. Moreover, selecting employees with the required skills and suitable personality profile regarding creative abilities must be considered during the recruitment process in the enterprises (Chi & Pan, 2012). In short, the ultimate goal is to engender organisational effectiveness and efficiency.

6.6.4 In terms of confirming the significant and positive role of transformational leadership

Based on findings of this study, how each dimension of transformational and transactional leadership affected organisational innovation and employee creativity has been precisely specified. Accordingly, behaviours of transformational leadership including inspirational motivation, individualised consideration and intellectual stimulation positively influenced both employee creativity and organisational innovation. Moreover, such positive impacts that transformational leaders had on subordinates explicitly confirmed their important role in boosting creativity and innovation compared to transactional leaders.

Human practices show that contemporary employees tend to prefer working with the transformational leader who provides work-related challenges that inspire employees to utilise their knowledge and skills to improve their performance capacity in a dynamic business environment (Alsalami et al., 2014). Moreover, as displayed by results of this study, once employee creativity is promoted, employees feel more confident in attempting novel approaches towards existing problems, which subsequently brings about higher level of organisational innovation (Tim et al., 2011). As a result, organisational innovation as a collective achievement will thrive as transformational leadership is supported by employee creativity in the organisations. Therefore, this style of leadership should be considered as a primary criterion for the management to select and appoint an appropriate leader as well as nurture qualities of transformational leadership to lead the enterprises. Generally, this helps attain overall organisational effectiveness in the current business climate represented by fast changes and fierce competitions among enterprises. As leaders in the organisations strive to perform the full extent of their designated leadership roles, organisational innovation will be boosted as innovative objectives of the enterprises are more likely to be fully achieved.

While creativity and innovation are risk-related activities (West & Richter, 2008), the role of leaders in organisations, specifically in Vietnamese public coffee enterprises is critically important to promote the creativity of employees, manage risks and generate innovative outcomes. By strategically planning and predicting, the level of risks in creative and innovative activities is assessed by the leader, which serves as a basis for employees to confidently demonstrate their creativity (Zhou & George, 2003). In other words, it relates to balance management between change and stability in the performance of organisations that a

good balance indicates a high level of organisational effectiveness and vice versa (Hermann & Felfe, 2013). This also implies that a profound understanding of the dynamic and interdependent linkage between organisational change and organisational stability is essential for the leader to achieve the expected organisational goals. In short, an effective leader should display specific leadership characteristics such as innovative thinking, confidence, ethics and disciplines in developing trust and establishing an open working environment to promote employee creativity and accelerate organisational innovation.

6.7 Limitations of the study

This study hopes to advance profound understanding of the leadership styles – organisational innovation relationships by considering the mediating effect of employee creativity. Empirical findings of investigating formulated hypotheses in the comprehensive literature demonstrated the significant role of employee creativity in the linkages between leadership styles and organisational innovation. Despite the fact that several encouraging outcomes of the empirical analysis in this study have been found out and highlighted, it is significant to recognise some limitations based on interpreting the current findings.

Specifically, a potential limitation may lie in the usage of adopted self-report measure of creativity as this scale is argued to be biased by participants who tend to give socially desirable responses and increase the possibility of common method variance (Podsakoff & Organ, 1986; Tung & Yu, 2016). However, this inherent issue of applying self-reporting is generally acceptable.

Additionally, data on both predictors and outcome variables were simultaneously collected from the same source. Accordingly, employees might assess their behaviour as creative despite the fact that it is not in reality. However, Zhang and Bartol (2010) stated that individual creativity is considered as an internal process that should be rated by the employee themselves rather than their supervisors. Moreover, Zhou and George (2003) argued that employees are those who have more expertise and specific knowledge in their routine work. This indicates that they tend to recognise the arising problems and performance gaps that necessitate their creative ideas to improve the efficiency of their jobs. Thus, Spector (2006) claimed that non-self-report data does not secure more accurate assessment, which supports that self-rating of creativity tends to be more valid than supervisor's. In other words, supervisors rating the creative level of their employees might not fully cover the continuum of creativity compared to that of employees', which leads to potentially less accurate assessment (Conway & Lance, 2010).

Additionally, to address the common method variance problem, the reduction of bias in survey data of this study was also supported by the fact that the anonymity of responses from the participants was ensured, as argued by Hair et al. (2010) and suggested by Podsakoff et al. (2003). Besides, regarding statistical remedies as recommended by Podsakoff et al. (2003), discriminant validity test among variables

in the study produced good results. Furthermore, the results of EFA also demonstrated that no single factor accounting for the majority of covariance among all measures was found. In short, the uninfluential common method variance on the data and the reasonableness of the data in this study were verified.

Despite its good generalisation for research findings, the adopted non-experimental cross-sectional design in this study also makes it difficult to provide inference about the direction of causality between variables because all variables were measured at the same point of time and using the same questionnaire. Nevertheless, to some extent, this limitation may also be mediated by utilising path analysis in structural equation modelling to investigate relationships between variables in the model of the study.

Besides, another limitation of the current findings in this study is potentially the research sample that was collected from employees working in Vietnamese public enterprises in the same coffee industry. Despite its controllable industry effects, new discovery of different factors and linkages between variables across various industries regarding the confronted uncertainty level of environment and technology may be precluded, which influences the significance of organisational innovation (Jung et al., 2003). On the other hand, employees who are not working in public enterprises in the same coffee industry or working in other industries may have different perceptions and responses towards similar problems, which possibly influences the findings. Moreover, the completion of survey questionnaires were done by employees working in the single sector may also limit external validity. Additionally, the result generalisation of this study applied to Western enterprises is also the potential disadvantage, specifically the partial mediating role of employee creativity in the leadership styles – organisational innovation relationships.

6.8 Recommendations for future research

Recognised limitations in the current findings of this empirical study suggest further possibilities for field experts and academia to conduct future research on leadership, creativity and innovation in the context of Vietnamese enterprises in particular and other countries in general. Accordingly, this study strived to investigate the relationships between specific attributes of transformational leadership as well as those of transactional leadership, employee creativity and components of organisational innovation. Nevertheless, findings on key leadership attributes that effectively promote organisational innovation may not be universally endorsed, which was supported by inconsistencies between studies. Therefore, an inclusion of the role of cross-social culture in further research may be imperative for a thorough understanding of the leadership context from the global perspective.

Additionally, as the hypothesised relationship between transformational leadership and organisational innovation was partially supported as well as the linkage between transactional leadership and organisational innovation was negative, it proposes that other styles of leadership may also contribute

to explaining those linkages. Thus, future studies might include other leadership behaviours in the theoretical model providing that they are congruent with the context of Vietnamese enterprises. This serves the aim of obtaining the variance that different leadership behaviours account for the organisational innovation and suggests the most likely appropriate one to the enterprises.

Regarding the relationship between transformational leadership and employee creativity, the creativity of employees is affected by transformational leadership behaviours. Accordingly, the transformational leader provides intellectual stimulation for employees, motivating them to try out different approaches for existing problems as well as taking individual needs of employees into consideration. Therefore, it implies that employees seem to be intrinsically motivated to accomplish positive organisational outcomes (Baer, 2012; Brockner & Higgins, 2001; Smith et al., 2009) while transactional leaders utilise extrinsic motivation (Ensley et al., 2006). By synthesising the current study and previous research, recommendations are made upon establishing a complex mediating mechanism in the research model for the interrelationships among leadership styles, employee creativity and organisational innovation. Specifically, transformational leadership influenced employee creativity through the mediating role of intrinsic motivation, transactional leadership impacts employee creativity by the mediator of extrinsic motivation, and employee creativity plays the mediating role in the relationships between leadership styles and organisational innovation. Generally, amending the research model by adding other mediating variables will help obtain deeper and richer research findings relating to the linkages between variables.

This study purposefully focuses on testing the effects of leadership styles on individual creativity that targeted at employees working in Vietnamese public coffee enterprises. However, future research could extend the multilevel framework based on the one presented in this study by considering how different leadership styles impact on creativity at different levels. For instance, departmental level or group and team level can be considered, specifically investigating the mediating role of creativity beyond individual level to fully understand the effects of leadership styles on creativity and innovation as well as provide the basis for comparison between studies. Moreover, considering the contingent reward component of transactional leadership, future studies may replicate this study by clearly specifying the range of reward contingencies and examining their effects on employee creativity and innovation.

Future studies should also be undertaken to consider the relationships between leadership styles and different types of innovation and interrelationships between these types of innovation, namely, organisational innovation, technical innovation and marketing innovation to extend the hypothesised model in this empirical study and investigate its validity. Furthermore, significant differences in innovative outcomes will be established, which helps enterprises identify which type of innovation to put more focus

on to improve the overall organisational performance. Additionally, while the concept of organisational innovation is still inconsistently defined, specific standardised definitions of concepts are essential.

Besides, different organisational factors of influences on organisational innovation should be further researched in order to see differences in significant impacts among factors as well as the amount of variance on organisational innovation explained. Studies of consequences of organisational innovation in enterprises such as organisational effectiveness, organisational performance and employee satisfaction can be expanded and exploited as a diverse approach.

This empirical study adopted a cross-sectional non-experimental quantitative study using survey questionnaire for data collection to test the relationship between leadership styles, employee creativity and organisational innovation. However, future research should attempt to add qualitative component to supplement the findings of quantitative methods by conducting in-depth interviews with leaders and employees regarding organisational innovation in their organisations, the creative level of employees as well as how employees perceive the leadership style that their leader demonstrates. Since then, a thorough understanding of the respondents' viewpoints and the relationships among variables studied in this research are obtained. Moreover, a longitudinal study may be conducted to capture the temporal logic of the linkages between constructs in this research.

Opportunities for future research may include replicating the findings by validating the proposed mediated model of this study through surveying different industries and research settings, which serves the generalisation and reliability of findings. Comparisons between different types of enterprises involving public and private-owned enterprises can be taken into consideration regarding leadership, creativity and innovation.

The measure of organisational innovation adopted in this study might be appropriate for future research in other industries and services and different countries to evaluate its external validity and reliability and compare with technical and marketing innovation. Moreover, more in-depth accounts of organisational innovation and its variations should be analysed based on the context of particular settings in accordance with other variables. Additionally, future studies may validate the research findings of this research by assessing the relationships between variables utilising both employees and leaders' rating, which may produce possible differences and similarities in the results.

6.9 Conclusion

This empirical study achieved its objectives and add to the current body of research by filling the research gaps in leadership, creativity and innovation literature. Specifically, it affirmed and expanded the understanding of the relationships between leadership styles and organisational innovation using the sample of employees working in Vietnamese public coffee enterprises. From a comprehensive literature review, hypotheses were established, quantified and investigated considering the relationships between variables by utilising statistical softwares. Overall, the majority of formulated hypotheses were supported and substantiated in the theoretical model, which demonstrated different impact of leadership styles on employee creativity and organisational innovation.

Considering the management strategy in the organisation, different behaviours of transformational and transactional leadership that essentially support innovation and desired performance should be employed by the leader (Ebrahimi et al., 2016; Mumford et al., 2002; Schweitzer, 2014). Accordingly, findings show that both transformational and transactional leadership were antecedents of employee creativity and organisational innovation (Jung et al., 2003; Shin & Zhou, 2003). Among behaviours of both leadership styles, inspirational motivation positively affected all dimensions of organisational innovation, which indicates that this behaviour should be more attentively improved by the transformational leader in the organisations. Additionally, as transformational leadership positively affected organisational innovation, necessary supports by an organisational context will stimulate this advantageous relationship, which improves the collectively organisational performance.

Continuous innovation, especially paying more systematic attention to the organisational methods aspect of organisational innovation is significant for enterprises of all types to remain competitive in the current business climate and improve organisational performance (Hamel, 2009). The combination of organisational innovation and technological efforts will allow enterprises to fully capture the benefits of innovative capabilities (Damanpour et al., 2009). Therefore, organisations need to perform innovatively by encouraging the development of creative ideas, knowledge and skills from employees. Moreover, supports from the leadership as a significant influencer on organisational vision and strategies development as well as an antecedent of organisational ability to innovate are essential.

As leadership styles are significant predictors of organisational innovation, a positive influence of leadership style, specifically transformational leadership on employee creativity is conducive to organisational innovation. Inversely, a negative impact of transactional leadership on employee creativity is detrimental to organisational innovation. Moreover, results in this study developed a greater understanding that employee creativity played the mediating role in the relationships between leadership styles and organisational innovation. Specifically, the enhanced level of employee creativity fuelled by

favourable policies and supports by the leader will lead to increased organisational innovation, which ultimately conveys into organisational effectiveness. On the contrary, the diminishing level of employee creativity hindered by the unfavourable working policies in the organisation and lack of supports from the leader will weaken organisational innovation. Generally, an appropriate leadership style adopted by the leader in the organisation may support employees with specific directions, clear regulations and expectations as well as well-clarified procedures to complete their tasks with the highest outcomes, which helps achieve the overall business outcomes.

Finally, results of this research also benefit academic researchers, the management of organisations and policy makers by recognising that organisational innovation is more likely to be fostered by the positive influence of innovative leadership behaviours and the improvement of employee creativity. A thorough understanding of the mechanisms underlying the impact of leadership styles on organisational innovation provides organisations on a strategic basis with insights into the adaptive changes of leadership behaviours and approach. Specifically, this aims to improve creative performance of employees by means of motivation, empowerment and inspiration that induces organisational innovation. In summary, due to ambiguous empirical evidences, further critical investigations to enhance knowledge on the impact of employee creativity in the leadership styles – organisational innovation relationships is essential.

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Appendix I: Questionnaire Survey (English Version)

Dear Sir/Madam,

My name is NGUYEN NHAT TAN, a Phd student from The University of Nottingham Malaysia Campus, Nottingham University Business School. I am currently conducting a research on **"The effects of leadership styles on organisational innovation in Vietnamese coffee enterprises: A mediating role of employee creativity"**. Specifically, this study aims to test the relationship between two different leadership styles, namely, transformational and transactional leadership, and organisational innovation as well as investigate the mediating role of employee creativity in the leadership style-organisational innovation relationship. As the focus of this study is on Vietnamese public coffee enterprises, I would like to invite you as a staff member in your organisation to participate in this survey.

It will take around 15 to 20 minutes to complete the survey. Kindly rest assured that your response will be anonymous and treated in the strictest confidence. The obtained responses are critically important in getting the accurate findings that will help reflect the practical scenario of your organisation. Moreover, there is no right or wrong answer and information derived from this questionnaire will be used for **research purposes only** to fulfil the Phd thesis requirements of The University of Nottingham.

While you are completing this survey, please do not hesitate to contact me in case of any related enquiries. If you wish to complain about the way in which the research is being conducted or have any other concerns about the research then in the first instance please contact my supervisor Associate Prof Dr. Carol Hooi at Carol.Hooi@nottingham.edu.my. Alternatively, you may contact Research Ethics Committee, Nottingham University Business School (NUBS REC) at nubs-rec@nottingham.edu.my. Thank you for your cooperation and agreement to participate in this survey.

Yours Sincerely,

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SECTION 1: ORGANISATIONAL INNOVATION

Organisational innovation refers to the introduction of novel organisational methods that supports management in the working environment or in the firm-external agent relation.

The following part of this survey focused on the respondent's perception and evaluation towards **Organisational innovation** that resulted from the direct and indirect effects of leadership styles and employee creativity. Please circle the most appropriate number that best matches your own assessment based on the given rating scale: 1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Often, 5 = Very often.

Dimensions	No	The company where I am currently working has recently for the first time…	Never	Rarely	Occasionally	Often	Very often
Business practices (BP)	BP1	Used databases of best practices, lessons, and other knowledge.	**1**	**2**	**3**	**4**	**5**
	BP2	Implemented training programmes for employee development *to* create efficient *and* functional teams	**1**	**2**	**3**	**4**	**5**
	BP3	Used an integrated monitoring system for firm activities	**1**	**2**	**3**	**4**	**5**
	BP4	Used quality-management systems for general production or supply operations	**1**	**2**	**3**	**4**	**5**
Workplace organisation (WO)	WO1	Implemented decentralisation in job responsibility for workers in the organisation	**1**	**2**	**3**	**4**	**5**
	WO2	Established formal or informal work teams to improve the access and sharing of knowledge from different departments	**1**	**2**	**3**	**4**	**5**
	WO3	Implemented an anonymous incident reporting system to encourage the reporting of errors or hazards	**1**	**2**	**3**	**4**	**5**
External relations (ER)	ER1	Collaborated with customers and other organisations	**1**	**2**	**3**	**4**	**5**
	ER2	Used methods of integration with suppliers	**1**	**2**	**3**	**4**	**5**
	ER3	Outsourced business activities	**1**	**2**	**3**	**4**	**5**

SECTION 2: EMPLOYEE CREATIVITY

Employee creativity is understood as the process in which novel, useful and appropriate ideas concerning products, services, processes, business and management practices, organisational models and strategies are generated by employees so as to solve problems in the pursuit of work objectives.

The following part of this survey focused on the respondents' perception and evaluation towards their **Individual creativity** that correlates with fostering organisational innovation. Please circle the most appropriate number that best matches your own assessment based on the given rating scale: 1 = Not at all

characteristic, 2 = Slightly characteristic, 3 = Fairly characteristic, 4 = Characteristic, 5 = Very characteristic

No	Description	Not at all characteristic	Slightly characteristic	Fairly characteristic	Characteristic	Very characteristic
EC1	I suggest new ways to achieve goals or objectives.	**1**	**2**	**3**	**4**	**5**
EC2	I come up with practical ideas to improve performance.	**1**	**2**	**3**	**4**	**5**
EC3	I search out new technologies, processes, techniques, and/or product ideas.	**1**	**2**	**3**	**4**	**5**
EC4	I suggest new ways to increase quality.	**1**	**2**	**3**	**4**	**5**
EC5	I am a good source of creative ideas.	**1**	**2**	**3**	**4**	**5**
EC6	I am not afraid to take risks.	**1**	**2**	**3**	**4**	**5**
EC7	I promote and champion ideas to others.	**1**	**2**	**3**	**4**	**5**
EC8	I exhibit creativity on the job when given the opportunity to.	**1**	**2**	**3**	**4**	**5**
EC9	I develop adequate plans or schedules for the implementation of new ideas.	**1**	**2**	**3**	**4**	**5**
EC10	I often have innovative ideas.	**1**	**2**	**3**	**4**	**5**
EC11	I come up with creative solutions to problems.	**1**	**2**	**3**	**4**	**5**
EC12	I often have a fresh approach to problems.	**1**	**2**	**3**	**4**	**5**
EC13	I suggest new ways of performing work tasks.	**1**	**2**	**3**	**4**	**5**

SECTION 3: LEADERSHIP STYLES

Leadership encompasses a shared vision by the leader, an interactive influence between the leader and followers towards attaining the specific goals to improve organisational performance.

SECTION 3A: TRANSFORMATIONAL LEADERSHIP

Transformational leadership refers to the interaction between leaders and their followers in raising one another to higher levels of motivation and morality, inspiring employees through visions and persuading them to excel in performance and goal attainment.

The following part of this survey focuses on the respondent's perception and evaluation towards **Transformational leadership** style that their leader may demonstrate as an influential factor on organisational innovation. Judge how frequently each of the statements fits the leader you are describing by circling the most appropriate number that best matches your own assessment based on the given rating scale: 1 = Not at all, 2 = Once in a while, 3 = Sometimes, 4 = Fairly often, 5 = Frequently, if not always

Dimensions	No	The person I am rating….	Not at all	Once in a while	Sometimes	Fairly often	Frequently
Idealised Influence (II)	II1	Instills pride in me for being associated with him/her	**1**	**2**	**3**	**4**	**5**
	II2	Goes beyond self-interest for the good of the group	**1**	**2**	**3**	**4**	**5**
	II3	Acts in ways that builds my respect	**1**	**2**	**3**	**4**	**5**
	II4	Displays a sense of power and confidence	**1**	**2**	**3**	**4**	**5**
	II5	Talks about his/her most important values and beliefs	**1**	**2**	**3**	**4**	**5**
	II6	Specifies the importance of having a strong sense of purpose	**1**	**2**	**3**	**4**	**5**
	II7	Considers the moral and ethical consequences of decisions	**1**	**2**	**3**	**4**	**5**
	II8	Emphasises the importance of having a collective sense of mission	**1**	**2**	**3**	**4**	**5**
Inspirational Motivation (IM)	IM1	Talks optimistically about the future	**1**	**2**	**3**	**4**	**5**
	IM2	Talks enthusiastically about what needs to be accomplished	**1**	**2**	**3**	**4**	**5**
	IM3	Articulates a compelling vision of the future	**1**	**2**	**3**	**4**	**5**
	IM4	Expresses confidence that goals will be achieved	**1**	**2**	**3**	**4**	**5**
Intellectual Stimulation (IS)	IS1	Re-examines critical assumptions to question whether they are appropriate	**1**	**2**	**3**	**4**	**5**
	IS2	Seeks differing perspectives when solving problems	**1**	**2**	**3**	**4**	**5**
	IS3	Gets me to look at problems from many different angles	**1**	**2**	**3**	**4**	**5**
	IS4	Suggests new ways of looking at how to complete assignments	**1**	**2**	**3**	**4**	**5**
Individualised Consideration (IC)	IC1	Spends time teaching and coaching	**1**	**2**	**3**	**4**	**5**
	IC2	Treats me as an individual rather than just as a member of a group	**1**	**2**	**3**	**4**	**5**
	IC3	Considers me as having different needs, abilities, and aspirations from others	**1**	**2**	**3**	**4**	**5**
	IC4	Helps me to develop my strengths	**1**	**2**	**3**	**4**	**5**

SECTION 3B: TRANSACTIONAL LEADERSHIP

Transactional leadership builds the foundation for relationships between leaders and followers in terms of specifying expectations, clarifying responsibilities, negotiating contracts, providing supervisory control and output control, based on an exchange process whereby followers are recognised and rewarded for attaining specified goals and achieving the expected performance.

The following part of this survey focused on the respondent's perception and evaluation towards **Transactional leadership style** that their leader may demonstrate as an influential factor on organisational innovation. Judge how frequently each of the statements fits the leader you are describing by circling the

most appropriate number that best matches your own assessment based on the given rating scale: 1 = Not at all, 2 = Once in a while, 3 = Sometimes, 4 = Fairly often, 5 = Frequently, if not always

Dimensions	No	The person I am rating….	Not at all	Once in a while	Sometimes	Fairly often	Frequently
Contingent Reward (CRW)	CRW1	Provides me with assistance in exchange for my efforts	**1**	**2**	**3**	**4**	**5**
	CRW2	Discusses in specific terms who is responsible for achieving performance targets	**1**	**2**	**3**	**4**	**5**
	CRW3	Makes clear what one can expect to receive when performance goals are achieved	**1**	**2**	**3**	**4**	**5**
	CRW4	Expresses satisfaction when I meet expectations	**1**	**2**	**3**	**4**	**5**
Management by exception – Active (MBEA)	MBEA1	Focuses attention on irregularities, mistakes, exceptions, and deviations from standards	**1**	**2**	**3**	**4**	**5**
	MBEA2	Concentrates his/her full attention on dealing with mistakes, complaints, and failures	**1**	**2**	**3**	**4**	**5**
	MBEA3	Keeps track of all mistakes	**1**	**2**	**3**	**4**	**5**
	MBEA4	Directs my attention toward failures to meet standards	**1**	**2**	**3**	**4**	**5**

SECTION 4: RESPONDENTS' DEMOGRAPHIC PROFILES

Instructions: *Please tick (✓) in the box given*

1. **Gender**
   - ☐ Female
   - ☐ Male
2. **Age group**
   - ☐ 18-24
   - ☐ 25-34
   - ☐ 35-44
   - ☐ 45-54
   - ☐ 55 and above
3. **Position/Designation/Profession at the current organisation**
   - ☐ Vice-captain
   - ☐ Captain
   - ☐ Officer
   - ☐ Deputy of department
   - ☐ Head of department

4. **Length/Tenure of service at the current organisation**

- ☐ 1-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ More than 15 years

5. **Highest educational level**

- ☐ Vocation
- ☐ Associate/College
- ☐ Undergraduate
- ☐ Postgraduate
- ☐ Others

-End-

Thank you very much for your cooperation and time for completing this survey. Rest assured that your feedback will be strictly used for academic purpose only.

Appendix II: Questionnaire Survey (Vietnamese Version)

Kính chào quý Anh/Chị,

Tôi tên là Nguyễn Nhật Tân, hiện là nghiên cứu sinh đang theo học chương trình Tiến sĩ ngành Kinh doanh và quản lí tại trường đại học Nottingham, cơ sở Malaysia. Tôi đang tiến hành khảo sát cho đề tài "**Tác động của phong cách lãnh đạo đến sự đổi mới về tổ chức ở các doanh nghiệp cà phê quốc doanh tại Việt Nam: Vai trò trung gian của sự sáng tạo của nhân viên"**. Cụ thể hơn, đề tài này tập trung nghiên cứu mối quan hệ giữa hai phong cách lãnh đạo khác nhau lần lượt là phong cách lãnh đạo chuyển đổi và phong cách lãnh đạo nghiệp vụ với sự đổi mới về tổ chức cũng như xem xét vai trò trung gian của sự sáng tạo của nhân viên trong mối quan hệ giữa phong cách lãnh đạo-sự đổi mới về tổ chức. Vì trọng tâm của khảo sát phục vụ cho nghiên cứu này là tại các doanh nghiệp cà phê quốc doanh ở Việt Nam, tôi trân trọng kính mời quý Anh/Chị với vai trò là nhân viên trong tổ chức tham gia vào khảo sát này.

Thời gian dự kiến để hoàn thành bảng khảo sát này là khoảng 15 đến 20 phút. Xin quý Anh/Chị yên tâm rằng phản hồi của quý Anh/Chị sẽ được bảo mật tuyệt đối và thông tin cá nhân cũng như danh tính sẽ không được tiết lộ cho bất kì người nào. Những phản hồi nhận được có vai trò rất quan trọng trong việc mang lại các kết quả nghiên cứu chính xác góp phần phản ánh tình hình thực tế của đơn vị nơi các Anh/Chị đang công tác. Hơn thế nữa, các phản hồi từ phía các Anh/Chị sẽ không mang tính đúng hay sai, và mọi thông tin từ khảo sát chỉ được sử dụng với mục đích nghiên cứu để hoàn thành yêu cầu của luận án tiến sĩ tại trường đại học Nottingham.

Trong quá trình hoàn thành bảng khảo sát này, nếu có bất kì câu hỏi hay thắc mắc nào có liên quan, quý Anh/Chị vui lòng liên hệ với tôi. Nếu quý Anh/Chị muốn đóng góp ý kiến về quá trình thực hiện nghiên cứu này, quý Anh/Chị vui lòng liên hệ với người hướng dẫn khoa học, PGS.TS, bà Carol Hooi tại địa chỉ email Carol.Hooi@nottingham.edu.my. Ngoài ra, quý Anh/Chị cũng có thể liên hệ với Hội đồng đạo đức nghiên cứu của trường (NUBS REC) tại địa chỉ email nubs-rec@nottingham.edu.my. Xin cảm ơn sự hợp tác và đồng ý của quý Anh/Chị khi tham gia vào khảo sát này.

Trân trọng,

NGUYỄN NHẬT TÂN
Nghiên cứu sinh
Trường đại học Nottingham cơ sở tại Malaysia
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PHẦN 1: SỰ ĐỔI MỚI VỀ TỔ CHỨC

Sự đổi mới về tổ chức liên quan đến việc giới thiệu các phương pháp về tổ chức mới giúp hỗ trợ cho việc quản lý trong môi trường làm việc hoặc trong mối quan hệ giữa công ty và các đối tác bên ngoài.

Phần tiếp sau đây của bảng khảo sát tập trung vào nhận thức và đánh giá của người được hỏi đối với sự đổi mới về tổ chức mang lại bởi tác động trực tiếp và gián tiếp của phong cách lãnh đạo và sự sáng tạo của nhân viên. Quý Anh/Chị vui lòng khoanh tròn vào con số thích hợp nhất với đánh giá của Anh/Chị dựa trên thang đo cho sẵn từ 1 = Không bao giờ, 2 = Hiếm khi, 3 = Thỉnh thoảng, 4 = Thường xuyên, 5 = Rất thường xuyên.

Biến	Kí hiệu	Công ty mà tôi hiện đang làm việc gần đây đã lần đầu tiên ...	Không bao giờ	Hiếm khi	Thỉnh thoảng	Thường xuyên	Rất thường xuyên
Thực tiễn kinh doanh (BP)	BP1	Sử dụng các cơ sở dữ liệu về thực tiễn tốt nhất, các bài học kinh nghiệm và các kiến thức khác.	**1**	**2**	**3**	**4**	**5**
	BP2	Thực hiện các chương trình đào tạo cho việc phát triển nhân viên để tạo ra các nhóm làm việc hiệu quả và thiết thực	**1**	**2**	**3**	**4**	**5**
	BP3	Sử dụng một hệ thống giám sát tích hợp cho các hoạt động của công ty	**1**	**2**	**3**	**4**	**5**
	BP4	Sử dụng các hệ thống quản lý chất lượng cho sản xuất nói chung hoặc hoạt động cung ứng	**1**	**2**	**3**	**4**	**5**
Tổ chức nơi làm việc (WO)	WO1	Thực hiện phân quyền về trách nhiệm trong công việc cho người lao động trong tổ chức	**1**	**2**	**3**	**4**	**5**
	WO2	Thành lập các nhóm làm việc chính thức hoặc không chính thức để cải thiện khả năng tiếp cận và chia sẻ kiến thức giữa các phòng ban khác nhau trong tổ chức	**1**	**2**	**3**	**4**	**5**
	WO3	Triển khai một hệ thống báo cáo sự cố nặc danh để khuyến khích việc báo cáo lỗi hoặc nguy cơ tiềm ẩn	**1**	**2**	**3**	**4**	**5**
Mối quan hệ bên ngoài (ER)	ER1	Hợp tác với khách hàng và các tổ chức khác.	**1**	**2**	**3**	**4**	**5**
	ER2	Sử dụng các phương pháp tích hợp với các nhà cung cấp	**1**	**2**	**3**	**4**	**5**
	ER3	Thuê ngoài các hoạt động kinh doanh	**1**	**2**	**3**	**4**	**5**

PHẦN 2: SỰ SÁNG TẠO CỦA NHÂN VIÊN

Sự sáng tạo của nhân viên là quá trình trong đó nhân viên tạo ra những ý tưởng mới, hữu ích và thích hợp liên quan đến sản phẩm, dịch vụ, quy trình, thực tiễn kinh doanh và quản lý, mô hình tổ chức và chiến lược để giải quyết các vấn đề nhằm đạt được các mục tiêu trong công việc.

Phần tiếp sau đây của bảng khảo sát tập trung vào nhận thức và đánh giá của người được hỏi về sự sáng tạo của cá nhân có liên quan đến việc thúc đẩy sự đổi mới về tổ chức. Quý Anh/Chị vui lòng khoanh tròn

vào con số thích hợp nhất với đánh giá của Anh/Chị dựa trên thang đo cho sẵn từ 1 = Không đặc trưng, 2 = Ít đặc trưng, 3 = Khá đặc trưng, 4 = Đặc trưng, 5 = Rất đặc trưng.

Kí hiệu	Mô tả	Không đặc trưng	Ít đặc trưng	Khá đặc trưng	Đặc trưng	Rất đặc trưng
EC1	Tôi gợi ý những cách mới để đạt được mục tiêu.	**1**	**2**	**3**	**4**	**5**
EC2	Tôi đưa ra những ý tưởng thiết thực để cải thiện hiệu suất làm việc.	**1**	**2**	**3**	**4**	**5**
EC3	Tôi tìm kiếm những ý tưởng công nghệ mới, quy trình mới, kỹ thuật mới và/hoặc sản phẩm mới.	**1**	**2**	**3**	**4**	**5**
EC4	Tôi đề xuất những cách mới để nâng cao chất lượng.	**1**	**2**	**3**	**4**	**5**
EC5	Bản thân tôi là một nguồn ý tưởng sáng tạo tốt.	**1**	**2**	**3**	**4**	**5**
EC6	Tôi không sợ rủi ro.	**1**	**2**	**3**	**4**	**5**
EC7	Tôi ủng hộ và bảo vệ những ý tưởng mới trước các đồng nghiệp	**1**	**2**	**3**	**4**	**5**
EC8	Tôi thể hiện sự sáng tạo trong công việc khi có cơ hội.	**1**	**2**	**3**	**4**	**5**
EC9	Tôi phát triển những kế hoạch và lịch trình phù hợp để thực hiện các ý tưởng mới.	**1**	**2**	**3**	**4**	**5**
EC10	Tôi thường có những ý tưởng sáng tạo.	**1**	**2**	**3**	**4**	**5**
EC11	Tôi đưa ra các giải pháp sáng tạo cho các vấn đề.	**1**	**2**	**3**	**4**	**5**
EC12	Tôi thường có cách tiếp cận mới đối với các vấn đề.	**1**	**2**	**3**	**4**	**5**
EC13	Tôi gợi ý những cách mới để thực hiện công việc được giao.	**1**	**2**	**3**	**4**	**5**

PHẦN 3: PHONG CÁCH LÃNH ĐẠO

Lãnh đạo là một quá trình bao gồm sự tương tác mang tính ảnh hưởng giữa người lãnh đạo và cấp dưới với tầm nhìn chung được đề ra bởi người lãnh đạo nhằm đạt được những mục tiêu cụ thể để cải thiện hoạt động của tổ chức.

PHẦN 3A: PHONG CÁCH LÃNH ĐẠO CHUYỂN ĐỔI

Phong cách lãnh đạo chuyển đổi là quá trình tương tác lẫn nhau giữa nhà lãnh đạo và cấp dưới nhằm làm tăng mức độ động viên và tinh thần của nhân viên, truyền cảm hứng cho nhân viên với tầm nhìn chung và thuyết phục họ cố gắng đạt được những mục tiêu và kết quả trong công việc vượt trội so với mong đợi bằng cách khơi gợi những mức nhu cầu cao hơn của họ, xây dựng lòng tin và đặt lợi ích tổ chức lên trên lợi ích cá nhân.

Phần tiếp sau đây của bảng khảo sát tập trung vào nhận thức và đánh giá của người được hỏi về **Phong cách lãnh đao chuyển đổi** mà người lãnh đạo của họ có thể biểu lộ như là một yếu tố tác động đến sự đổi mới của tổ chức. Qúy Anh/Chị hãy đánh giá mức độ thường xuyên mà mỗi nhận định dưới đây phù hợp với người lãnh đạo mà quý Anh/Chị đang mô tả bằng việc khoanh tròn vào con số thích hợp nhất với đánh

giá của Anh/Chị dựa trên thang đo cho sẵn từ 1 = Không chút nào, 2 = Hiếm khi, 3 = Thỉnh thoảng, 4 = Khá thường xuyên, 5 = Thường xuyên.

Biến	Kí hiệu	Người lãnh đạo tôi đang đánh giá….	Không chút nào	Hiếm khi	Thỉnh thoảng	Khá thường xuyên	Thường xuyên
Sự hấp dẫn của nhà lãnh đạo (II)	II1	Truyền cho tôi sự an tâm về chuyên môn khi hợp tác chung	**1**	**2**	**3**	**4**	**5**
	II2	Bỏ qua những lợi ích riêng của bản thân vì những lợi ích chung của tập thể	**1**	**2**	**3**	**4**	**5**
	II3	Có những hành động mẫu mực khiến cho tôi tôn trọng.	**1**	**2**	**3**	**4**	**5**
	II4	Hành động theo cách tạo ra ấn tượng cho tôi rằng người quản lý là người tự tin và có năng lực	**1**	**2**	**3**	**4**	**5**
	II5	Chia sẻ với tôi những giá trị cốt lõi và lý tưởng mà mọi người nên hướng tới.	**1**	**2**	**3**	**4**	**5**
	II6	Chỉ ra cho tôi biết tầm quan trọng của việc ý thức rõ ràng về mục tiêu đang hướng tới	**1**	**2**	**3**	**4**	**5**
	II7	Cân nhắc đến vấn đề đạo đức khi đưa ra các quyết định	**1**	**2**	**3**	**4**	**5**
	II8	Nhấn mạnh tầm quan trọng của việc nỗ lực nâng cao ý thức tập thể đối với các sứ mệnh của tổ chức.	**1**	**2**	**3**	**4**	**5**
Sự truyền cảm hứng (IM)	IM1	Thể hiện một cách nhìn lạc quan về tương lai.	**1**	**2**	**3**	**4**	**5**
	IM2	Truyền đạt một cách nhiệt tình những kinh nghiệm cần thiết để thành công.	**1**	**2**	**3**	**4**	**5**
	IM3	Cho thấy tầm nhìn đầy thuyết phục về tương lai	**1**	**2**	**3**	**4**	**5**
	IM4	Thể hiện sự tự tin sẽ đạt được các mục tiêu đề ra	**1**	**2**	**3**	**4**	**5**
Sự kích thích trí tuệ (IS)	IS1	Đánh giá lại các cách tiếp cận cũ để xem chúng có còn phù hợp trong bối cảnh hiện tại hay không.	**1**	**2**	**3**	**4**	**5**
	IS2	Tìm kiếm nhiều quan điểm khác nhau khi giải quyết vấn đề.	**1**	**2**	**3**	**4**	**5**
	IS3	Giúp tôi nhìn nhận vấn đề ở nhiều góc độ khác nhau	**1**	**2**	**3**	**4**	**5**
	IS4	Đưa ra những cách tiếp cận mới để hoàn thành công việc	**1**	**2**	**3**	**4**	**5**
Sự quan tâm nhân viên (IC)	IC1	Dành thời gian để hướng dẫn cho cán bộ công chức	**1**	**2**	**3**	**4**	**5**
	IC2	Đối xử với tôi như là một cá nhân thay vì xem tôi chỉ là một thành viên trong nhóm	**1**	**2**	**3**	**4**	**5**
	IC3	Hiểu được những khác biệt về nhu cầu, khả năng, nguyện vọng của tôi so với các cán bộ công chức khác	**1**	**2**	**3**	**4**	**5**
	IC4	Giúp đỡ tôi phát triển năng lực bản thân	**1**	**2**	**3**	**4**	**5**

PHẦN 3B: PHONG CÁCH LÃNH ĐẠO NGHIỆP VỤ

Phong cách lãnh đạo nghiệp vụ xây dựng nền tảng của mối quan hệ giữa người lãnh đạo và cấp dưới bằng cách: người lãnh đạo nêu lên những mong đợi cụ thể của tổ chức đối với nhân viên, giải thích rõ ràng trách nhiệm của họ trong công việc, thỏa thuận các điều khoản với nhân viên và theo dõi kết quả công việc của nhân viên dựa trên quá trình trao đổi thưởng phạt căn cứ vào mục tiêu họ thực hiện được.

Phần tiếp sau đây của bảng khảo sát tập trung vào nhận thức và đánh giá của người được hỏi về **Phong cách lãnh đạo nghiệp vụ** mà người lãnh đạo của họ có thể biểu lộ như là một yếu tố tác động đến sự đổi mới của tổ chức. Qúy Anh/Chị hãy đánh giá mức độ thường xuyên mà mỗi nhận định dưới đây phù hợp với người lãnh đạo mà quý Anh/Chị đang mô tả bằng việc khoanh tròn vào con số thích hợp nhất với đánh giá của Anh/Chị dựa trên thang đo cho sẵn từ 1 = Không chút nào, 2 = Hiếm khi, 3 = Thỉnh thoảng, 4 = Khá thường xuyên, 5 = Thường xuyên.

Biến	Kí hiệu	Người lãnh đạo tôi đang đánh giá….	Không chút nào	Hiếm khi	Thỉnh thoảng	Khá thường xuyên	Thường xuyên
Thưởng theo thành tích (CRW)	CRW1	Cung cấp cho tôi những công cụ hỗ trợ cần thiết để tôi có thể hoàn thành công việc được giao	**1**	**2**	**3**	**4**	**5**
	CRW2	Thảo luận cụ thể ai là người sẽ chịu trách nhiệm hoàn thành các mục tiêu trong công việc	**1**	**2**	**3**	**4**	**5**
	CRW3	Nói rõ những phần thưởng tương ứng tôi có thể nhận được một khi hoàn thành công việc.	**1**	**2**	**3**	**4**	**5**
	CRW4	Bày tỏ sự hài lòng khi tôi hoàn thành những mục tiêu công việc như đã kỳ vọng	**1**	**2**	**3**	**4**	**5**
Quản lý bằng ngoại lệ - chủ động (MBEA)	MBEA1	Cảnh báo cho tôi biết những sai sót, khuyết điểm, sự lệch hướng có thể xảy ra trong quá trình làm việc	**1**	**2**	**3**	**4**	**5**
	MBEA2	Tập trung vào việc xử lý triệt để những sai sót, những khuyết điểm, sự lệch hướng xảy ra trong quá trình làm việc	**1**	**2**	**3**	**4**	**5**
	MBEA3	Để ý đến những sai sót, những khuyết điểm, sự lệch hướng xảy ra trong quá trình làm việc để rút kinh nghiệm và điều chỉnh.	**1**	**2**	**3**	**4**	**5**
	MBEA4	Hướng dẫn tôi cách sửa những khuyết điểm, sai sót, sự lệch hướng có thể xảy ra trong quá trình làm việc	**1**	**2**	**3**	**4**	**5**

PHẦN 4: THÔNG TIN CÁ NHÂN

Hướng dẫn: *Qúy Anh/Chị vui lòng đánh dấu (□) vào các ô trống ở bên dưới*

1. **Giới tính**
   - ☐ Nữ
   - ☐ Nam
2. **Độ tuổi**
   - ☐ 18-24
   - ☐ 25-34
   - ☐ 35-44
   - ☐ 45-54
   - ☐ 55 và hơn
3. **Vị trí công tác trong tổ chức hiện tại**
   - ☐ Đội phó
   - ☐ Đội trưởng
   - ☐ Nhân viên
   - ☐ Phó phòng/ban
   - ☐ Trưởng phòng/ban
4. **Thâm niên công tác tại tổ chức hiện thời**
   - ☐ 1-5 năm
   - ☐ 6-10 năm
   - ☐ 11-15 năm
   - ☐ Trên 15 năm
5. **Trình độ học vấn cao nhất**
   - ☐ Trung cấp, nghề
   - ☐ Cao đẳng
   - ☐ Đại học
   - ☐ Trên đại học
   - ☐ Khác

-Hết-

Xin chân thành cảm ơn quý Anh/Chị đã hợp tác và dành thời gian hoàn thành bản khảo sát này.

Phản hồi từ quý Anh/Chị chỉ được sử dụng duy nhất cho mục đích nghiên cứu.

Appendix III: Research Ethics Approval Issued by NUBS REC

University of Nottingham
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Search this site

NOTTINGHAM UNIVERSITY BUSINESS SCHOOL
RESEARCH ETHICS COMMITTEE REVIEW FORM - STAFF AND DOCTORAL RESEARCH

Reference Number	**NUBS-REC-2017-010**
Project Title	**Relationships between leadership styles and organisational innovation in Vietnamese coffee enterprises: A mediating role of employee creativity**
Applicant Name	**Nguyen Nhat Tan**
Date	**1/16/2018 3:43 PM**

1. In your professional judgement, is the proposed research project of minimal risk or more than minimal risk as defined by the ESRC Framework for Research Ethics?

A project is regarded as "minimal risk" if:

- the applicant has answered 'no' to all of the questions on the checklist; and
- that you are satisfied that these answers are correct; and
- that you are satisfied that the proposal is complete and raises no other ethical issues.

Project judged to be minimal risk require independent review by two members of the committee. Many projects judged to be more than minimal risk will still be approved, but they will require greater scrutiny and may be reviewed by more than two members of the committee at the REC chair's discretion.

Risk Status **More than minimal risk**

2. Regardless of the risk status of the project, please indicate your view below:

- Conditional approval is for minor amendments (e.g., changes to participant information sheets) which are straightforward enough not to require a full resubmission.
- Recommendations for minor amendments/revise and resubmit will be shared with the second reviewer so that a consensus may be reached where possible.
- If you are request further information, this will be requested from the applicant and then forwarded to both/all the project reviewers.
- The REC chair may invite other committee members to review an application in the event of disagreement.

Review Status **Approve (unconditional, non-binding suggestions)**

3. Please complete below full details of the changes you recommend, details of the further information you require, or your reasons for rejecting the application.

Comments:
It may be good idea to indicate how the data will be disposed off after the research,
Although the answer to two questions were "Yes" but the applicant has addressed satisfactorily any potential ethical issues that may arise.

Email Content

16 Jan 2018

Dear Nguyen Nhat Tan

Reference Number: NUBS-REC-2017-010
Title: Relationships between leadership styles and organisational innovation in Vietnamese coffee enterprises: A mediating role of employee creativity

The NUBS Research Ethics Committee approves your application. See the feedback form attached for the reviewers' recommendations/suggestions.

Please note that this approval is for the research work you describe in the application. If you change your research design (i.e., the research questions, the methodologies, or the respondents), you would need to apply for an ethical approval again.

We hope you have the best of luck with your research project.

Regards,

Rasyad A. Parinduri
Chair
NUBS Research Ethics Committee

Comments:
It may be good idea to indicate how the data will be disposed off after the research,
Although the answer to two questions were "Yes" but the applicant has addressed satisfactorily any potential ethical issues that may arise.

Cancel