NURTURING ARTISTIC CREATIVITY AMONG CHINESE FEMALE ADOLESCENTS IN HONG KONG: A QUALITATIVE STUDY

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Preface

Time flies. I started this thesis eight years ago. It started with the idea of studying something that was relevant to my personal life and could contribute in a way helping the students in Hong Kong.

After months of consideration, I decided to focus my thesis on the area of nurturing creativity among adolescents in Hong Kong. I chose to study this topic because creativity can enable the growth of individuals and societies, especially in this era marked by the challenges of globalization.

Globalization is one of the overwhelming trends in the 20th century, which continues to gather momentum in the 21st century. Under the influence of globalization, world cities and individuals need to face and adapt to formidable changes in social and economic transformation. Creativity has been recognised as a core ability of individuals for enhancing personal and social development as well as generating economic growth, sustainable development and competitiveness of cities and countries in the global economy (Landry, 2000, Cunningham, 2002).

Hong Kong is “Asia’s world city”, and was ranked as the world’s freest economy by the Heritage Foundation in the 2017 Index of Economic Freedom Report – for the 23rd consecutive year. The city was also named the world’s most competitive economy in the IMD World Competitiveness Yearbook 2016 and 2017. Nurturing creative people is one of the

significant measures to maintain and improve the competitiveness of Hong Kong among world economies.

Moreover, under “One Country, Two Systems” policy, Hong Kong is a Chinese city. Hong Kong is China’s global business and financial centre that can play an active role to facilitate the economic development of China in the 21st century. At this important stage of development, Hong Kong’s education system needs to better cultivate students’ creativity for them to manage challenges, grasp opportunities and live more happily in this changing world. But there are voices criticizing the lack of focus on creativity and saying the emphasis on examinations in education have obstructed Hong Kong’s ability to build creativity. As a lecturer, teaching Marketing courses in a Community College in Hong Kong, and a mother of a ten-year-old daughter when I started this study, I was very concerned about the effectiveness of Hong Kong education system in nurturing the students’ creativity. I want to find out the ways to foster the creativity of my students and my daughter.

Creativity is a huge and complex topic. In view of my limited time and resources, I focused my study on the area of cultivating the artistic creativity among female adolescents. My daughter loves to draw and that inspired me to examine the question “What constitutes the artistic creativity of Chinese female adolescents in Hong Kong?” I want to find out the ways of nurturing artistic creativity so as to help my daughter and students to acquire this valuable ability.

Abstract

Creativity is an important ability of an individual which enables her or him to live better, raise their quality of life and develop competitive advantage in the changing society. Little research has been focused on the learning and development of artistic creativity among Chinese female adolescents.

This qualitative life history research introduces and explores what constitutes artistic creativity among Chinese female adolescents in Hong Kong and how this is developed. Seven Chinese female adolescents were analysed and are presented in this study. Their learning and development of artistic creativity is interpreted in terms of ideas drawn mainly from the literature on creativity, and the influence of personal and environmental factors on the development of artistic creativity in the visual arts.

Based on the life history narratives of the participants, new insights are derived as to what personal and environmental factors may lead to the development of artistic creativity, and how Visual Arts teachers and education institutions can play a vital role in nurturing the artistic creativity among Chinese female adolescents in Hong Kong.

The study found that some factors, like motivation and teachers' influence, have a more significant and positive influence in fostering the artistic creativity among Chinese female adolescents in Hong Kong. Visual Arts teachers need to act as facilitators to motivate students, and provide

learning opportunities and supportive classroom environment to nurture the artistic creativity among female adolescents.

This thesis contributes to the academic understanding on the learning and development of artistic creativity in the visual arts. The study makes a number of contributions with implications for teachers and education institutions to nurture the artistic creativity among Chinese female adolescents with reference to the complex environment in Hong Kong.

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Chapter 1 Introduction

1.1 Chapter Introduction

This chapter discusses the aims of the thesis, and the development of creativity and the education system in Hong Kong. Arts education and new senior secondary education system are covered to understand the creativity curriculum offered in Hong Kong. The research question of this thesis is also provided in the last section.

1.2 Aims of the Study

Creativity has engaged the interest of many scholars throughout history. Creativity is viewed as a natural resource (Guilford, 1950), and creative potential is a form of human capital (Rubenson and Runco, 1992). Creativity can provide satisfaction for individuals and competitive advantage to society (Moran, 2010). Creativity, like artistic creativity can help people live better. People develop new things or use new ways in doing things may raise their quality of life.

Many governments and organisations have established plans to stimulate creativity in education. Starting in the 1990s, policymakers across the world (including Australia, Canada, China, England, Hong Kong and the Middle East) started to formulate policies aimed at developing creative potential among students – for the benefit of their students' and country's future (Craft, 2007, Beghetto, 2010). There is an international trend to include creativity in curriculum frameworks (Le Metais, 2003). The World

Conference on Higher Education in 1998 also stressed the importance to include creativity as one of the main learning areas in Higher Education (Reid and Petocz, 2004). Education institutions and the whole community in Hong Kong need to take actions to nurture the creativity among adolescents.

Although creativity was well researched in the West after Guilford's influential American Psychological Association presidential address in 1950, I was unable to locate any research that investigated the factors that may lead to the development of creativity among Chinese female adolescents in Hong Kong. As a college lecturer and a mother of a teenage girl, I am interested in examining the development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong. The study may offer insight into the ways to foster the creativity of my students and my daughter.

1.3 Creativity Development in Hong Kong

The Hong Kong government has been promoting the development of creativity for many years. In the 2003 Policy Address, the then HKSAR Chief Executive Mr Tung Chee-hwa stated that the HKSAR government would "inject a new dimension and vigour into our economy by actively promoting creative industries" (paragraph 19) (HKSAR Government, 2003). Creative industries are defined by Cunningham (2002) as "activities which have their origin in individual creativity, skill and talent and which have the potential for wealth and job creation through generation and

exploitation of intellectual property" (p. 54). The Hong Kong government planned to promote creativity in the city by attracting creative talent to expand the creative industries, which include performing arts, film and television, publishing, art and antique markets, music, architecture, advertising, digital entertainment, computer software development, animation production, and fashion and product design (HKSAR Government, 2003).

Later, in his 2009 Policy Address, HKSAR Chief Executive Mr Donald Tsang continued this direction and announced the setting up of a dedicated office to develop creative industries (HKSAR Government, 2009), and creativity in Hong Kong. Create Hong Kong (CreateHK) was set up within the Commerce and Economic Development Bureau on 1 June 2009 to lead, champion and drive the development of the creative economy in Hong Kong (HKSAR Government, 2017a). It provides "one-stop" services to co-ordinate Government policy and effort on creative industries, and to focus Government's resources on facilitating the development of creative industries in Hong Kong (HKSAR Government, 2017b).

Currently, creative industries appear to be a key economic driver for Hong Kong. The cultural and creative industries in Hong Kong have grown at a rate faster than the overall economy in recent years (HKSAR Government, 2014). During 2005 to 2014, the value added by the cultural and creative industries increased rapidly at an average annual rate of 8.6% (HKSAR Government, 2015). During the same period, the value added by the

design sector as a percentage of Gross Domestic Product has tripled and the number of jobs increased by nearly 50%. According to statistics published by the HKSAR Information Services Department, Hong Kong had around 40,500 cultural and creative industry-related establishments, with about 213,100 practitioners engaged in 2014. The value added by cultural and creative industries in nominal Gross Domestic Product was about HK$110 billion in 2014, representing around 5% of the Hong Kong's Gross Domestic Product (HKSAR Government, 2017a). For this reason, Hong Kong government is likely to continue to promote creativity and creative industries, with the aim to build Hong Kong into a creative capital in the region. Education plays a significant role in developing creative young people for the prosperity of Hong Kong.

1.4 Creativity in the Hong Kong Education System

After the reunification of Hong Kong with China in 1997, there were several major changes in the education system in Hong Kong. First of all, from 1998 to 2000, the Education Commission launched a comprehensive review of the education system in Hong Kong, and recommended an education reform. The reform advocated principles that students needed to have creativity, be able to deal with changes, and to possess a wide range of knowledge (Hong Kong Arts Development Council, 2006).

Under the curriculum reforms of the Hong Kong government, creativity is being emphasised as one of the most important "generic skills" to be developed across all subject curricula in primary and secondary schools

(Hong Kong Curriculum Development Council, 2002b, Hong Kong Curriculum Development Council, 2003). According to the Hong Kong Curriculum Development Council (2003), creativity is "the ability to generate original ideas and solve problems appropriate to the contexts" (p. 11). Several principles were recommended for schools to develop students' creativity, including: teachers need to encourage students to think more, give them time to think, enhance their creative abilities, value and reward their creative efforts, teach them creative thinking and creative problem solving techniques, and create a favourable climate to creativity (Hong Kong Curriculum Development Council, 2002b). It is recommended to infuse creativity into the regular curriculum, which is highly conventional and knowledge-centred (Cheng, 2010). There were three stages in the curriculum reform for Arts Educations: 2001-2002 to 2005-2006 (short term), 2006-2007 to 2010-2011 (medium term), and beyond 2011 (long term) (Hong Kong Curriculum Development Council, 2002a).

1.4.1 Arts Education

One main focus of the education reform in Hong Kong was to use arts education to nurture creative people. The education reform listed arts education as one of the eight key learning areas in the school curriculum; and the other learning areas were Chinese-language, English-language, mathematics, personal-social-and-humanities, science, technology, and physical education (Hong Kong Curriculum Development Council, 2002b).

Arts education is part of a balanced education for students to have whole-person development, that is crucial to the intellectual, emotional, and creative growth of children and youth (Education Commission, 2000). Arts education includes visual arts and music. One of the learning targets in the visual arts is to develop creativity and imagination among students (HKCDC and HKEAA, 2007). Visual arts activities, such as drawing, painting and designing, are important in promoting creative expression and creativity. Arts education nurtures the artistic creativity among students and enables them to cope with the needs of the new knowledge-based society.

1.4.2 New Senior Secondary Curriculum

The new senior education system has been implemented since September 2009, which might have an impact on the development of creativity among students in Hong Kong. Under the new education system, the structure of secondary and university education in Hong Kong changed from the former British model towards one more compatible with that of mainland China: a new “3+3+4” academic structure in which students are expected to have 3 years of junior and 3 years of senior secondary education. This is different from the previous 3 years of junior level, 2 years of senior secondary level and 2 years of matriculation. Undergraduate degree programmes have also been lengthened from 3 to 4 years starting from September 2012. Moreover, students only sit for one public examination under the new system, the Hong Kong Diploma of

Secondary Education Examination (HKDSE) in their sixth year of secondary education, instead of two public examinations (the Hong Kong Certificate of Education Examination at Form 5 and the Hong Kong Advanced Level Examination at Form 7). The aim is to lessen examination pressure on students under the new senior secondary curriculum.

Under the new system, arts education is still included in the secondary curriculum. Students can select arts education (visual arts or music) as one of three elective subjects, which they must take together with the four core subjects (Chinese, English, Mathematics and Liberal Studies) during the three years of new senior secondary education. Students therefore have the opportunity to receive formal training in visual arts to develop their artistic creativity.

Table 1.1 summarizes the major changes in the education system and key development of arts education in Hong Kong for the period 1980 - 2012. Arts education has been offered in schools for nearly twenty years with the aim of nurturing the creativity among students. The influence of arts education on the development of artistic creativity among adolescents is one of the topics covered in this thesis.

Table 1.1: Major developments of arts education and creativity curriculum in Hong Kong

Year	New Initiatives	Outcomes
1980s	More concrete cultural policies from the Government Set up Council for Performing Arts (Now Hong Kong Arts Development Council) Set up Hong Kong Academy for Performing Arts	Provided performance venues and facilities; developed performing groups and training of artists Provided funding resources for arts groups Provided professional training for artists
1995	Set up Hong Kong Arts Development Council	A statutory body set up by the Hong Kong Government to support the broad development of the arts in Hong Kong Its major duties include grant allocation, policy and planning, advocacy, promotion and development, and programme planning
1996	Hong Kong Arts Development Council published **Arts Education Policy**	Promoted arts education at all levels of society Advocated "One Art for Life", arts as integral part of all-round education (supported by Education Department) Formed Arts Education Committee (with representatives from Education Department), and brought **arts education into formal education**
1997	Hong Kong Arts Development Council launched a three-year "Artistic-in-Schools Programme"	Promoted arts education in schools
1998-2000	Education Commission had a comprehensive review on Hong Kong education system	**Education reforms:** **1) Students needed to have creativity** **2) Arts education is one of the eight key learning areas**
2000	A three-year pilot project "**Arts-in-Education"** organised by Education and Manpower Bureau (EMB) and Hong Kong Institute of Education	**Incorporated the arts into the teaching of other curriculum subjects**
2001 - 2005	Curriculum Development Institute of EMB organised	Studied the feasibility of including arts education in school curriculum

	seven SEED projects	
2004	Tertiary institutions offered creative industries programmes with increasing intake numbers	Offered programmes such as arts, design and film production
2009	**Implemented New Senior Secondary Curriculum**	**Arts education as one of the elective subjects in new senior secondary education**
2010	Set up the Working Group on the Development of Education Services	Advised the Government on strategies for the development of education services in Hong Kong
2012	Adopted 3+3+4 academic structure	3 years of junior secondary and 3 years of senior secondary education, and 4 years of undergraduate degree programmes
2012	Implemented school-based assessment for Visual Arts curriculum	Subject teachers assess students' works, and marks awarded will be included in the results of HKDSE Examination

1.5 Research Question

Creativity is an important ability of individuals which enables them to live better and have competitive advantage in this fast changing world. Although the Hong Kong government has been promoting the development of creativity and arts education for many years, little research has studied Chinese female adolescents in Hong Kong. I am interested in examining the learning and development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong. In this thesis, I attempted to answer a key overarching question:

> "What constitutes the artistic creativity of Chinese female adolescents in Hong Kong?"

Three specific questions are developed in order to address this main overarching research question:

1. What are the elements that contribute to the development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong?

2. How do these elements affect Chinese female adolescents in developing artistic creativity in the visual arts?

3. What are the implications for Visual Arts teachers and education institutions nurturing artistic creativity among Chinese female adolescents in Hong Kong?

The next chapter presents a literature review of creativity for investigating the research question, with particular emphasis on various factors that affect the development of creativity.

Chapter 2 Literature Review

2.1 Chapter Introduction

In this thesis, I focus on the learning and development of artistic creativity among Chinese female adolescents in Hong Kong. In order to review the literature relevant to this field, I searched electronic library databases from the University of Hong Kong and the University of Nottingham to retrieve articles and books that were related to the development of artistic creativity. Keyword searches were used to identify literature, and the search terms included “creativity” and “artistic creativity”. I also followed the bibliographic references of useful articles and books to search for more works that covered the development of artistic creativity. Except for influential literature, I usually placed a time frame of 30 years on the age of the works to be included in the literature searches. However, there were a number of seminal texts which were included in the literature review, such as Guilford (1959), as they were part of a growing body of work in this field of nurturing creativity.

The structure of the following literature review is framed around the key themes of the three specific questions that are developed to address the main overarching research question. The literature review begins with an array of definitions of creativity, and a brief discussion on major types of creativity. Major creativity theories are examined to identify important personal and environmental factors that affect the development of creativity. The influences of these factors on the learning and

development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong are discussed separately. Creativity in adolescence is examined to understand the characteristics and age range of adolescents. Lastly, a summary of the literature review is provided.

2.2 Definitions of Creativity

Most researchers agree that creativity exists, but the term "creativity" has been defined differently. Some definitions focus on creative person, and some on creative product or creative process. A brief overview on the various definitions of creativity follows.

2.2.1 Creative Person

A creative person is defined as an individual who arrives at a product that has novel aspects (Guilford, 1958). Piers, Daniels and Quackenbush (1960) identified creativity as "the capacity of the individual to avoid the usual routine, conventional ways of thinking and doing things" (p. 347).

Other scholars, like Gardner (1999), have similar interpretation of creativity, but they include an additional element of social acceptance in the definitions. Gardner (1999) stated that "people are creative when they can solve problems, create products, or raise issues in a domain in a way that is initially novel but is accepted in one or more cultural settings" (p.116). This suggests that a person would be described as creative if people in a society accept his or her new idea or product.

2.2.2 Creative Product

Another perspective on creativity is focused on product. Weisberg (1993) explained creativity as "an individual's goal-directed novel and valuable products" (p. 63). Sternberg and Lubart (1999) defined creativity as that which "produces work that is both novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive concerning task constraints)" (p.3). Jeffries (2007) stated that the tangible products of creativity can be "a painting, a poem, a music composition, and a scientific discovery" (p. 487).

Some scholars also emphasised the value of creative products to society in the definitions of creativity. Cropley, Kaufman and Cropley (2008) stated that "for a product to be regarded as creative, it must possess not only novelty, but also relevance and effectiveness" (p. 108). A product has to be accepted by experts or people in a society in order to be deemed creative. Take the case of Vincent Van Gogh. His creative style and works of paintings were not appreciated by experts during his lifetime, even though he was recognised as one of the most influential figures in the history of Western art years after his death. Social acceptance is one of the elements in defining whether a product is creative or not.

2.2.3 Creative Process

Some scholars, like Guilford (1959) and Amabile (1983), defined creativity from the perspective of creative process. Weisberg (2006b) defined creativity as the "processes underlying production of creative products" (p.7). Not surprisingly, various creative processes were proposed by

different scholars. Guilford (1959) stated that there are four stages in creative process: problem recognition, idea generation, evaluation of alternatives, and drawing conclusions that lead to the solution of the problem.

On the other hand, Amabile (1983, 1996) emphasised the effects of social environment on creativity and advocated creativity as a process with five stages: problem or task identification, preparation, response generation, response validation and communication, and the outcome. An individual can go through the creative process in varying orders once the process has begun.

Since it is difficult to examine the creative process of an individual, I focused the study on examining creative persons (i.e., Chinese female adolescents) who have developed artworks with original ideas in the domain of visual arts that are accepted by their Visual Arts teachers.

2.2.4 Innate or Acquired Creativity

Another argument on creativity is whether creativity can be learned. Historically, most personality psychologists thought that creativity was fixed at birth and it could not be increased (Sawyer, 2006). But the belief of innate creativity has begun to change to acquired creativity since the late 19th century. Modern creativity researchers commented that every individual may have certain degree of creativity, and it is possible to enhance creativity through training, practice and experience (Amabile,

1989, Cropley, 2001, Sternberg and Lubart, 1995, Guilford, 1950, Csikszentmihalyi, 1996).

Some scholars further emphasised the importance of right environment and atmosphere in stimulating creativity through training (Stamm, 2008, Amabile, 1996, Kokotsaki, 2011). It is believed that certain people are more creative because they have the resources and knowledge to start the creative processes that are in the cognition of every individual. Education can be one of the methods to foster the creativity of individuals.

Based on the view that creativity can be acquired and trained, I examined what factors may lead to the development of artistic creativity among Chinese female adolescents and explored ways to nurture students' creativity in schools.

2.3 Types of Creativity

Not surprisingly, creativity is further categorized into different types, according to the levels of creativity and the domain of activities.

2.3.1 Big C and Little c Creativity

Some scholars believe that creativity can be distinguished according to different levels of creative magnitude (Runco, 2007, Beghetto and Kaufman, 2007). Big-C or legendary creativity refers to outstanding new discoveries that have significant contributions to society and usually involve long development time, like the invention of the World Wide Web. Little-c or everyday creativity is about useful and important contributions

that occur all the time, but are not world-shaking, like developing a new recipe for a dish; whereas mini-c or personal creativity is defined by Beghetto and Kaufman (2007) as “novel and personally important interpretation of experiences, actions, and events” (p. 75), such as writing a story or making a painting.

In view of limited resources and knowledge, it is hard for adolescents to have Big-C creativity. In this study, I investigated the factors that may nurture the development of mini-c and little-c creativity among Chinese female adolescents.

2.3.2 Generality versus Domain-specificity

Another avenue of categorizing creativity requires the identification of general traits. Some scholars believed in the presence of general traits like flexibility and motivation that tend to be associated with creative behaviour in various domains (Torrance, 1962).

On the other hand, most creativity research results show that creativity is domain specific (Weisberg, 2006a). The term domain is defined as the bodies of knowledge (such as arts, crafts, sciences), which can be learned, practiced, and progressed through the act of creating (Li and Gardner, 1993). Most creative people are creative in a specific domain (Csikszentmihalyi, 1988). Not many people can excel in multiple domains, especially when domains are very different in subject nature.

In view of this, I focused the study of creativity in a particular domain, the visual arts, which is a common subject offered by almost all schools in Hong Kong for primary and junior secondary school students.

2.3.3 Artistic Creativity

Creativity is connected to every aspect of life, and all activity can be considered an art (Bohm, 2004). The study of creativity in the domain of visual arts is related to the investigation of artistic creativity. Artistic creativity is defined as the creativity expressed in any aspect of the arts, which includes visual art (Alland, 1977, Niu and Sternberg, 2001). Visual arts incorporates fine art, folk art, and popular art. It is believed that artistic talent is needed for a person to have good performance in the visual arts (Feldhusen and Goh, 1995).

As artistic creativity is expressed in the domain of visual arts, I focused the study on examining what factors may lead to the development of artistic creativity among Chinese female adolescents in Hong Kong.

2.4 Creativity Theories

Many scholars have studied creativity, and the concepts of creativity have been evolved with time. Some theories focus on the study of individuals, and some are on the interactions among people. Major creativity theories are briefly discussed here in order to identify factors that may affect the development of artistic creativity to be discussed in the next section.

2.4.1 Psychoanalytic Theories

Psychoanalytic theories explain human behaviour and development from the perspective of the unconscious mind. The most important was Freud, who described creativity as a healthy form of sublimation of drives deriving from the id, the primitive unconscious part of the mind (Freud, 1961). According to Freud (1961), creativity and adult behaviour are influenced by events in childhood, and personality is developed before mid-adolescence. It appears that there are connections between art, dreams and children's play.

Similar conclusions were mentioned by other scholars. For example, creativity is shaped by personal experience and the unconscious mind (Jung, 1972); and creativity is the result of one's effort in handling unconscious childhood pain (Miller, 1990).

According to the advocates of psychoanalytic theories, unconscious mind and childhood can influence the development of creativity.

2.4.2 Behaviourist Theories

Different from psychoanalytic theories that view creativity from unconscious mind of a person, behaviourist theories explain human behaviour is the result from a series of stimuli and responses (Mednick, 1962). Skinner (1972), the "Father of Behaviourism", stressed that the behaviour of an individual is affected by his or her reinforcement

experiences. A person will be more willing to engage in creative behaviour if he or she knows that a reward will be received from such behaviour.

Based on the concept of positive reinforcement, if educators provide students a sound foundation for creative thinking in schools, students may continue to have creative behaviour long after they have completed their schooling (Runco, 2007). The way of teaching students has a lasting impact on their creative behaviours.

It is of interest to note that reinforcement such as rewards and positive comments from parents, peers and teachers can facilitate people to learn and develop creativity.

2.4.3 Humanistic Theories

Humanistic theories focus on the study of healthy human mental growth. Maslow (1968), founder of human psychology movement, stated that the ability to express ideas freely without self-criticism is “a potentiality given to all or most human beings at birth, which most often is lost or buried or inhibited as the person gets enculturated” (p. 24).

Moreover, creativity is described as resulting from healthy human growth through the interaction between an individual and the environment (Rogers, 1961). A person can have better interaction with the environment if he or she is willing to try new things, able to play with ideas and rely on own judgement.

Motivation, personality and interaction with the environment are important factors that influence an individual in the development of creativity.

2.4.4 Cognitive Theories

Cognitive theories focus on studying the influence of thinking skills and intellectual processes on creativity (Runco, 2007). Guilford is the pioneer in the study of cognition who stated that divergent thinking and transformation are two types of cognitive abilities associated with creativity (Guilford, 1988). Divergent thinking is related to the ability of fluency (generating lots of ideas), flexibility (generating various ideas from different perspectives), originality (generating new ideas), and elaboration (improving existing ideas); whereas transformation is the ability to produce new ideas with existing knowledge and feelings.

Different perspectives of cognition are also studied, including memory, divergent/convergent thinking, problem finding/problem solving, and association, and the impacts on creativity (Perkins, 1981, Weisberg, 1986). According to the advocates of cognitive theories, cognitive thinking is a factor that affects the development of creativity.

2.4.5 Socio-cultural Theories

Socio-cultural theories focus the study of creativity on social interaction. One of the famous scholars in this area was Vygotsky (1967), who advocated that childhood, adolescence and adulthood are the three

important stages in the development of creativity. Childhood is the stage for children to have creative imagination, and they pay little concern on social conventions (Cropley, 2001). Adulthood is another stage for individuals to have creativity. Adults are influenced by the social environment to change and combine ideas through the process of thinking.

Adolescence is an important transition stage to have creativity. During adolescence, individuals are less concern about social controls and can develop their ability to manipulate abstract ideas. Moreover, learning is embedded within social events, and the interactions with events in the environment influence an individual in the development of creativity.

According to socio-cultural theories, formal schooling, social interactions and cultural settings are important factors that influence the creativity development of individuals.

2.4.6 Systems Theories

Systems theories take a broad view to explain creativity as an interaction between a person and the external environment. Many scholars, like Csikszentmihalyi, Sternberg and Lubart, have worked in this area. Csikszentmihalyi (1990) stated that "creativity is the result of the interactions between three sub-systems: a domain, a person, and a field" (p. 200). A person acquires knowledge in a domain and produces the variations, which may be selected by members and experts in a field. The selected variations will then be passed by the field to the domain.

Amabile's (1996) componential model of creativity further elaborated the influence of social environment on creativity. Task motivation, domain-relevant skills and creativity-relevant processes are the three main components in Amabile's model. According to Amabile (1996), task motivation is the most important component and is greatly influenced by the social environment which affects how people perceive activities. Domain-relevant skills are the knowledge and technical skills in a domain in which a person can have creativity. An individual must have the opportunity to acquire information, knowledge and skills before he or she can use these in a creative way. The final component is creativity-relevant processes which are about cognitive style and methods in generating novel ideas (Amabile, 1996). To develop one's creative thinking, a person has to focus attention on a task over time and know the strategies to have creative thinking, such as brainstorming, and skills to search information from his or her memory and environment.

According to the various scholars of systems theories, the development of creativity is influenced by an array of factors that interact between an individual and his or her external environment. Motivation, knowledge, cognitive processes, family, and social environment are important factors that influence the development of creativity.

In summary, according to the major theories of creativity, an individual is shaped by a mix of personal, family, social and cultural influences. The complex interactions of these factors can influence people in the

development of creativity. Table 2.1 is a table adapted from Starko (2010) that listed out the main types of creativity theories, the advocates and their primary assertions discussed in this review. Important factors that can influence the development of creativity are identified in the last column of the table, and are discussed in the next section.

Table 2.1: Major types of creativity theories

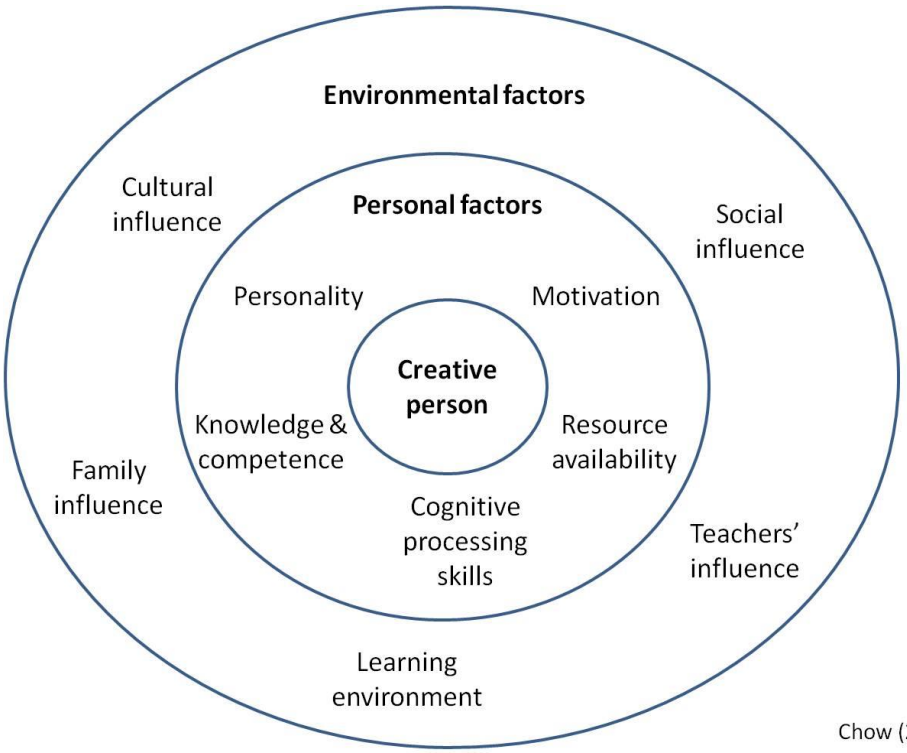
Types of theories	Major studies	Primary assertion	Factors affecting the development of creativity
Psychoanalytic theories	Freud, Carl, Miller	Creativity can be explained by unconscious process	Unconscious mind, childhood events
Behaviourist theories	Skinner, Mednick	Creativity is the result of responses to specific stimuli	Rewards, reinforcement
Humanistic theories	Maslow, Rogers	Creativity is a natural part of healthy development	Motivation, personality, environment
Cognitive theories	Guilford, Perkins, Weisberg	Cognitive structures and processes result in creativity	Cognitive thinking and processes
Socio-cultural theories	Vygotsky	Interactions among individuals affect creativity development	Formal schooling, social environment, culture * Adolescence is a special stage in developing creativity
Systems theories	Csikszentmihalyi, Feldman, Sternberg , Lubart, Amabile	Creativity entails complex interactions of elements that may include cognitive processes, personality traits, and interactions with the environment, domain and field	Intrinsic motivation, knowledge, skills in creative thinking, family, social environment

Source: Adapted from Starko (2010).

2.5 Factors Affecting the Development of Creativity

With reference to the major creativity theories mentioned in the above section, ten factors that can influence the development of creativity are identified and grouped into two main categories for discussion. They are the personal and environmental factors.

Figure 2.1: Important factors affecting the development of creativity



Chow (2014)

2.5.1 Personal Factors

The personal factors studied in this thesis include personality, motivation, knowledge and competence, cognitive processing skills, and resource availability. The personal factors are explained as follows:

1. Personality

Personality, as one of the personal factors, is playing an important role in creativity (Guilford, 1950, Weisberg, 2006a). According to Guilford (1959) an individual's personality is "his unique pattern of traits" (p. 5), which make people differ from one another. From the comprehensive review of research on personality and creativity, it is concluded that personality traits are determinants of creative behaviour (Dellas and Gaier, 1970).

Some personality traits are defined by scholars as assisters that are necessary for creativity. According to Guilford (1950), personality factors that lead to creativity include sensitivity to problems, ideational fluency, flexibility, ideational novelty, synthesizing ability, span of ideational structure, and evaluating ability. Black (1990) developed a list of "32 traits of creative people" and is shown in Table 2.2:

Table 2.2: 32 Traits of creative people identified by Black (1990)

1. Sensitive	11. Able to fantasize	21. Self-disciplined
2. Not motivated by money	12. Flexible	22. Self-knowledgeable
3. Sense of destiny	13. Fluent	23. Specific interests
4. Adaptable	14. Imaginative	24. Divergent thinker
5. Tolerant of ambiguity	15. Intuitive	25. Curious
6. Observant	16. Original	26. Open-ended
7. Perceive world differently	17. Ingenious	27. Independent
8. See possibilities	18. Energetic	28. Severely critical
9. Question asker	19. Sense of humour	29. Non-conforming
10. Can synthesize	20. Self-actualizing	30. Confident
		31. Risk taker
		32. Persistent

Source: Stamm (2008).

Other scholars, like Amabile (1983) and Runco (2007) also developed similar personality traits. Starko (2010) grouped the lists of personality characteristics developed by scholars over the years into nine trait clusters. The clusters include willingness to take risk, perseverance and commitment to task, curiosity, openness to experience, tolerance for ambiguity, broad interests, value originality, intuition and deep emotions, and being internally occupied or withdrawn.

On the issue of risk-taking, the willingness of an individual to take risk in creative behaviour depends on whether one believes that he or she has creative ability or not. Creative self-efficacy is a term defined by Tierney and Farmer (2002) as "the belief one has the ability to produce creative outcomes" (p. 1138), which is strongly related to actual creative performances of an individual. People have to believe in themselves, otherwise they may not pursue creative idea that is unconventional and often involves a risk in it (Rubenson and Runco, 1992). This suggests that individuals would engage more in creative behaviours when they think they have creative ability.

Adolescence is an important stage in human life. Some creativity scholars found that the personalities of young creative people are similar to those of creative adults (Dellas and Gaier, 1970, Feist, 1999). Based on a research on 1,300 Chinese adolescents, Qian, Plucker and Shen (2010) concluded that the creative personality can be grouped into three clusters. The internal factor comprises self-confidence, norm-doubt, internal

motivation, and persistence; the external factor is related to curiosity, risk-taking, openness and independence; and the self factor includes self-acceptance. However, people tend to avoid risk with the development of formal thinking from the age of 12 (Piaget, 1962). The play-safe attitude may prevent adolescents and adults from creative thinking and behaviour.

Even though some creativity scholars stated that certain personality traits are related to the development of creativity, others argued that it is not possible to find one single or a set of personality trait that leads directly to creativity (Runco, 2007). Every individual is unique, and creative personality may vary for different domains. The research findings of Getzels and Csikszentmihalyi (1976) supported this argument because career success of students cannot be predicted by the personality characteristics measured in art school.

It is difficult to have a conclusion on the issue of personality. More studies and researches are needed to clarify the relationship between personality and creativity. In this study, I investigated the personality traits of Hong Kong female adolescents and the influence on their creative behaviours in the visual arts.

2. Motivation

Motivation is another important factor that has been studied by many recent creativity research (Kreitler and Casakin, 2009). Motivation is the driving force for a person to develop, improve, or maintain competence,

and to express oneself, develop meaningful interpretations of experience, and cultivate one's own goals (Runco, 2005).

Perkins (1981) stated that creativity is the result of six elements, of which four are closely related to motivation, and they are the drive to create order out of chaos, willingness to take risks, willingness to ask unexpected questions and the feeling of being challenged by an area. Motivated individuals will strive for competence or insist on solving problems (Chand and Runco, 1992). Motivated individuals are interested in learning new knowledge and ways of doing things when they need to handle a task or problem (Runco, 2005).

In general, motivation for creativity can be grouped into two main types, and they are (a) intrinsic motivation and (b) extrinsic motivation. Explain as follows:

(a) Intrinsic Motivation - Intrinsic motivation is about the joy and good experience in doing a task or a creative behaviour which attract people in doing it. Amabile (1989) stated that "people will be most creative when they feel motivated primarily by the interest, enjoyment, challenge, and satisfaction of the work itself" (p. 54). Intrinsic motivation characterizes activities whose reward is inherent in the creativity itself (Gardner, 1993). Intrinsic motivation is often a consequence of discovering a problem, which excites the person's interest and leads to a desire to spend time searching for a solution (Runco, 1994). Amabile (1996) pointed out that

people are more creative if “they are allowed to do something they love”(p. 305).

Conti, Amabile and Pollak (1995) pointed out that people who work in creative field, like artists, tend to be more intrinsically motivated toward their work than the general public. The joy of creativity motivates people to have creative behaviours.

(b) Extrinsic Motivation - Extrinsic motivation is defined by Lepper, Greence and Nisbett (1973) as the motivation to engage in activity mainly to get some rewards external to the activity itself. Extrinsic motivation comes from sources outside the task, like constructive feedback, evaluation, reward, praise, and even avoidance of punishment (Cropley, 2001, Starko, 2010, Amabile et al., 1996). People are attracted by external rewards to have creative behaviours.

However, some researchers argued that extrinsic motivation is not good for creativity. Rewards reduce intrinsic task interest by reducing the degree of self-determination and autonomy(Deci and Ryan, 1985). Runco (2007) also had similar argument, and stated that “educators should avoid emphasizing grades, incentives and other extrinsic motivation, so that students follow their own interests (intrinsic motivation) without worrying about pleasing the teacher” (p. 189).

Another school of thought on motivation advocates the use of both extrinsic motivation and intrinsic motivation to produce creative behaviours (Weisberg, 2006a, Amabile, 1996). For example, Amabile

(1993) stated that extrinsic motivation can be further classified into synergistic extrinsic motivators and nonsynergistic extrinsic motivators. Synergistic extrinsic motivators can work together with intrinsic motivators and provide information for a person to better complete a task; whereas nonsynergistic extrinsic motivators are incompatible with intrinsic motivators and make a person feels controlled (Collins and Amabile, 1999). Teachers' recognition and promise of giving more time for students to pursue their interesting ideas are some of the examples of synergistic extrinsic motivators, which can work together with the intrinsic joy of learning in fostering the creativity of students.

Motivation is one of the significant factors discussed by many creativity theorists over the years. In this study, I examined the types of motivation that can influence the development of artistic creativity among Chinese female adolescents in Hong Kong.

3. Knowledge and Competence

Knowledge and creativity are complementary (Sternberg and Lubart, 1995, Amabile, 1996). Most activities require certain technical skills and knowledge to perform the tasks. The deep knowledge of a field is called the "knowledge base" of creativity, and it is essential to have a knowledge base in a domain (Feldhusen, 1995, Feldhusen, 2006). Stamm (2008) stated that "the existing body of knowledge is as vital as the novel idea and really creative people spend years and years acquiring and refining their knowledge base" (p. 2). This implies that an individual may be able to

generate creative thinking after he or she has the opportunity to acquire the knowledge of a specific task and get familiar with the skills in performing the task.

Knowledge can be classified into different types. Knowledge includes "knowing what" (conceptual/declarative knowledge) and "knowing how" (procedural knowledge to be acquired through experiential learning) (Craft, 2005). The influence of knowledge on creativity can be divided into two development stages: the first stage is the acquisition of the necessary domain-specific expertise, whereas the second stage involves the manifestation of that expertise in overt creative products (Simonton, 2006).

In addition to knowledge, competence can influence the creative behaviour of individuals. The level of competence in a domain is related to the amount of time and learning opportunity allowed for acquiring the knowledge base of a given domain. Creativity may be enhanced with intrinsic motivation and increased involvement in a task (Amabile, 1996). Eminent artists such as Picasso required years of study and practice to have the expertise before they produced breakthrough works (Weisberg, 2006b). For young art students, they need to spend many years in purposeful learning, and put effort to achieve competence in the visual arts domain (Rostan, 2010).

Competence is also related to the level of confidence. Tierney and Farmer (2002) pointed out that "students' confidence in their creative ability

influences their decisions to behave creatively, the amount of effort they are willing to invest and the extent they will persevere when confronted with difficulties" (p. 1138).

However, research has shown that high expertise does not always have novelty production (Cropley, 2001). Knowledge is favourable for creativity when it is accompanied by insight and flexibility of the individuals. Experts develop huge of knowledge bases in the domain-specific area, and some may often make assumptions on areas of their expertise that prevent them from original and creative thinking (Runco, 2007). Reading outside one's area of expertise could give an individual a new perspective on his or her own field (Martinsen, 1995). Knowledge in different areas might enhance the creativity of individuals.

In view of the above discussions, domain-specific knowledge and certain degree of competence are needed for individuals to generate new ideas and creativity. In this study, I investigated the influence of knowledge and competence on the development of artistic creativity among Chinese female adolescents in Hong Kong.

4. Cognitive Processing Skills

The ability to think and analysis is another crucial factor that affects the development of creativity. Some theorists believed that divergent thinking is an important form of cognitive thinking process to generate creativity (e.g., Guilford 1950; Cropley 2001). Divergent thinking involves processes like transforming, or producing multiple answers from the available

information (Cropley, 2001). In addition, the ability of information analysis, problem finding, critical thinking, and decision making are needed in creative development (Runco, 2007).

However, in recent years, some creativity researchers like Puccio, Treffinger and Talbot (1995) stated that there is no single cognitive processing strategy that is most favourable for creativity. For example, both divergent and convergent thinking processes are required to generate creativity, and creative people are good at switching back and forth at different points in the creative process (Sawyer, 2006).

On the issue of intelligence, it is interesting to note that high intelligence is not a prerequisite for people to have creativity. Intelligence is defined as an ability to understand complex ideas, to adapt to the environment, to learn from experience and to engage in reasoning to overcome obstacles (Neisser, 1996). Intelligence reflects an individual's cognitive abilities, and is often operationally measured by an IQ test. However, creativity is more than intelligence, and cannot be accounted for adequately in terms of IQ (Guilford, 1950). There is no absolute correlation between high IQ and a high level of creativity (Balkin, 1990). For example, childhood academic intelligence (giftedness) is a relatively poor predictor of adult creative achievement (Feist, 1999). Intelligent people are not necessarily creative.

In this study, I examined the cognitive thinking process of Chinese female adolescents when they engage in activities of the visual arts. As

intelligence is not directly related to creativity, their intelligence level is not studied.

5. Resource Availability

Many creativity scholars believed that the availability of resources (including time, money, mentors) facilitates creativity. Csikszentmihalyi (1996) stated that the provision of materials and intellectual resources (such as training opportunity) to all talented and interested members of the society is an effective way to nurture creativity.

Among the various types of resources, time is needed for individuals to learn knowledge in a domain and acquire expertise (Weisberg, 2006a, Starko, 2010). In a research on young art students, it is found that creativity can be increased with the increasing years of training (Rostan, 2010). This is similar to the concept of ten-year rule advocated by Gardner (1993) that creative individuals tend to come up with major breakthroughs that are 10 years apart. However, it is interesting to note that excess resources can diminish creativity, and certain amount of hardship might have a positive effect on individuals (Csikszentmihalyi, 1996).

In this study, I examined what types of resources that are important and their influence in enhancing the artistic creativity among Chinese female adolescents in Hong Kong.

2.5.2 Environmental Factors

The environmental factors studied in this thesis include cultural influence, social influence, family influence, learning environment, and teachers' influence. The environmental factors are discussed as follows:

1. Cultural Influence

Contemporary creativity theories include culture as a crucial aspect in discussing creativity (Csikszentmihalyi, 1988, Starko, 2010). According to Hofstede and Bond (1988), culture is defined as "the collective programming of the mind that distinguishes the members of one category of people from those of another" (p. 6). People in different nations have different cultural traits that are difficult to change.

Moreover, culture may influence creativity through fostering the development of creativity and through the influence of social values used in judging creativity (Niu and Sternberg, 2001). Culture communicates to individuals via standards, norms and values, and influences people development, values, thinking and behaviour (Runco, 2007). Culture can affect people's perception and their criteria for judging creativity.

Hong Kong is an international city in the world today. After its return to Chinese sovereignty in 1997, Hong Kong became a special administrative region of mainland China. Although approximately 97% of the population in Hong Kong is native Cantonese speaking, Hong Kong culture is diverse

because it stems from local practices enriched by Chinese, Asian and international influences (Wee, 2010).

According to the cross-cultural comparison study of Hofstede (2017), similar to other Asian societies, Hong Kong has a high ranking in collectivism and long-term orientation. Under the influence of the collectivist culture, the self-concept of a person is interdependent with the values of family, friends, community members, and authority figures (Markus and Kitayama, 1991). People in Hong Kong may act in the interests of their in-groups (such as family), and value perseverance in achieving results. Cheng (2011) stated that "people in Hong Kong tend to value actions and attitudes that affect their future, instead of immediate happiness and enjoyments" (p. 69).

It is of interest to note that people in Hong Kong place a huge emphasis on academic success (Kashdan and Yuen, 2007). Students compete for academic success to get into a local university, and that would be an efficient way to have a better life in the future. In a study of Asian students, 40% of Hong Kong students mentioned intrinsic interest in their studies and extrinsic interest in obtaining a good career to support themselves and their family (Kember, 2000). Having a high-income job after graduation is the dream of most adolescents in Hong Kong. Under the competitive education system in Hong Kong, adolescents need to study hard for various examinations and compete for a finite number of university openings.

On the other hand, the way of creative training in Hong Kong is affected by the Chinese culture. Kim (2005) stated that the Confucian principles of rote learning, hierarchical relationship and conformity have negative influence on the development of creativity in Hong Kong; and "students seek to avoid appearing different from others, individuals learn to restrain themselves to maintain group harmony, and the fear of making a mistake or feeling embarrassed keeps many students silent" (p. 341). Creativity is discouraged because children are under pressure to conform to prescribed standards. Individual differences are not encouraged in classroom teaching in most traditional schools in Hong Kong (Kim, 2005, Hui and Yuen, 2010).

In addition, young people in Hong Kong do not highly value imagination. Hong Kong secondary school students attribute success to, in order, effort, interest in study, study skill, mood and ability (Hau and Salili, 1991). Imagination and creativity are not on their list of success factors. Similar findings are also concluded in a study of Hong Kong high school adolescents, and the value of being imaginative was ranked very low, 16th on a list of 18 values (Cheung et al., 2004, Lau and Wong, 1992). The creativity of adolescents in Hong Kong may be hindered by the conservative culture and competitive education systems, which do not encourage imagination and creative behaviours. For this reason, I investigated the influence of culture on the development of artistic creativity among Chinese female adolescents in Hong Kong.

2. Social Influence

Some creativity scholars argued that human interaction plays a role in the development of creativity (Cropley, 2001, Runco, 2007). Creativity is a phenomenon that emerges through an interaction between producer and audience (Csikszentmihalyi, 1990). Social environment affects creative product and provides criteria for the judgment (Amabile, 1990). Experts and people in the community are the judges for the creativity of a new product or an idea (Feldhusen and Goh, 1995). Perception, the way individuals perceive environmental and situational variables also affect their behaviour and creative work (Nicol and Long, 1996). Thus, creative behaviour of an individual may be enhanced or hindered by other people in a society.

Csikszentmihalyi (1988) stressed that "social support networks" are vital determinants of creativity which include parents, teachers, spouses, mentors and colleagues. The networks enable creative people to acquire high level technical skill, develop and maintain intense motivation in creativity. Artists are highly dependent on social networks for esthetic success (Simonton, 1984). John-Steiner (2000) argued that creative collaborations among students can help them to generate ideas from "joint thinking, from significant conversations, and from sustained, shared struggles to achieve new insights by partners in thought" (p. 3). Students can form thought communities and support each other to continue their creative behaviours.

Some researchers found that creativity either stays at the same level or begins to diminish in adults (Denel 1981; Gonen and Buluc 1997; cited in Hasirci and Demirkan 2002). The diminishing in creativity may be due to the effects of the social rules and regulations. As a person grows older, he or she becomes more aware of the society's rules about the environment that detracts him or her from the creativity within (Hasirci and Demirkan, 2002). Likewise, creativity becomes increasing rare in youths and adults, as they learn and behave in a way to fit the social environment (Goswami, 1996).

Moreover, some studies have found that creativity is an inverted U function of educational level. An inverted U curve means that there exists an optimal level of training beyond which additional education can have deleterious effects (Simonton, 2006). After getting enough education to acquire the domain, additional training can oversocialise a person, resulting in a rigid, conventionalized way of thinking (Sawyer, 2006). Similar findings are concluded in a Hong Kong government-funded arts education research project focusing on motivation to study the arts at primary and secondary school levels (McPherson et al., 2005). It is found that students' perceptions of the arts subjects (visual arts and music) decreased as they progressed through each grade level. The two arts subjects were perceived as "far less important to study" and "far less useful in terms of their long-term aspirations", and parents did not value these arts subjects as much as academic ones and did not expect their

children to do well in them. The study reflects that adolescents in Hong Kong have a low value perception on artistic creativity.

In this study, I examined the influence of human interaction and social support networks on the development of artistic creativity among Chinese female adolescents in Hong Kong.

3. Family Influence

Family influence in creativity is another important factor discussed by many creativity theorists. Creativity can be boosted through early exposure to the wealth and variety of life (Csikszentmihalyi, 1996). Family values and lifestyles influence the development of creativity among children and adolescents.

Among the various aspects of family influence, parental attitudes and behaviours may have more direct influence on children's creativity. Parents of creative children treat them with respect, with confidence in their abilities, give them responsibilities with autonomy and freedom and expect them to do well (Mackinnon, 1962, Domino, 1969, Dewing and Taft, 1973, Runco, 2007). Close supervision from parents may suppress children from the development of creativity. Parents also need to model independent and intrinsically motivated activity, and encourage playful exploration of activities (Amabile, 1996).

In addition, parental encouragement of art (and creativity) may have a positive influence on their children. For example, Picasso's father was a

painter and a teacher of painting, so Picasso was exposed from an early age to training from a professional (Weisberg, 2006b); Alexander Calder was raised in an artistic family (his mother was a painter and his father and grandfather were sculptors), and was strongly encouraged to participate in artistic activities since childhood (Weisberg, 2006b). On the other hand, parental vigilance, authoritarianism, control, dominance and restrictiveness inhibit the development of children's creativity (Getzels and Jackson, 1961, Miller and Gerard, 1979). Parental interests outside the home free children from close supervision and emotional relationships with parents, which tend to stifle the development of creativity (Albert, 1971).

Family background also has impact on the development of creativity, but the findings are somewhat inconsistent and unclear. Miller and Gerard (1979) reviewed previous studies and concluded that the socioeconomic status of parents is more positively associated with the verbal creativity of their children, but which seems not necessarily to greater creativity. Socioeconomic status of parents may determine the diverse experience a child will have and also one's exposure to new things. For example, higher-income families are more likely to provide their children with painting or music lessons, and to take them to museums or concerts (Sawyer, 2006).

The birth order effect on creativity development is another controversial issue. Family size and birth order are not consistently related to creativity in children (Miller and Gerard, 1979). Most original artists were more

likely to be first born (Csikszentmihalyi, 1965), and second born child is the most likely to develop a rebellious personality and behave in an unconventional and creative manner (Sulloway, 1996). It is difficult to say with certainty that first born or later borns are more likely to be creative. It probably varies from one creative domain to another, and also with the type of problems facing the domain (Sawyer, 2006). On the issue of siblings, a few studies found that there is a tendency for highly creative children to have younger sibling close in age (Helson, 1968, Miller and Gerard, 1979).

People are influenced by family and parental behaviours, especially during childhood period. In this study, I therefore investigated the influence of family background and parental behaviour on the development of artistic creativity among Chinese female adolescents in Hong Kong.

4. Learning Environment

Many scholars pointed out that a positive learning environment in schools is important for creativity development. Csikszentmihalyi (1996) emphasised the importance of having a “congenial” learning environment in fostering creativity, which is open to new ideas, with positive attitude to novelty, acceptance of personal differences and willingness to reward divergence. Schools with a positive learning environment can facilitate students to acquire both cognitive abilities (fluent thinking, flexible thinking, original thinking and elaborate thinking), and affective abilities (favour risk-taking, complexity or challenges, curiosity and imagination)

(Cheng, 2010). A holistic education that emphasises the development of the whole human being is advocated by Steiner (2000), and such education integrates the emotional, social, physical, creative/intuitive, aesthetic and spiritual aspects for students to grow and develop. Thus, schools need to provide a supportive learning environment for students to explore and discover the joy of creativity.

Evaluative feedback also encourages students to engage in creative behaviour. Classrooms that provide unconditional support and give individual a sense of psychological safety can encourage students to express themselves in spontaneous and creative ways (Rogers, 1995). Teachers need to provide more positive feedback to encourage student creativity, especially for shy individuals who may be sensitive to evaluative feedback (Cheek and Stahl, 1986). Students are more willing to express their new ideas in a supportive learning environment. According to Amabile, Goldfarb and Brackfield (1990), the expectation of evaluation is proved to have negative effects on artistic and verbal creativity. But some scholars claimed that, instead of giving unconditional positive rewards, some sort of tension is necessary for individuals to grow and develop creative efforts (Runco, 2007).

In addition to focus on the knowledge transfer to students, schools need to promote networks of relationships in the classroom setting, encourage discussion and the exchange of ideas and non-verbal communication among students in order to foster both creativity and interpersonal

communication skills (Passanisi et al., 2015). Group work is one of the methods to encourage communication and stimulate creativity. It is found that adolescents learn well in multi-disciplinary group situations (Reid and Petocz, 2004). The survey conducted by Leong (2010) in Hong Kong also found that most visual arts students in secondary schools placed high importance on creative activities (creating artworks) in their ideal secondary arts classes and thought group learning was beneficial for cultivating their creative thinking.

Furthermore, schools need to provide a favourable environment to encourage students in problem finding and problem solving. Students should be given the opportunity to discover problems and develop questions themselves, rather than just answer them (Runco, 2007). This is particularly important for the domain of visual arts, as students need to practice to acquire the skills and have the actual experience in implementing their creative ideas. Students cannot just follow teachers' instructions without questioning and practice. The availability of school facilities (such as computers, visual art rooms and studios) can encourage students to practice new skills that stimulate their artistic creativity.

In addition to formal education, individuals can acquire art knowledge and have creative development in the arts through activities outside the classroom (Simonton, 2006). Most students in Hong Kong like to attend various types of tutorial classes after school, such as painting class and English drama class. A positive and happy learning environment in these

classes is highly needed to encourage and stimulate learners to develop their creative ideas and put them into practice.

Hong Kong is with a highly competitive learning environment which has found to diminish the intrinsic value of learning, decrease learning motivation, lower the quality of learning and undermine creativity (Zeng, 1999). Students in primary, secondary and tertiary educational institutions are exposed to a highly rigid curriculum. Hong Kong education system consists of various highly stressful and competitive examinations, which place an emphasis on rote memorization (Cooper, 1980). The educational experience for adolescents in Hong Kong is highly structured and uniform.

Hong Kong schools, especially secondary schools, are under the influence of an examination-oriented system which emphasises competition and rote-learning at the expense of student-centred teaching methods (Burton, 2010). The use of teacher-centred approach seems to be efficient with better time control and can result in standardised test scores, but at the cost of student creativity (Beghetto and Plucker, 2006). Students are expected to give standard answers in classrooms and examinations, which actually restrain them from creative thinking and activities. Assessment methods need to provide opportunities for students to be creative, to demonstrate creativity and to critique creative processes and outcomes (Reid and Petocz, 2004).

Moreover, academic performance and examination results are highly valued by students, teachers, parents and education institutions. Biggs

(2003) stated that most students would “focus their learning on what they think they will be tested on” (p. 182). Thus, most educational efforts emphasise convergent thinking (finding or remembering one correct or conventional answer), and may do little for creative potentials (Runco, 2007).

The average class size in Hong Kong is usually large with 35 students. Jarvis, Holford and Griffin (2003) pointed out that teachers lecture a lot and focus closely on getting the best results in public examinations, which are highly competitive and put intense pressures on students and teachers. Moreover, the learning environment in Hong Kong is still quite conservative. Students are expected and used to keep quiet, listening to teachers, daring not to speak up (especially strange ideas or those denying the norm), and students are used to rote learning, paying great effort in memorizing knowledge and seeking standard teacher-approved answers (Cheng, 2010). Teachers usually expect students to improve their artistic skill by imitating the classics (Moran, 2010). The conservative classroom culture hinders students from developing different thinking skills and creativity.

Creativity research works have demonstrated a connection between learner-centred classrooms and the development of student creativity (Beghetto and Plucker, 2006). Thus, it is necessary to change classroom culture and assessments into more learner-centred so as to induce creativity in learning. In this study, I examined the learning environment

and its influence on the development of artistic creativity among Chinese female adolescents in Hong Kong.

5. Teachers' Influence

Teachers have frequent direct contact with students, and they play an important role in stimulating and encouraging the creative thinking of students. Csikszentmihalyi's (1996) system theory predicted that teachers may be significant gatekeepers in the development of their students' creative potential. Teachers can act as facilitators of learning and moderators to facilitate the development of creativity. Creative teachers are the most likely to foster creative students, both by modelling creative behaviour and by providing creative tasks (Cropley, 1997). Moreover, teachers who look for new and different ways to teach, encourage creativity in the classroom, value creativity in the work of their students can act as role models to stimulate the creativity of their students (Smith and Smith, 2010).

The way creativity is taught is greatly dependent on teachers' ability to recognise, understand and support students' creativity (Cropley, 2001). Creative teachers can use different teaching strategies to encourage creativity in the classroom. Soh (2000) listed out nine teachers' creativity-fostering behaviours, including independent learning; cooperative learning; motivation in mastery of knowledge; suspended judgment; flexibility in thinking; self-evaluation; building on students' ideas; opportunities for trial; and positive coping with frustration in learning. Besides providing

support to bright students, teachers need to identify and encourage students who are not yet productive but have the potential of creativity (Runco, 2007).

However, the creativity of students may be inhibited by the conservative thinking of teachers. It is found that, although teachers proclaimed that creativity was encouraged in the classroom, they in fact disliked students to display specific creative characteristics, such as asking too much or expressing many ideas in classroom (Westby and Dawson, 1995). Teachers who claim to treasure creativity still seem to believe that the ideal student is polite, punctual, conventional, and anything but nonconforming (Torrance, 1963, Raina et al., 1980). Teachers have been found to associate creativity with nonconformity, impulsivity and disruptive behaviour (Chan and Chan, 1999). Creativity is unpredictable and may be a problem for teachers in Hong Kong, especially when they have to face a big class with more than 35 energetic students.

The teacher education in Hong Kong in the past mainly serves the purpose of training teachers for teaching knowledge and shaping moral values, but not for eliciting creative mind. Teachers themselves received traditional education in their studies, which shaped them with conservative thinking style, and some of them have difficulties in developing creative teaching skills and assessment to stimulate the creativity of their students. Most Chinese educators use direct instruction in teaching students as they are influenced by Chinese culture to believe that the period of education in

school is the time for children to learn basic skills systematically and to acquire the appropriate knowledge (Niu and Sternberg, 2001). This is also the reason that teacher-centred teaching approach is still common in most classrooms in Hong Kong. Teachers need to change their attitude on creativity development for the benefit of students.

Moreover, a recent study found that a sample of Hong Kong teachers with adequate knowledge about good practices for fostering students' creativity did not use the skills in their actual classroom practices. This was possibly due to inhibiting influences that are out of a teacher's control such as limited teaching time, workload, and pressure of examinations. In this study, I therefore examined the influence of teachers and their teaching styles on the development of artistic creativity among Chinese female adolescents in Hong Kong.

In summary, individuals are influenced by various personal and environmental factors that may enhance or hinder their development of artistic creativity. The whole community, including parents, teachers, government bodies need to provide opportunity and favourable environment for nurturing the artistic creativity among adolescents.

2.6 Creativity in Adolescence

Adolescence is an important stage in the development of creativity. Young people during adolescence begin to express their personal life in visual terms artistically based on skills acquired during middle childhood

(Gardner, 1980). Adolescents are at the peak periods during which creativity is most likely to be worked on and developed (Dacey, 1989).

However, research has shown that after this stage, creativity either stays at the same level or begins to diminish (Denel 1981; Gonen and Buluc 1997; cited in Hasirci and Demirkan 2002). Adolescents are under peer pressure to confirm when they get into higher grades of schooling and are careful to take trials and to express themselves freely (Lau and Li, 1996, Lau et al., 2004). Thus, adolescence is a golden stage to nurture creativity.

On the other hand, it is quite hard to get exactly the same age range for adolescence among different scholars. Social scientists who study adolescence usually differentiate this period of growth into different stages. Early adolescence covers the period from about age 10 through age 13; middle adolescence, from age 14 through age 18; and late adolescence (or youth), from about age 19 through age 22 (Arnett, 2000, Kagan and Coles, 1972, Keniston, 1970). People in the adolescence are the approximate ages that attending at secondary school, high school, and college.

As adolescence is an important stage in the development of artistic creativity, I focused the study on examining what factors may nurture the development of artistic creativity among Chinese female adolescents in Hong Kong who are aged 15 to 20.

2.7 Summary of the Literature Review

The literature cited has provided comprehensive descriptions from classic and recent articles on creativity. That body of literature included descriptions of some work regarding the definitions of creativity, types of creativity and major creativity theories throughout the years. Significant factors specified in various creativity theories were explored to analyse their influence on the development of artistic creativity.

Creativity can be acquired and trained is concluded from the literature review. Modern creativity researchers found that every individual may have certain degree of creativity. It is possible to enhance creativity through training, practice and experience (Amabile, 1989, Cropley, 2001, Sternberg and Lubart, 1995, Guilford, 1950, Csikszentmihalyi, 1996).

Literature regarding personal and environmental factors identified from creativity theories was examined to find out their influences on the development of artistic creativity among Chinese female adolescents. The five personal factors are personality, motivation, knowledge and competence, cognitive processing skills, and resource availability; and the five environmental factors discussed include cultural influence, social influence, family influence, learning environment, and teachers' influence.

The next chapter presents a discussion on the research methodology and methods used to conduct the study on the development of artistic creativity among Chinese female adolescents in Hong Kong.

Chapter 3 Research Methodology and Methods

3.1 Chapter Introduction

This chapter presents the research methodology and methods used to examine the development of artistic creativity among Chinese female adolescents in Hong Kong. A discussion on the ontology and epistemology of this research, research design, identification of sample, field questions, data collection procedures, data analysis methods and research ethics are covered.

3.2 The Ontology and Epistemology of this Research

The world is changing fast under the ever-increasing influence of globalization and technological advancements. People need to be flexible and resourceful in order to adjust to the rapid changing environment. Creativity has been recognised as a core ability of individuals for enhancing personal and social development (Landry, 2000). As a mother and a college lecturer, I am interested to find out what constitutes artistic creativity among Chinese female adolescents in Hong Kong.

I conducted this study of nurturing artistic creativity carefully and systematically. After extensive reading of literature on creativity, I found that modern creativity researchers, like Guilford (1950), Amabile (1989) and Csikszentmihalyi (1996), supported the notion of acquired creativity. Every individual has certain degree of creativity, which can be enhanced through training, practice and experience. I based on the view that

creativity can be acquired and trained to formulate the three specific questions: (1) What are the elements that contribute to the development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong? (2) How do these elements affect Chinese female adolescents in developing artistic creativity in the visual arts? and (3) What are the implications for Visual Arts teachers and education institutions nurturing artistic creativity among Chinese female adolescents in Hong Kong?

Further, with reference to Burrell and Morgan's analysis of methodological assumptions about the nature of social science, I adopted a subjectivist approach (Burrell and Morgan, 1979). I viewed the development of artistic creativity as the personal and subjective experience of individuals, and which can be studied by using life history research methodology to gather first-person narratives from every subject in order to understand their unique experiences and find out the factors that affect their development of artistic creativity. In line with many life history researchers (Goodson and Sikes, 2001, Merrill and West, 2009), I trusted the narratives disclosed by the participants as they volunteered to participate in this research and the narratives depicted the personal life experiences and influences that had affected their development of artistic creativity in the visual arts.

Major creativity theories were studied to identify key factors that influence people on the development of artistic creativity. The influence of these factors was examined using a life history research methodology to

demonstrate what hold significance in the lives of the participants for the development of their artistic creativity in Hong Kong. However, the data collected for this study is of a non-generalisable nature given the limited sample size and the methodological paradigms that I adopted in the research.

3.3 Research Design

In this thesis, I focused on examining the development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong. As I viewed the development of artistic creativity is the personal and subjective experience of individuals, the life history research is an appropriate method to collect first-person narratives in finding out what factors that affect their development of artistic creativity. According to Atkinson (1998), if researchers want to know the unique experience and perspective of an individual, there is no better way to get this than in the person's own voice.

Life history research is defined by Atkinson (1998) as "a qualitative research method for gathering information on the subjective essence of one person's entire life" (p. 3). This method emphasises the inner experience of individuals and its connections with changing events and phases throughout the life course (Bryman, 2008), and provides researchers with the opportunity to study lives from the point of view of those who live them (Polkinghorne, 1988). Life history research is a powerful medium of recording an individual's experience (Germeten,

2013). It is a participant empowering methodology as it sets the person and his or her story at the centre of the research (Bergold and Stefan, 2012).

In addition, Goodson and Sikes (2001) stated that the life history research is suitable to use "if the researcher wants to know 'why', 'how', 'what is it like' and 'what does it meant to you'" (p. 18). In this research, the stories of the participants helped me to understand their individual lives and find out what factors that affect their development of artistic creativity.

It is more convenient, in helping people to tell their stories, to record interviews with a tape recorder (Atkinson, 1998). In this research, I used face-to-face semi-structured interviews to collect first-person narratives from the participants.

3.4 Identification of Sample

The sample consisted of seven Chinese female adolescents (aged 15-19) who volunteered to participate in this research. Subjects were recruited with reference to criterion sampling that looked for participants who showed creative ability in the visual arts.

The following four selection criteria were developed to identify and select participants for this research:

(1) Chinese female adolescents who are aged between 15-20 (middle to late adolescence);

(2) Chinese female adolescents with at least 10 years of formal education in Hong Kong;

(3) Chinese female adolescents with proven performance in the visual arts (artistic creativity), such as winners in recognised visual arts competitions; creative students nominated by their Visual Arts teachers; and students who studied visual arts programmes in recognised secondary schools, colleges or universities; and

(4) Chinese female adolescents who are willing to participate in the study and voluntarily disclose personal information for the analysis.

The seven participants met all of these four selection criteria. Two methods were used to recruit participants for the research:

(1) Direct approach – I contacted 50 secondary schools, colleges and universities in Hong Kong whose students had won awards in various visual arts open competitions in the past three years. Invitation letters were sent to their principals and/or Visual Arts teachers in December 2012, and follow-up calls were conducted in January and February 2013 to recruit Chinese female adolescents for the study. Subsequently, two secondary schools responded and nominated six participants for the study. The low response rate may reflect a lack of interest on the part of principals of secondary schools and universities in a non-government-funded, personal research project.

(2) Indirect approach – I looked for participants through referrals from friends to recruit Chinese female adolescents who are studying visual arts in secondary schools or universities in Hong Kong. Only one participant was recruited through referral.

Participation was voluntary. To ensure confidentiality and anonymity, participants were assigned pseudonyms after signing the consent form to participate in this study. Table 3.1 displays the demographic characteristics of the seven participants.

Table 3.1: Demographic characteristics of the seven participants

Variable	Number (%)
Gender	
Female	7 (100%)
Age	
15-16	3 (43%)
17-18	3 (43%)
19-20	1 (14%)
Education level	
Junior secondary education	1 (14%)
Senior secondary education	5 (72%)
University	1 (14%)

The interesting sample represented a diverse group of Chinese female adolescents aged from 15 to 19 years old. They were with different education levels and studied different subjects in school. In this way, the study of seven life histories in this research achieved a breadth of coverage of examine Chinese female adolescents with different kinds of characteristics.

3.5 Field Questions

A discussion guide with open-ended field questions was designed and translated into Chinese requesting demographic information as well as questions relating to the personal and environmental factors that affect the development of artistic creativity. The field questions are divided into four types: warm-up questions to collect personal data, questions contribute to the personal factors and the environmental factors that affect the development of artistic creativity, and wrap-up questions. They are listed below:

Warm-up Questions:

(A) “What is your age?”

(B) “What is your educational level?”

(C) “What do you like to do in your leisure time?”

The warm-up questions were used to collect demographic information of the participants.

Questions contribute to the personal factors that affect the development of artistic creativity:

(Q1) “How do you describe your personality?”

(Q2) “What are the reasons for you to study and/or engage in the visual arts?”

(Q3) “What type of visual arts does you like most? Why do you say so?”

(Q4) “Describe some of your favourite works in the visual arts.”

(Q5) “On average, how much time and money have you spent on the visual arts?

Questions contribute to the environmental factors that affect the development of artistic creativity:

(Q6) “Could you tell me something about your family, your parents and siblings? Have they involved in any art-related activity?”

(Q7) “Describe the schools you studied, and your learning experiences.”

(Q8) “Do you think the culture in Hong Kong has an influence on your visual arts? Why do you say so?”

Wrap-up (Exit) Questions:

(Q9) “What is your advice for individual to have artistic creativity in the visual arts?”

(Q10) “Thank you very much for your help. Are there anything you would like to add?”

Follow-up questions were used to ask for additional information. For example, a follow-up question “Is there any family influence on your course selection?” would be asked after (Q2) “What are the reasons for

you to study Visual Arts?" A sample of interview transcript was in Appendix A.

3.6 Data Collection Procedures

I used face-to-face, one-to-one semi-structured interviews to collect participants' life history, learning process, education, personality, family background, and achievements in the visual arts. The interviews aimed at collecting in-depth descriptive data in the participants' own words and help to generate insights about their beliefs (Spradley, 1979).

Total sample size for this research was seven. I collected the seven life histories from interviews conducted with the participants separately during February to May 2013. I debriefed the participants at the beginning of the interviews as to the nature of the study and that participation was strictly voluntary and anonymous. It is important under the Chinese culture to build trust with the participants before discussing "personal and sensitive information" during personal interviews. The participants were given the information sheet (see Appendix B) and asked to sign the informed consent before the start of the interviews.

The participants were informed at the outset that the duration of each interview would be approximately 60 to 90 minutes, and the interviews were audio-recorded. The interviews were conducted in Cantonese. The participants were thanked for their time and given a small gift at the end of the interviews. The recorded interviews were transcribed into English

in narrative form to create a database for retrieval and analysis. The translation of Cantonese into English interview transcripts was handled seriously and carefully to keep the original meaning of the participants.

3.7 Data Analysis

This study focuses on investigating the factors that influence the learning and development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong. Life history research with multiple face-to-face interviews was used to collect qualitative data, and the following four techniques were employed in data analysis:

(1) Humanistic approach: The interview transcripts and data were analysed in detail based on their context and to interpret their meaning. A humanistic approach was used which emphasises to build reflexive research by listening attentively to diverse voices but also being sensitive to how people can be storied, including by researchers (Merrill and West, 2009).

(2) Template analysis: A template was developed to analyse the interview transcripts (see Appendix E). The collected descriptive data was grouped into several categories, including biographical information, personality, motivation, creative process, early visual arts experiences, achievements, family background, parental and family influences, educational and social influences.

(3) Interpretation of individual life history: Interpretation of individual life history was first developed by making a complete transcript for the life history of every participants. I followed the guidelines advocated by Atkinson (1998) in preparing the transcripts, aiming to achieve clarity, completeness, and conciseness. The transcription process helped me to be familiar with each life history in order to locate the unique patterns. I analysed the life history of every participants separately. I focused on finding the relevance of each life history with personal and environmental factors that affect the development of artistic creativity.

(4) Search for patterns across all life histories: I searched all seven life histories to identify shared experiences and patterns of similarities and differences from the multiple stories. A list of factors affecting the development of artistic creativity developed from the literature was then compared with the findings of each life history for explanation. I anticipated that a number of implications and new perspectives on the development of artistic creativity among Chinese female adolescents in Hong Kong might be found in the process of analysis.

3.8 Research Ethics

I strictly followed the ethical principles depicted in the Ethical Guidelines for Educational Research published by the British Educational Research Association (BERA, 2011) and the University of Nottingham's Code of Research Conduct and Research Ethics (University of Nottingham, 2013)

in designing the life history research, collecting and analysing data and writing up the findings.

I made every effort to ensure the privacy of all participants involved in this research. Pseudonyms were used to keep the confidentiality and anonymity of the participants. The life histories collected from the interviews were processed and analysed by me only. All personal records of the participants were kept and locked up in a drawer at my home securely, and I did not disclose the identity of the participants to third parties. Personal data will be destroyed three months after successful completion of the degree.

All participants volunteered to participate in the research and signed the consent form (see Appendix C) before interviews. I provided the information sheet (see Appendix B) to every participant to make sure they had information about the research which was sufficient and relevant for them to make decisions about whether to participate. I explained the nature and purpose of the research, how data would be held and anonymity preserved to the participants at the beginning of the interviews. Written informed consent was obtained from the participants prior to engaging them in the interviews that affirmed their understanding and agreement to participate in the research voluntarily.

Two participants were aged 15 and 15.5 years old at the time of interview. I took the cautious steps to explain the research process and their rights as participants prior to the interviews getting under way. In addition to

getting the voluntary informed consent from these two participants, their parents also signed the consent form granting approval for their daughters to participate in the research.

All participants were informed that they could withdraw from the study at any time for any or no reason without incurring any penalty. I mentioned to every participant the right to withdraw from the research again, verbally, at the beginning of each interview. It was important for the participants to understand that they could withdraw consent retrospectively and their personal data would then be destroyed. None of the participants withdrew from the study.

I respected the participants and treated them fairly and sensitively. I took care to avoid harm and any other adverse effect that the research might have on the participants. I took the steps necessary to ensure the participants felt comfortable and relaxed. All interviews were pre-arranged and took place in a classroom or university campus that was familiar to the participants. I gave them time to think and describe their life histories in the interviews. I did not pursue questions when the participants seemed to be finding it difficult to continue. I mentioned to the participants that they could get a copy of the interview transcript for comment if they wished. As none of them took up my offer of a copy of the transcript, this could imply their trust on me or indifference to the transcripts.

I also took care about ethical issues in analysing and writing up the research findings. I did not withhold information about any aspect of my research. I used the humanistic approach to analyse the life histories of the participants, and recognised the need to include all their first-person narratives in finding out the factors that affect the development of artistic creativity.

Application for this study was made and approval granted on 12 April 2013 by the Research Ethics Committee from the University of Nottingham (see Appendix D).

3.9 Chapter Conclusion

With the view that the development of artistic creativity is the personal and subjective experience of individuals, life history research with semi-structured face-to-face interviews was used to collect first-person narratives from seven Chinese female adolescents. Interpretation of individual life history and searching for patterns across all seven life histories was conducted to seek explanations answering the research question of what factors that may affect the development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong.

Chapter 4 presents the narratives of the seven Chinese female adolescents who contributed to the research by sharing their life histories in the multiple interviews.

Chapter 4 Life History Narratives

4.1 Chapter Introduction

This chapter presents the life history narratives of the seven participants. Each participant's life history is presented separately, and includes four parts: the background of the participant, personal factors and environmental factors that affect her development of artistic creativity, and a brief summary on her story. The narratives placed in this chapter are in the order in which I completed their interviews.

4.2 Anna (Participant A)

Table: 4.1 Anna check box (as at 2013)

Background	**Anna**
Age (at the time of interview)	19 years old
Education level	First year of Fine Arts degree programme
Dream career	Open an art tutorial centre, or become an art teacher

Source: From the interview with Anna.

4.2.1 Background

Anna (a pseudonym) was 19 years old at the time of interview. She was studying in the first year of a Fine Arts degree programme offered by a top university in Hong Kong. She was busy at attending lectures and producing artworks for various courses under this four-year degree programme.

Anna had many hobbies, including drawing, dancing, playing piano and reading scientific fictions. She worked as a part-time tutor for an art tutorial centre teaching children to draw.

4.2.2 Personal Factors that Affect Artistic Creativity Development

Anna had a mixed personality: casual and easy-going on most issues, but persistence on what to draw for her artworks. She was independent and introvert, and loved to think wild ideas. She loved to express her emotions and feelings in artworks. She always spent long hours to produce, revise and improve artworks.

Anna described herself as a practical person. She wanted to earn a stable income after graduation and enjoy a leisure life. She dreamed to have her own art tutorial centre or become an art teacher to enjoy the freedom of art creation. Anna preferred to develop artworks with new methods. The Fine Arts degree programme that she studied encouraged and trained her to think and develop artworks creatively.

Anna did not get high marks in the subject of Visual Arts in junior secondary education. But she chose to study Visual Arts as one of the elective subjects in senior secondary education. Anna thought that Visual Arts was an interesting subject and did not require students to memorize many standard answers for examinations. She loved to express ideas in paintings freely.

"I always spent time in the visual arts such as painting and paper folding, and gave my artworks to friends as gifts. I enjoyed working in the visual arts more than doing school assignments."

Anna had been serious in the subject of Visual Arts since she was in Secondary Four. She got good grade in Visual Arts (awarded Grade 5) in the Hong Kong Diploma of Secondary Education Examination. She liked oil painting and Chinese painting, and preferred drawing objects. She was weak in drawing sketches. Anna had attended summer courses organised by private tutorial centres on ballet, clay art and painting when she was in kindergarten.

Unlike her classmates, Anna did not participate in many art competitions. She had won a few art awards in the three years of senior secondary education, including the award of book-mark design competition organised by her secondary school.

Anna did not have a stable performance in Visual Arts. Some artworks got high marks from her lecturers, but some just with a pass grade. She needed to learn and practice more to master the skills of art making.

"It is important to be competent in art skills. Lecturers in the university required students to imitate the skill/style of famous painters. For example, I imitated the works of Lin Fengmian, the master of Chinese painting. Students will be able to create their own style of painting after acquiring different art making skills. Creativity is possible after years of training and practicing."

Anna discussed one of her favourite paintings in the interview. The painting was developed for the Hong Kong Diploma of Secondary Education in Secondary Six, and she still kept it at home. It was an acrylic painting of a cat and was 2.5 feet in height. She used an abstract approach to draw a big cat sitting at the centre of the painting. The furry cat was presented in two different styles: one half was white with ceramic appearance, and the other half was colourful to show big contrast in the painting. Anna wanted to symbolise the contradiction that people face in struggling between emotion and rational thoughts.

> *"I drew the cat to represent myself. Cat has a mixed personality, sometimes lovely and naughty, but also quite fierce and not willing to obey orders. I am happy that my art teacher and classmates understood what I wanted to express in the painting."*

Anna spent nearly three months to finish the painting, and went through the whole process of idea generation, theme development, research on various facial expressions and gestures of cats, making drafts, and finally painting on art paper. Getting high marks is not the main focus of Anna in art making:

> *"I would check the assessment criteria of school assignments, and try my best to fulfill the requirements. Getting high marks is not my main study goal, rather I would like to learn and try different types of art making skills. I am willing to take risk, make mistakes and get low marks in the learning process."*

As a student of Fine Arts degree programme, Anna usually had ten hours of lectures on art courses every week. She usually spent on average thirty hours each week to practice art making skills and do homework. She spent time to develop creative themes, choose and source materials for artworks. She sometimes visited art exhibitions with her classmates.

4.2.3 Environmental Factors that Affect Artistic Creativity Development

Anna's family seldom engaged in the visual arts. Her parents divorced when she was five years old. She lived with her mother and a younger sister in a private housing estate in Hong Kong. Her mother was a nurse, and father was a retired ambulance man. Anna's mother was busy at work and spent time taking care of her younger sister. After the divorce of her parents, Anna did not attend art courses in private tutorial centre because her mother had to save money for the family. Although her parents did not participate in visual arts activities, they supported Anna to study the Fine Arts degree programme.

The learning experience in primary education did not nurture her interest in the visual arts. Anna studied in a girls' primary school. The school had a new computer room with good hardware and software. However, Anna did not like to attend Visual Arts class because of the subject teacher. The teacher was a traditional old lady who taught Visual Arts and English, and gave students many home assignments to do like paper cutting and colouring. Anna did not like to follow the teacher's strict instructions in

doing homework. In fact, Anna's mother helped her to finish most assignments for Visual Arts beautifully.

Anna developed an interest in painting when she was in secondary education. Anna studied at a girls' government-aided secondary school, which had fewer art facilities compared with her primary school. The secondary school had one Visual Arts Room with low-speed computers and basic art-related software, such as Illustrator and Photoshop. As she liked to draw and preferred to learn different types of knowledge, Anna chose to study three elective subjects in senior secondary education. The electives were Visual Arts, Combined Science (Biology and Chemistry) and Economics, which broadened her horizon and enhanced the development of creativity.

There were twenty students in the class of Visual Arts in the first semester of Secondary Four. But a few students dropped the subject in Secondary Five, because they got low marks in Visual Arts and wanted to reduce workload by taking two instead of three elective subjects. Anna studied hard and enjoyed a happy school life in Secondary Four to Six.

Anna emphasised that her interest in the visual arts was inspired by a good Visual Arts teacher in the secondary school. The teacher was about thirty years old, who was open-minded and loved to communicate with students. The teacher stimulated and encouraged students to develop their artworks creatively.

"My Visual Arts teacher only informed students the topics of assignment, gave constructive comments and suggestions for us to improve our works. She did not set many rules to restrict our thinking and creativity. I love Visual Arts because I am free to draw what I think is relevant to the given topic. There is no standard answer in Visual Arts to restrict my creativity."

The Visual Arts teacher in the secondary school taught Anna the skills of art making, concept development and presentation, which helped her to have a better performance in the visual arts.

"My teacher gave many opportunities for students to share ideas and learn from other classmates. Each student had 10 minutes to do in-class presentation on creative concept, theme and art making method before they started to develop artwork. Then, during the interim assessment, each student needed to report the work progress and present the semi-finished artwork to the teacher and classmates. My teacher always gave constructive comments. I usually thought a lot and was able to present my ideas, but I was slow in painting and producing artworks."

Anna was greatly inspired by the Visual Arts teacher in her secondary school. She was currently studying the same Fine Arts degree programme as her teacher in the same local university. She learnt a lot of art knowledge and art making skills (such as Chinese painting) from the programme. The lecturers in the university were experienced artists, who

taught students various art knowledge and skills and allowed them to develop work creatively.

Anna enjoyed the process of art making. She did not worry about the assessment of Visual Arts teachers. The Visual Arts teacher in her secondary school and the lecturers of the Fine Arts degree programme that she studied only gave general assessment guidelines to indicate marks allocation for composition, art making skills, materials used, and/or in-class presentation. Students had the flexibility to create their own works.

When asked about the cultural influence on the development of artistic creativity, Anna mentioned that Hong Kong is a special place where west meets east. People in Hong Kong have the freedom to develop and express their ideas and creativity, even on sensitive topics which might not be allowed in Mainland China. Anna felt that creative themes related to social issues in Hong Kong might be easier to gain resonance and get high marks from Visual Arts teachers. However, this would not happen in her university. Most students, including her, in the Fine Arts degree programme loved to develop artworks with different themes and art making skills. Lecturers would not give extra marks for works that were associated with current social issues in Hong Kong.

Based on her personal experience, Anna believed that a person must develop an interest in the visual arts before having artistic creativity. The development of creativity in the visual arts might be fostered by observing

more in our daily lives, exploring new ideas to handle tasks, willing to face objections and comments, keep on learning different knowledge and skills, and having more practices in art making.

4.2.4 Summary on Anna's Life History Narratives

Anna was a university student who studied a Fine Arts degree programme at the time of interview. She liked drawing and loved to express feelings and emotions in artworks. She always spent long hours and tried to use different methods and skills in producing her works creatively. Her interest in the visual arts was mainly nurtured and enhanced by the Visual Arts teacher in the secondary school. The teacher gave her the freedom and constructive comments to develop artworks, which stimulated the development of artistic creativity.

The story of Anna showed that a female adolescent can develop artistic creativity if she has an interest in the visual arts. With the interest in art and the support from the Visual Arts teacher, Anna was able to study a Fine Arts degree programme in a famous local university and would become an artist in the near future.

4.3 Becky (Participant B)

Table: 4.2 Becky check box (as at 2013)

Background	**Becky**
Age (at the time of interview)	18 years old
Education level	Secondary 6, completed Hong Kong Diploma of Secondary Education
Dream career	Illustrator for children story books

Sources: From the interview with Becky.

4.3.1 Background

Becky (a pseudonym), who was 18 years old at the time of interview, just completed her Secondary Six and the public examinations for Hong Kong Diploma of Secondary Education. She spent most of time studying for school and public examinations in the past few years. Becky loved to draw, and usually drew and browsed the Internet in her leisure time.

4.3.2 Personal Factors that Affect Artistic Creativity Development

Becky described herself as an optimistic person with positive thinking and happy personality. She was willing to try new things, especially those on the visual arts. Becky wanted to work in art-related field after graduation. As she loved reading picture books, she hoped to be an illustrator for children story books.

Becky usually handled daily issues with traditional methods to get things done quickly. But she preferred to produce artworks with different creative themes and art making skills, which was also highly encouraged by her Visual Arts teacher.

> *"I always tried to use different art making skills to present my creative themes. For example, the three artworks that I submitted for Hong Kong Diploma of Secondary Education Examination were developed with a variety of technical skills. One was a painting, and the others were a collage and a poster with photography."*

Becky loved to draw dolls. Her parents told her that she had started to draw when she was two years old. She was happy and satisfied to look at her own drawings. Becky usually got high marks in Visual Arts and praised by Visual Arts teachers in kindergarten and primary school, which gave her a sense of achievement in drawing. However, Becky added that her interest in drawing was not totally influenced by other people:

> *"I always wanted to draw better even I got low marks in Visual Arts. I feel boring if I cannot draw. I like visual arts, so I chose to study Visual Arts in a self-learning mode in senior secondary education."*

The secondary school that Becky studied did not offer Visual Arts in Secondary Four to Six. She was the only student in her school chose to study Visual Arts as the elective subject in senior secondary education. The Visual Arts teacher supported her decision and was willing to teach her the subject knowledge after class.

Becky joined the Visual Arts Club organised by her secondary school and took an active role in promoting club activities to schoolmates. She was the chairlady of the Visual Arts Club when she was in Secondary Five. Becky said,

> *"I took up the role as the chairlady because I wanted to have more schoolmates participated in visual arts activities. I was happy that I could design posters to promote school activities and arranged arts events for club members."*

Becky remembered that she had attended a short course in a private tutorial centre to learn basic sketching skill during the summer holiday of Secondary Two. The course was recommended by a friend of her mother. As it was expensive to attend art classes in private tutorial centre, she learnt art knowledge from the Visual Arts teacher in the secondary school.

Becky loved to draw people with eyes and facial expressions to express their emotions. She preferred to paint with acrylic materials, and would use different skills and materials to create artworks. She was eager to acquire more art making skills to have good performance in Visual Arts.

Becky won a few awards of visual arts during her years of secondary education, like the Certificate of Merit award from the Hong Kong Flower Show Drawing Competition 2010 organised by the Leisure and Cultural Services Department in Hong Kong.

Becky discussed one of her favourite artworks in the interview. She learnt the technique of making collage in Secondary Six, and produced a collage for the Hong Kong Diploma of Secondary Education Examination. The collage was 2.5 feet in height that shown a boy searching for direction.

> *"I was busy studying for school and public examinations when I was in Secondary Six. I was uncertain about my future. With this in mind, I created a collage with a theme that people needed quiet moments in their busy life to think about the future, search for direction and create new ideas."*

Becky browsed the Internet to search for ideas and photos for the artwork. She started with an idea of making a line painting, and later changed her mind to make a collage. After deciding on the creative concept of the collage, Becky searched for references from the Internet, books, magazines, and even discussed her ideas with friends and the Visual Arts teacher for advice. She developed a table to list out different sorts of materials that might be used for the collage, and then started to source them. Becky took pictures on reference materials, drew outlines on tracing papers, developed drafts, and finally pasted different materials on the sketchpad to make the collage.

> *"I searched for various different materials with graphics to represent the concept of direction. I used maps, newspapers, magazines, papers with door graphics, sudoku and word puzzle, letterhead and envelope. I*

spent most of time thinking about the creative theme, and sourced suitable materials for the collage."

Becky finished the collage "Direction" in five weeks, in which four weeks were spent to develop the creative idea and source art materials, and one week was used to paste the collage.

Becky would consider the assessment criteria of assignments and try to use different art making skills in developing artworks. However, her creative ideas were always limited by tight submission deadlines.

Becky often browsed the Internet and read arts appreciation books to generate creative ideas for her artworks. The other five subjects that she studied in senior secondary education (i.e. Chinese Language, English Language, Mathematics, Liberal Studies and History) did not influence her artistic creativity. Becky spent on average ten hours each week to study and practice art making skills. She had to study and prepare for the public examinations in Secondary Six, and could not spend much time in the visual arts.

Becky spent a minimal amount of money on the visual arts. She only attended Visual Arts lessons in her secondary school, and usually visited free art exhibitions. She had visited five art exhibitions in the past five months, including the famous Andy Warhol Hong Kong Exhibition 2013.

4.3.3 Environmental Factors that Affect Artistic Creativity Development

Becky was the second child in her family. She lived with parents, one elder sister, one younger sister and one little brother in a public housing estate in Hong Kong. Her father was working in a factory and mother was a saleslady. Becky's parents gave her the freedom to pursue an interest in the visual arts, but they had never participated in any type of art activities. Her parents had never bought cartoon books and art magazines. They gave Becky money to buy art materials because they knew she loved painting and worked hard to study Visual Arts. But they seldom praised her paintings.

Becky's elder sister, who was one year older than Becky, was in the first year of a Visual Arts degree programme offered by a tertiary institution in Hong Kong. Becky and her elder sister came from the same secondary school. Her elder sister also studied Visual Arts in a self-learning mode in senior secondary education, and taught by the same Visual Arts teacher. Becky mentioned that,

> *"In my family, only my elder sister and I are interested in the visual arts. When we were young, we had not always drawn pictures together and my sister seldom praised my work. But now, as we both studied Visual Arts, we would discuss more on art. For example, my elder sister told me information about famous art exhibitions in Hong Kong."*

Becky's interest in the visual arts was nurtured during the years in kindergarten. She recalled that teachers in kindergarten praised and decorated classroom with her paintings, which stimulated her interest and built up the confidence in the visual arts.

Her talent in the visual arts was further developed in primary education. She studied at a co-ed traditional primary school that was located in a public housing estate. Like other government aided schools, the primary school had an art room with computers and no other art facility. The Visual Arts teacher in the primary school taught her a number of art making skills, like painting with acrylic and poster colour materials, and using computer software to draw pictures. The Visual Arts teacher encouraged Becky and other students to join many drawing competitions.

> *"I usually got the highest marks in Visual Arts in my class. I joined several drawing competitions, such as the Flower Drawing Competition."*

When asked about the influence of secondary education on the development of artistic creativity, Becky commented that her school had provided a favourable environment for her to engage in the visual arts. Becky studied at a government aided co-ed secondary school. The school did not have many facilities (such as Photoshop software), but teachers were willing to arrange different types of extra-curricular activities for the holistic development of students. Becky had joined a creative thinking

programme in Secondary Four, which stimulated her to think and paint creatively.

Visual Arts was Becky's most favourite subject in secondary education. She greatly appreciated her Visual Arts teacher. Since she was in Secondary One, she had usually stayed in the art room to develop artworks until seven o'clock in the evening. The teacher was willing to give her the support to study Visual Arts in a self-learning mode in senior secondary education, and taught her subject knowledge after class and even on school holidays.

> *"The Visual Arts teacher is the most important person to influence my development of artistic creativity. He taught me the art making skills and gave me lots of advice to improve artworks that fostered my creativity. He encouraged me to use new methods and think from new perspectives in producing artworks. He spared his time after work to help me. Without him, I would not be able to study Visual Arts in a self-learning mode for the Hong Kong Diploma of Secondary Education."*

The Visual Arts teacher was very kind and supportive. He was willing to share art knowledge with students. He gave students general assessment criteria and allowed them to create and develop artworks.

Becky thought that people in Hong Kong were too busy and worked long hours that hindered their creative development. She added that,

"The culture in Hong Kong does not favour teenagers to develop artistic creativity. Teenagers are too busy and spend all their time studying for school and public examinations. They are under great pressure and do not have time to think and do visual arts creatively."

Becky would not include Chinese cultural elements in her work deliberately. She often browsed the Internet, and tried to think and develop artwork differently. Becky believed that everyone would have artistic creativity if one has an interest in the visual arts. Artistic creativity can also be developed if a person has enough time to think, create, and practice. More exposures in the visual arts and life experience can stimulate the development of artistic creativity.

4.3.4 Summary on Becky's Life History Narratives

Becky was a Secondary Six student and just finished secondary education. She loved to draw when she was a young child. She felt the happiness and satisfaction in drawing. Praise from teachers in kindergarten reinforced her interest in drawing and nurtured her creativity.

The Visual Arts teacher in the secondary school supported Becky to study Visual Arts in a self-learning mode in senior secondary education. The teacher spent time after class to teach her art knowledge and skills. The supportive learning environment and Visual Arts teacher were important factors to foster her development of artistic creativity.

4.4 Carol (Participant C)

Table: 4.3 Carol check box (as at 2013)

Background	Carol
Age (at the time of interview)	17.5 years old
Education level	Secondary 6, completed Hong Kong Diploma of Secondary Education
Dream career	Art-related job

Source: From the interview with Carol.

4.4.1 Background

Carol (a pseudonym), who was 17.5 years old at the time of interview, just completed Secondary Six and the public examinations for Hong Kong Diploma of Secondary Education. Carol loved drawing and reading art books in her leisure time.

4.4.2 Personal Factors that Affect Artistic Creativity Development

Carol described herself as an active and talkative teenage girl. She was happy to share thinking and feeling with friends. She loved to listen to lively music while doing visual arts. Lively music helped her to concentrate and work better. Soft music, on the other hand, made her sleepy. Carol was allowed to listen to lively music with earplugs while taking the public examinations of Visual Arts.

Carol had become a talkative and optimistic person after joining the Red Cross in her secondary school. She had the opportunity to participate in many social events and communicate with people. The experience helped her to build up confidence and broaden her horizon. She also made friends with many schoolmates. She was willing to share artworks with friends when she was in Secondary Three.

Carol wanted to work in art-related field to enjoy the freedom of creativity after graduation. She did not want a job that had to follow many guidelines and instructions. She always tried to include new elements in art making.

> *"I was inspired by my Visual Arts teacher to use new methods in producing artworks. She had shown me how to develop artworks with different types of materials, such as macaroni. Recently, I drew pictures on the shells of pistachio. It's really fun!"*

Carol liked paper folding and clay art since she was in Secondary One. She learnt the skills of paper folding by following instructions from guide books. After managing the skills, she created new items of paper folding. Carol's friends always praised her works, and she loved to give them artworks as gifts.

Carol had only attended a short course of drawing in a private tutorial centre when she was in kindergarten. She recalled that she drew with colour pencils at home when she was a child. But when she learnt to use computer in Primary Four, she seldom drew pictures with colour pencils.

Carol learnt the skills of art making from the Visual Arts teachers of her primary and secondary schools. She liked colourful paintings, and loved to draw people with markers in different colours.

> *"I like the colourful paintings of Voka, and was inspired by him to finish a self-portrait with acrylic materials. I like drawing people, but cannot draw the whole figure proportionately. Therefore, I usually use markers to draw Q-figures with big head and small body. Comparatively speaking, I am better in using colour than drawing people."*

Visual Arts was Carol's most favourite subject in school. She worked hard to get good performance in Visual Arts in senior secondary education. She had read many art books borrowed from libraries to enrich basic art knowledge when she was in Secondary Four. She also spent time to practice art making skills at home.

Carol discussed one of her favourite works in the interview. It was a wooden pyrography of a mermaid with long hair jumping out from water. There were waterfall and flying birds at the background, and tortoises and small fishes swam near to the mermaid. The pyrography was developed for an exhibition in a local university.

> *"When I knew that I could display my work in an exhibition, I was excited and would like to develop an artwork with the theme of speed. At the beginning, I planned to draw an erhu that showed fast movement. Later, I was attracted by the smooth hair of my classmate when I attended a seminar in school, which inspired me to make an*

artwork on it. But the drawing of smooth hair looked like a waterfall, so I changed to draw a mermaid instead. The creative concept of the pyrography was evolving and refining continuously before it came to the final version."

Carol asked friends for advice and showed the draft to her Visual Arts teacher for comment. She spent time after class to work on the Mermaid pyrography, and finished it in a week's time. Four days were on concept development and reference search for photos of different postures of mermaid, and the other three days were to draft the main characters of the pyrography. She usually spent several days to finish an artwork, and took breaks to think, relax and refresh mind and then made amendment to the previous work.

Carol spent on average twelve hours each week to finish four paintings. She usually drew and developed artworks on weekends and school holidays. Her spending on the visual arts was minimal as she did not attend art classes in private tutorial centre. She usually bought one drawing marker at HK$19.5 each month, took photos with mobile phone for reference, and visited free art exhibitions.

4.4.3 Environmental Factors that Affect Artistic Creativity Development

Carol lived with her parents and one elder brother in a private housing estate in Hong Kong. Her father was a construction contractor, and mother was a housewife who took care of the family. Carol's father was a

talkative person and had never engaged in art activities. But he supported Carol's decision to study Visual Arts as one of the elective subjects in senior secondary education.

Carol described her mother as a traditional woman who wanted to nurture her daughter to become a lady. Her mother did not participate in art-related activity, but she encouraged Carol to develop an interest in the visual arts.

> *"My mother believed that girls have to study music in order to become a lady. She encouraged me to play violin when I was in Primary Six, but I did not like music. So, my mother bought me books of paper folding and clay art to nurture my interest in art, and that was what I liked to do in Secondary One."*

Carol's brother was two years older than her and worked for a curtain company in Hong Kong. Carol was the only member in her family who engaged in the visual arts. Her parents gave her financial support to visit art exhibitions and buy art making materials.

Regarding the learning environment, Carol had a happy school life in primary education. She studied in a government aided co-ed primary school with a new, big and beautiful campus. The school had one art room and no other art facility.

> *"I had always got high marks in Visual Arts when I was a primary student. Most students and I had regular art lessons in the classroom.*

Only a few students who were good at drawing would be nominated by teacher to attend special drawing class in the art room. I had never joined such drawing class."

Carol was later progressed to study in a co-ed government secondary school. The school only offered the subject of Visual Arts for students in Secondary One to Three. Those who studied Visual Arts in senior secondary education had to attend classes in a nearby sister school. There were eight students in her school being selected to study Visual Arts in Secondary Four to Six. Carol developed a painting, a sketch and a poster for the selection interview of Visual Arts in order to be selected to study the subject in senior secondary education.

"I joined Red Cross in Secondary One to Four, and made friend with a senior member who studied Visual Arts in my school. When I was in Secondary Three, she gave me information on choosing Visual Arts as an elective subject in senior secondary education. She helped me to prepare for the Visual Arts selection interview. She spent a whole day teaching me basic art concepts, sketching skills and colour mixing method. I was thankful for her help."

Carol admired the Visual Arts teacher in her secondary school, and decided to study Visual Arts in senior secondary education.

"The Visual Arts teacher taught students various art making skills, such as using large paint brush to draw tiny objects. She always

showed and discussed art in class which stimulated my interest in the visual arts. I like drawing because it is enjoyable and have fun."

Carol liked the teaching approach of the Visual Arts teacher. The teacher listed out assignment topics and a few instructions, and allowed students to create their works freely. For example, the teacher once asked students to source pictures of different types of animals, and then drew a new creature imagined by them. It was really fun because every student had their own creative animal in the painting. Carol added that the Visual Arts teacher followed the assessment criteria of Hong Kong Diploma of Secondary Education Examination in marking assignments. Most students got low marks in their artworks.

"I usually got low marks in the subject of Visual Arts. But I learnt much from the constructive comments of the Visual Arts teacher. For example, she reminded me to express creative theme of every artwork clearly. She encouraged me to improve my creative thinking and skills in art making. I always tried to draw better and not to disappoint the Visual Arts teacher."

Carol had joined a six-month art programme that was co-organised by the Hong Kong Arts Development Council, Hong Kong Education Bureau and a local university when she was in Secondary Five. The programme aimed at promoting art to secondary school students, and providing opportunities for them to discuss and learn from university students of Fine Arts degree programme.

"The programme gave me opportunities to visit art exhibitions with university students of Fine Arts degree programme, and even had my painting displayed in an exhibition of a local university. I learnt more about art appreciation and art making skills of some famous paintings."

Carol would not include the elements of Hong Kong culture in her artworks deliberately. She was not particularly interested in Chinese culture and had not learnt the skills of Chinese painting.

Carol thought that the development of artistic creativity among adolescents can be enhanced by reading art magazines and visiting art exhibitions. Encouragement and appreciation are also good methods to foster the creativity of students. However, Carol expressed that the creativity of students in Hong Kong was restricted by the rigid marking schemes under the current education and examination system. Students had been trained to give standard answers in order to get high marks in examinations that hindered their development of creativity.

4.4.4 Summary on Carol's Life History Narratives

Carol was a Secondary Six student. Her interest in the visual arts was nurtured by her mother. Carol's mother gave her colour pencils to draw when she was a young child, and bought her books to learn paper folding and clay art in Primary Six. She enjoyed drawing and paper folding.

Carol's interest in the visual arts was influenced by the Visual Arts teacher in the secondary school. The supportive teacher taught her art making skills and encouraged her to improve artworks with constructive comments. Carol also participated in a six-month art programme that fostered her development of creativity by visiting art exhibitions and displaying her painting in an art exhibition.

4.5 Debra (Participant D)

Table: 4.4 Debra check box (as at 2013)

Background	**Debra**
Age (at the time of interview)	17.5 years old
Education level	Secondary 6, completed Hong Kong Diploma of Secondary Education
Dream career	Not yet decided

Source: From the interview with Debra.

4.5.1 Background

Debra (a pseudonym), who was 17.5 years old at the time of interview, completed her Secondary 6 and the public examinations of Hong Kong Diploma of Secondary Education. Debra loved drawing, reading and singing in her leisure time.

4.5.2 Personal Factors that Affect Artistic Creativity Development

Debra described herself as a candid and talkative person who always loved to laugh. She sometimes was too excited and could not stop laughing. She liked to share ideas with friends. Debra loved to draw, but had not decided whether to become an artist after graduation. She wanted to study a degree programme of multimedia or social work in a local university.

Debra usually used traditional standard methods to complete school assignments in order to get high marks. But she preferred to include new elements in her artworks. Debra enjoyed drawing. She loved to draw at leisure and after studying. Drawing was an interesting and relaxing activity to refresh her mind.

Debra had loved to read cartoon books since the summer vacation of Primary Six, which influenced her drawing of cartoon characters. She was especially fond of a cartoon character when she was in Secondary One. She was disappointed by the ugly drawing of the character on the cover of a cartoon book, and decided to draw the cartoon character. Gradually, cartoon drawing became her hobby. She always wanted to draw the cartoon character beautifully.

Debra loved to show her drawings of the cartoon character to friends and classmates. They praised and encouraged her to draw more. She was happy and satisfied to create a beautiful look for her favourite cartoon character.

"I created stories with new cartoon characters and designed the appearance and clothing for them. I was lucky that a few of my classmates also liked to draw and read cartoon books. We sometimes worked together to create a storyline and drew different cartoon characters to develop our own cartoon book. I had many such drawing books at home. I loved to create my own cartoon characters and stories."

In addition to reading cartoon books, Debra loved to read different types of stories from the Internet, including stories about enchanted world, martial arts and science fiction. All these hobbies had an influence on her art.

Debra became serious in drawing started from the summer vacation of Primary Six. She would read cartoon books and drew a lot of cartoon characters. She attended drawing courses in a community centre near her home on every Friday afternoon for a year. She stopped attending the course when she was in Secondary Six as she needed to prepare for the examinations of Hong Kong Diploma of Secondary Education.

"I learnt art making skills from my Visual Arts teacher in the secondary school. The drawing courses organised by the community centre did not teach me much. Anyway, I like to draw cartoon characters in my own style."

Debra noted that drawing was her most preferred type of visual arts, especially drawing cartoon characters with oil pastel. She usually drew the

eyes first, and then the body of the character. When drawing for school assignments, Debra preferred to paint with acrylics because it was easy to do corrections by covering a new layer of acrylic on the initial drawing. She did not participate in drawing competition and had not got award in the visual arts. Debra was not fully satisfied with her artworks and wanted to draw better.

> *"I might just get a pass grade in drawing cartoon characters. I saw many beautiful drawings posted by other artists on the Internet, mine was not particularly good. Anyway, drawing is my interest and hobby. "*

Debra got the inspirations of creative artworks from various sources, including cartoon books, paintings on the Internet, advice from friends and classmates, and even from her dreams.

When asked to describe one of her artworks, Debra discussed an acrylic painting "Rough Sea". The painting was created when she joined a drawing course organised by a community centre a year ago. The painting was displayed in the centre for some time. At the beginning, she drew a lady and the painting was in vertical format. But she did not like the look of it, and managed to draw a rough sea on the same painting horizontally. There were big waves on the right side of the painting, and a small island in the far distance under the purple and green sky.

Debra spent a total of eight hours to finish the painting. She separated the whole development process into three phases: drawing of a lady, drawing

of the rough sea, and final touching up of the painting. She liked to draw at leisure, and enjoyed drawing freely without making draft.

Debra stated that getting high marks was not her main focus in art making. She would check the assessment criteria of school assignments, but that would not affect her creativity in the visual arts.

> *"In general, there were two main types of assessment criteria for Visual Arts. One was the requirement on the use of specific art making skill, and the other was about the use of specific wordings or graphics. Other than that, students were free to create their artworks. My Visual Arts teacher usually gave a total grade for the work, and would not inform students the breakdown for each assessment item. The assessment criteria gave me general guidelines, but would not affect my creativity."*

Debra noted that extra-curricular activities had positive influence on her creativity in the visual arts. Reading and singing inspired her to draw. She sometimes drew a picture to express feeling on a song or a story.

Although Debra did not study Visual Arts in Secondary Four and Five, she spent on average twelve hours per week in drawing. However, she stopped to draw when she was in Secondary Six. She spent all time and energy to study for the Hong Kong Diploma of Secondary Education Examinations. Her expenditure on art was quite minimal. She took photos for art reference with mobile phone and did not visit art exhibition.

4.5.3 Environmental Factors that Affect Artistic Creativity Development

Debra lived with her parents and two sisters in a government housing estate in Hong Kong. She was the youngest in her family. Her father was working in servicing industry and her mother was a housewife who took care of the family. Debra's parents had never participated in art-related activity and did not support her daughter to study Visual Arts.

> "*My parents believed that doing business can make money. They did not allow me to study Visual Arts as my elective subject in senior secondary education. They said that artists could not earn a living in Hong Kong, and wanted me to study business-related subjects. My parents refused to give financial support for me to engage in the visual arts. Anyway, I insisted to continue to draw in my leisure time.*"

Her two elder sisters were aged twenty-one and nineteen respectively. Both of them were studying business degree programmes in local universities. Debra was influenced by her big sister who had read cartoon books and drawn beautiful cartoons when she was in junior secondary education. Her big sister had the talent in drawing, but she was stopped by her parents to further pursue an interest in the visual arts. Debra would not show her paintings to parents and sisters.

Regarding the influence of learning environment on the development of creativity, Debra expressed that she learnt nothing about visual arts in

primary education. She studied in a traditional co-ed government-aided primary school, which did not allocate resource on the visual arts.

> *"The school had only one art room. I did not like the Visual Arts teacher because she was very strict and used traditional methods in teaching students. The school and teacher did not nurture my interest in the visual arts."*

Debra's interest in the visual arts was enhanced when she was in secondary education. She studied in a co-ed government secondary school with one art room. The school only offered the subject of Visual Arts in Secondary One to Three, and seldom displayed students' artworks in the campus. However, Debra liked the art room very much because it was clean and tidy, which provided a comfortable and quiet environment for students to create their works.

Debra was greatly influenced by her favourite Visual Arts teacher in Secondary One and Two. The teacher left the school for two years and came back to teach when Debra was in Secondary Five. With the return of the Visual Arts teacher, Debra actively participated and became the Vice Chairlady for the Visual Arts Club when she was in Secondary Five.

> *"The Visual Arts teacher taught me various art making skills. She just told students the general assessment criteria of assignments like the use of specific art making skill, and then allowed us to create work freely. She always gave students constructive advice. I learnt a lot from her and had the satisfaction in making art. I liked her teaching style*

which was different from another teacher who taught me when I was in Secondary Three. The other teacher just told students assignment topics without teaching any drawing skill."

The Visual Arts teacher stimulated and motivated Debra to draw and practice a lot to improve art making skills. Debra was happy that she got high marks in Visual Arts,

"I was interested in the subject of Visual Arts and worked very hard on it. I was able to manage the skills of composition and colouring."

Debra thought that Chinese and Western cultures had an influence on her art making. She sometimes would draw Chinese-old-styled buildings and eyes of cartoon characters in different colours.

Debra thought that observation and learning can enhance the development of artistic creativity among adolescents. Adolescents need to "open their eyes". More observations and knowledge can help a person to generate new ideas in the visual arts. Practice is needed to improve art making skills.

4.5.4 Summary on Debra's Life History Narratives

Debra was a Secondary Six student. Her interest in drawing was stimulated by cartoon books, and further strengthened by the enjoyment and satisfaction that she gained in the art making process. She created and drew her own cartoon stories with new cartoon characters. Debra insisted to engage in the visual arts without the support from her parents. She

kept on drawing pictures in leisure time even though she was not allowed by her parents to study Visual Arts in the senior secondary education.

Debra's artistic creativity was nurtured by the Visual Arts teacher in the secondary school. The teacher taught her art making skills, gave constructive comments and freedom for her to create artworks. She drew a lot to manage the skills of drawing cartoon characters, and incorporated new elements in her artworks.

4.6 Eva (Participant E)

Table: 4.5 Eva check box (as at 2013)

Background	Eva
Age (at the time of interview)	16 years old
Education level	Secondary 4
Dream career	Fashion designer

Source: From the interview with Eva.

4.6.1 Background

Eva (a pseudonym), who was 16 years old at the time of interview, was a Secondary Four student. Eva had many hobbies, including drawing, drum beating, playing guitar and surfing the internet.

4.6.2 Personal Factors that Affect Artistic Creativity Development

Eva described herself as an optimistic person with positive thinking and the willingness to learn new things. She was pretty shy and would not like to talk with strangers. Eva wanted to become a fashion designer so as to design beautiful clothes and accessories for herself and other people.

Eva preferred to finish school assignments with traditional standard methods. But she always tried to think and include new elements in art making. She expressed that it was fun to develop artworks with new methods.

Eva did not get high marks in the subject of Visual Arts in Secondary One to Three. She loved to draw, so she chose to study Visual Arts as her elective subject in senior secondary education.

> *"I loved visual arts. I always thought about how to draw better. My parents told me that I loved to draw when I was a young child, and even drew pictures on the wall of our house. I liked to express thinking and feeling in artworks. I was happy and satisfied whenever I finished a painting. I wanted to learn more art knowledge and art making skills, so I decided to study Visual Arts in Secondary Four. It was a right choice."*

Eva attended art classes in a tutorial centre when she was in Primary Three to Six. She learnt basic drawing skills, and drew cartoon characters with watercolour and grease colour.

"I liked to read cartoon books and draw cartoon characters when I was a primary school student. I asked my mother to let me attending art classes in a private tutorial centre to learn cartoon drawing. When I progressed to secondary education, the Visual Arts teacher in my secondary school taught me art knowledge and skills of art making."

Eva liked colourful paintings and preferred to draw the image of people with watercolour. She had won her first drawing award in the Fire Safety Poster Design Competition that was opened for all secondary school students.

"I am quite capable of doing visual arts. I attended art classes in a private tutorial centre for four years when I was in primary school. The art lessons helped me to acquire basic drawing skills, such as drawing people with watercolour. And I studied Visual Arts in my secondary school."

Eva discussed a poster that she drew in the interview. It was an A4-sized poster with the theme "Dangerous Fire" that won an award in the Fire Safety Poster Design Competition.

"The Visual Arts teacher in my secondary school encouraged and invited students to join the Poster Design Competition. I searched for fire information from the Internet, and wanted to design a poster showing the danger of fire. I showed my two drafts to the Visual Arts teacher, classmates and my mother for comment. I started to draw after deciding on the composition of the poster."

The watercolour poster showed demon-liked fire coming out from windows of a building. Eva spent two weeks, mostly worked after school, to draw the poster. She did not concern about winning award from the Competition. She enjoyed drawing, and wanted to draw a beautiful poster.

In addition to the visual arts, Eva loved playing guitar and beating drum. She spent eight hours each week attending music lessons in private tutorial centres. All these activities helped her to express the inner-world.

Eva spent on average seven hours each week in the visual arts. She had three sessions, each 55 minutes, of Visual Arts class each week in the secondary school. She also spent on average two hours each week to search art references from the Internet. Besides making artworks for school assignments, she would spend one to two hours each week to draw at leisure.

Eva spent very little of money on the visual arts. She only attended Visual Arts class in the secondary school, and seldom went to art exhibition that charged an entry fee. She spent money in buying colouring materials, utensils and drawing books that could be used for a period of time.

4.6.3 Environmental Factors that Affect Artistic Creativity Development

Eva lived with her parents and a brother in a private housing estate in Hong Kong. She was the youngest in the family. Her father had already

retired and did not engage in art activity. Her mother was a housewife who took care of the family. Her parents were with secondary education level. Eva's brother was 25 years old and did not like visual arts.

Eva expressed that her interest in the visual arts was influenced by her mother. Her mother learnt the skill of sketching at young age, but did not draw after married. Eva and her mother joined a parent-child colouring competition when she was a young child, and they went together to the exhibition of "Riverside" Chinese painting three years ago.

> *"My mother taught me basic sketching skill. I loved to discuss artworks with my mother. My parents told me that most artists were poor and difficult to earn a living. Anyway, my mother supported my decision to study Visual Arts in senior secondary education. My mother had great influence on me."*

Eva studied in a co-ed government aided primary school. She did not quite remember about her teachers and primary school life.

> *"My primary school was small in size. It did not have an art room and facility for the visual arts. I had no interest in study when I was a primary student. I remembered that my classmates and I liked to read cartoon books."*

Eva was later progressed to study in a co-ed government secondary school. The school was with limited resources allocated to the visual arts, and had only an art room and some outdated computer software. But Eva liked to

attend Visual Arts lessons and was able to get high marks on this subject. Visual Arts was her favourite subject in secondary education.

Eva preferred to make artworks on her own. She liked to draw in the art room and shared ideas with classmates. Eva learnt art knowledge and skills from her Visual Arts teacher in the secondary school. The teacher always encouraged students to draw more and participate in drawing competitions. But Eva was busy in studying and did not have time to draw.

> *"The Visual Arts teacher was nice and taught me art making skills. She told students topics of assignment, shared samples for reference, and allowed us to create artworks freely. The teacher also gave advice and comments to students. She did not set rigid assessment to limit our creativity in the visual arts. I enjoyed art making and did not feel pressure from my Visual Arts teacher."*

Eva respected her Visual Arts teacher in the secondary school, and would follow her advice to improve artworks. Eva would not argue with the teacher if she did not like her creative ideas or artworks. Rather, she would modify her work to incorporate the comments and ideas of the teacher.

Eva attended art lessons in a private tutorial centre when she was a primary school student. It was a happy experience to learn drawing in the centre.

"The tutor was very nice. She was patient and friendly. I was proud to have some of my paintings displayed in the centre. I was happy and satisfied because my artworks were appreciated by other people."

Eva was influenced by the Chinese culture in art making. She thought that most Chinese people were conservative and liked paintings that showed real objects, so she seldom drew abstract paintings.

On the issue of creativity development, Eva believed that "read more, observe more and practice more" are three important methods for adolescents to have creativity in the visual arts. Young people can enrich art knowledge and get inspiration by reading art magazines and browsing the Internet. Moreover, adolescents have to be open-minded and willing to accept new ideas and opinions. They need to build up the confidence in developing new things, and resist the temptation to follow traditional methods in art making.

4.6.4 Summary on Eva's Life History Narratives

Eva was a Secondary Four student. Her interest in reading cartoon books stimulated her to draw. Eva's passion in drawing was also influenced by her mother who taught her basic sketching skills and let her attended art lessons when she was a primary school student. The happy learning experience in the tutorial centre built up her confidence in the visual arts.

Her parents thought that it was hard for an artist to earn a living in Hong Kong, but they still allowed and supported Eva to study Visual Arts in

senior secondary education. The Visual Arts teacher in the secondary school taught her art making skills and stimulated her interest in the visual arts. Eva enjoyed drawing, and did not feel pressure in art making. The positive learning environment and supportive teacher nurtured her development of creativity in the visual arts.

4.7 Fiona (Participant F)

Table: 4.6 Fiona check box (as at 2013)

Background	**Fiona**
Age (at the time of interview)	15 years old
Education level	Secondary 3
Dream career	Graphic designer

Source: From the interview with Fiona.

4.7.1 Background

Fiona (a pseudonym), who was 15 years old at the time of interview, was a student of Secondary Three. She loved to draw and listen to music, and liked to chat with friends at leisure.

4.7.2 Personal Factors that Affect Artistic Creativity Development

Fiona described herself as an optimistic teenage girl who loved to learn new things. She wanted to become a graphic designer because she was interested in drawing graphics and patterns with computer.

"It would be great if my design could bring benefits to other people and make them happy. As a graphic designer, I would like to design beautiful and user-friendly road signs for people in Hong Kong."

Fiona mentioned that she usually followed traditional methods in completing tasks when she was young. As a teenager, she tried to use new methods to handle tasks and school assignments.

Fiona was interested in drawing when she was a young child. She was the only child in the family, and got bored with no one to play with at home. She liked to draw because she could express feelings and emotions in paintings.

"I learnt how to draw cartoon characters with colour pencils and watercolour when I was at the age of five to nine years old. I usually drew by following the illustrations in picture books. I was happy with my drawings."

Fiona enjoyed drawing. She could draw three to four hours in a day because it was fun and a way of relaxation to refresh from loads of school work. Moreover, Fiona was happy and satisfied when classmates in the primary school praised her drawings, which further motivated her to draw more and work better.

Fiona attended art lessons in a private tutorial centre for two years when she was in Primary Five to Six. She had one session of two hours each week to learn basic sketching skill. When she progressed to secondary

education, she was busy in studying and had to stop attending the art lessons in the tutorial centre.

Drawing Q-figures, the funny image of people, was Fiona's most preferred type of visual arts. She was the die-hard fan of a band of Korean singers, and loved to draw Q-figures for her idol singers. She usually drew the Q-figures in black.

Fiona seldom participated in drawing competitions and did not get any award in the visual arts. She was confident in drawing people, especially Q-figures. However, she was weak in using and mixing colours. She would like to learn the skill of colour mixing in order to draw colourful paintings beautifully.

Fiona discussed a nearly-finished oil painting in the interview. It showed a dancing girl who was bending down and with wings at her back.

> *"My classmate attended ballet lessons and shared with me a website which showed various beautiful postures of ballet dancers. The dancers were so elegant that inspired me to draw a dancing girl. I drew a pair of wings for the dancing girl to represent freedom, and that was important to everyone. The background was in orange to project a warm feeling from the painting."*

Fiona put many layers of oil paint on the wooden board to have the special effect of oil painting. It usually took two weeks for a layer of oil paint to dry before brushing another layer on it.

"After I decided to draw a dancing girl, I searched the Internet for reference, and then sketched drafts on paper. Finally, I drew on the wooden board and painted it with oil paints layer by layer. I worked on the painting for three months, and drew it once a week after school. I spent most of the time waiting for the layers of oil paint to dry. I was happy with the work."

The oil painting "Dancing Girl" was one of the paintings that Fiona drew at leisure. She loved to create artwork without the need to worry about assessment criteria. Fiona also played base drum with members from the school orchestra four hours each week. Drawing and drum beating helped her to express feelings and emotions.

Fiona did not devote much time and money on the visual arts. She usually spent three hours each week in art making. She made many drafts, but was slow in finishing a painting. Moreover, Fiona did not attend art lessons in private tutorial centre. Most of her expenditure was on paint brush and art materials that could be used for a few months. For example, she bought a paint brush at HK$55 and still kept it for later use. She usually visited art exhibitions during summer vacations.

4.7.3 Environmental Factors that Affect Artistic Creativity Development

Fiona lived with her parents in a private housing estate in Hong Kong. She was the only child in the family. Her parents were busy in work and did not have time to take care of her. Her father was a craftsman who repaired

electric and water facilities, and usually worked seven days a week. Fiona's mother worked as a clerk for a school. She worked long hours and usually came home around 10 o'clock in the evening.

> *"My parents never engaged in visual arts activity. They thought it was boring and never visited art exhibition with me. They were too busy and not interested to see my paintings. My grand-mother took care of me when I was a young child."*

Fiona's mother bought her many stuff toys and dolls, such as Mickey Mouse and Hello Kitty. She played dolls and read picture books at home when she was young, which affected her interest in drawing cartoon characters.

Fiona studied in a co-ed government aided primary school, but the school did not foster her interest in the visual arts. No painting was displayed in the school. The Visual Arts teacher just told students topics of assignment and demanded them to make drafts and do colouring quickly in-class.

> *"There was an art room in my primary school which was reserved for those who were good at visual arts. I got 70-80 marks in Visual Arts, but I never had the chance to use the art room. I did not like to attend art lessons. Chinese Language was my favourite subject at that time."*

On the other hand, Fiona expressed that her interest in the visual arts was inspired by a classmate in the primary school. The girl in her class was very good at drawing. She showed her artworks and taught Fiona drawing

skills, such as how to plan and structure a painting. Fiona liked to discuss drawing with her classmate and learnt much from her.

Later, Fiona progressed to study at a co-ed government secondary school. The school had limited resources allocated to arts education, and only offered the subject of Visual Arts for students in Secondary One to Three. All students in Secondary Three had one session of 55 minutes each week on Visual Arts class in the first semester, and took Music lesson in the second semester instead.

> *"I do not have Visual Arts class this semester, but I keep on drawing pictures after school or in my leisure time. My Visual Arts teacher is very helpful. She encouraged and opened the art room for students to use after school."*

Discussions with classmates in the secondary school also enhanced the interest of Fiona in the visual arts. Fiona loved to discuss art with a boy in her class, who drew beautiful pictures and gave constructive comments for classmates to improve their artworks. Fiona was motivated by this classmate in art making.

Happy learning experience also had a positive influence on Fiona. She attended art lessons in a private tutorial centre years ago. The small classroom was with one long table and a plaster status. But the tutor was very nice, and taught Fiona the skill of sketching and composition for two years.

"The tutor in the centre taught me new skills every class, and gave comments for me to improve my drawings. She aroused my interest in the visual arts. I learnt a lot from the tutor, who later worked in a design company."

Fiona loved to chat with a classmate in the tutorial centre, who was two years older than her. Nice teachers, supportive learning environment and friendly classmates helped Fiona to develop an interest in the visual arts.

Fiona wanted to try new things in art making. She did not want to be restricted by elements of Hong Kong or Chinese culture. Hong Kong is an international city, and people are exposed to different types of creative arts in the world. People in Hong Kong have the freedom to express ideas and create artworks.

Fiona believed that everything in life can inspire people to have creative ideas. She loved to observe the natural environment, like the sky, clouds, sunset and trees. On the issue of creativity development, adolescents need to have their own thinking and draw more to acquire art making skills. They can create something new in the visual arts after mastering the skills of art making.

4.7.4 Summary on Fiona's Life History Narratives

Fiona was a Secondary Three student. She was the only child in the family. Her parents were busy in work and had not involved in the visual arts. Her mother supported her to attend art lessons in a private tutorial centre

when she was in Primary Five and Six, which nurtured her interest in the visual arts. Fiona enjoyed drawing, and was encouraged and motivated to draw better with the praise from classmates in the primary school.

Moreover, Fiona loved to discuss art with classmates in the primary and secondary schools. Her experience of happy learning environment and supportive Visual Arts teachers nurtured the development of creativity in the visual arts.

4.8 Grace (Participant G)

Table: 4.7 Grace check box (as at 2013)

Background	Grace
Age (at the time of interview)	15.5 years old
Education level	Secondary 4
Dream career	Work in government sector

Source: From the interview with Grace.

4.8.1 Background

Grace (a pseudonym), who was 15.5 years old at the time of interview, was a student of Secondary Four. She had many hobbies, including drawing, reading cartoon books and love stories, playing sports and outdoor activities. She was a member of the Scout Association of Hong Kong.

4.8.2 Personal Factors that Affect Artistic Creativity Development

Grace described herself as an extravert and independent teenage girl who liked to learn new things. She loved the nature and enjoyed outdoor activities. Grace wanted to become an interior designer or fashion designer when she was in primary school. As a teenager, she preferred to work in the government sector to earn a stable income after graduation.

> *"Visual arts and design are my interests, and I might not work in art-related field after graduation."*

Grace always wanted to handle tasks with new methods in order to get the job done faster.

> *"Once I was far behind schedule to finish my artwork, I developed my first collage with photos in order to meet the submission deadline. It would take more days to finish the artwork by drawing, so I used a new skill to get the job done."*

Grace liked Visual Arts because she could develop her artworks without the need to follow standard answers. She was happy and satisfied to express feelings and emotions in art. Grace usually worked hard and got good grade in the subject of Visual Arts. As Grace had good performance in Visual Arts, she chose to study the subject as one of her electives in senior secondary education.

Grace attended drawing lessons in a private tutorial centre when she was a little child. She learnt the skills of drawing, clay art and polymer clay

from Visual Arts teachers in primary and secondary schools. She liked photography and fashion design.

Grace had won a few awards in the visual arts. For example, she got an award of the inter-class T-shirt Design Competition in her secondary school. However, Grace said that she needed to improve the art making skills.

> *"I am not good at art making skills, such as drawing illustration and using computer software to paint. I need to learn more and practice more."*

Grace discussed one of her favourite works in the interview. It was a beautiful costume for an eagle that was made for a parade in an art carnival at Hong Kong Victoria Park last year. Her secondary school joined the event and invited students to design costumes for an eagle. A stage designer was invited to come to the school to teach students making costumes. Grace was happy and enjoyed making 3D items with her team members. They shared ideas, planned and worked as a team to make the costume.

Grace was responsible for decorating the head and wings of the eagle. She searched photos of eagle from the Internet for reference, shared ideas with team members, sourced materials, decorated and painted the eagle.

> *"It was really fun to make costume for the eagle. I developed a pair of big 3D moveable wings for the eagle, and decorated it with beautiful*

feathers and cloth. The lovely eagle costume was selected to display at a shopping mall after the art carnival. I was very happy, learnt new skills and enjoyed the whole process of art making."

Grace worked together with team members after school and at weekends for two months in designing the eagle costume. She did not concern about getting high marks or winning award in the event. She just wanted to make beautiful eagle costume for the art carnival.

Grace was a member of the Scout Association in her secondary school, which enabled her to learn different skills and knowledge, such as leadership skill. But these extra-curricular activities did not have much influence on her art making.

Grace had three hours of Visual Arts lessons each week in the secondary school. She was busy in studying other subjects, and usually spent three to four hours each week to do school assignments for Visual Arts. Grace spent a minimal amount of money on the visual arts. She usually visited free art exhibitions, such as the free "Buildings in Taiwan" Photo Exhibition at Kowloon Park.

4.8.3 Environmental Factors that Affect Artistic Creativity Development

Grace lived with her parents and a sister in a private housing estate in Hong Kong. She was the youngest in the family. Her father was working in the construction industry and mother was a housewife who took care of

the family. Her parents did not participate in art activity, but they praised her artworks. They supported Grace and gave her the freedom to select elective subjects and extra-curricular activities.

> *"Last year, I invited my parents to visit the costume exhibition of the art carnival and took photos with my beautifully dressed eagle. They were happy with my design."*

Grace had a sister, who was eight years older than her, working in a shipping company. Her sister had studied window display and shop decoration in a college.

Grace expressed that her interest in the visual arts was nurtured by a Visual Arts teacher in the primary school. She studied at a government aided co-ed primary school with good and new facilities. The school had two music rooms, one computer room and one art room.

> *"I liked the subjects of Visual Arts and Mathematics because the teachers were very nice. My Visual Arts teacher always praised the works of students, including me, that encouraged me to draw more. I was happy to attend the class and was motivated to work harder in the visual arts."*

Grace attended free drawing classes to learn poster colour, watercolour and Chinese painting in her primary school. She was grateful that the primary school gave her many opportunities to learn different drawing skills and nurtured her interest in art making.

When asked about the influence of secondary education on the development of artistic creativity, Grace stated that her Visual Arts teacher played a crucial role in stimulating her interest in art. She studied at a co-ed government secondary school with limited resources on arts education. The school only offered the subject of Visual Arts for students in Secondary One to Three. Those who studied Visual Arts as elective subject in Secondary Four to Six had to attend class in a nearby sister school.

> *"The Visual Arts teacher who taught me in junior secondary level was good. Her class was interesting and sometimes made me laugh. She just set general assessment criteria, and gave students the freedom to create their works."*

In addition to teaching art making skills, the Visual Arts teacher took the initiative to apply government funding for students to participate in art carnivals in the last two years. Grace was happy that she got the opportunity to gain new knowledge and experience in designing costume for the art carnival.

> *"It is good for school to participate in art events, so as to provide students with more learning opportunities and stimulate their creativity. I am thankful to my Visual Arts teacher who always arranged events for students to learn new things. Her teaching and encouragement had a direct influence on my pursuit in the visual arts."*

Grace had been exposed to Chinese and Western cultures as she usually browsed the Internet and watched TV programmes to get ideas for art making. But she did not prefer to include Hong Kong or Chinese cultural elements in artworks deliberately.

Grace believed that the development of artistic creativity can be stimulated by observation, learning new knowledge and meeting new friends. Teenagers need to observe people around and the natural environment. Besides, learning new knowledge and gaining new experiences can broaden the horizon and stimulate young people to think more.

4.8.4 Summary on Grace's Life History Narratives

Grace was a Secondary Four student. She loved visual arts because she was happy to express feelings and emotions in art. Her parents did not participate in art activity, but they praised her artworks and supported her decision to study Visual Arts in senior secondary education.

Moreover, her interest in the visual arts was mainly influenced by the positive learning experience in the primary and secondary schools. The Visual Arts teacher in the secondary school was nice and praised her works. The teacher also invited Grace to design costume for an art carnival, which enhanced her artistic creativity. The encouragement, recognition and support from the Visual Arts teacher gave her confidence in art making and nurtured her interest in the visual arts.

4.9 Chapter Conclusion

This chapter presents the personal narratives collected from interviews with the seven participants. All participants were Chinese female adolescents (aged 15 to 19) studying at secondary school or university at the time of interviews. Personal and environmental factors that influence their learning and development of artistic creativity in the visual arts were discussed.

The next chapter, Chapter 5, presents an analysis of the seven life histories to examine what factors affect the development of artistic creativity among Chinese female adolescents in Hong Kong.

Chapter 5 Discussion

5.1 Chapter Introduction

The primary purpose of this study was to explore a key question "What constitutes the artistic creativity of Chinese female adolescents in Hong Kong?" This chapter presents an analysis to answer the three specific questions that are developed to address the key overarching question with reference to the life history narratives in Chapter 4 and the literature in Chapter 2.

5.2 Factors that Affect the Development of Artistic Creativity

Question 1: What are the elements that contribute to the development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong?

Creativity can be acquired, and the development of artistic creativity is influenced by an array of factors (e.g., Csikszentmihalyi 1988; Amabile 1996; Runco 2007). A discussion of the personal and environmental factors identified from the life history narratives and their relationships to the literature is presented in Section 5.2.1 and 5.2.2 to answer Question 1.

5.2.1 Personal Factors

The five personal factors studied in this thesis: personality, motivation, knowledge and competence, cognitive processing skills, and resource availability are discussed as follows:

1. Personality

The influence of personality on the development of creativity has been studied by many scholars (e.g., Guilford 1950; Getzels and Csikszentmihalyi 1976; Weisberg 2006a; Qian, Plucker et al. 2010). Personality traits like curious, openness and persistence seem to have a positive impact on creative individuals. But it is argued that no unique set of personality traits leads directly to creativity, and creative personality varies among domains and persons (e.g., Runco 2007). This study explored the presence of common personality traits that might affect the artistic creativity of Chinese female adolescents in Hong Kong.

All participants were willing to learn new knowledge and skills, and apply what they learnt in the visual arts. As full-time students at the time of interviews, the participants realised that they were at the learning stage to acquire knowledge and art making skills. They were open to new knowledge, activity and experience in the visual arts.

Most of the participants (five out of seven participants, including Participant B, C, D, E, F) explicitly mentioned that they were optimistic with positive thinking, which took them to have a can-do attitude in the

visual arts. They were willing to take actions in developing artworks. Participant A was willing to take risk in art making, and Participant C and G disliked to following strict instructions in finishing artworks and school assignments. It was reflected that the participants were willing to create artworks with different themes, art skills and materials. They would like to try new things in art making even if that might not be appreciated by their art teachers, classmates and peer groups. With reference to Qian, Plucker and Shen (2010) (see Chapter 2), the willingness to take risk is an essential factor for adolescents to have creativity in the visual arts.

Four participants (Participant A, D, E, F) always had the desire and persistence in drawing. They thought themselves have the ability to produce good artworks, which motivated them to practice art making skills and improve artworks continuously. Participant A, a university student who majored in Fine Arts, had always worked hard to improve artworks for school assignments within tight submission timelines. With reference to the concept of creative self-efficacy advocated by Tierney and Farmer (2002) (see Chapter 2), a sense of self with artistic creativity can stimulate adolescents to work harder and better in the visual arts.

Three participants (Participant C, D, F) loved to communicate with friends. They described themselves as a talkative person who enjoyed sharing ideas and discussing art with friends and classmates. Participant G was an outgoing teenager who loved to play team sports and outdoor activities. As reflected from the life history narratives, the participants were socially

confident to communicate with friends in getting insights and comments that enhanced their creativity in the visual arts. The findings are somewhat different from the personality characteristics of artists described by Feist (1999) that artists may tend to be more independent, less friendly and not social as compared to non-artists (see Chapter 2). I argued that the participants, as adolescents and full-time students, were at the learning stage and needed to share ideas, get feedback and comments from art teachers, classmates, friends and peer groups. The ability to communicate with people can enhance the development of artistic creativity among female adolescents.

Two participants (Participant A and G) used the descriptor "Independent thinking" to describe their personality. However, all the participants had created their artworks, which shown that they had the quality of independent thinking. The participants, as adolescents aged 15 to 19 at the time of interviews, had their own thinking and were eager to express emotions in artworks.

Only Participant A mentioned about imagination in the interviews. "I loved to think wild ideas," said Participant A. But I argued that the participants in the study were with the trait of imaginative, which enabled them to create different characters, visuals and stories in artworks. For example, Participant D was an imaginative girl because she loved to create cartoon characters and had developed story books.

Table 5.1: Personality traits mentioned by the participants

Personality trait	No. of participants	Participant who mentioned the trait in interviews
Willingness to learn art knowledge	7	All
Positive thinking	5	B, C, D, E, F
Willingness to take risk in art making	3	A, C, G
Persistence in art making	4	A, D, E, F
Love to communicate	3	C, D, F
Independent thinking	2	A, G
Imaginative	1	A

In summary, the participants in the study shared some of the creative personality of artists discussed in Chapter 2 Literature Review, and they were: willingness to learn, open to new experience, willingness to take risk in art creation, independent thinking, persistent, love to communicate with friends, and imaginative.

2. Motivation

Motivation is the driving force for an individual to develop, improve and achieve one's works and goals. A number of creativity research has confirmed that motivation plays an important role in creativity (e.g., Amabile 1996; Cropley 2001; Kreitler and Casakin 2009).

All participants had a passion in the visual arts. Participant A loved oil and Chinese painting; Participant B and C loved to draw people; Participant D, E and F loved to draw cartoons; and Participant G loved to take

photography. They loved to engaged in the visual arts primarily because it was fun, interesting, enjoyable, happy and with satisfaction in doing the work itself. The intrinsic motivation, the reward that inherent in the creativity itself, had attracted the participants to engage in the visual arts for many years.

Six participants (Participant A, B, D, E, F, G) pointed out that they enjoyed to express thinking and emotions in artworks freely. Participant A drew a cat to represent her mixed personality, Participant D created her story books with various cartoon characters, and Participant F drew beautiful Q-figures (funny images of people with large head and small body) to symbolize her favourite Korean singers were the examples of expressing one's thinking and emotions in art. Although Participant C did not express the love of self-expression explicitly in the interviews, her preference to make new designs of paper folding as gifts for friends can be seen as a way to express her ideas in art. The life history narratives showed that the love of expressing own thinking and feelings was one of the driving forces for the participants to have creativity in the visual arts.

The freedom in art creation was another intrinsic motivator mentioned by three participants in the study (Participant A, D, G). Unlike other subjects in the curriculum of secondary education, Visual Arts did not demand students to learn by rote many standard answers for examinations. Students had the freedom to think and create their artworks, and made decisions on the creative theme, colour and materials used. The joy of

freedom in art creation served as an impetus for the participants to engage in the visual arts.

Extrinsic motivation, on the other hand, also had a positive influence on the participants. All participants were happy to have their works being praised by friends (Participant A, C, D), classmates (Participant D and F), teachers (Participant B and E), and parents (Participant G). Praise served as an encouragement for the participants to engage in the visual arts. In addition, two participants (Participant B and G) pointed out that they usually got good grades in the subject of Visual Arts. Participant B had always achieved good performance in Visual Arts since she was in kindergarten; and Participant G chose to study Visual Arts in senior secondary education because of the high marks that she got from the subject in Secondary Three. Good grade had a positive influence to motivate the participants to engage in the visual arts.

However, it was interesting to find that getting high marks or winning award was not the focus of the participants in the process of art making. They just had the interest and enjoyed creating artworks. Participant A and E got low marks in the subject of Visual Arts in junior secondary education, but they insisted on studying Visual Arts as one of the elective subjects in senior secondary education. Participant A ended up achieving good grade in Visual Arts (Grade 5) in the Hong Kong Diploma of Secondary Education Examination, and was admitted to a Fine Arts degree programme in a famous local university. The life history narratives showed

that the joy of learning and art making (intrinsic motivation) had a greater impact on the participants.

Table 5.2: Motivation mentioned by the participants

Motivation	No. of participants	Participant who mentioned the factor in interviews
Intrinsic motivator:		
Fun, interesting, enjoyable, happy and with satisfaction	7	All
Love of self-expression	6	A, B, D, E, F, G
Freedom in art creation	3	A, D, G
Extrinsic motivator:		
Praise	7	All
Good grade	2	B, G

As reflected from the life history narratives, motivation was an element that influenced the development of artistic creativity among adolescents. Intrinsic motivation had a bigger impact than that of extrinsic motivation in stimulating adolescents to engage in the visual arts. Intrinsic motivators (including fun, interest, enjoyment, satisfaction, freedom in art creation, and idea expression) were able to drive creative individuals to work more and produce better artworks. The life history narratives supported the arguments of scholars on intrinsic motivation discussed in Chapter 2 (e.g., Gardner 1993; Amabile 1989). However, on the issue of extrinsic motivation, the life history narratives did not support the notion of Deci and Ryan (1985) that reward is not good for creativity (see Chapter 2). Rather, with reference to the extrinsic motivation identified by Amabile

(1993) (see Chapter 2), I argued that praise is a type of synergistic extrinsic motivator that can work together with intrinsic motivation (like the joy of learning and art making) to enhance the development of artistic creativity among female adolescents in Hong Kong.

Education institutions and the society as a whole should use intrinsic motivators to nurture the development of creativity among adolescents. The joy of art making, satisfaction, and freedom in art creation can be emphasised to encourage female adolescents to participate in the visual arts. Extrinsic motivators like encouragement, praise and recognition are good to build up the interest and confidence of adolescents in the visual arts. External rewards of praise or good grade might be used together with intrinsic motivators to stimulate the creativity of female adolescents in art making.

3. Knowledge and Competence

Modern creativity researchers commented that creativity can be enhanced through training, practice and experience (Amabile, 1989, Sternberg and Lubart, 1995, Csikszentmihalyi, 1996), and knowledge is essential for individuals to have creativity (Sternberg and Lubart, 1995, Amabile, 1996, Stamm, 2008, Rostan, 2010). People need to acquire the knowledge of a specific domain with competence before they can generate creative thinking.

All participants attended art lessons in schools for ten years, from kindergarten, primary education to junior secondary education. Five

participants (Participant A, B, C, E, G) studied Visual Arts as an elective subject in senior secondary education. Participant A was further progressed to study a Fine Arts degree programme in a local university. For the other two participants, Participant F was in junior secondary education that had to learn the subject of Visual Arts; and only Participant D did not study Visual Arts in senior secondary education, but she kept on drawing pictures in Secondary Four and Five. All participants spent time and effort to learn and practice art making skills; however, they admitted that they were far from enough in mastering the knowledge base of visual arts, as shown in the following quote:

> *Participant A: "It is important to be competent in art skills. I might just with a pass grade in mastering the skills of visual arts… Creativity is possible after years of training and practicing."*

The importance of knowledge on the development of artistic creativity was also reflected from the narratives of Participant C and D. Participant C had read art books and practiced art making skills in Secondary Four to Six to improve the performance in the visual arts; whereas Participant D had read cartoon books and practiced a lot to learn the skills of drawing cartoons since she was in Primary Six. The narratives of all participants demonstrated the concept advocated by Amabile (1989), Sternberg and Lubart (1995), Csikszentmihalyi (1996), and Cropley (2001) that it was possible to enhance the artistic creativity of individuals through years of learning and training. Furthermore, the life history narratives supported

the idea of Rostan (2010) that adolescents need years of study and practice to acquire art knowledge and skills, and achieve some degree of competence in the visual arts which enable them to have the development of artistic creativity.

The narratives of all participants supported the concept of Craft (2005) that knowledge includes “knowing what” (the understanding of knowledge base in the visual arts) and “knowing how” (the acquisition of technical skills through practicing art making techniques), that together facilitate the participants to have artistic creativity. Moreover, with reference to Simonton’s (2006) two development stages of knowledge on creativity, the life history narratives demonstrated that, as students, the participants were in the first stage of acquiring domain-specific knowledge of visual arts, and sometimes they might progress to the second stage of expertise manifestation by incorporating creative elements in artworks. The participants were switching back and forth between the two stages of knowledge development on creativity. They worked hard to learn art knowledge and skills which enabled them to have artistic creativity in artworks, and then they would continue the learning process by acquiring new knowledge to further improve their performance in the visual arts. Knowledge acquisition with continuous learning and practices was necessary for female adolescents to develop artistic creativity in the visual arts.

In addition, all participants developed certain degree of competence in the visual arts, which had a positive influence on their confidence and encouraged them to continue the work in art making. For example, Participant A was good at developing and presenting creative ideas; Participant B had the confidence to draw people with facial expressions; and Participant C and D were confident in using colour for paintings. Four participants (Participant A, B, E, G) won art-related awards which signaled their competence in the visual arts. The life history narratives demonstrated the ideas of Tierney and Farmer (2002) that students' confidence in creative ability influences their decisions to behave creatively and the amount of effort they are willing to invest in the visual arts (see Chapter 2).

The life history narratives also showed that the development of creativity can be enhanced by acquiring knowledge other than the visual arts. Participant A stated that the study of Biology, Chemistry and Economics in senior secondary education broadened her knowledge and stimulated her creativity. Four participants (Participant C, D, E, F) got inspiration from the extra-curricular activities that they participated in secondary schools, such as singing, playing guitar and beating the drum. Three participants (Participant B, D, E) loved to browse the Internet for information. The life history narratives were consistent with the concept of Martinsen (1995) that individuals could have a fresh perspective on his or her own field by getting knowledge outside one's area of expertise (see Chapter 2). As reflected from the life history narratives, education institutions should

provide a balanced curriculum and arranged extra-curricular activities for learners to acquire various types of knowledge that could facilitate the development of creativity and all-round personal development during the stage of adolescence.

Table 5.3: Knowledge and competence mentioned by the participants

Knowledge and Competence	No. of participants	Participant who mentioned the factor in interviews
Attended art lessons for ten years	7	All
Studied Visual Arts in senior secondary education	5	A, B, C, E, G
Not able to master the knowledge base of visual arts	7	All
Importance of art knowledge on artistic creativity	2	C, D
Certain degree of competence in visual arts that encouraged the participant to continue in art making	7	All
Creativity can be enhanced with knowledge other than visual arts	6	A, B, C, D, E, F

4. Cognitive Processing Skills

Creativity achievement requires a combination of complex cognitive processing skills which enable creative individuals to have the ability of information analysis, problem finding, divergent thinking, decision making and other cognitive skills (e.g., Sawyer 2006; Runco 2007; Cheng 2011).

All participants in the study showed their ability of divergent thinking in art creation, which is a critical component of creativity mentioned by scholars (e.g., Guilford 1950; Cropley 2001) (see Chapter 2). The

participants loved to generate creative ideas and developed artworks with different compositions, styles of presentation and materials. Participant B, for example, developed three pieces of work with different themes and presentation styles for the examination of Hong Kong Diploma of Secondary Education, and they were a painting, a collage and a poster with photographs. The participants loved to think divergently to produce variable creative ideas, so as to express their thinking and emotions in the visual arts beautifully.

Moreover, according to the life history narratives, all participants were highly involved in the process of thinking, information analysis and decision-making whenever they engaged in the visual arts. Four participants (Participant A, B, E, F) spent most of the time thinking about the creative themes, presentation styles, choices and sources of materials. Two participants (Participant A and C) usually generated creative ideas from their daily lives and observations. Five participants (Participant B, D, E, F, G) sourced information from the Internet, and books such as cartoon books, fictions and art appreciation books. It could be argued that the participants engaged actively in various cognitive processing skills, like idea generation, information analysis, evaluation of alternatives, decision making and problem solving in order to have better performance in the visual arts.

Table 5.4: Cognitive processing skills mentioned by the participants

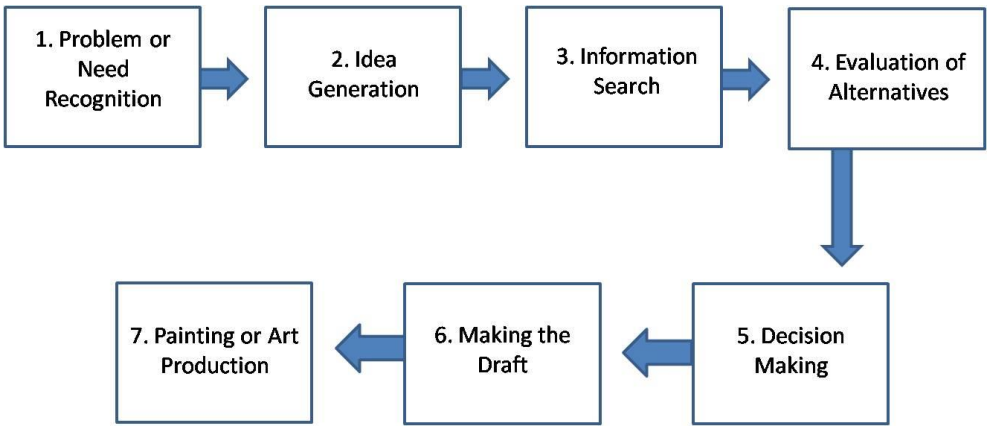
Cognitive processing skills	No. of participants	Participant who mentioned the skill in interviews
Divergent thinking	7	All
Idea generation	7	All
Information analysis	7	All
Decision making	7	All

The life history narratives also showed that all participants followed certain procedures in creating their favourite artworks. Four participants (Participant A, B, C, F) went through the five steps in developing artworks: idea generation, confirmation of creative ideas, information search, making the draft, and art production. Two participants (Participant E and G) worked through the process of idea generation, confirmation of creative ideas, information search, making the draft, discussions with teachers and friends, refinement, and finally, art production. One participant's (Participant D) work involved idea generation, confirmation of creative ideas, art production, change in creative concept, and then create a new painting on the initial artwork without making a draft.

With reference to the life history narratives and the creative processes proposed by scholars like Guilford (1959) and Amabile (1996) (see Chapter 2), I suggested that there are seven steps involved in the creative process of visual arts, and they are: (1) problem or need recognition (as the starting point when adolescents aware of the need to create something

for assignments, examinations or just for fun), (2) idea generation (the production of a variety of relevant or wild ideas that might take days or weeks to generate; insights might come from daily life activities, observations of the surrounding environment, discussions with friends, teachers and family members, the Internet, books, magazines, and even from dreams), (3) information search (active search for information and reference that might help adolescents to understand more about "what to do" and "how to present" the ideas generated in step 2, and the Internet is the main source of information for adolescents in Hong Kong), (4) evaluation of alternatives (the analysis and evaluation of information collected, which might be influenced by the desire of adolescents, their ability of artistic creativity and technical skills, assessment method, availability of resources such as materials and time, and advice from teachers and friends), (5) decision making (the confirmation of creative theme, style of presentation, composition and materials used for the work, and the sourcing or purchase of materials), (6) making the draft (the preparation of a sketch or an outline of the work, which might be modified or changed after discussing with teachers, friends and parents), and the final step (7) painting or art production (the actual art making which might last for several weeks for reasons such as time for paint oil to dry, time for adolescents to re-think and improve the work, and most importantly, have to allocate time for studying other subjects or preparing for examinations). Adolescents would switch back and forth among the steps once the creative process has started.

Figure 5.1: The seven steps of creative process in the visual arts



Source: Compiled by the author.

5. Resource Availability

Many scholars believed that the availability of resources could facilitate creativity development (e.g., Vygotsky 1930/1967; Csikszentmihalyi 1996; Weisberg 2006a; Starko 2010). Time, money, training opportunity and materials are needed for people to learn and develop creative works.

However, all participants in the study were full-time students and faced the problem of insufficient time to engage in visual arts activities. Participant A, a university student who majored in Fine Arts, could only spend forty hours each week in the visual arts which was not enough for her to learn and practice art making. The remaining six participants were secondary school students who struggled to allocate more time in art making or studying. Two participants (Participant B and C) had on average ten to twelve hours each week to work in Visual Arts as they needed to reserve time studying other five subjects that had open examinations in Secondary Six. Participant B was always forced to modify her initial great

ideas of art making in order to meet the submission deadlines of school assignments.

Two participants (Participant E and G) spent around seven hours each week; and Participant F only had three hours each week in the visual arts. Participant D even stopped all visual arts activities when she was in Secondary Six in order to prepare for the examinations of the Hong Kong Diploma of Secondary Education. She managed to have twelve hours each week to draw pictures when she was in Secondary Four and Five, but she had to put all effort in studying six subjects for open examinations in Secondary Six. It was reflected that adolescents as full-time students in Hong Kong were under great study pressure. They faced heavy workload of school assignments and examinations, and did not have time to learn the domain of visual arts. With reference to Rubenson and Runco's (1992) concept of time to have competencies, female adolescents in Hong Kong do not have sufficient time to develop competencies in the visual arts that hinders their development of artistic creativity.

Training opportunity was another type of resources that might facilitate creativity. In addition to learn the subject of Visual Arts in schools (kindergarten, primary and secondary education), the narratives of all participants reported that they had attended art lessons at private tutorial centres for a period of time. Three participants (Participant A, C, G) joined summer courses at tutorial centres to learn ballet, clay art and drawing when they were at kindergarten; Participant B attended a summer course

to learn basic sketching skill when she was in Secondary Four; Participant D joined a drawing course for a year when she was in Secondary Five; and two participants (Participant E and F) enjoyed art lessons at tutorial centres for four and two years respectively when they were in primary education. Three participants (Participant D, E, F) stopped attending courses at tutorial centres because they needed to spend time studying for school assignments and examinations. Based on the life history narratives, it was good for adolescents to have an early exposure to art training which might stimulate their interest and build up confidence in the visual arts.

In addition, all participants reported that the money spending on the visual arts was quite minimal. All participants mainly learnt art knowledge in schools that minimized their spending on expensive tuition for private art tutors. Two participants (Participant A and B), for example, needed to save money and had to stop attending art courses at tutorial centres. All participants came from ordinary families in Hong Kong, and they did not want to spend much on the visual arts. Four participants (Participant B, C, E, G) visited art exhibitions that were free of charge; two participants (Participant C and D) took photos with mobile phones for art references; three participants (Participant B, E, F) browsed the Internet to search for information; and Participant C borrowed art appreciation books from school or public libraries.

Moreover, the participants mainly developed artworks with materials provided by their schools. The expenses in buying art making materials were minimal. For example, Participant C bought a marker at HK$19.5 for drawing once a month, and Participant F bought a paint brush at HK$55 that could be used for a few months. Female adolescents in Hong Kong had the opportunity to learn the subject of Visual Arts in schools with minimal expenses. Low-cost information sources are also available for adolescents to learn art knowledge, such as the Internet, public and school libraries. As reflected from the life history narratives, all participants were able to learn and engage in visual arts with minimal spending.

Table 5.5: Resource availability mentioned by the participants

Resource	No. of participants	Participant who mentioned the resource in interviews
Insufficient time to engage in the visual arts	7	All
Opportunity to attend art lessons at private tutorial centres (e.g. summer course, short course)	7	All
Spent a minimal money on the visual arts	7	All

5.2.2 Environmental Factors

The five environmental factors studied in this thesis: cultural influence, social influence, family influence, learning environment, and teachers' influence are discussed as follows:

1. Cultural Influence

Many scholars stated that people in a community share similar culture which influences their beliefs, values, perception and behaviour of creativity (e.g., Csikszentmihalyi 1988; Runco 2007). Chinese culture, in general, is different from Western culture in many aspects, including value systems and learning methods. With its past colonial history, geographic location and economic development, Hong Kong's unique culture has many facets that can be traced to Chinese roots and global influences. The majority of Hong Kong residents are Cantonese speaking and they are influenced by the Chinese collectivist culture with an emphasis on social norms, harmony, and hard working (e.g., Jarvis, Holford et al. 2003; Kashdan and Yuen 2007; Cheng 2011).

The study showed that all participants concerned about their academic performance and wanted to have a degree qualification from a local university. With reference to the study of Kashdan and Yuen (2007), the participants were influenced by the general belief in Hong Kong of pursuing academic success. Most of them were secondary school students at the time of interviews, and they spent most of the time and energy in studying to get better grades in examinations which limited their

involvement in the visual arts. The life history narratives reflected that the pursuit of academic success was emphasised more by Secondary Six students as they needed to achieve good academic results from the examinations of Hong Kong Diploma of Secondary Education for admission to a university. Three participants (Participant B, C, D) were under such great pressure in studying for the public examinations which hindered their development of artistic creativity, as shown in the following quotes:

> *Participant B: "I was busy studying for school and public examinations when I was in Secondary Six. I could only spend limited time in completing Visual Arts assignments. I did not have enough time to think and develop my artworks creatively."*
>
> *Participant D: "I was busy studying six subjects for the examinations of Hong Kong Diploma of Secondary Education, and had to stop all visual arts activities when I was in Secondary Six."*

The emphasis of Hong Kong students on academic success had an impact on the number of adolescents studying Visual Arts in senior secondary education, as reflected by the narratives of Participant A. Some of her classmates in Secondary Five dropped the elective subject of Visual Arts because they got low marks in the subject and wanted to reduce the workload by taking two instead of three elective subjects.

Most degree programmes in Hong Kong would enroll students with good academic results in four core subjects and two elective subjects in the public examinations of Hong Kong Diploma of Secondary Education (see

Appendix F). The life history narratives illustrated that the pursuit of academic success might encourage adolescents to think pragmatically in studying only two elective subjects with better academic performance in senior secondary education. Students, like the classmates of Participant A, might drop the third elective subject of Visual Arts in Secondary Five and focus on the other best two electives. In view of the great pressure in achieving good academic performance, adolescents might attempt to study two instead of three or even four elective subjects, which would limit their exposure in artistic knowledge and creativity development.

In addition, all participants believed in hard working as the key to achieve good performance. They spent years in attending art lessons to acquire the knowledge base of visual arts. With reference to the study of Hofstede and Bond (1988) and Hau and Salili (1991), the participants might be influenced by the Hong Kong and Chinese culture that value hard-working and persistence. They were also under the influence of Chinese culture in believing skills are the bases to have creativity that should be developed first (Jarvis et al., 2003), and creativity is a more gradual process of development (Thomson, 2006).

The life history narratives were consistent with the study of Cheng (2011) that people in Hong Kong tend to value long-term orientation and prefer actions and attitudes for their future, instead of immediate happiness and enjoyments. The participants worked hard in studying and even sacrificed their enjoyment in the visual arts in the hope to have better examination

results for admitting into a university and then have a brighter future in the long run.

The life history narratives supported the study of Kember (2000) that Hong Kong students concern about having a good career to aid themselves and their family. All participants in the study thought about their career after graduation. Five participants (Participant A, B, C, E, F) would like to work in art-related fields: be an art teacher, illustrator for children picture books, graphic designer, fashion designer, or open her own art tutorial centre. The other two participants (Participant D and G) wanted to earn a stable income after graduation and would prefer to work in business-related or government sector. Like most people in Hong Kong, the participants wanted to have a good career; and their perception of good career might have a direct influence on the choice of elective subjects in senior secondary education and degree programmes.

Furthermore, six participants (Participant A, B, C, D, F, G) mentioned that they would not include Hong Kong and/or Chinese cultural elements in their works deliberately. Hong Kong is a fusion of East and West cultures. The participants, like adolescents in Hong Kong, were exposed to various sorts of information around the world through the Internet and mass media. They enjoyed the freedom to express creative ideas in the visual arts.

However, two participants (Participant D and E) admitted that Chinese culture had an impact on their artistic creativity. Participant D drew

Chinese-old-styled buildings, and Participant E seldom drew abstract paintings as Chinese people preferred paintings that showed real objects. The creative behaviours of the two participants appear to demonstrate the ideas of Csikszentmihalyi (1988), Niu and Sternberg (2001) and Starko (2010) that culture is a crucial aspect in determining the appropriateness of creativity (see Chapter 2). The Chinese and Hong Kong cultures have an effect on the criteria used by people (and the society) in judging artistic creativity, which in turn influences the way creativity is expressed in the visual arts. It is good to introduce Chinese, Western and other cultures to adolescents in order to broaden their horizon and influence their artistic creativity.

In addition, all participants in the study respected their Visual Arts teachers, who were the mentors teaching them art knowledge and art making skills. They expressed the view that their teachers were knowledgeable and experienced in the visual arts. They followed the instructions of teachers in learning and practicing various art making skills. The works of the participants were also assessed and marked by the teachers. The participants usually presented ideas and/or artworks to their teachers for comments that helped them to improve the works. For example, Participant E would not argue with her teacher, and would modify her artworks to incorporate the comments of the teacher.

The life history narratives illustrated the ideas mentioned by Hofstede and Bond (1988), and Cheng (2011) that people in Hong Kong are affected by

the Confucianism with an emphasis on harmony, respect for elders and those in authority positions (see Chapter 2). Under the influence of Chinese culture in Hong Kong, the participants played the role of students in schools and knew that they had to respect and obey their teachers, and that had an impact on their creative development.

The same principle of Confucian teaching also affected the relationship of adolescents with their parents. Hofstede and Bond (1988) stated that children in Hong Kong need to restrain themselves, to overcome their individuality and pay respect to parents in order to maintain the harmony in the family. The creativity of adolescents, sometimes, might be hindered by the need to obey their parents. As shown from the narratives of Participant D, because of the objection of her parents, she decided not to select Visual Arts as an elective subject in senior secondary education. Adolescents are influenced by the Chinese culture to follow the instructions of their parents, teachers and seniors in the society which might affect their original thinking and the development of artistic creativity.

Table 5.6: Cultural influence mentioned by the participants

Cultural influence	No. of participants	Participant who mentioned the influence in interviews
Concern about academic performance	7	All
Belief in hard working	7	All
Concern about future career	7	All
Enjoy the freedom in expressing ideas in the visual arts	6	A, B, C, D, F, G
Influence of Chinese culture on the artistic creativity of the participant	2	D, E
Respect Visual Arts teacher and follow instructions	7	All
Obey parents and not to study Visual Arts in senior secondary education	1	D

In summary, the participants in the study were under the influence of Chinese and Hong Kong cultures, which affected their perception of success, belief in hardworking, ways of judging and expressing creativity, and the willingness to maintain harmonious relationship with teachers and parents. All these had an impact on the development of artistic creativity among Chinese female adolescents in Hong Kong.

2. Social Influence

The influence of social environment on creativity has been discussed by many scholars (e.g., Csikszentmihalyi 1988; Amabile 1990; Runco 2007). The ways that people interact, communicate and evaluate creativity are believed to have an impact on creative individuals.

The study showed that all participants had positive interactions with their teachers who encouraged and motivated them to engage in the visual arts. All of them learnt art knowledge and art making skills from their Visual Arts teachers in schools. Five participants (Participant A, B, C, D, E) expressed in the interviews that their Visual Arts teacher always encouraged students to be creative in art making, and gave constructive comments to inspire their creativity. As reflected from the life history narratives, teachers are the mentors who teach and inspire students to pursue an interest in the visual arts.

Six participants (Participant B, C, D, E, F and G) had happy experiences with fellow classmates in the process of art making, and five participants (Participant B, D, E, F, G) shared ideas and worked with classmates in developing artworks. For example, Participant C got support from a senior form schoolmate who taught her basic art making skills and helped her to prepare for the Visual Arts interview in the secondary school; Participant D worked together with her classmates to create and draw cartoon characters for their own cartoon books; and Participant F loved to share ideas with classmates, and their comments helped her to improve artworks. As reflected from the life history narratives, social interaction with classmates and peer groups has a positive effect on adolescents in arousing their interests and development of artistic creativity. The findings appear to demonstrate the notions of John-Steiner (2000) and Runco (2007) that collaboration and competition are important person-environment interaction that influence creativity (see Chapter 2).

One participant (Participant E) expressed that, in addition to teacher and classmates, her mother taught her basic sketching skill when she was a primary student. She loved to discuss artworks with her mother, who supported her to study Visual Arts in senior secondary education.

The life history narratives demonstrated that Csikszentmihalyi's idea (1988) of "social support networks" as vital determinants of creativity (see Chapter 2) is applicable to explain the case of adolescents in Hong Kong. The participants were adolescents and students at the time of interviews, Visual Arts teachers, classmates and mother (parents) were their supportive social networks. The networks encouraged and helped the participants to acquire art making skills and motivate them to think creatively and work better in the visual arts.

Visual Arts teachers, classmates and parents were also the main audience who judged and commented the creative works of the participants. According to Amabile (1990) and Feldhusen and Goh (1995), the judgement criteria set by Visual Arts teachers and the audience in the social environment definitely affected the artistic creativity of the participants. Furthermore, with reference to Nicol and Long (1996) that the way individuals perceive environment variables affect their behaviour and creative work (see Chapter 2), the perception of being judged by teachers and classmates might have an influence on the creative behaviour of the participants. The perception of a supportive social

environment would encourage adolescents to think wild and dare to develop artworks creatively.

Table 5.7: Social influence mentioned by the participants

Social influence	No. of participants	Participant who mentioned the influence in interviews
Positive interaction with Visual Arts teacher	7	All
Happy experience with fellow classmates in art making	6	B, C, D, E, F, G
Share ideas and work with classmates in developing artworks	5	B, D, E, F, G
Support from mother	1	E

The study showed that a supportive social environment is favourable for the development of artistic creativity among Chinese female adolescents in Hong Kong. It is especially important to have a positive social environment in schools, so that female adolescents can have frequent contacts with helpful teachers and friendly classmates (peer group) and that would facilitate their artistic creativity.

3. Family Influence

Many studies on the influence of family environment on creativity found that family background, parental attitudes and behaviours have direct impact on the development of creative individuals (e.g., Dewing and Taft 1973; Weisberg 2006b; Runco 2007).

With regard to the study of parents, most participants (six out of seven participants, including Participant B, C, D, E, F, G) lived with parents. Only Participant A lived with her mother because her parents had divorced when she was five years old. The father of five participants (Participant B, C, D, F, G) were blue-collar workers in different types of industries, including manufacturing, servicing and construction fields; whereas the father of two participants (Participant A and E) had retired at the time of interview. The mother of four participants (Participant C, D, E, G) were housewife who took care of the family, and the mother of three participants (Participant A, B, F) had full-time job and worked as a nurse, a sales person and a clerk respectively. Three participants (Participant A, B, F) needed to look after themselves as their parents were busy at work.

Five participants (Participant A, C, E, F, G) lived in private housing estates, and two participants (Participant B and D) were in public housing estates. All participants were from ordinary families in Hong Kong. The life history narratives reflected that most participants were with busy parents who did not have time to supervise their children closely. With reference to Albert's (1971) idea of parental interests outside the home free children from close supervision and emotional relationships with parents (see Chapter 2), the need to look after themselves might have a positive impact on the development of creativity among adolescents in Hong Kong.

For the family structure, four participants (Participant A, C, E, G) had one sibling, either a brother or a sister; whereas two participants (Participant B

and D) had two to three siblings; and Participant F was the only child in the family. Moreover, two participants (Participant A and F) were the first born child in the family; four participants (Participant B, C, E, G) were the second born child; and Participant D was the third born child and the youngest in the family. In general, the participants were with diverse family background of parental occupations and family structure. It is difficult to say with certainty that a specific family background reflected from the life history narratives is more favourable for nurturing artistic creativity among female adolescents in Hong Kong. Previous studies conducted by scholars, including Miller and Gerard (1979) and Sawyer (2006), also showed unclear and inconsistent conclusions on the impact of family background on creativity development (see Chapter 2).

In addition to family background, parental attitudes and behaviours might have an influence on creative individuals. All participants stated clearly that their father had not engaged in any type of visual arts activities. Six participants (Participant A, B, C, D, F, G) disclosed that their mother also had not involved in the visual arts. Only the mother of Participant E engaged in the visual arts many years ago. Her mother learnt the skill of sketching at young age, but did not draw after married.

Although the parents of most participants were with limited involvement in the visual arts, they were willing to let their daughter to have an early exposure in art-related activities. Four participants (Participant A, B, C, G) attended drawing lessons at private tutorial centres as early as when they

were four to six years old; and two participants (Participant E and F) attended drawing lessons when they were ten to eleven years old. Six out of the seven participants had an early exposure to drawing, which might stimulate their interest in drawing and artistic creativity with reference to the concept of Csikszentmihalyi (1996) that creativity can be boosted through early exposure to the wealth and variety of life (see Chapter 2).

In addition, the parents of six participants (Participant A, B, C, E, F, G), who had early exposure to drawing, allowed their daughter to try new things and participate in the visual arts. For example, the parents of Participant B supported her to study Visual Arts in a self-learning mode for the Hong Kong Diploma of Secondary Education. Only Participant D was not supported and allowed by her parents to study Visual Arts in senior secondary education. Her parents worried that artists could not earn a living in Hong Kong, and insisted Participant D to study business-related subjects for a better career. However, Participant D had not given up her interest in the visual arts, and persisted in drawing in her leisure time.

The life history narratives of this study reflected that most parents had confidence on their daughter, and allowed them to pursue an interest in the visual arts. The findings seems consistent with the conclusion of Mackinnon (1962), Domino (1969), Dewing and Taft (1973) and Runco (2007) that parents of creative children treat them with respect, give them responsibilities with autonomy and freedom and expect them to do well (see Chapter 2).

The life history narratives of Participant D appear to demonstrate the views of Miller and Gerard (1979) that parental authoritarianism and control could inhibit the development of children's creativity (see Chapter 2). Participant D was not allowed by her parents to study Visual Arts, which might hinder her development of artistic creativity. On the other hand, the life history narratives of Participant D reflected that parental opposition and control could not totally forbid female adolescents from participating in the visual arts. Under the current education system in Hong Kong, children and adolescents have to learn Visual Arts in primary and junior secondary education. Students can participate in art-related extra-curricular activities organised by schools. Like Participant D, female adolescents with unsupportive parents are still able to learn and pursue their interest in the visual arts at schools under the education system in Hong Kong.

On the issue of parental encouragement, four participants (Participant C, E, F, G) were influenced by their mother to have an interest in the visual arts. The mother of Participant C bought books of paper folding and clay art for her to learn and make artworks. The mother of Participant E taught her sketching skill when she was in primary school, and went with her to visit the "Riverside" Chinese painting exhibition three years ago. The life history narratives demonstrated the point advocated by Weisberg (2006b) that parental encouragement of art has a direct and positive influence on their children (see Chapter 2). Moreover, compared with father, mother seems to have a closer emotional bond with their daughter as four

participants (Participant C, E, F, G) were influenced by their mother to develop an interest in the visual arts.

In addition to parental influence on creativity, elder sisters who lived together in a family might have an influence on creative adolescents. Three participants (Participant B, D, G) pointed out that their sister was also interested in the visual arts. Participant B followed her elder sister to study Visual Arts in a self-learning mode for Hong Kong Diploma of Secondary Education; and Participant D was influenced by her big sister to draw cartoon characters. The life history narratives reflected that, in addition to parents, children and adolescents were influenced by the behaviours of their elder sisters, such as reading cartoon books, drawing and studying same subjects in school. Elder sister serves as a role model and motivates female adolescents to develop an interest in the visual arts.

Table 5.8: Family influence mentioned by the participants

Family influence	No. of participants	Participant who mentioned the influence in interviews
Need to take care of herself as parents were busy at work	3	A, B, F
Father had not engaged in visual arts	7	All
Mother had not engaged in visual arts	6	A, B, C, D, F, G
Parents let the participant to have an early exposure in drawing	6	A, B, C, E, F, G
Parents allowed the participant to try new things and learn visual arts	6	A, B, C, E, F, G
Parents did not support and allow the participant to study Visual Arts	1	D
Influenced by mother to have an interest in visual arts	4	C, E, F, G
Elder sister was interested in visual arts	3	B, D, G

Adolescents usually live with their family. Parental influence and encouragement of art can stimulate and nurture female adolescents to have an interest in the visual arts. The behaviours of other family members, like elder sister, may also motivate adolescents to engage in art-related activities and foster the development of artistic creativity.

4. Learning Environment

Many scholars claimed that a positive learning environment in schools is important for creativity development (e.g., Csikszentmihalyi 1996; Simonton 2006; Runco 2007; Cheng 2010). Most adolescents in Hong Kong receive formal education in schools for more than ten years. School

facilities, classroom environment and assessment methods all have a direct influence on creative individuals.

Most participants joined co-ed schools where boys and girls were studying together. Six participants (Participant B, C, D, E, F, G) were from government-aided co-ed primary schools, and only Participant A studied at a government-aided girls' primary school. All of the participants had later progressed to another school to continue their secondary education. Participant A studied at a government-aided girls' secondary school; Participant B was at a government-aided co-ed secondary school; and the other five participants (Participant C, D, E, F, G) studied at a government co-ed secondary school.

All participants had one session of 55 minutes each week on Visual Arts in junior secondary education. Five participants (Participant A, B, C, E, G) had three sessions of Visual Arts each week, and each session was 55 minutes in senior secondary education.

All participants claimed that their primary and secondary schools were with limited resources allocated in art-related facilities. Five participants (Participant A, C, D, F, G) studied at a primary school with one art room; the primary school of Participant B had an art room with computers; and Participant E was studied at a primary school without any art room for students to attend art lessons. Participant C remembered that her primary school was in a new, big and beautiful campus, but it only had an art room

and no other school facility to arouse the interest of students in the visual arts.

In addition, all participants commented that their secondary school had only one art room and a few outdated versions of software for students to learn visual arts. For example, the secondary school of Participant A had one art room with low-speed computers and basic art-related software such as Illustrator and Photoshop. The life history narratives reflected that schools in Hong Kong do not place great emphasis on the arts education.

Table 5.9: Types of school and art-related facility mentioned by the participants

School type and facility	No. of participants	Participant who mentioned the influence in interviews
Government-aided co-ed primary school	6	B, C, D, E, F, G
Government-aided girls' primary school	1	A
Co-ed secondary school	6	B, C, D, E, F, G
Girls' secondary school	1	A
Basic art-related facilities in primary and secondary schools	7	All

Five participants (Participant A, C, D, E, F) stated that the conservative classroom atmosphere in primary schools could not stimulate their interest in the visual arts. For example, Participant C usually followed the instructions of Visual Arts teacher to draw pictures; and the Visual Arts

teacher of Participant F just told students assignment topics and demanded them to make drafts and do colouring quickly in-class. The life history narratives demonstrated that the use of teacher-centred approach and conservative classroom culture cannot stimulate students to develop artistic creativity. With reference to the study of Cheng (2010) in Chapter 2, I argued that some primary school teachers in Hong Kong are influenced by the Chinese culture, which makes them expect and demand students to keep quiet, listen and follow instructions, and give standard teacher-approved answers even for a creative subject such as Visual Arts.

Moreover, teachers in Hong Kong seem to be under great pressure in view of teaching large class size of more than 30 students and with limited support from schools. As reflected from the life history narratives, some teachers in primary schools were only able to provide additional art training for a small group of selected students with higher drawing ability. Participant C and F were not invited to attend such art training classes and were not interested in the visual arts when they were in primary education. With reference to Zeng's (1999) study on the learning environment in Hong Kong (see Chapter 2), the rigid and competitive learning environment in primary schools might have pressure on young students, which diminish their intrinsic motivation of learning visual arts and hinder the development of artistic creativity among primary students in Hong Kong.

On the other hand, all participants in the study claimed that supportive classroom environment and Visual Arts teachers in secondary schools had a positive influence on their interest and development in the visual arts. For example, Participant B stated that her secondary school had provided a favourable environment for her to develop an interest in the visual arts. The Visual Arts teacher was very kind and supportive, and the art room was always opened for students after school. Two participants (Participant E and F) pointed out that the happy learning experience in private tutorial centres also had a positive influence on their interest in the visual arts. "The tutor was very nice and aroused my interest in the visual arts, and I loved to chat with a girl in my class," said Participant F.

With reference to Csikszentmihalyi (1996) and Cheng (2010) (see Chapter 2), the life history narratives demonstrated that a positive learning environment in a learner-centred classroom can encourage adolescents to develop an interest and creativity in the visual arts. Teachers who are open to new ideas, willing to accept individual differences and give encouragement to students could facilitate adolescents to explore the joy and satisfaction in creating their own piece of art. Adolescents are willing to express themselves in creative ways and engage in the visual arts as they feel the support from teachers referenced to the psychological safety advocated by Rogers (1995) (see Chapter 2).

Furthermore, five participants (Participant A, B, C, D, E) mentioned about the constructive comments and suggestions given by their teachers had

helped them to improve their works and creativity. The participants treasured evaluative feedback from teachers. The life history narratives did not illustrate the point mentioned by Amabile, Goldfarb and Brackfield (1990) that the expectation of evaluation has negative effects on artistic creativity (see Chapter 2). This might be due to the psychological safety and support perceived by the participants, so they were willing to accept evaluation from teachers whom they respected in order to improve their works. One participant (Participant D) expressed in the interviews that her Visual Arts teacher was strict in assessing student works, and she had always tried to do the best to get higher marks and not to disappoint her teacher. It appears to demonstrate that some sort of tension is good for students to grow and develop creative works as discussed by Runco (2007).

In addition to learn from classroom teaching, three participants (Participant B, C, G) expressed that their creativity in the visual arts was further stimulated by attending activities outside the classroom. Participant B joined a creative thinking programme organised by her secondary school when she was in Secondary Four, which stimulated and encouraged her to think creatively in art making. Participant C joined a six-month art programme co-organised by the Hong Kong Arts Development Council, Education Bureau and a local university when she was in Secondary Five. Participant G designed a beautiful eagle costume for a parade in the art carnival at Hong Kong Victoria Park last year. As reflected from the life history narratives, adolescents gain new insights and experience in art by participating in creativity-related or art-related extra-

curricular activities as mentioned by Simonton (2006) (see Chapter 2). With reference to Steiner's (2000) idea of holistic education, schools and teachers need to arrange more interesting activities to broaden the horizons of students and stimulate their development of creativity in the visual arts.

Table 5.10: Classroom environment mentioned by the participants

Classroom environment	No. of participants	Participant who mentioned the influence in interviews
Primary school with conservative classroom atmosphere	5	A, C, D, E, F
Supportive classroom environment and Visual Arts teacher at secondary school	7	All
Happy learning experience in private art tutorial centre	2	E, F
Constructive comments from teachers	5	A, B, C, D, E
Gain new insights and experience from extra-curricular activities	3	B, C, G

Many scholars pointed out that assessment is an important influence on learning (e.g. Guilford 1950; Beghetto and Plucker 2006). Six participants (Participant A, B, C, D, E, G) mentioned that the general assessment criteria set by Visual Arts teachers allowed them the flexibility in developing creative works freely. For example, Participant A stated that the teachers in secondary school and university informed students the

marks allocation for composition, art making skills, materials used, and/or in-class presentation. She enjoyed the freedom in creating artworks. The life history narratives of this study illustrated that adolescents are happy to create and show their artistic creativity if assessments provide opportunities for them to be creative as advocated by Reid and Petocz (2004) (see Chapter 2).

In addition, teachers in Hong Kong are required by the Hong Kong Examination Authority to employ various assessment methods to evaluate the ability of students who studied Visual Arts in senior secondary education. Creative works, written journals and in-class presentations are common assessment methods to evaluate the individual performance of students. One participant (Participant A) appreciated her Visual Arts teacher who used various methods to help students improving creative ability and communication skills, such as in-class presentations of creative concepts and art making methods. As reflected from the life history narratives, adolescents are able to develop artistic creativity in a supportive classroom environment with activities and assessments that allowed them to demonstrate creativity.

Table 5.11: Assessment methods mentioned by the participants

Assessment methods	No. of participants	Participant who mentioned the influence in interviews
General assessment criteria allowed flexibility in the visual arts	6	A, B, C, D, E, G
Good to use various assessment methods	1	A

5. Teachers' Influence

Teachers have face-to-face interactions with students, and they are able to influence the creative development of students (e.g. Cropley 2001; Csikszentmihalyi 1996; Runco 2007). Teachers can transmit information and knowledge to students, provide opportunities for students to practice skills and creativity, model creative behaviours and encourage creativity in the classroom.

All participants in the study expressed that they were inspired and influenced by teachers to develop an interest in the visual arts. One participant (Participant B) was inspired by teachers as early as when she was in kindergarten; two participants (Participant B and G) had teachers in primary schools to stimulate their interests in the visual arts; all seven participants thanked their Visual Arts teachers in secondary schools; and two participants (Participant E and F) were also influenced by tutors in art tutorial centres.

As reflected from the life history narratives, Visual Arts teachers and tutors in art tutorial centres play an important role in stimulating the interest of students and encouraging them to work better in the visual arts. Teachers who employ learner-centred mode of instruction are welcomed by students, and they are in a better position to motivate students to learn and produce creative works. With reference to Csikszentmihalyi (1996) in Chapter 2, the life history narratives illustrated that Visual Arts teacher can act as a facilitator and a main source of information for students to learn art knowledge, skills and creativity.

In addition to teaching students, the life history narratives showed that Visual Arts teachers provide opportunities for students to explore their potential on creativity, practice creative thinking and artistic creativity. All participants appreciated their teachers in providing various opportunities for them to learn visual arts. The participants were encouraged to develop artworks for school assignments, share creative thinking in class, and participate in drawing competitions and art carnivals. Teachers also encouraged and valued students to have divergent thinking and creativity in their works. Positive feedbacks, constructive comments and appreciation were given by teachers to motivate students to work better. For example, the Visual Arts teacher of Participant A gave her many opportunities to share ideas in class and learn from classmates; and the teacher of Participant B spared his time after work and even holidays to teach her knowledge and skills of the visual arts.

Three participants (Participant A, B, D) expressed that the constructive comments of teachers helped them to improve their works; and four participants (Participant B, E, F, G) used positive adjectives of “nice, friendly and helpful” to describe their teachers. The life history narratives demonstrated the ideas of Runco (2007), Soh (2000) and Smith and Smith (2010) (see Chapter 2) that teachers need to provide opportunities for students to practice creative thinking, encourage creativity in the classroom and value creativity in the work of their students.

All participants in the study appreciated their teachers in giving them the freedom in creating art. For example, Participant A loved Visual Arts because the teacher did not set many rules to restrict the creativity of students, and she was free to create artworks. As shown from the life history narratives, adolescents love to have the flexibility in developing their works of art. Teachers who provide creative assignments and general assessment criteria can stimulate the creativity of students. It appears to demonstrate the point mentioned by Cropley (1997) that creative teachers are the most likely to foster creative students, both by modeling creative behaviours and by providing creative tasks (see Chapter 2).

Moreover, teachers can act as role models by demonstrating their creative behaviours so as to motivate students to think divergently and act creatively. One participant (Participant C) pointed out that she was inspired by the Visual Arts teacher in her secondary school who used macaroni and various materials in art making. She was motivated to use

new methods in developing her artworks, like a drawing on the shell of pistachios. The life history narratives seem consistent with the concept of Smith and Smith (2010) (see Chapter 2) that teachers need to model creative behaviours themselves in order to stimulate creativity in their students.

On the other hand, three participants (Participant A, D, F) mentioned about the negative influence of conservative teachers on their interest in the visual arts. Participant A disliked the subject of Visual Arts when she was a primary student as she was not interested to follow strict instructions in doing paper cutting and colouring. The teacher of Participant D in the primary school was very strict; and Participant F did not like to attend art lessons because her teacher in the primary school demanded students to do colouring quickly in-class. The life history narratives showed that the pedagogy of teachers has a direct influence on students. Teachers who use teacher-centred teaching approach and stress too much on academic performance might hinder the interest and artistic creativity of students. With reference to the studies conducted by Niu and Sternberg (2001) and Cheng (2010) (see Chapter 2), Visual Arts teachers in Hong Kong need to use more creative teaching skills in actual classroom practices to nurture the creativity of students.

Table 5.12: Teachers' influence mentioned by the participants

Teachers' influence	No. of participants	Participant who mentioned the influence in interviews
Inspired by teacher to develop an interest in the visual arts	7	All
- By teacher in secondary school	7	All
- By teacher in primary school	2	B, G
- By teacher in kindergarten	1	B
- By tutor in private art tutorial centre	2	E, F
Opportunities to learn, share ideas, and practice art making skills	7	All
Constructive comments to improve artwork	3	A, B, D
Nice, friendly and helpful teacher	4	B, E, F, G
Freedom to create artworks	7	All
As a role model to stimulate the participant to think and act creatively	1	C
Negative influence of conservative teacher	3	A, D, F

5.2.3 The Inter-relationship of Significant Factors Identified From the Life History Narratives

Question 2: How do these elements affect Chinese female adolescents in developing artistic creativity in the visual arts?

As reflected from the life history narratives discussed in Sections 5.2.1 and 5.2.2, some of the personal and environmental factors were mentioned by all or most (six out of seven) participants in the interviews. These factors can be interpreted as playing a more significant role in influencing the artistic creativity of Chinese female adolescents in Hong Kong. They are grouped into two categories: (1) facilitating factors and (2) obstacle factors, and are discussed as follows:

1. Facilitating Factors

Some personal and environmental factors identified from the life history narratives have a positive influence in fostering the artistic creativity of the sample in the study, as shown in the following Table 5.13.

Table 5.13: Significant personal and environmental factors reflected from the life history narratives

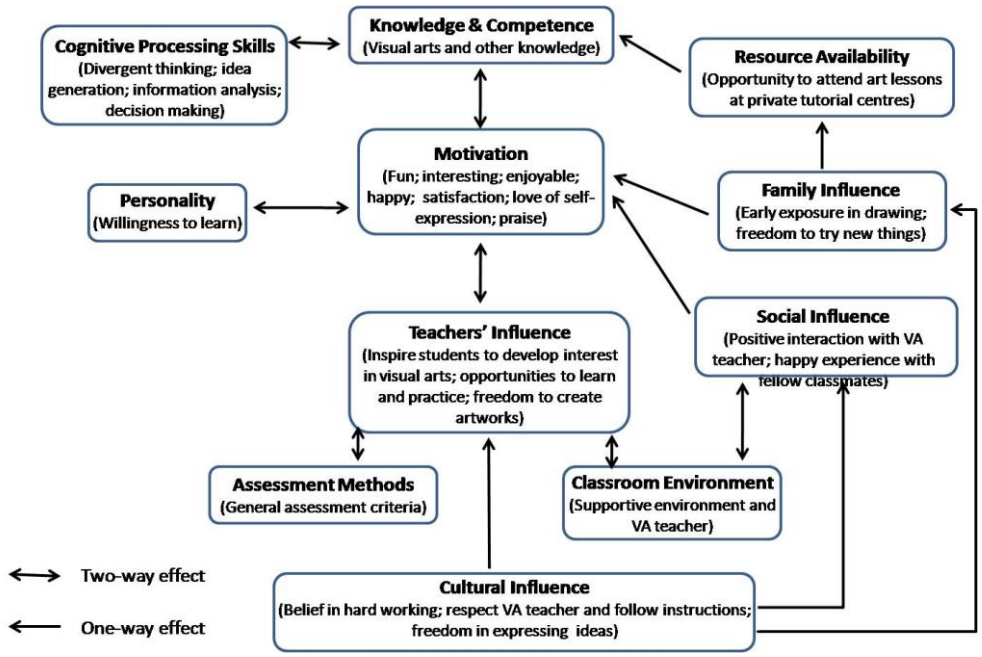
Personal factor	Environmental factor
Personality - Willingness to learn	**Cultural influence** - Belief in hard working - Respect Visual Arts teacher and follow instructions - Enjoy the freedom in expressing ideas in the visual arts
Motivation - Fun, interesting, enjoyable, happy and with satisfaction - Love of self-expression - Praise	**Social influence** - Positive interaction with Visual Arts teacher - Happy experience with fellow classmates in art making
Knowledge and competence - Certain degree of competence in visual arts that encourage the participant to continue in art making - Creativity can be enhanced with knowledge other than visual arts	**Family influence** - Parents let the participant to have an early exposure in drawing - Parents allowed the participant to try new things and learn visual arts
Cognitive processing skills - Divergent thinking - Idea generation - Information analysis - Decision making	**Classroom environment** - Supportive classroom environment and Visual Arts teacher at secondary school
Resource availability - Opportunity to attend art lessons at private tutorial centres (e.g. summer course, short course)	**Assessment methods** - General assessment criteria allowed flexibility in the visual arts
	Teachers' influence - Inspired the participant to develop an interest in the visual arts - Opportunities to learn, share ideas, and practice art making skills - Freedom to create artworks

Source: Compiled by the author.

As reflected from the life history narratives, the creativity development of female adolescents in Hong Kong involves a complex mix of factors. These factors interact, combine and create favourable conditions to foster the interest and capabilities of individuals to have artistic creativity. The

following is a conceptual framework showing the inter-relationships of these facilitating factors with reference to the life history narratives and literature presented in this thesis.

Figure 5.2: A conceptual framework on facilitating factors reflected from the life history narratives



Source: Compiled by the author.

The framework illustrates the importance of Motivation and Teachers' Influence which are inter-related in nurturing the development of artistic creativity among Chinese female adolescents. Both intrinsic motivation (fun, interesting, enjoyable, happy, satisfaction, love of self-expression) and extrinsic motivation (praise) are needed to stimulate the interest of Chinese female adolescents and encourage them to create their work of arts. Teachers' Influence, on the other hand, provides a favourable environment for individuals to have interest and opportunity to learn, practice and create their artworks. Assessment Methods (general

assessment criteria) and supportive Classroom Environment are also inter-linked with Teachers' Influence to arouse the interest and increase the likelihood of Chinese female adolescents to involve in artistic activities during their secondary education. In view of this linkage, school administrators and the Education Bureau need to provide adequate support for Visual Arts teachers to nurture adolescent students.

Motivation to engage in the visual arts, as reflected from the life history narratives, is related to Personality (willingness to learn) and Knowledge and Competence (visual arts and other knowledge). Female adolescents with a willing-to-learn attitude and basic knowledge in the visual arts are easier to be motivated to engage in art making. The level of Knowledge and Competence, in turn, is inter-related with Cognitive Processing Skills (divergent thinking, idea generation, information analysis, decision making). Moreover, Knowledge and Competence is affected by Resource Availability (opportunity to attend art lessons at private tutorial centres). Female adolescents who attended art lessons at tutorial centres might be able to acquire more knowledge in the visual arts, which facilitate them to involve in artistic creativity. Family Influence (early exposure to the visual arts, freedom to try new things) has a direct influence on Motivation and Resource Availability which encourage female adolescents to engage in artistic activities.

In addition, Social Influence (support from Visual Arts teacher, happy experience with fellow classmates) is inter-related with Classroom

Environment and has a direct impact on Motivation. Happy experience with teacher, classmates and/or peer groups can reinforce the interest and capability of female adolescents in the visual arts. Cultural Influence (belief in hard working, respect Visual Arts teacher and follow instruction in learning and practicing visual arts, freedom in expressing ideas in the visual arts) has an impact on Teachers' Influence, Social Influence and Family Influence. The general belief of Hong Kong community has an influence on Visual Arts teachers in teaching students, and the ways how people judging artistic creativity.

2. Obstacle Factors

With reference to the life history narratives, four factors are identified that might hinder the artistic creativity among Chinese female adolescents in Hong Kong.

Table 5.14: Obstacle factors reflected from the life history narratives

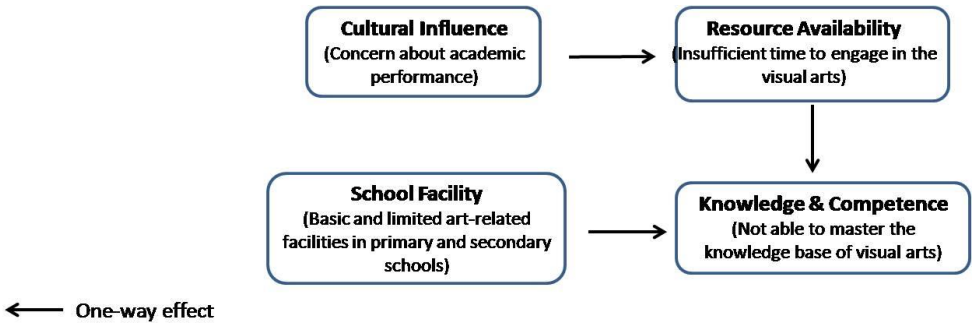
Personal factor	Environmental factor
Knowledge and competence - Not able to master the knowledge base of visual arts	**Cultural influence** - Concern about academic performance
Resource availability - Insufficient time to engage in the visual arts	**School facility** - Basic and limited art-related facilities in primary and secondary schools

Source: Compiled by the author.

The relationships between the obstacle factors are depicted in Figure 5.3. All participants in the study were affected by Cultural Influence (concern about academic performance) as they wanted to be admitted to a degree programme at a local university. They had spent most of the time in studying to get better grades in examinations, which limited their

involvement in the visual arts during senior secondary education. Resource Availability (insufficient time to engage in the visual arts), in turn, has a negative impact on Knowledge and Competence (not able to master the knowledge base of visual arts). School Facility (basic and limited art-related facilities in primary and secondary schools) may also limit the exposure of students to new skills and experience in the visual arts.

Figure 5.3: A conceptual framework on obstacle factors reflected from the life history narratives



Source: Compiled by the author.

5.2.4 Implications for Visual Arts Teachers and Education Institutions

Question 3: What are the implications for Visual Arts teachers and education institutions nurturing artistic creativity among Chinese female adolescents in Hong Kong?

With reference to the life history narratives, it is found that teachers and schools play a vital part in the cultivation of artistic creativity among Chinese female adolescents in Hong Kong. The way of teaching and school atmosphere greatly affect the motivation, knowledge acquisition, creative thinking and behaviour of an individual. The pedagogical strategies that

follow are recommended for Visual Arts teachers and education institutions to provide favourable conditions and environment for nurturing and enhancing artistic creativity among Chinese female adolescents in schools.

1. Visual Arts Teachers

Teachers have a central role to play in fostering the creativity of female adolescents. Teachers cannot rely excessively on formal teaching, they need to act as a facilitator to arouse the interest and let students experience the joy of artistic creativity. Five strategies for Visual Arts teachers are discussed as follows:

(a) Teachers as facilitators of creativity - Visual Arts teachers need to think beyond the box of teaching students "subject knowledge". They should treat themselves as a facilitator to enhance each individual student's creative mentality, knowledge, abilities and behaviour in the visual arts. Teachers who are aware of and interested in artistic creativity are able to enhance the creative thinking of students.

Teachers also play an important role in motivating students to be creative, assisting them to experience success in artistic creativity, and to provide opportunities for achievement. When students find personal relevance in learning visual arts (such as interesting, satisfaction, self-expression), they will be more involved in artistic creativity. A teacher who is with positive attitudes, open to ideas, and able to display caring, patience,

understanding and tolerance towards students can foster creativity among female adolescents.

(b) Encouraging confidence in artistic creativity - Teachers need to give encouragement (such as praise, recognition and constructive advice) to motivate female adolescents in art making and build up self-confidence in expressing their ideas in art. It is important to let students understand that there is no wrong and standard solution in the visual arts, but only better ways of presenting one's creativity in art.

Confidence building is essential because most female adolescents always want to play safe and take the easy option in finishing their assignments. By letting students aware of different ways of developing artworks in a safe and stimulating environment, they would be more confidence to explore alternative ways in creating their works.

(c) Encouraging a willingness to take risks - Teachers also need to help students to cope with frustration and failure. The fear of failure or getting low marks often limits students' willingness to make an attempt in the visual arts. Students should be reminded that failures and mistakes are an inevitable part of the learning process. Teachers need to make students feel valued for their own views, accept and appreciate their creative thinking, and help students see that they created something artistically.

Teachers need to demonstrate tolerance, appreciation of unusual creative ideas and works. Students would then be encouraged to think

independently, have the courage to take risk by using different methods in art making, adjust ideas and develop creative artworks.

(d) Approaches to teaching and developing artistic creativity - The approach of student-centred learning supports creativity. Visual Arts teachers can employ more creative teaching methods and set creative tasks to stimulate the artistic creativity of students. For example, the introduction of games as a teaching method is a relaxing way to motivate adolescents to express their ideas and develop creativity. Opportunities to work on interesting tasks with varied materials can motivate students and stimulate their creativity.

As adolescents love to have their creative autonomy, freedom of choice for students to select creative topics, tasks and art materials can inspire them to engage in artistic creativity. Teachers must not force their own ideas on students. They need to encourage students to find things out for themselves and take responsibility to work on their own initiatives. It is important to make the process of learning and art making enjoyable, and get students deeply involved in work which interests them.

Enrichment and extension activities outside regular classroom might inspire students to think creatively and develop an interest in the visual arts. It is good to organise joint art activities with art associations, local artists, fine art department in universities so as to give exposure and opportunity for secondary school students to learn from others and create artworks. In addition to gain technical competence in painting and

drawing, students can learn ways of seeing, thinking and judging creative artworks by participating in these interesting activities.

Students should be allowed some personal space to work independently in creating their artworks. Visual Arts teachers also need to give time for students to present and discuss ideas in class. Through presentations and peer interactions, students are able to share ideas, understand other's perspective, amend their own ideas and develop new possibilities.

Teachers do not need to give solutions to students quickly, but give hints step-by-step to stimulate the self-learning and independent thinking of students. Teachers need to give constructive criticism, and allow students to make mistakes in the process of learning and producing artworks.

Supportive classroom environment is vital to female adolescents. Students should have the rights to have their creative ideas taken seriously. Teachers should try to avoid and prevent negative reactions by classmates, even on ideas that might look ridiculous. Group pressure and envy of competition among students should be avoided. By providing an open, relaxing, fun and encouraging atmosphere in the classroom, students are free to think and express their creative potential.

(e) Assessing artistic creativity - Visual Arts teachers play an important role in designing constructive assessment for learning. Assessment methods that encourage and reward creativity are necessary to nurture the artistic creativity of students. Teachers may consider assessing student works in two areas. One is to capture the quality of artistic creativity

during the process of art making, and the other is to evaluate the final artwork. Various types of assessment methods are suggested to evaluate student performance from different perspectives, including class presentations, research work, exploration of ideas, creative works, portfolios, and reflections on art making.

Moreover, Visual Arts teachers are expected to provide more creative activities with general assessment criteria, which give the flexibility for students to think, create and develop their own artworks.

2. Education Institutions

Under the current education system in Hong Kong, adolescents have to spend years of formal education in schools. School atmosphere, facilities and management all have a direct impact on fostering students' creativity and supporting teachers to teach creatively. Four strategies for education institutions to nurture the creativity of students are discussed as follows:

(a) Whole school commitment - The development of artistic creativity among students is positively influenced by the involvement of the whole school, especially the support from principals. Principals and school administrators need to recognise the importance of schools in artistic creativity enhancement. A positive school environment that values student creativity, promotes artistic creativity and happy learning experience can give support to both students and teachers in cultivating artistic creativity.

To cultivate an encouraging school climate of creativity, principals have to value openness to new ideas, acceptance of diversity, encouragement of independent thinking and self-expression, and provide opportunities of creative problem solving for teachers and students. A harmonious study environment lets students feel safe in learning and practicing artistic creativity in schools, and encourages them to build their support network of schoolmates and friends, which is an important source of support to motivate them in creative art making.

(b) More school resources and support - School administrators need to provide more concrete support to teachers so as to facilitate them in nurturing students' artistic creativity. More art-related facilities and teaching resources (such as art display corner, art making computer software, design materials and art reference books) are needed for teachers to teach and enhance students' artistic creativity. Financial support and credit should be given to teachers who inject creativity into the Visual Arts curriculum or re-design the visual art classrooms to stimulate student creativity. Principals should appreciate and give support to teachers who devote time and effort in organising creative visual arts activities for students to learn and experience different types of art making.

The fundamental task of teachers is to teach and nurture students. Teachers should be given sufficient time in preparing lessons, organising creative student activities, advising and counselling students. Excessive

non-teaching workload and excessive teaching load would restrict teachers in devoting sufficient time to each student and fostering their creative potential.

(c) Creativity curriculum - Teachers and principals need to work closely with the Education Bureau in designing a more creativity-oriented curriculum for Visual Arts with purposeful learning outcomes that allow students to explore and develop artistic creativity. In addition to the technical and theoretical aspects of visual arts, the curriculum should focus on the value of developing artistic creativity and creative thinking. Sufficient time should be given to students which allow them to learn, incubate ideas and develop creative artworks.

In order to enhance the learning experience of students, school administrators should allow effective teachers to take a flexible approach in learning and teaching. Teachers can deliver a prescriptive curriculum in a flexible way depends on the degree of students' knowledge acquisition in subject domains. Regular discussions and reviews with teachers are necessary to improve the teaching quality and joyful learning experience of students.

(d) Teacher training - Appropriate professional development with an emphasis on practical techniques of nurturing students' creativity is necessary for all teachers. A formal mechanism for the exchange of ideas on the development of artistic creativity among teachers can be set up to increase the sharing of good practice in schools. Pre-service teacher

education should be reviewed periodically to better prepare a visual arts teaching force capable of fostering adolescents' artistic creativity.

5.3 Chapter Conclusion

This chapter discusses the influence of personal and environmental factors on the development of artistic creativity among Chinese female adolescents in Hong Kong. With reference to the life history narratives, there are a few factors named as facilitating factors that demonstrated to have significant positive influences in fostering artistic creativity. These factors interact, combine and create favourable conditions to develop creative individuals. Among them, Motivation and Teachers' Influence are the important factors that facilitate female adolescents to develop artistic creativity. Pedagogical strategies are recommended for Visual Arts teachers and education institutions to nurture creative adolescents.

A summary of analysis to answer the key question of this study, the contribution to knowledge of the study, the limitations of the research and the reflections on further research are covered in Chapter 6.

Chapter 6 Conclusion

6.1 Chapter Introduction

This chapter concludes the thesis by drawing the findings and the analysis to answer the key overarching question "What constitutes the artistic creativity of Chinese female adolescents in Hong Kong?" and the corresponding three specific questions. The limitations of the research and the reflections on further research are also covered.

6.2 Insights from the Research

The findings of this study are useful and have implications for theory and practice. The study provides a framework to better understand the learning and development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong. The findings also have the potential to enhance the understanding of various significant factors and pedagogical strategies that can nurture creative adolescents in the visual arts. The three specific questions shown in Chapter 1 (p. 23) are addressed below:

6.2.1 What are the elements that contribute to the development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong?

In this study, based on literature review and life history research, I found that Chinese female adolescents in Hong Kong are influenced by an array of factors on the development of artistic creativity. These factors can be

grouped into two categories, and they are personal and environmental factors. Personal factors include personality, motivation, knowledge and competence, cognitive processing skills, and resource availability; whereas environmental factors include cultural influence, social influence, family influence, learning environment, and teachers' influence.

6.2.2 How do these elements affect Chinese female adolescents in developing artistic creativity in the visual arts?

The life history narratives confirmed that some of the factors play a significant and positive influence in fostering the artistic creativity among Chinese female adolescents in Hong Kong. These facilitating factors (see Chapter 5, Figure 5.2) interact, combine and create favourable conditions to nurture the artistic creativity of Chinese female adolescents. Motivation (the enjoyment of art making) stimulates the interest of female adolescents to engage in the visual arts, and Teachers' Influence provides a supporting environment to nurture the artistic creativity among adolescent students. Moreover, those Chinese female adolescents who are with a willing-to-learn attitude and have an early exposure to basic art knowledge are more motivated to develop artistic creativity. Happy interactions with Visual Arts teacher and schoolmates further reinforce the interest and capability of female adolescents in artistic creativity. The beliefs in hard working and freedom to express ideas also affect female adolescents in developing their works of art.

The life history narratives reflected that there are obstacle factors which might hinder the artistic creativity among female adolescents in Hong Kong (see Chapter 5, Figure 5.3). Under the influence of Hong Kong culture, Chinese female adolescents concern about having good academic performance in examinations so as to continue their study in a university. They spend most of time and energy in studying, which limit their involvement in the visual arts and creativity. Moreover, limited art facilities in primary and secondary schools further hinder individuals to learn art knowledge and develop artistic creativity.

6.2.3 What are the implications for Visual Arts teachers and education institutions nurturing artistic creativity among Chinese female adolescents in Hong Kong?

The life history narratives demonstrated that Visual Arts teachers play a significant role in nurturing the artistic creativity among Chinese female adolescents in Hong Kong. Teachers do not just teach students subject knowledge, they should act as facilitators to motivate students to engage in the visual arts and encourage them to create their creative works. Moreover, Visual Arts teachers have to use student-centred approach and creative teaching methods to stimulate the artistic creativity of students. Teachers need to provide opportunities and support students to create their works, give constructive comments and allow students to make mistakes in the process of learning and developing artistic creativity. Interesting tasks with general assessment criteria give students the

flexibility to think and create their creative artworks. Teachers also need to encourage students to appreciate the work of their classmates, and prevent them from giving hostile comments. Supportive classroom environment is vital to nurture and enhance the artistic creativity of students.

In addition, principals and school administrators need to support teachers in fostering students' creativity. A positive school atmosphere that values student creativity and happy learning experience is needed to cultivate the artistic creativity of students. The curriculum of Visual Arts should focus more on developing the creative thinking and artistic creativity of learners. Students need to have sufficient time to learn, think and produce their creative artworks.

6.3 Contribution to Knowledge

This qualitative study of the development of artistic creativity is a small scale study in a complex area. The focus of this study is on Chinese female adolescents in Hong Kong, with the aim to find out what factors foster their development of artistic creativity. I was not able to find any creativity research that explored the same topic in Hong Kong, the findings of this study therefore provide useful insights that matter to the development of artistic creativity among this specific group.

This research study is the first to focus on examining the influence of ten personal and environmental factors identified by major creativity theories

(see Chapter 2, Table 2.1 and Figure 2.1) on the development of artistic creativity among Chinese female adolescents in Hong Kong. Previous research has examined only the impact of one factor on creativity (e.g., Feist 1999; Niu and Sternberg 2001). This study also contributed knowledge to the literature on creativity by describing what factors can foster the development of artistic creativity in a particular domain, the visual arts, among Chinese female adolescents in Hong Kong.

The findings of this study are valuable because they were collected and analysed from the first-person life history narratives of seven Chinese female adolescents who lived and studied in Hong Kong. Significant factors that affect their development of artistic creativity were examined based on the experiences of the participants. The findings confirmed that the concepts of systems theories discussed in Chapter 2 (p. 34-35) are appropriate to explain the development of artistic creativity among Chinese female adolescents in Hong Kong. As reflected from the life history narratives of the participants, the development of artistic creativity among Chinese female adolescents is influenced by an array of personal and environmental factors that interact between an individual and the external environment. Some of these factors that I termed as facilitating, like Motivation and Teachers' Influence, are factors that interact and combine to have a significant and positive influence in fostering the development of artistic creativity in the visual arts among Chinese female adolescents in Hong Kong.

By exploring the influence of motivation on creativity development, this study supported Amabile's theory (1993) discussed in Section 2.5.1 (p. 43). Motivation is confirmed by the life history narratives of the participants as an important factor that fosters the development of artistic creativity among Chinese female adolescents. In addition, the study demonstrated that synergistic extrinsic motivation (praise) can work together with intrinsic motivation (the joy of learning and art making) to enhance the development of artistic creativity in the visual arts. Praise, encouragement and recognition from teachers, peer groups and parents are important for Chinese female adolescents for artistic creativity, and have been neglected in some previous studies (Deci and Ryan 1985).

This study has extended the notion of Kashdan and Yuen (2007) discussed in Chapter 2 (p. 49) by indicating that the Hong Kong culture of concern about academic performance as one of the obstacles to the development of artistic creativity. The life history narratives of the participants reflected that female adolescents are under great study pressures. Under the current competitive education system in Hong Kong, adolescents need to study hard to achieve academic success and compete for a finite number of university openings. It is found that the concern about academic performance also leads to another obstacle (Resource Availability): there is insufficient time to engage in the visual arts. Female adolescents need to spend time studying to get better exam grades, and that may limit their involvement in the visual arts and hinder the development of their artistic

creativity. This study has deepened the understanding of current issues faced by Chinese female adolescents in Hong Kong.

The study also shows that teachers play an important role in fostering the development of artistic creativity – as suggested in the literature (e.g., Csikszentmihalyi 1996; Cropley 1997). The life history narratives of the participants demonstrated that Visual Arts teachers can act as facilitators to motivate students to be creative and provide freedom and supportive learning opportunities for Chinese female adolescents to experience happiness in artistic creativity.

It is imperative that our education system meets the needs of students and Hong Kong's need for creativity. The narratives of the participants in this study reflected that Motivation (the enjoyment of art making) and Teachers' Influence (supportive learning environment) are important factors that may foster the development of artistic creativity. This study contributes insights for teachers and education institutions to prioritize arts education reform in these two areas.

6.4 Limitation of the Study

This sample has limitations due to the nature of participants. The participants were volunteers that participated in the face-to-face semi-structured interviews. They were adolescent students with proven performance in the visual arts who studied visual arts programmes in recognised secondary school or university, or nominated by their Visual

Arts teachers. It is possible that the volunteers were with special interest in research due to the fact that these individuals went to greater lengths to participate.

The sample represents volunteers and not the entire group of Chinese female adolescent body in Hong Kong. It was difficult for me to find such a large amount of volunteers that were willing divert time away from their studies. I contacted 50 secondary schools, colleges and universities in Hong Kong and through referrals to recruit participants for the study. A lot of effort was required to get in contact with the participants and had their co-operation in disclosing personal information on the learning and development of artistic creativity. Arrangements were made to accommodate the busy schedule of the participants in conducting interviews.

The modest sample size was due to the nature of students volunteering. However, the sample size represented diverse groups of female adolescents, including junior secondary student, senior secondary students and university student. The participants came from different family backgrounds and studied different subjects in schools. A larger sample size of life history research or several years of tracking study might generate more insights to understand the learning and development of artistic creativity among creative individuals.

This sample was Chinese female adolescent students 15-19 years old and may not apply to older, more sophisticated and more accomplished age

groups. Moreover, I focused on the study of a sample of Chinese female adolescents, it would be interesting to conduct interviews with their parents and teachers that might provide data to study the development of artistic creativity from different perspectives.

6.5 Future Research

Future studies are needed to explore whether the findings are unique to Chinese female adolescents in Hong Kong. It is possible that different results may have been found for investigating a sample of male adolescents and children in Hong Kong. Also, additional studies should be completed to include a comparison among female and male adolescents, and examine the influence of music education on developing creative individuals.

Other areas that need further investigation may include how competent are teachers in fostering creativity among students, what constitutes a creativity-oriented curriculum and assessment for learning, and how to develop a favourable learning environment for creativity development in Hong Kong. Comparisons of assessment strategies and pedagogy for creativity development in different countries and cities may also generate insights for developing creative potentials among students.

APPENDICES

Appendix A

A SAMPLE OF INTERVIEW TRANSCRIPT

A SAMPLE OF INTERVIEW TRANSCRIPT

Warm-up questions:

Interviewer: What is your age?

Participant A: 19 years old.

Interviewer: What is your education level?

Participant A: I am studying a Fine Arts degree programme offered by a famous local university in Hong Kong. I am in the second semester of first year. It is a 4-year programme.

Interviewer: What do you like to do in your leisure time?

Participant A: Currently, I spend most of the time in attending lectures and developing artworks for courses. I have a part-time job as a tutor in an art tutorial centre to teach kids painting.

When I was in secondary school, most of my time was in studying. I was not sure of my interest and did not know what programme to study at university. Therefore, I chose to study 3 elective subjects in senior secondary level (S4-S6), they were Combined Science (Biology and Chemistry), Economics and Visual Arts (VA).

In DSE, I got the highest grade in Visual Arts. As I have an interest in VA, so I choose to study Fine Arts in the university.

I have many interests, like dancing and playing piano.

Interviewer: Have you learnt painting in any tutorial centre?

Participant A: I only attended summer classes in an art tutorial centre when I was in kindergarten.

Questions contribute to the personal factors that affect the development of artistic creativity:

<u>Personality</u>

Interviewer: How do you describe your personality?

Participant A: I have a mixed personality. I am casual and easy-going on some issues, such as eating. But I am quite persistence in art creativity, and is an introverted person. Sometimes, I am conservative; but sometimes with wild ideas.

Sometimes, I work very detail in my artworks and look for perfection. But sometimes, I just follow my emotion and feeling (follow my heart) in painting.

My teachers and classmates said that I am a person who follows the heart in painting. In general, I am good at art / painting that shows my emotion and feeling.

Interviewer: What do you like to draw the most?

Participant A: I started to learn painting mainly in my senior secondary education (started from S4). I do not learn sketching before, and not good at drawing black and white sketches. I prefer to have oil painting. I have learnt Chinese painting, and I am quite interested in it.

Interviewer: What do you want to be your future career?

Participant A: I am a practical person. Maybe I will be a teacher in order to earn a stable income. I would like to own a studio or tutorial centre, so as to do what I like and teach students drawing. I also want to have a leisure life. I may become an illustrator.

Most people learn fine arts are with ego, and do not want to follow order in one's career.

Interviewer: Do you prefer to handle your tasks creatively?

Participant A: The 4-year Fine Arts degree programme mainly focuses on training students' creative mind, such as how to think from a new perspective in developing one's artworks. Thus, I tend to use "new ways" in my work. Try to have creativity in my work.

Interviewer: Do you need to follow the assessment guideline in art making?

Participant A: There are assessment guidelines that list out the percentage of marks allocated for composition, art skills, and other important elements required for the work. They are general guidelines, and students have the flexibility in developing their works. Most lecturers are quite open in assessing artwork / assignment. Sometimes, they may give marks just for the idea presentation of the work.

Motivation

Interviewer: Visual Arts is one of your selective subjects in S4. What are the reasons for you to study Visual Arts?

Participant A: I feel that I have talent in Visual Arts. Studying is under pressure, I want to learn something that is interesting and enjoyable. VA is more flexible and dynamic. VA involves drawing and developing artworks, and not much on memorizing information.

Interviewer: Did you have good work in VA in S1-S3?

Participant A: No. My grade of VA in S1–S3 was not that good.

Interviewer: Is there any family influence on your course selection?

Participant A: No pressure from my family. I made my own decision in course selection. I want to learn more, so I chose to study 3 selective subjects in S4, which is 1 course more than the other classmates.

Interviewer: Any influence from your teachers in secondary school?

Participant A: No. Teachers did not discuss the issue with me. The choice of elective subjects depended on the academic results. For those who got good academic results, they are able to take the subjects they chose. Students with the highest academic results usually studied Physics, Chemistry and Biology. My school life of S4-S6 was very happy.

Interviewer: Any influence from your friend in course selection?

Participant A: Three of my primary school classmates studied at the same secondary school. But they did not influence my course selection. My best friend, from the same primary school, also studied VA in S4. But her main focus was on design, while my focus was on painting.

Usually, I think a lot, but do little in painting. I have the concept, but did not complete many artworks.

Knowledge and competence

Interviewer: What type of visual arts do you like the most?

Participant A: I seldom draw "people"; I like to draw "objects". Most ideas are from observation. I like to observe others.

Lin Fengmian, a master in Chinese painting, was very famous in drawing "Chinese ladies". After acquiring the skills of western and Chinese painting, he then created his own famous style of painting. Creativity is possible after years of training and practicing.

In school, students are trained to strictly follow a master's skill / style so as to learn and manage the skills. When the student becomes famous, he or she can then create her own style. It is important to be competent in skills.

Interviewer: Do you think you can master the skills of visual arts? If given 1 to 100 marks, what marks do you think you can get in the visual arts?

Participant A: My performance is not stable. Some works may get high marks, but the others are with low marks. I think I may just get a "pass" in mastering the skills.

Interviewer: What marks do you think you can get from the creativity in painting?

Participant A: I may get 70-80 marks in creativity. The inspiration is from daily life, through observation to get new ideas.

Interviewer: When have you started to learn the visual arts? Where did you learn the visual arts?

Participant A: I started to learn the visual arts in S4 in my secondary school.

Interviewer: Have you got any awards in the visual arts?

Participant A: I got some awards from the secondary school, such as award on book marks design. I seldom participated in design competition. Even now, not like other classmates in the university, I do not prefer to attend art exhibition.

Interviewer: Are you particularly interested in a specific type of visual arts?

Participant A: When I was in primary school, I liked paper folding (Origami). I read books to learn the methods of paper folding. But once I learnt the way and folded an object, I would not want to repeat making objects again and again. Now, I prefer painting. Each drawing is unique.

<u>Cognitive processing skills</u>

Interviewer: Describe some of your favourite works in the visual arts.

Participant A: I always give my favourite works to friends as gifts, such as birthday presents. I always make the gifts which express my feeling / emotion. I spend time making gifts, which might spend more effort than doing my assignments.

One of my favourite works is a painting I drew in S6 for DSE. I still keep it at home. The theme is “A Cat”. The cat represents me. Cat has a mixed personality, sometimes lovely and naughty, but also quite fierce and not willing to obey orders. I developed a series of 3 paintings to express my emotions.

The first one is about 2.5 feet height. A CAT is sitting on the moon, and there are people arguing about political and social issues on the ground. I

imagine I am the cat and preferred to stay in my imaginable world, rather than struggling in the ugly real-life situations.

The second painting is my favourite. It's about 2.5 feet height. It is an abstract painting, use wild approach in expressing my feeling. I am happy that people understand the emotion that I want to express just by looking at it. It is with a big cat at the centre. It's an acrylic painting with colours. A furry cat is in two different styles of presentation. One half of the cat is white with ceramic appearance. The two styles represent a contrast between emotional and rational thinking that shows contradiction. There is a triangular pyramid in the middle to represent "the boundary that I want to break through".

Describe the process to produce the work: I need to catch up with the tight timeline. I thought and created a theme for the paintings. Then, I discussed with my VA teacher. She mentioned that I need to have enough concept and feeling on the theme in order to express the emotion to the audience.

Interviewer: Will you consider how to get high marks in the development of artworks?

Participant A: No. I will not think from this perspective. Of course, I need to understand what are the criteria / requirements of teachers, and then try my best to do. However, I will not just focus on getting marks. I want to try different things, and willing to take risk of making mistakes in painting for school assignments.

Interviewer: How long did you take to finish the "Cat" painting?

Participant A: Around 3 months, including research. I sourced many cat photos showing different facial expressions and gestures (mostly from the internet). Sometimes, my ideas were banned by VA teacher and had to think again.

The development process is from concept creation to research, and then drawing. I prefer to start with a very rough draft on a sketch paper, and then directly draw on art paper.

Interviewer: Do you think your academic performance in school can help you in visual arts activity?

Participant A: Secondary education is boring, and not much influence on my painting / creativity. But the subjects of biology, chemistry and economics broaden my knowledge and help me in creativity. For example, these subjects stimulate and help me to generate creative ideas, and teach me where to find information.

Resource availability

Interviewer: On average, how much time and money have you spent on the visual arts?

Participant A: As a student in Fine Arts, I at least spend 2 hours in lectures per day. And most of my time is thinking creative concepts, what material used and where to get it. Not much time spent in developing artworks. In general, I spend around 6 hours a day in drawing.

I like to draw in leisure time, such as to copy masters' skills.

Interviewer: Have you visited art exhibition?

Participant A: I try to see more, and I usually go with my classmates. I like traditional style of painting, rather than digital painting.

Questions contribute to the environmental factors that affect the development of artistic creativity:

Family influence

Interviewer: Could you tell me something about your family, your parents and siblings? Have they involved in any art-related activity? How many people in your family?

Participant A: I live with my mother and a younger sister who will take

DSE this year. She does not like drawing.

Interviewer: Does your mother like drawing?

Participant A: No. She is a nurse. She is very patient, attentive to details and good at knitting. She did not go to exhibition with me.

My parents divorced when I was 5 years old. My father is a taxi driver after retirement. My mother always says that my personality and appearance look like my father.

I attended ballet class, drawing lessons and clay art class before I was 5 years old.

Interviewer: Who takes care of you most of the time?

Participant A: My grandma took care of me when I was a baby. Later, mother took care of the family. We have a maid. They spend much time on my younger sister. I am quite independent.

<u>Learning environment; Teachers' influence</u>

Interviewer: Describe the schools you studied, and your learning experiences.

Secondary school

Participant A: I studied at a girls' school. The VA teacher at my secondary school was good. She was around 25-30 years old, and graduated from Fine Arts of Chinese University of Hong Kong. She was open and liked to communicate with students. She did not set many rules for students. She only gave students the topics, and then commented our work and also gave suggestions. This is good as students knew how to improve the work. She mainly taught S4-S6 classes.

There were 2 VA teachers in my secondary school. The other teacher was strong at using computer for digital design. In general, the DSE result in Painting class is better than Design class.

I like VA because of the teacher. She is professional in VA. She did not like the other teachers as she was not traditional in teaching. She aroused my interest to study Fine Arts.

I only learnt VA at school. My secondary school did not have many resources. For example, the computers were slow and only had basic software (such as Illustrator, Photoshop). There was only 1 VA class, with 1 furnace for burning ceram. Resources at primary school were more than that in the secondary school.

My secondary school was with limited resources, and the VA teacher wanted students to pick up the skills quickly. Teachers encouraged students to use acrylic in painting, which is similar to oil painting and can be used to paint large artworks. Only a few students used photography in creativity, but they usually got lower marks.

For large projects, students had 10 minutes in-class presentation. During the interim critic, students needed to report their concepts and work progress, and presented their half-finished drawing to teacher and classmates.

S4-S6 had 20 students per VA class. But some students dropped VA later because of heavy workload in studying 3 elective subjects, and got low marks from the first 1-2 artworks.

My interest in VA was mainly developed in secondary school, not much influenced by my primary education. I want to try different things. Under the new school curriculum of secondary education, I am able to study 3 elective subjects, and I chose VA in addition to biology and chemistry. Painting is more interesting, and it does not require memorizing information.

Primary School

Participant A: My primary school was a girls' school. It had a new computer room and invested in hardware and software, which was being reported in a local newspaper.

The art teacher (an old lady who also taught English) was very traditional in teaching. I did not like VA in primary school, may be because I did not like the teacher. Students were giving various tasks, like paper cutting, colouring and even 3D items (more variety than secondary school). But I always asked my mother to do it for me.

Interviewer: Do you think you have creativity?
Participant A: Yes. Sometimes, I always think of "wild and strange" ideas, and want to use various interesting methods in handling daily life. For VA, I think is through observation to handle trivial things in an interesting way. I like to read scientific fictions, and develop the story by myself. I like to create things and have it in my dreams.
Artists can be people with abstract mind, and those who think directly and impulsively.

<u>Cultural influence</u>
Interviewer: Do you think the culture in Hong Kong has an influence on your visual arts? Why do you say so?
Participant A: Under the current DSE education system, VA concepts related to social issues seem to be easier to get high marks. But it is not the case in university, creative concepts will not limit to social issues.
HK is a place where west meets east, and we are free to develop ideas / creativity (even sensitive topics), which is different from the mainland China.
University students are more individualistic, not sociable and don't like commercialization. They prefer to stay alone for the creativity, and may not be affected by the HK culture.

Wrap-up questions:
Interviewer: What is your advice for individual to have artistic creativity in the visual arts?

Participant A: First of all, VA must be their interest, because they need to think and paint a lot. Otherwise, it will be very painful. Secondly, learn to relax so as to have inspiration. Thirdly, study and learn different knowledge, discuss with more people. All these can help people to have creativity.

Interviewer: How to have creativity in the visual arts?

Participant A: (1) Observe more; (2) Don't be afraid of thinking of wild ideas. Think like a child is good for creativity; (3) Be persistence, don't be afraid of failure, and be brave to create; (4) Need to acquire skills and get training before one can create new things.

End of the interview

Appendix B

INFORMATION SHEET

The University of Nottingham
School of Education

Information Sheet

You are being invited to take part in a research project for the degree of Doctor of Education.

Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you.

Research topic: Study the internal and external factors that influence the development of artistic creativity in the visual arts among Chinese female adolescents (those aged 15-20)

Name of researcher: Chow Mei Fung

1. What is the aim of research?

The project aims at investigating the personal and environmental factors that influence the development of artistic creativity in female adolescents, and suggesting implications for art educators who teach female students in schools.

2. What would you be asked to do if you took part in the research?

You will be invited to participate in one to two face-to-face interviews with the researcher at your school, each for around one hour. You are welcome to express your view freely on topics about your life history, learning process, education, creativity development and achievements, personality and family background.

Follow-up telephone interviews might be arranged at your convenient time to clarify or supplement information for the research. The interviews will be recorded and transcribed into English. A copy of the interview report will be given to you for record.

3. How is confidentiality maintained?

All your personal information will be kept in confidential. Only the researcher will have the access to the personal information collected from interviews. The audio-tapes used to record down the interviews will be kept by the researcher and locked in a private safe place. The personal data and audio-tapes will be destroyed three months after the completion of the study (i.e., the researcher is awarded a degree of Doctor of Education).

Your personal identity will not be disclosed in the research report and any published materials. The information collected from interviews will be used to study the factors that influence the learning and development of artistic creativity among Chinese female adolescents.

4. What happens if I do not want to take part or if I change my mind?

Your participation in the research is completely voluntary. It is up to you to decide whether or not to take part in the research. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. If you are under the age of 18, your parent will also be asked to sign a consent form for you.

If you decide to take part in the research, you are still free to withdraw at any time without giving a reason and without negative consequences.

5. Will there be any potential risks, harms and benefits to me?

If you agree to participate in the research, you need to spend time joining the face-to-face and / or telephone interviews. You are free to

express your views during the interviews as there is not right or wrong answer for the interview questions.

With your participation in the research, the researcher will be able to collect information to study the various factors that influence the development of artistic creativity among Chinese female adolescents. The research findings may help to find out implications for art educators who teach female students in schools. Your participation will contribute to the education system and the society.

You will feel happy in taking part in the research because the interviews may refresh your happy memory on the development and achievement in visual arts and / or artistic creativity.

6. Contact for further information

Please feel free to contact the researcher, Chow Mei Fung, at (852) 98842609, or via email: belinda.chow@hkuspace.hku.hk

You may also contact the researcher's supervisors:
Professor John Holford (john.holford@nottingham.ac.uk), or
Dr Gillian Perkins (gillian.perkins@nottingham.ac.uk)

7. What if something goes wrong?

If you want to make a formal complaint about the conduct of the research, please contact the School of Education Research Ethics Coordinator, the University of Nottingham:
educationresearchethics@nottingham.ac.uk

APPENDIX C

PARTICIPANT CONSENT FORM

PARTICIPANT CONSENT FORM

Project title: Study the internal and external factors that influence the development of artistic creativity in the visual arts among Chinese female adolescents (those aged 15-20)

Researcher's name: Chow Mei Fung

Supervisor's name: Professor John Holford and Dr Gillian Perkins

- I have read the Participant Information Sheet and the nature and purpose of the research project has been explained to me. I understand and agree to take part.
- I understand the purpose of the research project and my involvement in it.
- I understand that I may withdraw from the research project at any stage and that this will not affect my status now or in the future.
- I understand that while information gained during the study may be published, I will not be identified and my personal results will remain confidential.
- I understand that I will be audio-taped during the interviews.
- I understand that data will be stored by the researcher in a private safe place, and only the researcher will have the access to the personal data collected from the interviews. The personal data will be destroyed three months after the completion of the study.
- I understand that I may contact the researcher or supervisor if I require further information about the research, and that I may contact the Research Ethics Coordinator of the School of Education, University of Nottingham, if I wish to make a complaint relating to my involvement in the research.

I agree to participate in the above research project.

Name of research Participant	Date	Signature
_____	_____	_____
Name of person taking consent (if participant is aged under 18)	Date	Signature
_____	_____	_____
(Relationship with participant:		)

Contact details

Researcher: Chow Mei Fung at (852) 98842609, or belinda.chow@hkuspace.hku.hk
Supervisors: Professor John Holford (john.holford@nottingham.ac.uk)
School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

APPENDIX D

RESEARCH ETHICS APPROVAL FORM

RESEARCH ETHICS APPROVAL FORM

2013/ 40 /JG

School of Education – Research Ethics Approval Form

The University of Nottingham

Name	Chow Mei Fung
Main Supervisor	Dr John Holford
Course of Study	EdD
Title of Research Project:	Study the internal and external factors influencing the development of artistic creativity in visual arts in Chinese female adolescents (those aged 16-20)
Is this a resubmission?	No

Date statement of research ethics received by PGR Office: 05/02/2013

Research Ethics Coordinator Comments:

The information provided meets the criteria for ethical approval of this research.

I consider this research to be above minimum risk ☐

Outcome:

Approved ☑ Revise and Resubmit ☐

Signed: W. J. Morgan Name: Professor W. J. Morgan Date: 12/4/13

(Chair of Research Ethics Committee)

APPENDIX E

TEMPLATE ANALYSIS – CODING

Template Analysis – Coding

1 Personal background

- 1 Age
- 2 Education level
- 3 School type
- 4 Hobby

2 Personality factor

- 1 Personality descriptors
- 2 Future occupation
- 3 Special way in completing an ordinary task
- 4 Ways in handling problem
- 5 Creative behaviour

3 Motivation factor

- 1 Extra-curricular activities
  - 1 Types
  - 2 Start date
  - 3 Reasons of participation
  - 4 Where to learn
  - 5 End date
- 2 Visual arts extra-curricular activities
  - 1 Types
  - 2 Start date
  - 3 Reasons of participation
  - 4 Where to learn
  - 5 Who make the decision for you to participate in the visual arts
  - 6 Who encourage you to participate in the visual arts
  - 7 Influence from friends / classmates

4 Knowledge and competence factor

- 1 Visual arts course studied
  - 1 Types of course
  - 2 Skills learnt
  - 3 Start date
  - 4 Where to learn
  - 5 End date
- 2 Awards
- 3 Most preferred type of visual arts
- 4 Degree of skill mastering in visual arts

5 Cognitive processing skills

- 1 Favourite visual arts work
  - 1 Theme
  - 2 Development process
  - 3 Material used
  - 4 Source of creative idea
  - 5 Time used to finish the work
  - 6 Consideration criteria in developing the work

7 Reasons for liking the work
2 Influence of academic performance on the visual arts
3 Extra-curricular activities influence on the visual arts

6 Resource availability
1 Time spent per week in visual arts
1 Tutorial class
2 Work development
2 Money spent per month in visual arts
1 Tutorial class
2 Exhibition
3 Materials

7 Family influence
1 Family size
2 Number of sibling
3 First child
4 Family economic status
1 Type of housing estate
2 Social class
5 Parents
1 Education level
2 Occupation
3 Interest in the visual arts
4 Belief in the visual arts
5 Influence on the visual arts
6 Relationship
7 Engaged together in visual arts activity
6 Siblings
1 Age
2 Education level
3 Occupation
4 Interest in the visual arts
5 Influence on the visual arts
6 Relationship
7 Engaged together in visual arts activity
7 Other relatives in the household
1 Relationship
2 Influence on the visual arts
3 Engaged together in visual arts activity
8 Encouragement from family members
9 Childhood
1 Games played
2 Important incident

8 Learning environment
1 Kindergarten
1 Type of school
2 School facilities / environment
3 School influence on the visual arts
4 Teacher influence on the visual arts
2 Primary school

1 Type of school
2 School facilities / environment
3 School life
4 Learning atmosphere
5 Favourite subject
6 Least preferred subject
7 Extra-curricular activities
8 School influence on artistic creativity / visual arts
9 Classmate influence on the visual arts
10 Teacher influence
    1 Favourite teacher
    2 Teaching style
    3 Teacher influence on visual arts
11 Assessment
    1 Methods
    2 Stimulate interest in artistic creativity / visual arts
12 Academic performance
    1 Best subject

3 Secondary school
1 Type of school
2 School facilities / environment
3 School life
4 Learning atmosphere
5 Favourite subject
6 Least preferred subject
7 Extra-curricular activities
8 School influence on artistic creativity / visual arts
9 Classmate influence on the visual arts
10 Teacher influence
    1 Favourite teacher
    2 Teaching style
    3 Teacher influence on the visual arts
11 Assessment
    1 Methods
    2 Stimulate interest in artistic creativity / visual arts
12 Academic performance
    1 Best subject

4 University
1 Programme
2 School facilities / environment
3 School life
4 Learning atmosphere
5 Favourite subject
6 Least preferred subject
7 Extra-curricular activities
8 School influence on artistic creativity / visual arts
9 Classmate influence on the visual arts
10 Teacher influence
    1 Favourite teacher
    2 Teaching style
    3 Teacher influence on the visual arts
11 Assessment

- 1 Methods
- 2 Stimulate interest in artistic creativity / visual arts

12 Academic performance
- 1 Best subject

5 Visual Arts tutorial centre
- 1 Programme
- 2 Facilities
- 3 Learning atmosphere
- 4 Influence on artistic creativity / visual arts
- 5 Classmate influence on the visual arts
- 6 Teacher influence
  - 1 Favourite teacher
  - 2 Teaching style
  - 3 Teacher influence on the visual arts
- 7 Stimulate interest in artistic creativity / visual arts

9 Cultural influence
- 1 Hong Kong culture
- 2 Chinese culture

10 Source of creativity
- 1 Daily life
- 2 Reading
- 3 Internet
- 4 Event participation
- 5 Others

11 Ways to have good performance in Visual Arts
- 1 Practice
- 2 Observation
- 3 Others

APPENDIX F

HKDSE – SENIOR SECONDARY SUBJECTS

HKDSE – Senior Secondary Subjects

All students in Hong Kong are expected to complete three years of junior secondary education followed by three years of senior secondary education. Upon completion of this six-year secondary education, students will take the Hong Kong Diploma of Secondary Education Examination (HKDSE), which aims to measure the attainment of students.

There are 24 senior secondary subjects with 4 core subjects and 20 elective subjects.

Core Subjects

Chinese Language	English Language	Mathematics	Liberal Studies

Elective Subjects

Chinese Literature	Biology	Business, Accounting and Financial Studies
Literature in English	Chemistry	Design and Applied Technology
Chinese History	Physics	Health Management and Social Care
Economics	Science: Combined Science	Information and Communication Technology
Ethics and Religious Studies	Science: Integrated Science	Technology and Living
Geography		Music
History		Visual Arts
Tourism and Hospitality Studies		Physical Education

Source: Hong Kong Examinations and Assessment Authority (2017)

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