# Using sequence analysis to explore the group interaction within a Circle of Adults: An exploratory study

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**Abstract**

Educational settings are required to differentiate for students with special educational needs which may now include social, emotional and mental health difficulties (SEND Code of Practice, 2014). Educational psychologists are often called upon by schools to support them in meeting the needs of vulnerable children. When aiming to build capacity in schools and facilitate change, educational psychologists increasingly opt to use consultative methods (Ingraham, 2000).

Circle of Adults is a tool used by educational psychologists to facilitate group problem solving (Grahamslaw and Henson, 2015). Yet despite its growing popularity, little is known about what yields successful outcomes (Bennett and Monsen, 2011). To understand the efficacy of the intervention, psychological theories of group interaction have been consulted. Though there is a consensus that groups interact in predictable ways (Wheelan, 1994), there are contrasting explanations for what actually happens within groups. Thus, the group dynamics within a Circle of Adults are not yet fully understood. This research aimed to enhance the existing evidence base by exploring the interactional patterns occurring within the group during Circle of Adults.

Five Circle of Adults were observed and coded using Bales' Interaction Process Analysis (IPA, 1951). Sequence analysis showed that 27 first order event pairs were found, indicating that Circle of Adults facilitates predictable group interaction. Findings also demonstrated that the intervention enables discussion which is functional in nature and that within the group, there is a balance between task and emotional interactional processes occurring.

Implications of this research are considered, particularly focusing upon how this research can be used by educational psychologists and local educational authorities. Through critically considering the methodology used, recommendations for future research are made.

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I dedicate this thesis my beloved daughter, Violet Clara, who has been my motivation to complete this work. Violet, I hope that this is symbolic in demonstrating to you that you can do anything you put your mind to. Never give up, embrace the challenges, grow through the hiccups along the way and enjoy every second. You have the World at your feet my darling daughter; believe in yourself and welcome every opportunity you are given.

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## 1. Introduction to thesis

This thesis has explored the ways in which a group of professionals interact within a Circle of Adults problem solving intervention. Whilst the understanding of how the group interact is integral to the research questions posed, at the heart of this study is the importance of empowering school staff through consultative working. By moving away from within child, deficit models of working, using consultation methods have been positioned to promote the inclusion of the most vulnerable children and young people within society. This research has examined the psychology of group interaction in order to offer an original interpretation into understanding how a Circle of Adults yields positive outcomes.

The need for enhancing an understanding into the efficacy of Circle of Adults is important for educational psychologists. Recognising the shift towards consultative practices and models of service delivery (Fagan and Wise, 2007), group problem solving tools are being increasingly chosen by educational psychologists to respond to complex case work (Lewis and Newcomer, 2002). Such ways of working also proves to be important within the wider legislative context which has been actively considered throughout the completion of this thesis. Currently, under the Special Educational Needs and Disabilities Code Of Practice(2014), responsibility is placed upon schools to provide appropriate differentiation, person-centred planning and a graduated response to support students with additional needs, ensuring their voices are listened to throughout such processes. Furthermore, research has demonstrated the rising prevalence of mental health issues in schools (NSPCC, 2014). In addressing these needs, the Department for Education have reinforced the importance of upholding a strategic approach to supporting positive mental health in schools (Mental Health and Behaviour Advice for Schools, 2016). Thus, using consultative tools like a Circle of Adults provides schools with creative opportunities to support those most at risk of exclusion, in accordance with recent legislative requirements. As such, the focus for this thesis to understand the workings of a group within a Circle of Adults context

proving to have wider implications for supporting educational psychologists to work systemically with their stakeholders.

### 1.2 Personal and professional interest

The author holds a strong personal and professional interest into working systemically within schools, particularly using consultation to empower stakeholders to effect change. When introduced to the Circle of Adults intervention during their first year of doctoral training, many questions arose due to the perceived power and success the intervention had. Such questions were found to be pertinent when examining the existing evidence base and also previous theses (unpublished) from the University of Nottingham; little could be found to explain the reported efficacy of Circle of Adults. The researcher pursued their interest, deciding to complete a thesis that explored the dynamics within the group, in order to help understand what factors may be attributed to the perceived success of the intervention.

### 1.3 Context of research

This research was conducted in the researcher's host local authority, whilst working on placement in the educational psychology service. The topic for this thesis was therefore not only decided upon based upon the author's interest, but also in consideration of priorities for the service. At the time of the thesis completion, Circle of Adults was being offered to schools as a free activity. The purpose of this initiative was to promote school inclusion for children and young people experiencing social, emotional and mental health difficulties. In addition, it was offered with the intention of building the longer term capacity within schools to support children and young people presenting with such needs.

A detailed research proposal was sent to the head of the educational psychology service and also the team where the author was working as a trainee educational psychologist. All were supportive of the research, recognising the value an in-depth exploratory study would offer to the

broader understanding of how and why a Circle of Adults is successful when responding to complex casework in schools.

### 1.4 Unique contribution

At present, there is no other published research which has explored Circle of Adults in this way. By examining the interactional processes occurring within the group during the intervention, this research offers a unique contribution to the existing evidence base for Circle of Adults.

By studying the processes and psychology beneath Circle of Adults, this research is able to offer a theoretical insight into the intervention. This may prove to be insightful for professionals working within educational contexts as it provides an understanding into the outcomes of working collaboratively from a systemic perspective. Within the wider legislative context, this working is encouraged under recommendations from the SEND Code Of Practice (2014) in order to promote school inclusion and the Department for Education (Mental Health and Behaviour Advice for Schools, 2015) to raise positive mental health in schools.

Finally, the study also offers educational psychologists an insight into Sequence Analysis; a tool for exploration which offers a unique way to understand how events are interrelated, in order to make subsequent predictions about human behaviour. It is hoped that the pragmatic approach taken to this applied research will highlight the capacity for educational psychologists to conduct original research, adding value to existing literature.

## 2. Literature review

### 2.1 Chapter overview

The purpose of this chapter is to provide an overview of the current context for educational psychologists working within schools. It highlights the shift in paradigms for the ways educational psychologists work in schools; presenting the move from within-child working to the adoption of more consultative practise. It is this move towards consultative working that has enabled collaborative work with children, families and schools.

In response to a change in working practise, problem solving tools including Circle of Adults, have been developed to guide joint problem solving between educational psychologists and their stakeholders. Circle of Adults is increasingly being used by educational psychologists and literature highlights that participants report positive experiences immediately after the intervention. Yet despite this, little is known about the longer term efficacy of the intervention or, what actually happens within the group to yield the reported favourable outcomes.

To address this gap within existing literature, this chapter draws upon theories of group development and dynamics to consider the psychology beneath group interaction; setting the scene for further exploration later in the thesis.

### 2.2 Educational context

United Nation Conventions on the Rights of the Child illustrates a responsibility for all children to have access to education. Within the United Kingdom, specific legislation is in place to govern the educational provision available to children. The Equality Act (2010) places a duty of care upon professionals working with children and young people to ensure that they take active steps to reduce inequalities and societal disadvantages. Further

drives to promote equity are administrated through government acts including the Children and Families Act which reformed legislation for children and young people with special educational needs in 2014. The Special Educational Needs and Disabilities (SEND) Code of Practice, 2014, outlines responsibilities for organisations working with children and young people to uphold, specifically when working with individuals with special educational needs. Within the 2014 Code Of Practice special educational needs refers to individuals who require support and intervention beyond quality first teaching and differentiation, due to their additional needs. Additional needs relates to difficulties in one or more domains including; cognition and learning, communication and interaction and social, emotional and mental health.

The Code places statutory obligation upon services within the health, social care and education domains to work collaboratively in order to facilitate inter-professional working to support 0 – 25 year olds with special educational needs. It specifies that professionals must actively seek to obtain the voices of parents and children in order to contribute to decisions made; service policies must demonstrate how they strategically work to capture views of those they are working with. In addition, professionals working with children and young people with special educational needs are required to show regard for their needs by demonstrating the arrangements they have made within their setting to raise aspirations and promote inclusion. In summary, the code illustrates a way of joint, multiagency working. It promotes a graduated approach to supporting those with special educational needs through early intervention, inclusivity and ensuring that the voices of children, young people and their parents/carers are central to working.

In 2014 statistics presented by the NSPCC signified an increase in children and young people seeking the support of ChildLine. Statistics demonstrated an 192% increase from 2010/11 in reports of self-harm during counselling sessions and a 38% increase in children under 11 years accessing support following reporting of suicidal thoughts. This data implies that the prevalence

and awareness of mental health needs is growing and thus, it is an area for all professionals working with children and young people to be mindful of.

Recently, mental health has also become a topic for discussion by the government; indicative of the rising prevalence of social, emotional and mental health needs within schools. Specifically, the Department of Education (DfE, 2016) have acknowledged the challenges faced by schools to meet the needs of their most vulnerable young people. This is indicative of school staff perceiving mental health to be a difficult area to support in schools. The DfE attribute this perceived difficulty to a lack of knowledge and understanding around how to support children presenting with complex social, emotional and mental health needs. Similarly, as part of the House of Commons Health Committee's review of Child and Adolescent Mental Health Services (CAMHS, 2014), young people themselves identified that staff are often ill-equipped to respond to the needs of pupils with mental health needs, describing teachers as being 'scared' of pupils exhibiting challenging behaviour.

In response to the apparent need for additional support for those experiencing social, emotional and mental health needs in school, the DfE issued the Mental Health and Behaviour Advice for Schools in March 2016. The publication highlights that one in ten 5-16 year olds have a clinically diagnosed mental health need. The document advises schools on how to promote positive mental health in schools, citing the importance of schools adopting a strategic whole school approach to support vulnerable students. It recommends the need for continuous professional development for all staff and places an obligation upon schools to appoint a qualified teacher with the role of special educational needs and disabilities co-ordinator (SENDCO). Though all staff are responsible for supporting children with special educational needs in school, there is specific responsibility upon a SENDCO to liaise with staff and work strategically to promote the needs of students with mental health needs. To support schools working in this way, the document also advises that drawing on support from external support agencies may also be appropriate; which could include an educational psychologist. This way of

working contributes to a 'graduated response' (SEND Code of Practice, 2014) in the assessment and intervention of learning needs. Through school systems operating in this way, it is anticipated that they are able to mitigate the risk of mental health problems in their pupils (DfE, 2016).

### 2.2.1 The role of an educational psychologist

As indicated in publications by the Department of Education, educational psychologists are well placed to support schools to provide good quality teaching and learning for children with special educational needs. This includes educational psychologists working directly with children and also alongside staff, contributing to their professional development and whole school policies. However, despite the current conception of their role, educational psychology practise has changed considerably since the role was created in 1913.

### 2.2.2 A change in paradigm for educational psychology casework

Initially, the role of the educational psychologist was to focus upon direct assessment of a child, typically through the means of intelligence (IQ) testing. This working reflects a within-child approach; focusing solely upon the characteristics of the child as opposed to how they function within a wider ecological context. Yet despite this, a paradigm shift for educational psychology practice occurred following a report by Gillham, titled 'Restructuring Educational Psychology' in 1978. It was posed by Gillham that adopting a purely child focused approach was hindering the impact of educational psychology work in schools. As an alternative it was suggested that a focus must be given to changing the experiences children have in school. Thus by changing the context, greater long term outcomes could be yielded. As a result, an ecological view began to dominate how educational psychologists approached case work in school; consideration of the child in context and the many influences upon them when problem solving became paramount in the role of educational psychologists. It is now widely accepted

within literature and educational psychology training programmes that adopting an ecological approach, working systemically, is likely to lead to change at a higher level (Beaver, 2011). And, as a result in this shift in practice, educational psychologists are now often involved with strategic work in order to facilitate whole school improvement. Bettle, Frederickson and Sharp (2001) explored the impact of educational psychologists working to improve schools, specifically those schools in special measures. They found that educational psychologists were able to use their professional repertoire of skills to support organisational change in schools which were experiencing challenge and perceived external pressures.

Systems Theory, posed by Dowling and Osbourne (1985), is rooted within an interactionist perspective which recognises how individuals function within a system which holds its own beliefs, values and behaviours. In response to a shift in working paradigms for educational psychologists, it is through an application of systems theory which enables the ecological context to be considered. Educational psychologists actively seek to gain insight into the wider system, smaller systems operating within it and consider the direct impact these have upon a child and presenting behaviour.

Beaver, 2011, acknowledges the shift in pedagogy which guides educational psychologists from within child working, to using a more holistic approach. Within his work, Beaver (2011) encourages educational psychologists to practice systemically through the notion that children do not operate in isolation from their context, which cannot be ignored within assessment and intervention. Beaver specifies that educational psychologists should draw upon their repertoire of skills in order to effectively combine individual based frameworks and knowledge of systems theory to make a unique difference to children and young people.

## 2.3 Consultative working

In response to the shift in pedagogy and working paradigm, educational psychologists now often draw upon their consultative skills to complete assessment and intervention work. Roberts and Rust (1994) argue consultation is now a preferred style of working by educational psychologists; a model which often informs model of whole service delivery. Conoley and Conoley (1992) define consultation as a voluntary, non-supervisory relationship between professionals from different fields, which is established to aid professional functioning. Other definitions found within the literature include that from Meyers, Parsons and Martin (1979) who explain consultation to be a problem solving process between a professional help-giver and a help-seeker, whilst Gendlin (1986) categorises consultation to be an interpersonal exchange.

### 2.3.1 Using consultation to work systemically in schools

In relation to how educational psychologists use consultation, Wagner and Watkins (2000) describe consultation as a way to uphold an indirect service model delivery. They illustrate that by educational psychologists taking the role of the consultant, they often do not meet a child or young person during their assessment and intervention and thus, remain removed from the problem. This ensures that the consultee is equipped through the consultation processes to become their own agent of change. Together, it is through this process that the consultee's professional role, capacity and opportunities to evoke change within the current context are reinforced. Wagner and Watkins add that through this process of professional peer consultation, it is anticipated that skills acquired by the consultee are generalised to other areas of their practice. Consultation can therefore be a tool for capacity building and facilitating long term change.

Wagner (1995) suggests that consultation processes adopted by educational psychologists have increased efficacy when using a multi-level model;

involving drawing upon situational, interactionist and systems level thinking. Through the use of these approaches, the consultee is able to consider their problem within context. Additionally, they are equipped with the support of a consultant who is able to offer knowledge and an understanding of psychology to understand behaviour, whilst simultaneously exercising their process leadership skills. Research suggests that working consistently and regularly in this consultative way, across all domains of the school, yields greater outcomes for educational psychology case work (Medway and Nagel, 1995).

Lewis and Newcomer (2008) considered schools in the USA, finding that expertise through a consultative process (even in specialist settings) is integral to enhancing capacity of general classroom practitioners. More specifically, Fagan and Wise (2007) estimated that around 20% of a school psychologist's time is spent engaged in consultation with school staff. Within the UK, local authorities are increasingly opting to use more indirect ways of working, as shown by defining their educational psychology service as an 'indirect service' available to schools . Wagner (2000) states that she has '*seen a number of EPSs make significant changes in their patterns of practice*' (page 17, lines 39-40). More recently in 2015, Farrell and Woods note that there is a large body of literature emphasising the importance of using consultation to deliver effective service in schools. Yet, despite such perceived benefits, the researchers identify that consultative approaches may not be being used as widely and consistently as some research would suggest. It is indicated that reasons for this include inconsistencies in defining what consultation actually is and also the wider constructions of the role of educational psychologists due to the profession being previously rooted within psychometric assessments. This suggestion has been reflected within other research. Erchul and Sheriden (2014) note that more time consulting with school staff would be preferred by many educational and school psychologists, indicative of the continuing development required in order to fully immerse consultation methods in educational psychology practice. Interestingly, within the same

article Farrell and Woods (2015) also highlight the differences in the use of consultation across the world; they describe the use of consultation in the UK as 'more encouraging' than compared to in other areas of the world. Together, it can be assumed that though there continues to be room for consultative practises to develop further within the profession the use of consultative working in schools has increased within the profession. These changes to EP working practices seem to be reflective of the shift in paradigm within the professional generally; though literature suggests that consultation is being used in varying amounts, with the UK seeming to be more advanced in using consultation to guide case work.

Overall, despite evidence to suggest that there continues to be room for the development of consultative working, existing literature consistently highlights the efficacy of consultancy approaches used by educational psychologists (Wagner, 2000). For instance, Ingraham (2000) summaries there are now 'excellent models for consultative working,' furnishing the climate for educational psychologists to adopt an indirect model of service delivery.

### 2.3.2 The efficacy of consultative models of working

Though consultation with individuals is a tool increasingly used by school psychologists, Lewis and Newcomer (2008) suggest that the efficacy of the approach is unclear. They argue that though indeed numerous studies illustrate the success of consultation, other studies have in contrast presented the challenges which occur when using a consultative model of service delivery. Specifically, Lewis and Newcomer note that different models of consultation each use the umbrella term 'consultation' which brings about challenges when implementing a consultative model and measuring outcomes. In their paper titled 'School Consultation: An interdisciplinary Perspective on Theory, Models and Research,' West and Idol (1987) present an overview to the varying models of consultation adopted by professionals, demonstrating the contrasting practises by professionals when adopting a consultative role. They examine consultative approaches including the

medical model, behavioural model and mental health model; each of which varies in the degree of collaboration and direction the consultant uses to engage with the consultee. Broadly, literature demonstrates that professionals from different domains adopt various methods of consultation, ranging somewhere between being coercive to collaborative and directive to non-directive (Gutkin, 1996). The chosen model of consultation is crucial as they each serve a unique, desired purpose (West and Idol. 1987). It could be argued that those coercive and directive present a hierarchical structure, perpetuating the 'expert' model, whereas non-directive, collaborative approaches contrast the 'expert model' greatly. This can be used to illustrate Lewis and Newcomer's suggestion that measuring consultation efficacy becomes difficult when the term reflects a broad definition, encompassing a range of processes, skills and purposes associated with a consultative approach.

Irrespective of the issues within current literature around defining consultation, it is indicated consistently within research that educational psychologists adopt a non-directive, collaborative approach to problem solving, conjoining elements of many models. This has been referred to as a 'holistic model' (Pryzwansky, 1977; Erchul and Martens, 2002; Egan, 2010). Thus, it is implied that though a broad and complex area, consultation is being used with some consistency amongst those practising educational psychology; adding increased validity to recent studies which indicate it being used increasingly in everyday practice (Roberts and Rust, 1994; Fagan and Wise, 2007; Lewis and Newcomer, 2008).

In consideration of the efficacy of consultation, research also suggests that consultancy skills are often correlated to consultation outcomes. This shows that the skill of the educational psychologist as a consultant will have a direct impact upon the outcomes yielded through consultation. According to Lewis and Newcomer, for changes to be implemented, a genuine shift in thinking is required in order for the consultee to change their behaviour. As a result, particular difficulties arise when school staff are required to implement the

interventions, yet genuine behaviour change has not occurred. Though it has been acknowledged that the model of consultation will affect the outcome (Egan, 2010), research also demonstrates that the success of consultation is dependent upon the competency of consultant. For instance, Gutkin & Conoley (1990) highlight that the success of consultation often depends upon the consultant's ability and skill to influence the consultee. This may include their ability to form a rapport with the consultee and the extent to which they are able to positively engage the consultee within the process. Consequently, Gutkin and Conoley suggest adopting consultative processes which involve a wider group of staff, whilst also addressing systemic practices and policies will build expertise within the system to facilitate long term, genuine change.

### 2.4 Group problem solving in schools

When working consultatively within schools, educational psychologists often rely upon groups of staff working collaboratively in order to problem solve as part of their assessment and intervention processes. Within organisational psychology literature, the term 'work groups' is used to describe a collection of at least two professionals who each perform a job for an organisation, coming together and relying upon one another to complete the group task (Nielson, Sundstrom and Halfhill, 2005). Literature searching also revealed the term 'work teams' is frequently used to describe two or more individuals brought together, to socially interact, with a specified purpose of completing an organisational related task (Kozlowski and Ilgen 2006). Current research evidences the possibility for work groups to allow for more complex tasks to be completed; flourishing healthy competition, consolidation and innovation amongst its members (Devine, Clayton, Phillips, Dunford and Melner, 1999). Group participation and experience has been described to be widely accepted within literature as a factor powerful in promoting change, despite there being little known about what mechanisms within groups facilitate change (Kassel and Wagner, 1993).

Farouk (2003) identified that educational psychologists are in a position to consult with groups of staff over longer periods of time. This places them in a unique position to develop consultative methods, moving away from those approaches which focus upon working with one member of staff in isolation. Group consultation is thought to enhance the efficacy of interventions as often, as described by Vaughn, Hales, Bush and Fox (1998), young people encounter a variety of adults when in school. When using consultation, it is essential that key adults are involved in processes, enabling them to develop and implement support plans which are compatible with school culture and ethos. Lewis and Newcomer (2002) indicate that when successful school wide consultation processes have been adopted by educational psychologists, whole systems are developed which enable effective practice to support the needs of vulnerable children and young people. Overall group consultation methods are documented to be a powerful tool for effecting change.

### 2.4.1 The psychology of group consultation

Group consultation models have been explored within literature through the work of Farouk (2004), Hanko (1985, 1999) and Gill and Monsen (1995). Specifically, the work of Hanko (1985, 1999) encourages group consultation models to look at a child holistically in their many contexts including: within child factors, home, systemic school and contextual factors. Hanko identifies that group consultative processes must enable teaching staff to reinstate their perception of self-confidence and competence to support students with complex needs. This outcome is argued by Hanko to be integral to group consultation, only achieved through acknowledging how personal feelings may be impacting upon professional practice. It is through this process in which the group supports one another, enabling them to recognise the influence of social and emotional factors upon a complex situation which subsequently yields successful outcomes.

The significance of group dynamics within consultation has been found to influence the outcomes of the process. Hawkins and Shohet, 1989, claim that

group dynamics can become so powerful and influential that no constructive work can take place. Thus, it is implied that understanding group dynamics and being able to manage the process of the group is essential to educational psychologists facilitating effective consultative work with groups in schools.

Research has also suggested that factors outside of the group may impact the consultative process, directing process facilitators to also consider experiences beyond those occurring immediately within a group. Bales (1953) found that the overall effectiveness of group problem solving is influenced by individual emotional needs and their preconceptions brought into the group; each was argued to have a direct impact upon the interpersonal dynamics within the group. Similarly, Prosner (1999) proceeds to note that systemic factors outside of the group, such as school ethos and subcultures or subgroups, can produce either harmonious or conflicting interactions which contribute directly to consultation outcomes.

Consistent in arguing that group consultation is impacted upon by factors beyond the immediate group, Farouk (2004) identified that school culture needs to be given sufficient attention during group consultation. Farouk goes further to state that in order to fully understand how consultative processes work, inter-related psycho-social processes should be considered. It is specifically indicated that school culture, subgroup functioning and group interactional processes and dynamics must be addressed in order to understand what aspects of the process yields positive outcomes for children and young people.

### 2.4.2 Summary

In summary, it is evident that educational psychologists are using group consultation models in order to build school capacity and advocate an ecological view to understand the needs of a child in a holistic context. However, it appears that the efficacy of group consultation is affected by not only how the group interacts, but also wider systemic factors and also the

experiences and emotional needs of individuals within the group. Lewin (1951) summarises groups through the formula B = f (P, E), assuming that behaviour of an individual in a group is determined by the interaction of the person and the environment. In turn, it is probable that as process facilitators, educational psychologists are challenged to draw upon their knowledge of group processes and interactions in order to manage and guide group problem solving through a complex psycho-social process. It is arguably this way of working which allows outcomes to be reached which are conducive to supporting the whole system around a child.

### 2.5 Circle of Adults

As discussed, evidence indicates that educational psychologist are increasingly turning to consultative methods to problem solve in schools (Fagan and Wise, 2007; Lewis and Newcomer, 2008; Erchul and Sheriden, 2014). This has resulted in more systemic working, through educational psychologists having greater opportunities collaboration with groups of teaching staff and apply group problem solving interventions (Hanko, 1985, 1999; Gill and Monsen, 1995; Farouk, 2004).

One group problem solving tool developed by Wilson and Newton (2006) is Circle of Adults. This intervention is intended to develop a deeper understanding of the social, emotional and mental health needs of children and young people. By two professionals guiding a group of school staff through the ten step process (appendix 1), the approach elicits a wealth of information about the 'focus' young person and perceptions held by adults. In turn, the process enables multiple perspectives to be considered, as well as the impact of systems around the child including: early life experiences, current home context and school systemic factors. The early stages to the process provide opportunities for exploration of how staff feeling about the focus child, whereas the latter stages are described to allow for analytically

driven solutions, rather than emotionally driven responses. Bennett and Monsen (2011) draw on the work of Hanko (1999), utilising the psychodynamic approach in order to inform how the process of Circle of Adults works. They describe that the recognition of both conscious and unconscious emotions occurring within the young person being supported can prompt similar feelings within the adults around them. Thus, school staff can begin to recognise the source of their feelings and gain a deeper insight into a young person's behaviour. The approach incorporates aspects of person centred planning into its delivery; focusing solely upon one young person and their surrounding adults. Through its attention to providing emotional support and containment to staff, a redefinition of the focus young person's behaviour is achieved. This generates a shared understanding of a young person's behaviour amongst staff, making the tool effective in person-centred planning for young people displaying social, emotional or mental health difficulties.

Using tools like a Circle of Adults to support students with complex needs is consistent with recent recommendations made by the Department of Education (2016), Mental Health and Behaviour Advice for Schools. By addressing a problem systemically, with the support of external agencies, a graduated response is facilitated; stated to be the most effective response in supporting social, emotional and mental health needs in school (DfE, 2016). It also meets requirements stated in SEND Code Of Practice(2014) to ensure that the voice of the child is centralised to all interventions and person-centred planning is conducted. Wilson and Newton (2006) suggest that through a shift in perspective which is experienced by a whole group of key adults, solutions are able to come from the problem holder. It is with an increased understanding, group collaboration and stakeholder responsibility that school capacity is enhanced. It is anticipated that through completing the process of a Circle of Adults, school staff are equipped with resources to effectively support and manage challenging behaviour to ultimately benefit the focus young person and promote their well-being.

### 2.5.1 Evidence base for Circle of Adults

Support for using Circle of Adults is weighted within qualitative literature, a significant amount of which is presented by Wilson and Newton. In 2006, the authors cited their evaluations of how teaching staff viewed their experience of participating in Circle of Adults, reporting an increased understanding of the young person and feeling more supported. Enhancing the qualitative literature base for Circle of Adults, Grahamslaw and Henson (2015) conducted a thematic analysis of participant responses following Circle of Adults. Participants self-reported a positive experience and sense of effectiveness achieved; obtained through thorough exploration of a child's life events and early history. Specifically, Grahamslaw and Henson state Circle of Adults is appropriate when in-depth exploration from key adults in school, alongside thorough information sharing, would be beneficial. Broadly, much of the supporting research for the intervention indicates that the approach draws heavily upon emotional processes occurring within the group; allowing members to share their personal thoughts and feelings, as well as openly considering the child's experiences and life history.

Circle of Adults is also a popular topic for unpublished doctoral research projects (Dempsey, 2012; Turner 2014). Dawson, 2013, using Interpretative Phenomemological Analysis, presented the views of adults and focus young people following Circle of Adults. Pre and post measures captured a shift in thinking; adults and young people report positive feelings post intervention, indicative of potential affective gains. Taking a quantitative stance to investigating the intervention, Turner (2014) used a mixed methods approach to explore causal attributions and self-efficacy following Circle of Adults and a planning meeting. Though no differences were found between attributions and self-efficacy following the two groups, Circle of Adults was found to have higher perceived success than a planning meeting in a later follow up. These findings are suggestive that the intervention may yield greater long term change, however further research is required to aid efficacy to the existing evidence base.

Bennett and Monsen (2011) acknowledge Circle of Adults is an increasingly popular tool used by educational psychologists in hope of working together and building capacity in schools. However, they draw attention to the implications arising from the narrow evidence base, stating that the intervention tool has 'no empirical basis' for its use. Instead, Bennett and Monsen suggest that educational psychologists should now spend 'additional time researching the references' provided in qualitative literature. Though acknowledging the value of case study research and qualitative studies, Bennett and Monsen advise that empirical research is now required. Thus, as the existing evidence base is weighted by qualitative research findings, unless these studies are aggregated, findings are unique to the context in which they were obtained and therefore more difficult to generalise. Bennett and Monsen suggest that through the development of a quantitative evidence base of the intervention, statistical analyses will provide a greater and more objective insight into the intervention. This will enhance the existing literature base through offering research which is more objective, lending itself to being more readily generalizable across different contexts.

### 2.5.2 Unanswered questions

As Circle of Adults continues to be used by educational psychologists, despite a limited evidence base, questions are raised which include:

- Broadly, what happens within Circle of Adults that makes the approach popular with educational psychologists?
- More specifically, how do the group interact during a Circle of Adults and, could group interactions be contributing factors to the perceived success of the intervention tool?
- What are the group dynamics which occur during a Circle of Adults?
- How can psychological theory be used to enhance a deeper understanding into the Circle of Adults intervention?

## 2.6 Group Development

Wheelan (1994) claims that understanding group development is 'potentially critical to human survival' due to the great power and influence groups hold. Even when outside of their group, the individual thoughts, feelings and behaviours of affiliated group members are influenced. The work of Kurt Lewin (1951) describes groups as dynamic entities; they are powerful, influential and evolve over time. Within literature, groups are defined as systems which are fluid and ever-changing over time.

### 2.6.1 Similarities across groups

Interestingly, despite their fluidity, much research evidences that groups show similar patterns of behaviour. In a series of controlled laboratory studies, Bales (1954) identified consistent patterns within successful group problem solving contexts. Irrespective of the given task focus and intended purpose, successful groups were found to behave in similar ways. Problem solving attempts dominated over half of the discussions held and chains of interactional processes were found to be commonly occurring. Bales found that problem solving processes had a cumulative effect in that once occurring they yielded further problem solving interactional processes. Bales also identified the likelihood of particular interactional processes happening at a particular stage in problem solving; positive emotional responses were, for instance, found to occur most frequently towards the end of the activity, whilst at this time giving information significantly reduced. It would appear that when groups are given pre-defined problems to solve, they respond in ways which show consistency. It can therefore be suggested that patterns of group interaction and dynamics can be predicted. Wheelan (1994) notes that overall within literature, observed group similarities occur more consistently than group differences. Consequently, it has generally been accepted that group developmental processes show patterns of consistency.

Tuckman first developed a model to describe stages of small group development in 1965 which was later revised by Tuckman and Jenson in 1977. The model hypothesises that group development follows sequential patterns of; Forming, Storming, Norming, Performing and Adjourning. Initially, groups in their early stages are characterised by a dominance of social emotional processes; beginning by establishing relationships and boundaries within the group and are usually directed by a group leader. Once achieved, groups progress onto the storming stage whereby typically, conflict characterises the stage as members often express dissatisfaction, antagonism and tension between members can occur. Despite the apparent difficulties, developmental sequences progress to a norming stage which sees a growth in cohesiveness and unity. Typically, relationships are defined through perceived trust and increased communication during norming stages. As groups proceed through these stages, members are concerned with resolving interpersonal relationships and also the task activities. As the group progresses, particularly in the latter stages, group development tends to address and place greater emphasis upon task accomplishment. The fourth stage, performing, involves group members focusing upon achievement of goals and increasing performance and group productivity. The final stage, when groups adjourn, occurs when tasks have been completed and roles can be terminated; at this stage, individuals become more independent and feelings of interdependence reduce. According to Tuckman's model, group development is believed to be both task and social-emotional focused.

In 2003, Miller recognised the contribution of Tuckman's model to understanding how groups develop and providing consultants with greater insight into patterns and sequences within group activities. The model was stated by Miller to be the most widely and predominantly used within organisational literature. Similarly, Wheelan (1994) identified that the plethora of research and interest into group development has been influenced by the work of Tuckman; frequently cited in scholarly literature

focusing on group productivity, project teams and leadership within an organisational psychology evidence base.

Through understanding these stages of group development using Tuckman's model, Bonebright (2010) advocates the model to be a helpful starting point for consultants understanding group developmental processes. Going on, Bonebright praises the model for it validity to applied contexts but draws attention to its limitations when failing to recognise the complexity of group dynamics. Despite its apparent versatility, the model is arguably simplistic as it does not capture complex group dynamics which occur within groups and also specialised aspects which affect groups such as motivation, rewards and group leadership. For instance, through the development of literature within this area, specific focus has been given to each stage rather than how group members interact with one another. Yet despite the model seeming to overlook how group dynamics impact processes, the norming stage of group development has been found to be a critical stage for furnishing positive group dynamics and overall productivity; it is at this stage that group unity is established (Wheelan, 1994). This demonstrates that group dynamics are important to consider when examining how groups operate and factors impacting overall productivity.

### 2.6.2 Summary

Together, research consulted indicates that there is consistency in group developmental patterns. It also suggests group interaction is both a task focused and social-emotional focused process. However, recognition of the role group dynamics contribute to group interaction should also be considered by consultants as this will inevitably equip them with a broad and holistic insight into the complexities of group interaction.

## 2.7 Theoretical perspectives of group dynamics

Though similar patterns occur within groups, it is important to draw on psychology to understand the phenomenon of group interaction. Existing literature has been consulted to gain an insight into the theoretical explanations for group interaction. This consultation has demonstrated that though many theories of group interaction share similarities, in contrast they focus attention on different aspects to group dynamics and place value and significance upon different processes in achieving successful outcomes. Though each perspective differs in its interpretation of group functioning, it is through a theoretical insight into the theories of group dynamics that enables psychologists to gain a greater understanding of how humans behave when placed within a group and, interestingly, what factors may influence the outcomes of group interaction.

### 2.7.1 Behaviourist perspective

From a behavioural perspective, Kelley's Social Exchange Theory (1959) suggests that within groups, individuals strive to maximise their rewards whilst minimising their costs. The Social Exchange Theory assumes that group membership enables beneficial outcomes for a group to occur through the promotion of interdependence amongst group members. The Social Exchange Theory is heavily documented within organisational psychology literature, as stated by Cropanzano and Mitchell, 2005, who stated that this theory of group interaction is '*among the most influential conceptual paradigms for understanding workplace behaviour*' (page 874, lines 2-3). According to this behaviourist perspective, negotiation during group interaction is a dominant process; individuals use this tool to secure greater rewards and reduce their personal costs. It is through this process of negotiation that interdependence between the group members is created and in turn, obligations arise within the group. Cropanzano and Mitchell, 2005, believe that it is this process of in-group interdependence being established which improves the likelihood of quality relationships being developed in the longer term. Using this model to

understand group interaction, literature has suggested that through establishing group norms, minimising resources required for individuals and developing high quality relationships, work productivity is increased and group members gain a favourable attitude to the group focus (Cropanzano, Byrne, Bobocel and Rupp, 2001). Yet, despite its apparent contribution to understanding the behaviour of groups within the workplace, Forsyth (2010) challenges the generalisability of the Social Exchange Theory arguing it ignores the wider contexts in which groups interact. Forsyth suggests that groups are more interrelated and complex than the Social Exchange Theory would suggest as for instance, interdependence is not always achieved and competition between members can arise. In addition, researchers like Cropanzano who align themselves with the theory acknowledge the difficulties arising when attempting to operationalise key components within the theory, recognising limitations of the model (Wayne, Shore and Liden, 1997).

### 2.7.2 Systems perspective

Acknowledging the interdependence created within a group, yet appreciating broader factors influencing a group, Systems theories can be consulted. Systems theory asserts that when dependency is created among formally independent components, a unified whole is created to form complex, adaptive and dynamic systems consisting of interacting individuals. Like systems which are designed with purpose, groups often hold a shared purpose with means to achieving a wider goal; though they can too be self-created and organised and also act in synchronised, integrated and co-ordinated ways. Within a systems perspective it is assumed that group processes are mediated by the relationships between individuals, group factors and the wider situation which transforms to create outcomes; it is through an open system following an input – process - output model which results in productivity. In 1982, Webb conducted research to explore how small group interaction impacted student learning and concluded that though indeed the individual role within a group is influential upon outcomes,

effective interaction was best predicted by multiple characteristics of the individual, group and wider setting. Interestingly, Webb referred to achievement of the group as a product of 'the system of relationships' (page 441, line 44), supporting the notion that groups are open systems which are mediated between relationships.

### 2.7.3 Cognitive perspective

Alternative perspectives on group dynamics place greater emphasis upon the role of individual cognitive processes; specifically how information is gathered, perceived and used to inform impressions. Furthermore, within groups, a cognitive perspective would also place importance upon the information which is stored and retrieved to inform understanding and interaction. Self-Categorisation Theory (Turner, 1991) adopts a cognitive perspective upon understanding group dynamics, specifically considering the cognitive mechanisms which are used to align an individual's self-conception with their conception of group(s) they belong to. In order to do this, individuals categorise themselves and their affiliated group based upon factors including: age, race and beliefs. Categorisation is typically informed by an understanding of the stereotypes held. It is through this cognitive process that, according to Self-Categorisation Theory, individuals are able to categorise themselves to be part of a group, fulfilling group purposes through identification of similar qualities and motivations. Despite an apparent influence of an individual's cognition when within a group, Self-Categorisation Theory has been critiqued for being simplistic and ignoring the role of the social context in which groups interact. In a review of cognitive explanations of group dynamics, Hornsey (2006) claimed that the merging of Self Identity Theory and Self Categorisation Theory to form the Social Identity Approach was a positive progression for the approach as this is now one of the most influential theories to explain group interaction and dynamics within social psychology. The Social Identity Approach focuses on how an individual's cognition, as well as social context, affects group interaction. In explanation of this theory, Hornsey describes how group members are equipped with

cognitive biases which lead them to favour their in-group and behave competitively against an out group. It is through this process that individuals become motivated to be part of in-group, as demonstrated by behaviours which seek to enhance similarities between in-group members and categorisation of the self to establish and then abide with in-group norms. Whilst within a group, members begin to actively seek comparison with other groups, helping to define their group norms and identity; indicative, according to this theory, of in-group motivation to think and act in ways which enhance their distinctiveness. Hornsey suggests that the purpose of these actions is to develop a positive and secure self-identity. Thus, people are able to view their in-group as good and positive which is essential enhancing a positive sense of self. The Self Identity Theory has been supported by researchers Rubin and Hewstone (1998) who in a meta-analysis found that displaying in-group bias raises individual group member's self-esteem. This reinforces the notion that through cognitive mechanisms such as self-categorisation and exaggeration of in- and out-group differences, group members are rewarded through positive thoughts about the self. Yet despite this, critique has been presented by Hogg and Williams (2000), stating that the theory overlooks wider influential factors upon group behaviour including language, culture and history and consequently, is rigid, over-simplified and not falsifiable. In light of these criticisms, literature has however shown that the theory has been used to explain naturally occurring human behaviour, within naturalistic contexts. Reicher, Spears and Postmes (1995) used the Self-Identity Theory to demonstrate how changes in identity occur when part of a group. Through a reinterpretation of the theory of deindividuation, Reicher and colleagues argue that individuals do not ever lose their identity as the theory of deindividuation would suggest, they simply shift their identity to that of a group in-order to fulfil group norms and achieve a positive sense of self through the shared identity created. Thus, the approach has been used to provide insight into group behaviour when it appears to be both anti-social and pro-social, suggesting the utility of the cognitive approach to understanding group dynamics.

### 2.7.4 Psychodynamic perspective

Recognising the impact emotional processes have upon group dynamics, a Psychodynamic perspective raises awareness of the effect non-conscious emotional processes have upon group interaction. McLeod and Kettner-Polley (2004), in accordance with a psychodynamic approach, put forward the suggestion that when unaware of these emotional processes, group productivity is inhibited. It is suggested that through raising awareness of emotional processes and how they affect interaction, group productivity can be enhanced. Moxnes, 1999, proposes that within groups, role differentiation will guide the interaction and dynamics between individuals; roles serve a symbolic function and will gratify unconscious wishes. When role differentiation is great Moxnes suggests that a group is under stress or experiencing difficulties achieving intended outcomes. Other psychodynamic researchers suggest that through structured, group problem solving, containment is provided to professionals which enables them to restore thinking capacity (Soloman and Nashat, 2010). The work of Hanko (2002) further recognised the importance of bringing unconscious emotions into the conscious, particularly for teaching staff who work with young people demonstrating challenging behaviour. Hanko believes that through the sharing of emotions, a deeper understanding is achieved and containment is provided to staff; facilitating them to empathise with the focus young person and confidently respond to their needs. Thus, adopting a psychodynamic perspective to explain group dynamics would focus upon emotion within group interaction, encouraging the group facilitator to bring unconscious emotion into the conscious group activity to enhance members' self-awareness and insight into emotional states.

### 2.7.5 Role of affect within groups

Mood and emotion are also suggested to be influential factors in understanding dynamics within a group. Though often used interchangeably, Kozlowski and Ilgen (2006) define emotions as having specific characteristics

which exist for an infinite period of time. Whilst mood is conceptualised similarly, it is distinguishable by its longevity. For ease of reference, Kozlowski and Ilgen suggest using the term affect is appropriate when looking the role of mood and emotions in human interaction. George (2000) suggests that the psychological mechanisms of affect, such as motivation and emotion, play a central role in cognitive process and subsequently, direct behaviour. Emotion and mood are believed to each be influenced by experiences, thoughts, beliefs and drives which cause individuals to affiliate to a group in order to take action. Therefore, consideration of affective states is arguable integral to understanding the interaction of humans within groups.

Discussion by George, 2000, considers how a group displaying a positive affect leads to increases in pro-group actions, more favourable engagement, increased positive outcomes and a better likelihood of successes being credited to the group and the avoidance of blame. In consideration of the role positive emotions have upon group dynamics, Isen, Daubman and Nowicki (1987) state research has consistently shown that positive mood is correlated with greater creativity within work groups. Succinctly, Lyubomirsky, King, and Diener (2005) stated the purpose of an individual's positive emotional state (for instance, happiness) when working is to help to prepare for challenge as they allow individuals to broaden relationships and personal resources, both of which can they be drawn upon in future. It is through strong relationships that interdependence and coordination and subsequent increased effort is furnished within teams, which enables a more successful group performance (Kozlowski and Ilgen, 2006). Hackman (1976) describes positive emotions as 'glue' that bonds together a work team; arguably a central role in facilitating effective group performance.

Conversely, negative affective states within a group are more likely to increase the chances of low morale, conflict and absenteeism (Bower, 1981; George, 1991, 1995; Rosenhan, Salovey and Hargis, 1981). Distinctively, high conflict has been suggested to be an indication of greater variance amongst group members which creates negative affect and thus, acts as a hindrance to

productivity (Bayazit and Mannix, 2003). Together, there is a body of research that appears to indicate a linear relationship between affective states and group productivity.

Yet, despite this there is an opposing body of research that illustrates the role of emotion should be carefully considered as the relationship between emotion and group success is not linear. Damasio (1994) found that heightened emotions, even those deemed positive, interfere with successful decision making whilst groups exhibiting minimal emotion can also be problematic for work groups as this can lead to irrationality. Similarly, Lau and Murnighan, 1998, found that a small degree of conflict actually proves to be helpful in preventing group members to feel pressured into a consensus in opinion and subsequently conforming due to perceived pressure; referred to in literature as 'group think.' It is argued by Ashforth and Humphrey (1995) that implicitly, emotions are viewed as signifying irrationality which has generated a negative perception of emotions within the work place. In turn, their potential for reinvigoration of workplace topics has been overlooked. Thus, emotion seems to have a purpose within group problem solving contexts and even conflict can be functional due to its potential to reveal opposing viewpoints, new information and innovative solutions.

Though the role of mood and emotion indeed appears influential in group interaction, research has been criticised by Keltner and Haidt (1999) for its emphasis upon the intrapersonal nature of mood and affect, instead of viewing them interpersonally. According to Keltner and Haidt, emotions are cultural products constructed by groups within a social context. Emotions have the ability to co-ordinate social relationships and interactions, and through their rapid, involuntary and responsive nature, they are able help people to engage in social interaction. Emotions are therefore products of the systemic context, as opposed to being solely individual. Though they appear beneficial for the group, this is due to them building, maintaining and navigating various relationships. For instance, within the early stages of group development, emotions assist in establishing norms and boundaries within a

group, whilst later they establish roles and statuses within a group, helping members to negotiate problems. Broadly, emotions solidify group bonds, even in the most challenging of situations.

In summary, according to this perspective, emotions are not solely intrapersonal factors, but a complex event which directly impact relationships between group members. Affective states prove to have a complex relationship with group productivity, yielding potential for group efficacy due to their functional nature. Mood and emotions are dynamic entities, responsive to a complex social context. They are complementary to group performance as they enable individuals to work cohesively, with innovation and positively engage with an ever changing social world in order to achieve collective goals.

### 2.7.6 Summary

There are a number of theoretical paradigms which can be drawn upon to support understanding of group interaction. These theories provide a basis for research and application to professional practice, as well as raising questions when exploring group dynamics within a Circle of Adults.

- Do particular stages of Circle of Adults lead to specific group dynamics occurring?
- Can theoretical insights into group dynamics be used to understand what actually happens within the intervention?
- In what ways can group dynamics be measured?

## 2.8 Observing group interaction

Developing theoretical perspectives to explain group functioning have been driven through ongoing research which has examined the functioning and outcomes of groups. The evidence base is now laden with a variety of

perspectives which allow for systematic knowledge of how groups function, informing a broader understanding of group interactional processes. In order to examine groups, observation methods are often the preferred choice of researchers, often adopted due to their unobtrusive and naturalistic nature which is suggested to best capture the complexities of group functioning (Jehn, 1997).

Due to the subjective nature of observational research and how terminology is used interchangeably, defining and developing observational systems proves challenging. Kassel and Wagner (1993) draw attention to the term group processes used within research to define dimensions of the group functioning, whilst also being used to refer to verbal interactions between members. This indicates the level of subjectivity when using observational methods to examine group interaction.

Bell and Morse (2013) recognise that objectivity of observational methods can become questionable; what an observer thinks may reflect group states and emotions can often be misread. By using SYMLOG (A system for multiple level observation of groups) a self-analysis tool, and BECM (Being, Engaging, Contextualising and Managing) an observer-analysis tool, they an investigated whether analytical methods of observation could be applied to studying groups. It was concluded that though the two perspectives differed on their measurement and inference of group dynamics, they both helped to illuminate group function and could be combined to enhance the reliability of observations and inferences made. This shows that despite limitations of structured observational approaches, by adopting systematic tools for observation a powerful, comprehensive approach to studying group dynamics is achieved. Through the use of structured observational tools, findings can be more reliably applied to a diverse range of contexts in order to understand social interaction systems. Moreover, Hare (2000) suggested that through enhancing insight and theoretical understanding of group interaction, overall group performance can be improved.

In reflection of this research, a series of questions are posed. Each will be explored further in the methodology section of this thesis.

- Are there tools for observing groups which could be applied to group problem solving in schools?
- If so, do observational tools show whether there are consistent group interactional processes occurring within a Circle of Adults?
- Can interactional processes occurring within a Circle of Adults group problem solving activity be used to understand the dynamics of the group?

## 2.9 Systematic literature review

### 2.9.1 Introduction

Aim:

To undertake a systematic review of existing qualitative research which provides insight into the group experience within collaborative problem solving groups.

Objectives:

It is anticipated that through this understanding, an insight will be provided into what happens within group problem solving interventions which may yield the reported successful outcomes. This will be achieved through providing a richer insight into the underlying psychological mechanisms which occur frequently within group problem solving contexts. Wider implications of developing such knowledge include that an enhanced understanding of what processes occur will be established; this can be used to further explain the factors which yield the reported successful outcomes of group consultation, such as Circle of Adults, in schools.

### 2.9.2 Formulation of review question and protocol

Review question:

What does existing qualitative data tell us about what happens within collaborative problem solving groups in schools?

Table 1 uses 'PICo' to define review question criteria. The PICo method enables the researcher to conceptualise appropriate components whilst being flexible enough to ensure that studies are not excluded (Joanna Briggs Institute, 2011).

**Table 1: PICo method**

| | |
|---|---|
| Population | School (adult) staff, working in the United Kingdom, who have participated within a collaborative problem solving group. |
| Phenomena of interest | Any structured group problem solving tool EG: Circle of Adults, Solution Circles. |
| Context | Any educational setting within the United Kingdom which has had a collaborative problem solving tool used (mainstream, specialist, primary, secondary) |

In addition to the PICo method, Table 2 presents inclusion and exclusion criteria for literature searching. Criteria is guided by the research question, thus a crucial parameter is studies using qualitative methodologies, recognising the existing literature available at this time.

**Table 2: Inclusion and exclusion criteria**

| Parameters | Inclusion | Exclusion |
|---|---|---|
| Location | United Kingdom (UK) | Countries not part of United Kingdom. This is due to different models of consultation being used outside of the UK. For instance, Sheridan and Cowan (2004) stated that Behavioural Consultation is traditionally used by practising school psychologists in the USA. This indicates that consultation processes may present differently in other areas of the world. |
| Language | English | Studies not written in English |
| Time | Post (including) 2000 | Pre 2000 |
| Population | School staff who have been part of a face to face, direct group problem solving activity.<br><br>A group is defined as 3 or more people working together on a particular 'problem.' | Professionals not working within an educational/school context, for example: social workers, parents or work groups from non-educational fields. Also, studies focusing upon professionals working in dyads for instance, using one to one supervision models, will also be excluded.<br><br>Studies which only detail the views of children/young people views will be excluded.<br><br>Also, group problem solving which is confined to computer based activities will not be used within the search. |
| Outcome | The self-reported group experience and outcomes following problem solving – as captured through the analysis of qualitative data. | Results gathered through quantitative measures or those which do not include self-reports of experiences within the group. |
| Research | Research included will include: primary research; qualitative studies; studies with extracts of qualitative data; and only those published. | The review will exclude: secondary research studies; those using only quantitative methodologies; and unpublished doctoral research projects. |

To gain insight into current publications, an initial scoping search was conducted on PsycINFO, enabling search criteria to be determined.

To examine existing literature, five databases were referenced; PsycINFO, PsycARTICLES, Embase, ERIC (EBSCO) on dates 20/07/2016 and 21/07/2016. PROSPERO was searched, confirming that at this time, no systematic reviews on this topic are due to be, or in process of being conducted. Outputs were documented electronically and publications meeting PICo (Table 1) and the inclusion and exclusion criteria (Table 2) were saved.

To ensure search techniques remained consistent across all databases, the same terms were used. As collaborative problem solving was the focus, this term was used in a majority of searches and accompanying terms were decided upon based on relevance to topic area (found in exploration of group interaction research) and their relevance to qualitative methodologies. Booth, 2001, defines qualitative research as 'reflexive', and thus using this conceptualisation, literature searching was intended to be iterative and fluid, as supported by exclusive and exhaustive search terminologies being used.

As research is limited within the current area, processes adopted in quantitative systematic reviews of searching for all studies available were used, reaching saturation. This was in contrast to finishing database searches when sufficient studies were obtained and saturation reached; chosen based upon the assumption that additional studies would provide no 'new' information. Though Cherry, Perkins, Dickson and Boland (2014) advocate for qualitative researchers using this process of reaching saturation, it has been avoided in the current context due to fewer publications in the area of research. To summarise, all studies generated by the search, which met predefined criteria, are included in the systematic review to avoid limiting or restricting the understanding of the chosen phenomena (Sherwood, 1999).

An exhaustive list of search terms used has been provided below. Appendix 2 illustrates the results output from each search.

- “collaborative problem solving”
- “collaborative problem solving” AND “school staff”
- “collaborative problem solving” AND “educational psychology”
- “collaborative problem solving” AND “group dynamics”
- “collaborative problem solving” AND “interaction*al processes”
- “collaborative problem solving” AND “effectiveness”
- “collaborative problem solving” AND “experience”
- “collaborative problem solving” AND “qualitative method*ology”
- “collaborative problem solving” AND “group”
- “collaborative problem solving” AND “group process*es”
- “collaborative problem solving” AND “process*es”
- “collaborative problem solving” AND “circle”
- “group consultation”
- “group consultation” AND “school staff”
- “group consultation” AND “educational psychology”
- “group consultation” AND “group dynamics”
- “group consultation” AND “interaction*al processes”

### 2.9.3 Publication bias

Unlike quantitative studies, the outcome of qualitative research is intended to provide a rich, detailed, personal account of an individual experience; it does not seek to make generalisations as in quantitative studies. In respect of this, qualitative studies do not intend to answer fixed questions or hypotheses; outcomes are instead dictated by the data obtained. Boland, Cherry and Dickson (2014) argue this indicates that qualitative studies are less likely to not be publicised due to a lack of positive findings; there are no right answers anticipated and therefore, publication is not avoided due to the results generated. Petticrew and Roberts (2010) suggest as a result, publication bias is less likely to occur in qualitative research. This implies that literature searching for the purpose of this review will generate existing qualitative research which has not been subjected to publication biases.

It is recommended when conducting qualitative reviews to be aware that due to the wealth of data generated by qualitative studies, biases may occur in order to reduce the word length. Petticrew and Roberts, 2010, suggest that

often, in response to word limitations, data published is often compressed or restricted. As a result, raw data may be missing and justification of epistemology or methodology may be reduced, causing bias. To minimise this bias, only full texts, with examples of raw data (where relevant) will be included in the current systematic review.

### 2.9.4 Analysis

Systematic reviews traditionally used quantitative studies to make generalisations in order to furnish an evidence base. Yet recently, Noyes, Popay, Pearson, Hannes and Booth (2009) acknowledged the helpful insight qualitative systematic reviews provide, particularly when used alongside quantitative reviews. According to Noyes and colleagues, insight into how people experience interventions and their overall efficacy can be gained through qualitative review projects. Additionally, qualitative studies are also valuable in their distinction from quantitative reviews as they generate findings which can inform practice, through their capacity to answer why and how interventions may work (Boland, Cherry and Dickson, 2014).

As described, it is important for psychologists to understand what mechanisms occur within group problem solving interventions. In accordance with qualitative research, it is important to acknowledge that the essence of qualitative research is the contextual importance; when used alone, findings must be kept in context if they are to remain both valid and reliable. This has been reinforced by Tong et al (2012), who described how although synthesis will not produce entirely generalisable answers, it enables identification of consistencies or differences in existing literature to inform understanding and increase possibilities for transferability.

Despite growing support for the synthesis of qualitative data, Campbell and colleagues (2003) highlight a current debate amongst qualitative researchers, arguing whether the epistemological positioning of qualitative research naturally lends itself to integration and synthesis. Qualitative post-modernists

are of the assumption that qualitative data is only valid within the context it is gathered; in turn, synthesis is not possible. On the other hand, modernist qualitative researchers whilst appreciating the unique, contextual nature of data believe that a shared understanding and reality can be generated through the high external validity of studies used. In accordance with this, the review aligns itself with a modernist view; attempting to collate some shared understanding of the experiences within group problem solving activities. This decision is further reinforced through the suggestion made by Denzin and Lincoln (1994), acknowledging that a modernist perspective is in fact a helpful in supporting the systematic review process of qualitative data as this process shows respectability to using scientific principles. Thus, even within applied, rich research studies, findings can be integrated and a process of systematic searching and analyses is viable. In specific consideration of the current research, in the absence of qualitative studies the value gained through capturing the unique human experience proves to be relevant for a enhancing an understanding of why interventions, like Circle of Adults, are increasingly being used by educational psychologists to support the most complex young people.

### 2.9.5 The Systematic Review Process

A pragmatic approach has been adopted to select the type of qualitative synthesis used for the purpose of this literature review. This has led to a meta-aggregation analysis being selected. Meta-aggregation is a method for systematically reviewing data which mirrors the processes typically associated with quantitative review techniques, whilst keeping hold of the requirements of qualitative research (Lockwood and Pearson, 2013). This is done by the process combining research findings as a whole, under the assumption that this is more than the sum of individual findings. Using meta-aggregation will enable exploration of data gathered and in turn, generate similarity of meaning between existing research (Boland, Cherry and Dickson, 2014). Additionally, due to the limited nature of the current published research, synthesis will include studies applying different qualitative methods. Meta-

aggregation lends itself to this type of review, allowing data which has been generated using various qualitative methodologies to be analysed and collated. In consideration of the wider implications for this approach to reviewing research, meta-aggregation has also been chosen due to the integrative nature it lends itself to. This allows outcomes to be used to develop guidance for action through the themes generated, gaining an increased recognition for the phenomena of group problem solving being explored (Briggs, 2007). According to Lockwood and Pearson, 2013, this process best allows for successful dissemination of findings. This is arguably vital for an understanding of the group experience when engaging in problem solving interventions, including Circle of Adults. There is already an established qualitative evidence base which supports the efficacy of group consultation methods. Therefore, the evidence base now needs to be extended, through capturing a more comprehensive and synthesised understanding of what specifically makes group consultation methods favourable to educational psychologists.

### 2.9.6 Appraisal of studies

A systematic process was used to collate papers which met relevant criteria for the purpose of this review. This was done by initially using clear, confined search terminology within academic databases. Following this process of searching, each abstract of papers found were screened by the author; using inclusion and exclusion criteria (Table 2) in order to select literature. This led to 10 papers being extracted; Annan & Moore (2012); Nugent, Jones, McElroy, Peelo, Thornton & Tierney (2014); Bozic & Carter (2002); Bennett & Monsen (2011); Grahamslaw & Henson (2015); Jones, Monsen & Franey (2013); Farouk (2004); Brown and Henderson (2012); Hulusi & Maggs (2015); and Evans (2005). These are presented in Table 4.

The selection process for papers to be included in the systematic review also involved the author assessing for quality. Quantitative and qualitative studies are distinguished by not only data output, but also epistemological stance and

objectives. As qualitative studies strive for interpersonal, subjective insight, there is no 'gold standard' of research to include in a qualitative review. In turn, studies are not able to be deemed better or worse, or placed in a hierarchy as would be done with quantitative research studies (Petticrew and Roberts, 2010). To ensure that quality of studies was explicitly considered within the review process, guidance from EPPI centre (Rees et al, 2001) was consulted. Quality assurance of studies has been chosen using the EPPI centre recommended method, argued to increase reliability and validity through thorough exploration of studies before they are included in the review. Table 3 presents each criterion which was used to critically appraise literature and deem whether it was appropriate for inclusion. Following scrutiny using EPPI centre guidance, seven studies were kept for the synthesis of literature using meta-aggregation; further detail about this process can be found in Table 4.

**Table 3: EPPI centre quality assessment measures**

| Criterion | Description |
|---|---|
| 1 | Focus on the group experience within a collaborative problem solving context |
| 2 | Clear justification for study and methodology |
| 3 | Explicit aims and objectives |
| 4 | Clear description of context and problem solving tool |
| 5 | Description of sample |
| 6 | Description of methodology |
| 7 | Reliability and validity considered and addressed by the researcher |
| 8 | Presentation of data is clear with rational links between raw data and researcher interpretation |

Once studies were assessed, classification for each criterion was given. Classification criteria are as described: A no/few flaws; B some flaws; C significant flaws; and D untrustworthy. Following the consideration of quality within the eight pre-defined areas, an overall judgement was awarded to each study (Table 4). Studies which were judged to be within the D category in one or more area were removed from synthesis due to the compromise made to reliability and validity.

Quality assessment was conducted by the researcher, using the whole academic article to ensure that data beyond the abstract was evaluated. Through the process of this assessment, the following three studies were removed from the review; Bennett & Monsen (2011); Farouk (2004); and Hulusi & Maggs (2015). Using guidance from the EPPI centre (Table 3), it was found that in all studies excluded, 'criterion 1' (focus on group experience) was classified as a 'D' and consequently, they were not appropriate for the purpose of this review. Justification for this classification can be given by the presentation of secondary sources to evaluate group problem solving tools; thus it was considered to not be appropriate for inclusion. Quality assessment was stopped at this stage and the papers were removed from the final systematic review process. A detailed overview of the quality assurance process and justification for the removal of each study can be found in appendix 3.

## Table 4: A summary of the studies and their overall quality

| | Annan & Moore (2012) | Nugent, Jones, McElroy, Peelo, Thornton & Tierney (2014) | Bozic & Carter (2002) | Bennett & Monsen (2011) | Grahamslaw & Henson (2015) | Jones, Monsen & Franey (2013) | Farouk (2004) | Brown and Henderson (2012) | Hulusi & Maggs (2015) | Evans (2005) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Group problem solving tool** | Staff Sharing Scheme | Group Process Consultation | Group process consultation | Four types of problem solving tools | Solution Circles and Circle of Adults | Staff Sharing Scheme | Group Process Consultation | Solution Circles | Work Discussion Groups | Group consultation |
| **Participants** | School staff | School staff | School staff | None | School staff | School staff | None | School staff | None | School staff |
| **Method** | Mixed method | Mixed method | Mixed method | Critique based upon literature | Qualitative | Mixed method | Critique based upon literature | Mixed method | Critique based upon literature | Mixed method |
| **Data** | Key themes summarised, further detail in appendices | Both qualitative and quantitative data included in main text | Quantitative data presented, extracts of qualitative data to illustrate themes | No data collected | Key themes presented and supported by quotations | Appendices supplement results section | No data collected | Data extracts used in text | No data collected | Focus on statistical data, qualitative data used to provide richer insight |
| **Quality Assessment** | B | B | B | D | A | A | D | B | D | B |

Using categorisation based upon similarity, meta-aggregation was used to pool together existing findings from the seven studies identified. Once this was completed, each category was synthesised into a broader, over-arching statement to capture meaning. This process has been summarised using diagram 1, below.

**Figure 1: Systematic review process**

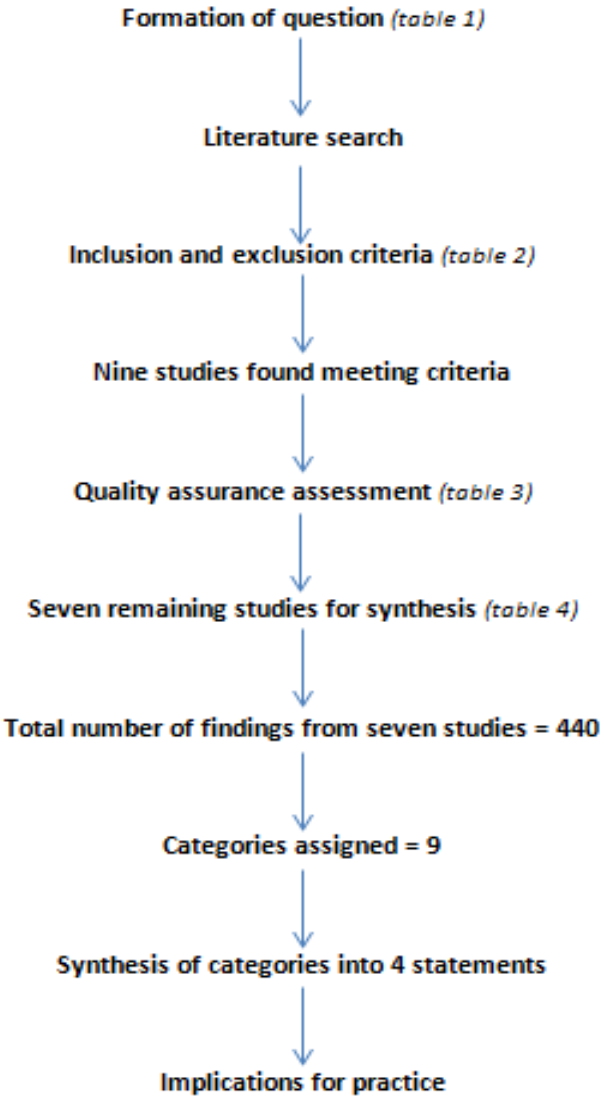



Figure 1 demonstrates that from the seven studies identified for review, a total of 440 qualitative statements were found within the texts. These

findings were then compiled based upon similarity of meaning into nine over-arching categories. Further synthesis was conducted in order to further reduce categories into rich, explanatory statements to illustrate how individuals experienced group problem solving interventions.

### 2.9.7 Findings of systematic review

Findings from the review are presented as synthesised statements. A total of four synthesised statements are given to describe the participant self-reported effects following participating in a group problem solving activity.

1. Participation in a group problem solving intervention yields long term capacity building. In consideration of the long term changes which occur for individuals, it would seem that the new understanding and ideas generated within problem solving groups are valued by members as professional development opportunities. This experience leads to new ways of working in other school contexts, developing more efficient and effective practise. There is also an impact upon the general capacity of the wider school system; group problem solving enables a difficult situation to be examined in a systemic context which leads to changes in policy and general school ethos. In turn, group problem solving builds capacity within individuals and also a school system to deal with similar issues in future.

2. Group problem solving interventions provide a highly structured approach which is recognised as a helpful mechanism for supporting the management of a problem. Specifically, the consistent features which are identified as important within the groups are: having a pre-defined process to follow; being given extended time and space to discuss in depth with others and; the generation of good quality solutions for moving forward. The structure of group problem solving means that collaboration and co-operation, which is integral to the intervention, promotes feelings of equality and safety to have honest,

open discussion. Group members reflect that having these opportunities are rare in school and as a result, the structure allows this shift in practise to occur whilst facilitating a new way of working.

3. When working as part of a problem solving group, a shift in identity is experienced by members. Rather than members being perceived as individuals working in isolation, a group identity is established, enabling a cohesive group to be established. The gained sense of group identity is the result of negotiating and agreeing a shared, unified purpose whereby members work towards a common goal with shared, joint responsibility. A product of this new identity means that on an individual level, group members feel reassured, contained and emotionally supported by their colleagues. Broadly, affiliation to a recognised school group increases the sense of well-being amongst staff.

4. Through sharing individual perspectives and experiences, group members feel reassured that they are not isolated in their current situation of feeling stuck. This insight creates an alternative way of viewing a problem and in turn, any negative perceptions which are brought into the group quickly become altered. It is through the sharing of resources (experiences, feelings, strategies) that professional capabilities are reinforced and in turn, group members develop a sense of increased confidence in their ability. Consequently, during group problem solving, members are able to address a specific problem by using their new learning which has been gained from one another. Therefore, what was once a difficult situation becomes manageable through the sharing of resources and new learning experienced within group interventions.

Though the four synthesised statements provide an insight into the group experience within problem solving activities and the wider implications after

the event, the process of synthesis can be viewed as a subjective process. This can lead to questions about the extent to which synthesised statements are truly able capture the experience of group problem solving experiences. To reduce threats to the reliability of the review process, Table 5, below, indicates where each synthesised statement was found to be relevant in each paper used in the synthesis.

**Table 5: An overview of synthesised statements**

| | Annan & Moore (2012) | Nugent et al (2014) | Bozic & Carter (2002) | Grahamslaw & Henson (2015) | Jones et al (2013) | Brown and Henderson (2012) | Evans (2005) |
|---|---|---|---|---|---|---|---|
| **1 – Capacity building** | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| **2 – Structured approach** | ✔ | ✔ | X | ✔ | ✔ | ✔ | ✔ |
| **3 – Group identity** | X | ✔ | ✔ | ✔ | X | ✔ | ✔ |
| **4 – Problem solving** | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

### 2.9.8 Discussion of findings

Overall the process of synthesis has illustrated that school staff engaging in group problem solving interventions, within the United Kingdom, report a positive experience. Specifically, the review process has illuminated that

when within a structured group problem solving context, members benefit through being given an opportunity for thorough, in depth discussion; are able to develop a group identity; generate strategies for addressing a specific problem and; gain skills which facilitate long term capacity building. It is likely that these are the specific elements associated with group problem solving approaches, contributing to the reported successful outcomes as documented within current literature. With this level of insight generated, educational psychologists are able to better understand the potential benefits of working in this way, using the evidence to further support a consultative way of working.

Upon exploration of the systematic review process it is evident that a range of group problem solving interventions are used in schools by educational psychologists. Though qualitative findings capture the subjective experiences and perceptions of individuals, similar meanings and insights were expressed consistently within the research examined. In concordance with the epistemological stance that though experiences are unique, similarity within these experiences and meanings is apparent. Therefore, this rich data can be used by educational professionals to understand what may make group problem solving in schools effective. The detailed insight generated through the review process can be used to deeper understand why group interventions, like Circle of Adults, have been reported to be successful in earlier research. Wider implications of the synthesis outcomes also includes the gained insight which can be used to inform educational psychologists about the components and conditions required to facilitate effective group interactions, supporting the solving of complex problems in schools.

Through application of the inclusion criteria, seven studies were included in the synthesis process. This appears to be a small sample in consideration of the increases in educational psychologists adopting group consultation process in their practise (Roberts and Rust, 1994; Fagan and Wise, 2007). Yet despite the apparent small sample of research, the rigorous selection criteria and quality control processes have ensured that those studies captured in

synthesis are those possessing high reliability and validity. In turn, it can be concluded that the studies included are those which can be trusted to best answer the review question, increasing the external validity of the synthesis.

By adopting a meta-aggregation analysis, the notion of a common reality and shared meaning which can be captured in research has been assumed. This implies that the four synthesised statements may be relevant to other group problem solving contexts in schools. However, it is important for practitioners to be aware of the impact 'history' has on internal validity. For instance, contextual factors may have contributed to the perspectives of members participating in studies and consequently, the same experiences cannot be predicted elsewhere. It is therefore important to be mindful that the accuracy of these findings may be reduced when applied to settings external to where the research was conducted. Considering the implications this carries, educational psychologists must be flexible in their application of synthesised results, using them as a tool to guide their practise with the knowledge that variability may occur. Despite this, the notion of valuing the subjective group experience, which has been paramount in this review, is important for all educational psychologists working in applied contexts.

In conclusion, the data which has been generated within this review can be used to enhance the existing evidence base to further explain the experiences shared by individuals participating in group problem solving interventions. The review process has placed value upon qualitative research, appreciating the rich, contextual insight which is gained through consideration of participant views. Though the findings are helpful in understanding what makes group problem solving so effective in schools, results must be used with caution in recognition of the limitations of qualitative research. Further research should be conducted which focuses upon measuring the quantitative gains following participating in a group problem solving intervention as this will yield more generalisable findings, adding a further dimension to the existing evidence base.

### 2.9.9 Conclusions

Existing literature demonstrates that group problem solving models, like Circle of Adults, are more increasingly being used by educational psychologists to facilitate systemic working within schools (Wagner, 2000). Despite being reportedly rooted within a psychodynamic perspective (Bennett and Monsen, 2011) and supported through anecdotal and qualitative data (Wilson and Newton, 2006), there is yet to be published any empirical support for this method of problem solving (Turner, 2014). Therefore currently, it appears that quantitative designs have struggled to capture and measure the changes occurring within the group or individuals when participating in a Circle of Adults. Consequently, little is known about the overall efficacy of the intervention and what yields the reported successes; enabling the intervention to make a distinct contribution to educational psychology casework. The existing evidence base encourages practitioners to question what furnishes such positive outcomes following a Circle of Adults intervention. Thus, consideration should now be placed upon understanding how and why the group problem solving appears helpful in facilitating key adults to understand and support young people with social and emotional needs in school. Therefore, this research has decided to look within the group in order to understand what interactions may be occurring in order to offer some initial insight into the reported powerful experience of a Circle of Adults.

In reflection of how questions about group interaction could be explored, literature on group processes can be consulted. As the intervention relies heavily upon group interactions to enable collaborative working which is both analytical and solution focused, it seems helpful to further examine this aspect; considering how group dynamics and processes are typically occurring within Circle of Adults. As Farouk (2004) stated, to understand what facilitates long term changes in perception and understanding of young people's needs, group processes and dynamics must be considered. Yet, despite it seeming to be a pertinent factor which could provide a greater insight into what actually

happens within a Circle of Adults, current research shows group dynamics is an area overlooked by the current evidence base.

### 2.10 Research questions

This research will examine the interactional processes occurring within the group during a Circle of Adults. The exploratory analysis of group interaction will enable a greater insight into how professionals collaborate during the activity and thus, why the problem solving intervention may be reported to be successful. Consequently, when using Circle of Adults, educational psychologists will have a greater insight into the underlying group processes and be able to use this knowledge to maximise their own use of process leadership skills. In turn, the findings gathered can be used to enhance the collective experience of problem solving activities.

The research question asks, 'what processes occur during a Circle of Adults?' An explorative methodology will be adopted to answer the question, achieved by providing descriptions of:

- frequencies of interactional processes during Circle of Adults
- the types of interactional processes occurring within the intervention (emotional or task focused)
- sequential relationships between interactional processes

As there is currently no published research around interactional, group processes within Circle of Adults, this research will leave hypotheses open. This will allow for an initial exploration in order to describe the interactional processes occurring within the group problem solving method. It is hoped that this research will enhance professional awareness of what sequences and process interactions occur within Circle of Adults. Furthermore, it is anticipated that an objective insight into the intervention will be offered, which can then be used for further research using scientific methods.

# 3. Methodology

## 3.1 Introduction

To provide a context for the methodological positioning of this study, the chapter begins by introducing the purpose of exploratory research and identifies the chosen philosophical approach used to answer the research questions. The issues associated with observational research when conducted within applied settings are examined, drawing particular attention to how observation can be made objective and systematic in order to enhance the reliability of data gathered. The chapter then explores the chosen coding system, Interaction Process Analysis (Bales, 1951) and also Sequence Analysis, each presented as tools for increasing efficacy when conducting inquiry into human interaction.

The chapter then offers a detailed description of the research strategy, including: stakeholder engagement, recruitment and the chosen coding strategy. Throughout the chapter, careful consideration of methodological issues and how they are addressed are made explicit, as well as recognition of how ethical practice was kept central to the research process.

## 3.2 Philosophical perspectives on research

It is the role of the researcher to consider the purpose of their enquiry during research; using this to guide later decisions regarding methodology, analysis and inferences made. In their study of teacher effectiveness, Doyle (1977) describes how using Kuhn's (1970) concept of paradigm is a useful tool for researchers to critically consider their work and determine what actions will be taken. The concept of paradigm framework enables researchers to define problems, methodologies and solutions for a variety of research communities. By aligning themselves with particular research paradigms, researchers are able to consider the utility of findings through the identification of ways they

will contribute to an existing evidence base. As both qualitative and quantitative methodologies each possess implicit assumptions about the nature of knowledge and reality, it is essential for researchers to consider the paradigm one aligns them with.

Allison and Pomeroy (2000) define epistemology as '*the nature of knowledge*,' whilst ontology refers to '*the nature of reality*.' Each epistemological and ontological position is intrinsically linked to values; values which influence overall purpose, methodology and implications when conducting research. Epistemological and ontological positioning as a result falls on a continuum, whereby a range of beliefs, interests and research motivations fall. This, at times, causes debate and divides within research communities and consequently, one's philosophical perspective must be well informed and consistent throughout the research process.

Quantitative approaches draw on a positivist epistemology: reflecting knowledge which can be 'known' and captured through scientific methods. The positivist epistemology corresponds with a realist ontological positioning; assuming that there is one objective reality, irrespective of individual feelings or beliefs as the world exists independently. On the other hand, qualitative researchers adopt a constructivist epistemology: believing that knowledge is constructed by individuals and defined by social interactions. In turn, qualitative studies recognise the subjective and unique nature of knowledge which cannot be captured through objective methods. As a result of choosing a constructivist approach, an ontological view of relativism is accepted by qualitative researchers. This is that there are multiple realities due to human beings each constructing their own reality differently due to a subjective interpretation of the world. As a result of such contrasting beliefs, researchers will adopt differing methodologies within studies, typically guided and informed by their belief of knowledge and reality.

The current research recognises the dichotomy between epistemological and ontological positioning and has therefore adopted a pragmatic approach to

conducting applied research. This approach, referred to as pragmatism, describes how the chosen methodology should be defined and chosen by purpose of the research. In accordance with pragmatism, this research does not ignore the importance of constructed meanings and interpretations; the subjective experience within a Circle of Adults intervention provides value to the evidence base for the intervention. Likewise, pragmatists may draw on a variety of methodologies, should they be appropriate for the question posed and therefore both quantitative and qualitative methodologies are compatible with pragmatism (Mertens, 2010).

In recognising the existing evidence base for Circle of Adults being heavily grounded within qualitative research, it is currently the subjective experience of individuals which is used to support the intervention's efficacy. Yet, despite gaining a rich insight into the subjective experiences occurring within a Circle of Adults, data gathered through qualitative methodologies do not provide an indication of any universal events occurring within the intervention. This lack of scientific, objective insight into the intervention therefore limits the existing evidence base as results are difficult to generalise. In consideration of the evidence base and thinking ahead about what is needed for educational psychologists to use Circle of Adults with a greater insight into its efficacy, a post positivist epistemology has been chosen. This epistemological stance assumes that knowledge can be captured using objective measures to illuminate patterns in human interaction.

Unlike traditional positivism, the post positivist epistemological stance recognises that 'facts' cannot be captured through research; only claiming and presenting knowledge which is 'probable'. Through adopting a post positivist approach, the chosen ontological positioning is that of critical realism. This is that although there is one reality, it can only be imperfectly measured and is only predictable in terms of probability. Yet like traditional positivist methods, this positioning lends itself to the use of scientific research methods by combining principles of control, reliability and objectivity throughout the research process.

### 3.3 Naturalistic Research

An exploratory approach has been adopted to investigate how groups interact during a Circle of Adults intervention. As this is an area which has not previously been addressed within existing literature, using an exploratory approach will highlight any sequences of interactional processes which occur within a Circle of Adults. The aim of this process is to enable consultation of relevant theories explaining group interaction, in order to support an understanding of how the intervention works.

To explore the sequences of interaction occurring within a Circle of Adults, the current research used observational methods within the naturalistic setting in which the intervention occurred. Therefore, the chosen research approach was through naturalistic enquiry. This paradigm of research has been described by Woods (1992) as a study where outcomes and meaning arise as a product of a social situation. According to Woods, human behaviour is dependent upon the context in which it occurs; in order to capture such behaviour in research, applied settings where behaviour would naturally occur must be incorporated into the research design.

#### 3.3.1 Advantages of naturalistic enquiry

The purpose of conducting a naturalistic enquiry study is often to gain an initial insight into complex human behaviours. More often than not, studies using this approach typically attempt to explore and gain an initial insight into a specific aspect of human behaviour. Therefore, they are not guided by pre-defined hypotheses and prior research findings. This process proves insightful for firstly exploring behaviours which may not yet be fully understood and secondly, in generating hypotheses for future research to be guided by. The process of hypothesis generation is described by Glaser and Strauss (1967) as derivative – grounded research which encapsulates research through using data to inform future hypotheses. Derivative-grounded research is used to develop hypotheses based upon findings gathered, proving informative for

researchers exploring areas of limited understanding or prevalence within existing research.

Through conducting a naturalistic enquiry Loftland, 1971, identified that three questions can be addressed which can later be used to develop future hypotheses. Firstly, what are the characteristics of the identified social phenomenon; secondly, what are the potential causes of the social phenomenon; and finally, can potential consequences of the social phenomenon can be explored? Through gaining an initial insight into a social phenomenon, such as Circle of Adults in the current study, naturalistic research is well placed to generate theories through the data gathered. Such theories can then be used to inform future research, enhance knowledge and understanding of complex human behaviour.

In following with Woods' (1992) description of naturalistic enquiry, to generate ecologically valid hypotheses using naturalistic enquiry approaches, research must be conducted within a social context. This proves advantageous particularly for applied researchers who often strive to capture rich, meaningful data which reflects real life behaviour within a natural context. Consequently, studies adopting a naturalistic approach ensure that the design process leaves the context in which human behaviour occurs untouched. In turn, the behaviour captured during research is completely natural, uncontrived and requires minimal researcher intrusion. By researchers often becoming participants and active members of a social group being studied or alternatively, at minimum their presence being known by the wider group, naturalistic enquiry adheres to ethical codes of conduct as no experimental manipulation is required and fully informed consent from participants is established.

### 3.3.2 Disadvantages of naturalistic enquiry

In recognition of the perceived strengths of naturalistic enquiry, it becomes equally important to consider how the approach may be limited as this allows

researchers to establish whether the form of enquiry is appropriate for the purpose of research.

Naturalistic enquiry is not influenced or indeed motivated by existing research findings and therefore, is not able to make predictions about phenomena and test pre-defined hypotheses. Therefore, research using a naturalistic approach does not attempt to control environmental factors and the likelihood of extraneous variables impacting upon results is increased. Arguably, this may impact upon the reliability of results and certainly, clear and definitive cause and effect relationships are impossible to establish when using naturalistic enquiry. Though this is not believed to be problematic by researchers aligning themselves with naturalistic enquiry, researchers seeking to test hypotheses and establish clear cause and effect relationships should steer from using the approach.

Critics of naturalistic approaches also suggest that there are weaknesses associated with the fundamental assumption that individuals are constructors of their own actions and reality is constantly being constructed. Rex (1974) raises the possibility that individuals may in fact be falsely conscious and therefore, their definitions of reality are flawed and may result in incomplete or misleading findings to be reported. In turn, Rex suggests that as scientist-practitioners, researchers are obliged to seek a more objective perspective. Similarly, others have suggested that in moving away from positive approaches, researchers are in danger of abandoning scientific procedures which results in potentially useful generalisations being left unfounded (Mead, 1934).

### 3.3.3 Summary

In summary, naturalistic approaches are able to offer an initial insight into previously unknown areas of human behaviour. In recognising the social-constructivist nature of reality, a rich understanding is gained which can then be used to inform subsequent research. Yet despite this strength, the divide

between research communities sheds light on the potential treats to relying solely upon naturalistic methods. It is essential that researchers do not overlook the potential value of using scientific methods to investigate human behaviour, appreciating the value that can be gained through generalisable research.

Due to the current evidence base, conducting a naturalistic enquiry is appropriate for furthering how educational psychologists understand a Circle of Adults intervention. Though it is known that participants report favourable outcomes following their participation in a Circle of Adults (Bennett and Monsen, 2011; Dawson, 2013; Grahamslaw and Henson, 2015), what is not yet understood is why positive outcomes are gained. However given the interactive, personalised nature of the intervention, it seems that the natural interaction between participants is essential in understanding the interventions reported success. Therefore, it is the occurrences within this natural context which should be explored further in order to understand whether this contributes to the reported efficacy.

To summarise, naturalistic enquiry has been chosen as the research approach. This will allow for the description of the interactional, group processes occurring within a Circle of Adults intervention. Rather than making predictions about the ways in which the group interact, naturalistic enquiry will enable exploration of group behaviour. In turn, the approach will offer a description of group processes; appropriate given the current research climate. Subsequently the research will present an initial insight into how groups interact within a Circle of Adults group problem-solving intervention. This will facilitate the generation of theories to hypothesise what may contribute to the reported successful outcomes of the problem-solving process, adding greater insight into the current evidence base and guiding future research to be conducted.

### 3.4 Observational research

Observational research involves the watching of participants in order to analyse live data gathered. Researchers are able to look immediately at occurrences happening in situ, as opposed to relying upon retrospective accounts. Due to the immediacy of observational research and its sensitivity to context, the method for gathering data has great potential to yield authentic data, rich in validity. Researchers are therefore able to become immersed in data and begin to understand first-hand what is being explored. Robson, 2002, suggests observational research is often favourable due to its ability to capture behaviour which may go unnoticed or unexpected. Furthermore, observational methods recognise the limitations of self-report data as the accuracy of what people report and think they do is often questionable.

Traditionally, observational methods had a tendency to be non-interventionist with researchers avoiding any manipulation of the context or participants. Observational methods are now however more diverse and can readily be adapted to suit both qualitative and quantitative research studies (Adler and Adler, 1994). Thus, observation now has many dimensions as described by Flick (1998) who highlights the ability for observational studies to adopt a structured or unstructured approach, be conducted overtly or covertly or be conducted in natural or artificial settings. Dependent upon the research method chosen, a different conceptual framework will be adopted; either an Etic or Emic analyses (Silverman, 1966). Adopting an etic approach uses a tight, conceptual framework which has been predefined in order to adhere to and answer specific questions. In contrast, an emic approach uses a flexible, more qualitative approach which intends to capture data through the eyes and direct experience of the participant; thus increasing the amount of subjectivity and idiosyncratic nature of the research. Each approach to conducting observational research, whether to test or generate theories, will bring both advantages and disadvantages. Therefore, the ways in which

observational tools are used within studies should be carefully considered in order to ensure that the chosen methods are fit for the intended purpose.

### 3.4.1 Advantages of using observational methods

In accordance with conducting a naturalistic enquiry, observational research intends to gather live data; that which is often naturally occurring within a real life context. Moyles (2002) states that conducting research in this manner results in data and results that are high in ecological validity. It is probable that the validity of data is enhanced as observational methods alleviate risks associated with other methodologies. For instance, self-reported, retrospective data is often critiqued due to the subjectivity associated with historical self-reports, which often assume accuracy of recall and also insight into one's own behaviour. Similarly, when participants are exposed to highly controlled conditions which are manipulated by an experimenter, their behaviour is vulnerable to being viewed as artificial and also threatens the accuracy of data. Through the careful choosing of particular observational methods, specifically those which purposely intend to capture live, natural behaviour free from experimental manipulation, this likelihood of reduced validity can be minimised. Therefore, one unique advantage of observational research is the ability to gather data which is high in ecological validity.

It proves advantageous that researchers have developed established ways of assessing the quality of observational methodologies. Though conventional measures of reliability and validity can be used within controlled, experimental studies, these measures are not possible to apply to naturalistic observational research. Irrespective of this however, similar rigour can be applied to assess the efficacy of observations conducted in applied settings. Making this distinction between how reliability and validity are assessed within different research designs proves to be appropriate as making direct comparisons between highly controlled, laboratory studies and those in naturalistic contexts is flawed. It is suggested by Lincoln and Guba, 1985, that instead researchers should consider the 'trustworthiness' of naturalistic,

observational research as this can overcome limitations to provide what is a more effective and appropriate measure of the reliability and validity. It is suggested that trustworthiness can be established based upon evaluation of observational research studies through explicit attention to and consideration of credibility, conformability, transferability and dependability of the research.

Credibility refers to having confidence in the 'truth' of findings and research outcomes. Within the current study, the high validity of the research design through the absence of researcher manipulation was anticipated to enhance the credibility of the findings. As conformability refers to the neutrality of the research, the current study attempted to ensure that results were driven by the participants included in the study, rather than possible researcher bias. Conformability has therefore been ensured through no direct change to the intervention process and the researcher not being involved in the interventions. Lincoln and Guba (1985) defined transferability as the ability to demonstrate that the findings are applicable in other contexts. Though the current study does not intend to generate cause and effect, generalisable findings, it is intended that through a varied sample of Circle of Adults interventions being included in the analysis, rich data will be captured in order to reflect the diversity of groups participating in the intervention. Thus, it is intended that the research findings will be transferable through their ability to illuminate patterns and sequences of interactions occurring, allowing hypotheses about the group interactional processes occurring to be developed. Finally, dependability indicates to the extent to which findings could be replicated and consistent results be generated in other research studies. As this is the first research study to explore the interactional processes occurring within the intervention, the data collection process has been thoroughly and precisely described to allow for consistency throughout data collection of the current study and also possible replication in future; enabling the consistency of findings to be assessed.

In addition to considering the trustworthiness, the reliability of observational research can also be increased through adopting structure and systematic rigor in the process of observation. Bakeman and Quera (2011) define systematic observations as those which specify a measurement strategy; the use of a coding system is central to all systematic observations, using a nominal measurement scale which allows a summary of scores to be produced. Furthermore, observations adopting a systematic process should be pre-planned, through a rigorous process of identifying research questions well in advance of data collection. Finally, the researchers state that in order to uphold a systematic process to observational research, observers must be trained to ensure reliability of the coding system is exercised. This process challenges researchers to be active, making data collection intensive and time consuming. However, it is only through this structured and rigorous process that observations lend themselves to a statistical investigation and gain greater objectivity.

The benefits of choosing a systematic observational method within natural contexts include researchers being able to investigate and explain group processes. These are often those which participants cannot explain themselves through other research methods. Consequently, as the researcher does not elicit anything directly from participants, systematic observations enable spontaneous human behaviour to be observed. Therefore, the researcher is uniquely placed to capture behaviour as it unfolds; paramount to understanding processes as opposed to outcomes which static observational methods focus upon. Thus, behaviour seen is that reflecting the natural repertoire that would be typically expected within a given context. Even with a researcher present, earlier research has demonstrated that participant awareness of their presence disappears over time, meaning that they habituate rapidly when being observed. This further adds to the ecological validity of observational research within natural settings.

### 3.4.2 Disadvantages of using observational methods

Despite an increase in ecologically valid data being gathered through observational methods used in a natural context, this research design can be critiqued for a lack of control over the variable(s) being measured. It is the result of research being conducted in a natural context, without direct researcher manipulation, which leads to extraneous variables possibly impacting upon variables being observed. As a result, though high in validity, applied researchers choosing to use observational methods within naturalistic enquiry must be cautious when applying findings and discussing implications.

Observational research can also be challenged for using a limited sample size; a critique which is a recurrent theme within literature as summarised by Altmann (1974). Limitations of a small sample include research being difficult to generalise as often it is unique to the context in which it was observed. Associated with a limited sample in terms of size and variability, this can potentially impact the replicability of observational research. It is through replicating studies that consistencies within various data sets can be established, informing an insight into consistencies within human behaviour. However, with the increase in sample variation with many observational studies, replicability may be difficult and consequently, reliability within data may be jeopardised.

Though the potential of observation enables the methodology to be applied across research contexts, on a continuum from highly controlled to naturalistic settings, critics question the reliability of data due to the subjective nature of interpreting human behaviour. Whether using structured or unstructured method, observation requires inference and interpretation of an observer; exposing data to risks of observer bias and misinterpretation even within the most controlled experimental contexts. As a result, though reliability of observational data can be enhanced through adopting structured observational tools or putting subjects into highly controlled contexts, a

certain degree of subjectivity is required when observing behaviour which threatens the overall reliability of data.

In consideration of the disadvantages to conducting observational research, it is apparent that though the method has the potential to generate highly valid data, this can be to the sacrifice of gathering reliable data. Furthermore, though observational tools can be used within highly controlled settings through the use of structured observational schedules, reliability may still be affected due to the subjective nature of interpreting human behaviour. Consequently, depending upon the purpose of research, it may be that more highly controlled research methodologies are adopted by researchers in order to ensure greater objectivity and consistency.

### 3.4.3 Summary

Observational research can take a variety of forms which each present advantages and challenges to researchers. However, the ability to adapt observational methods so that live data is gathered across different contexts and for different research purposes proves helpful in gathering data rich in validity.

In recognition of both advantages and disadvantages explored for observational research and the purpose of the current research, a systematic observational method has been chosen. Through the adoption of a semi-structured format, the current research has been able to specify what is being studied in order to provide clarity within the chosen subject. Due to its potential to generate hypotheses, a semi-structured observation method was chosen to offer an initial explanation of the phenomenon being observed. Through a semi-structured approach to data gathering, the current research aligns with an emic approach by allowing data to be captured as it occurs and then later explored with flexibility.

### 3.5 Choice of observational tool

In order to conduct a systematic observational method, a predefined coding system can be used to distinguish between the observed behaviours. Though researchers are able to develop their own observational schedule, using a well-established coding system is recommended by Bakeman and Quera (2011) when conducting enquiry with behavioural science. In the case of the current research, the coding system was required to be specifically focused upon examining speech. Through paying particular attention to speech, the researcher was able to operationalise how things were said during a Circle of Adults.

In order to select the most appropriate tool, numerous established coding systems were examined. Upon consultation of the literature, Bales' Interaction Process Analysis (1951) was initially found. This system makes a distinction between task and emotional processes, with the assumption that all groups behave in ways with a consistent style and purpose. It therefore follows a behaviourist perspective, assuming similarity across groups. Though developed during the 1950s, IPA has been used in current research, recently being used to code online behaviours (Fahy, 2005); indicative of its utility across real life contexts and also validity in measuring group behaviour in today's society. Despite the apparent robustness of IPA, the tool has been criticised by Hirokowa and Gouran (1989) for the lack of specificity in not acknowledging the distinction between on and off task group behaviours; subsequently there is an implicit assumption that all group behaviour is focused upon the identified topic. Following this critique, Hirokowa and Gouran (1989) developed a further observational tool to capture on task, helpful group behaviour. However this was consulted but felt to be too simplistic for the purpose of this research as it only focused upon 4 behaviours and therefore did not appear exclusive and exhaustive. Similarly, other coding systems were consulted but found to not be fit for the purpose of this study. Benne and Sheats (1948) behavioural coding system was initially explored due to the recognition it gave to the functional behaviour of group

members. The 'functional roles' coding system worked on the assumption that each member of a group had a specific role and used their communicative behaviours to serve their particular function. Benne and Sheats (1948) suggested that individuals behaving in emotional ways were negative to the wider group functioning as this only served as a tool to meet their own individual needs, rather than the needs of the whole group. It was felt that this too was not an appropriate tool to capture the activity within a Circle of Adults intervention, given the interventions focus upon how staff members feel about a focus young person; the tool actively facilitates discussion about individual thoughts and feelings. Furthermore, the notion that group behaviour is complex, dynamic and fluid indicates that group roles can change and that participants can take on more than one role. Finally, SYMLOG (Bales, 1983) was consulted as this systematically captures more complex behaviours which occur within a group by recording both verbal and non-verbal events. Though this would offer a more sensitive and rich picture of the group dynamics within a Circle of Adults, the use of SYMLOG requires specific training and the use of auditory and visual recording equipment. For the purpose of this research and in recognition of the constraints of applied research, it was felt that SYMLOG would not have been possible to use.

Following thorough examination of pre-existing coding systems, Bales' (1951) Interaction Process Analysis (IPA) was chosen to code the audio data (appendix 3). Broadly, it was felt that this system was not only objective but also exclusive and exhaustive in recognising the range of task and emotional focused behaviours within a group.

### 3.5.1 Interaction Process Analysis (IPA)

IPA is a robust, systematic procedure for analysing social interaction during observational research (Cornwell, 2015). It allows for records of sequences of behaviour to be gathered from real-life, applied contexts which are indicative of its utility due to high reliability and validity. The system classifies interactional behaviours into 12 categories; focusing on not *what* was said,

but *how* things were said. IPA was suitable for this particular study due to how it differentiates between task and emotional processes (Bales, 1954) The explicit distinction between task and emotional group process will provide a useful insight to inform a psychological discussion of the findings; examining to what extent the collaborative problem solving group addresses emotions held by school staff, in comparison to task/solution focused discussions. Further examples of IPA and how it was applied within the current study are included within the results section and appendices 4 and 9.

Due to the systematic nature of IPA, the original coding system was not adapted for the purpose of this research. It is intended that through using an exclusive and exhaustive coding system, observed behaviours fit within one code. As IPA is a commonly used coding system, supplementary dictionary-like definitions are available alongside more elaborate, extended descriptions of each behavioural code. These definitions also address similarities and differences between each behavioural category which minimises the likelihood of a co-occurrence of codes.

As with observational research, coding subjectivity poses potential threats to validity. However, use of inter-rater agreeability is anticipated to reduce the likelihood of coding subjectivity; reducing threats to validity (Bakeman and Quera, 2011). This will be explored further when the research design is presented.

### 3.5.2 Summary

A pragmatic approach to conducting research has been adopted; the researcher has been guided by the existing evidence base and intended purpose of the research. This has led to a post-positivist stance being taken whereby an assumption is made that scientific methods can be used to capture reality and knowledge which is only probable.

Conducting the current research within a naturally occurring context may appear paradoxical to the post-positivist stance adopted; naturalistic research

is not typically associated with this epistemological positioning. However, in accordance with a pragmatic approach to conducting research, controlled methods are being used with a natural context and subsequently, a degree of researcher control and objectivity within a natural context is established. Therefore, though data has been gathered within a real world context, the ways in which it has been collected and will be subsequently analysed enable objectivity and are closely aligned with post-positivism.

In summary, this research used a semi-structured observational method to gather live data within the naturally occurring context for a Circle of Adults, enabling a deeper understanding of how groups behave during the intervention.

## 3.6 Research Design

### 3.6.1 Recruitment and stakeholder engagement

Within the researcher's host local authority, the Educational Psychology Service (EPS) offered the Circle of Adults intervention as part of their traded service. However a designated number of the Circles are offered free of any financial charge, as part of a capacity-building initiative for 'Looked After Children' (LAC). All schools within the local authority which requested a Circle of Adults (paid for or 'free') between September 2016 and January 2017 were invited to participate. As the research does not require participants to do anything in addition to participating in the group, it was anticipated that stakeholder engagement would be increased. There were no rewards given to schools agreeing to take part and any schools choosing not to participate in the research continued to have a Circle of Adults available to them. This removed unwanted pressure or coercion, ensuring ethical and equitable practice was upheld.

During the recruitment process, head teachers and Special Educational Needs Co-ordinators (SENCo) were required to give their fully informed consent to participate. Should this have been obtained, consent from whoever held parental responsibility for the focus young person was then sought. Finally, participants of the Circle of Adults (school staff) were also required to give their fully informed consent. This three-stage consent process was anticipated to aid engagement as staff were aware of the research aims and procedures and also actively involved in gaining consent. Those circles who agreed to participate in the research were recorded using an audio recorder.

### 3.6.2 Sampling procedure

The chosen method of sampling was a voluntary, opt-in procedure. Those schools requesting a Circle of Adults within a 4 month period were invited to participate in the study, using an opportunity or convenience sampling procedure. Though this sampling strategy can lead to the generalisability of research findings being restricted, it is often used within real world research due to its increased accessibility (Cohen, Manion and Morrison, 2008). In addition, as this research is unique in investigating the group interactional processes occurring within Circle of Adults, the exploratory approach intends to provide only an initial insight into this specific area of interest. Thus, it is not anticipated that absolute generalisations will be made.

### 3.6.3 Data collection

Within the host EPS, head teachers are able to request a free Circle of Adults intervention. For those that made this request, an invitation to take part in the study was sent directly to them (appendix 5). The free Circle of Adults was not dependent upon research participation; schools which declined to participate were still provided with the intervention. However, for those schools opting to participate, head teachers were required to sign a consent form (appendix 6) and parents/carers of the focus child were required to give fully informed consent (appendix 7). Those staff participating in the Circle of

Adults were provided with additional standardised information and an additional consent form outlining right to withdraw (appendix 8). This was given immediately before the intervention commenced, without the presence of the researcher who left the room to ensure that participants were given the opportunity to withdraw without any perceived pressure from the researcher.

In total, seven schools requested a free Circle of Adults and were invited to also participate in the current study. Initially, all seven schools responded and agreed to take part but one later withdrew from the research due to concerns about how staff may be impacted by the presence of an audio recorder. This school still received the intervention, free of charge, by the host EPS. The first school recorded (out of the six schools in total) was used to complete a pilot study and not included in the final research sample.

### 3.6.4 Pilot Study

A pilot study was conducted to ensure that data collection procedures were appropriate and fit for their intended purpose. Cohen, Manion and Morrison (2008) state that the need to pilot structured and semi structured observations *'cannot be overemphasised.'* Through the process of completing a pilot study, categories being used can be trialled for their mutual exclusivity and also comprehension. The importance of conducting a pilot study within research using observation has also been emphasised by Bakeman and Quera (2011) due to its ability to ensure the coding system behaviours are mutually exclusive and exhaustive. Through having clear distinctions between behaviours coded by any system, subsequent analysis can be used to examine behaviour distinctively. Furthermore, using a pilot study to assess the exclusivity and exhaustive nature of behavioural categories ensures that the researcher is not relying upon categories being merged or 'lumped' due to lack of definition or an overlap of code assignment after initial analysis. This proves advantageous as lumping behavioural categories reduces the exclusivity of coded behaviours and should therefore be avoided.

The first school available to participate was used for the purpose of practising data collection procedures, trialling the use of coding system. As the coding system chosen is an established observational coding tool, accompanied with clear descriptors of each behavioural category, no amendments were required and the code was used as intended. However, a formative discussion between the researcher and member of staff completing inter-rater reliability checks was held, focusing upon the definitions of each behavioural category and the context in which they could be assigned. In addition, a trial of the coding system was also conducted, facilitating further discussion of the allocation of behaviour codes to data. Through this discussion, it was agreed that in the event of uncertainty, speech immediately before and after would be listened to in order to establish the meaning and underlying purpose of what was being said.

The pilot study showed that the recording equipment used was problematic due to positioning and sound quality. Changes were made to the voice recorder used and it was decided that the recorder would be placed in the centre of the group; on a table. These adaptions were made prior to the start of formal data collection and data collected during the pilot study was not included in research analysis.

In total, five Circle of Adults interventions were included in the final sample. An overall summary of the context for each school included in the research is provided below in table 6.

**Table 6: An outline of the schools included in data collection**

| Circle of Adults number | Type of school | Student age range (years) | Total number of participants | Staff attending- professional roles | First time using Circle of Adults |
|---|---|---|---|---|---|
| 1 | Specialist | 3 – 18 | 5 | Deputy head teacher<br>Class teacher<br>Teaching assistants | No |
| 2 | Mainstream | 11 – 16 | 6 | Assistant head teacher<br>SENCo<br>Class teacher<br>Teaching assistants | No |
| 3 | Mainstream | 3 – 7 | 3 | Class teacher<br>Teaching assistants | Yes |
| 4 | Mainstream | 3 – 11 | 10 | SENCo<br>Class teacher<br>Teaching assistants<br>Youth worker<br>Learning mentor | Yes |
| 5 | Specialist | 7 – 11 | 8 | Class teachers<br>Teaching assistants<br>Assistant head | No |

### 3.7 Data analysis

#### 3.7.1 Transcription

Audio (voice) recordings were taken of the five Circles of Adults, which were then transcribed. The researcher completed four of the transcriptions, whilst an under-graduate Psychology student on placement within the researchers host Educational Psychology Service completed one transcription. Transcription followed verbatim protocol; recording information was recorded line by line, based upon each individual speaker. Transcription ensured that any information which may make participants identifiable was omitted such as: name; location; date of birth; significant events seeming unique to the participants. Confidential data was also omitted from transcription. The process of ensuring participants were kept anonymous was not anticipated to impact analysis as the focus of this research was to explore how information was presented to understand sequences of interactive processes.

#### 3.7.2 Assigning behavioural codes

The IPA coding system was used to analyse the transcribed data. This involved single behaviours being assigned a category based upon the main function, or purpose, of the speech. To support the coding process, each category was given a number, enabling data to be numerically coded based upon categorisation.

**Table 7: An overview of behavioural codes, derived from Bales' IPA (1951)**

| Interactional processes | Code assigned |
|---|---|
| Shows solidarity | 1 |
| Tension release | 2 |
| Agrees | 3 |

| | |
|---|---|
| Gives suggestion | 4 |
| Gives opinion | 5 |
| Gives orientation | 6 |
| Asks for orientation | 7 |
| Asks for opinion | 8 |
| Asks for suggestion | 9 |
| Disagrees | 10 |
| Shows tension | 11 |
| Shows antagonism | 12 |

**Example extract 1: Circle 4**

Laughs (Code 2 – *tension release*)

Thank you (Code 1 – *shows solidarity*)

Is that alright? (Code 8 – *asks for opinion*)

Yes (Code 5 – *gives opinion*)

Super (Code 3 - *agrees*)

The chosen unit of measurement was by categorisation and used continuous coding; requiring one 'category' to be coded until a different category began. In practise, this meant that a single act of behaviour could be a single word, one sentence or a combination of sentences.

**Example extract 2: Circle 1**

So different reactions, at different times? (Code 7 – *asks for orientation*)

You can't kind of predict how is going to react, because the same situation can almost happen and he will react in a completely different way, (Code 6 – *gives orientation*) so it's almost what's going on inside his head, I suppose.

It feels unpredictable. (Code 5 – *gives opinion*)

It feels very unpredictable. (Code 1 – *shows solidarity*)

It feels really unpredictable. (Code 3 - *agrees*) Ok, anything else, that anyone would like to add in terms of what we see of D in school at the moment? (Code 4 – *gives suggestion*)

I think he's quite caring. (Code 5 – *gives opinion*)

Continuous coding was intended to overcome difficulties of knowing how long behaviours need to occur for in order to be coded (duration); for instance, during longer periods of narrative when only one interactional process was used, or alternatively, when a pause during the same coding category was observed. In cases where a co-occurrence of codes occurred, Bakeman and Quera's (2011) suggested hierarchical rule was adopted. This required the code which had been most frequently used to categorise data being selected. This coding strategy appears more insightful than adding a code of 'none or all of the above' to the coding system which is a lumping strategy argued to reduce the exclusivity and miss important distinctions which occur naturally within observational data. Additionally, a strategy of re-listening to recordings and considering the context was also used within the current study to support coding when difficulties arose. This was a strategy adopted by Mitchell (2011) to ensure coding consistency through gauging the affective states of speakers in order to distinguish the main purpose of their speech.

### 3.7.3 Analysis of Data

Inter-rater agreement checks were conducted on a sample of the data, completed by an assistant within the host EPS. This was done using a confusion matrix to show inter-observer reliability, then followed calculating Cohen's Kappa (Cohen, 1960). This is arguably more robust than a percentage calculation as it accounts for probability and 'chance' upon agreement occurring naturally (Shaughnessy et al 2003). The use of Cohen's Kappa to establish inter-rater reliability is discussed at greater depth later in this chapter in the section 'establishing trustworthiness.'

### 3.7.4 Descriptive statistics

Descriptive statistics were used to provide insight into the frequencies of interactional processes occurring within the data set. This included calculating the mean and standard deviations of the 12 interactional processes occurring within each of the five Circles recorded and also the overall observed frequencies within the whole data set (n=5).

### 3.7.5 Sequence analysis

Sequence analysis derives from Markov's (1856-1922) assumption that mathematical models can be utilised to understand relationships, through their ability to thoroughly analyse antecedent and consequent behavioural events. Sequence analysis enables researchers to examine how events unfold over time with the assumption that through the identification of the temporal order of events, a more comprehensive understanding of the subject can be obtained.

Specifically, sequence analysis is a systematic approach to understanding the dynamic and complex interplay of processes. The analysis yields such understanding through identifying potential key points within a data set; these are known as transitions. Transitions are frequently observed events, whereby an antecedent behaviour is succeeded by a consequential

behaviour. Through determining pivotal transitions within data, sequence analysis can be used to inform researchers how events unfold over time whilst paying close attention to significant interdependent events. Using probability, sequence analysis then allows predictions to be made about the course and unfolding of observable events.

Despite its origins within statistical scientific domains, Cornwell (2015) recognises that sequence analysis is continuously being developed in ways to be unique and relevant to the social sciences. It is defined by Bakeman and Quera (2011) as an analytical tool which captures patterns and contingencies in observed behaviours, making the analysis highly relevant to psychological investigations. In accordance to its roots within biological and mathematical sciences, sequence analyses draws upon behavioural psychology and ethnology by using scientific, objective measures to observe behaviour in natural environments in order to illuminate dynamic factors. Through such scientific rigor, sequence analysis allows researchers to gain an in depth understanding, similar to that which would typically be associated with qualitative methodologies, but with the associated strengths of quantitative research.

Clarke and Crossland (1985) identify the stages of sequence analysis which are carried out to determine the probability of a certain behavioural event being succeeded by another. The first stage requires the parsing of continuous behaviour, enabling behaviours to be separated into discrete events; also known as unitisation. Secondly, events can then be classified further so that they become exclusive and exhaustive and understood in terms of their function. Finally, at stage three, frequencies are calculated so that researchers are able to analyse the sequential interactions occurring within a data set. This requires calculations of probability and significance to determine whether the frequency and likelihood of one event succeeding another exceeds that due to chance.

Existing literature around sequence analysis provides a clear rationale for using the approach within the social sciences and specifically, the current study. According to researchers aligning themselves with the approach, human beings are socially connected; experiences are guided by fluctuating environmental factors, changes to statuses and preferences, the shifting of strategies and receptive to the constant flow of information being exchanged. Thus, there is a dynamic series of ordered events which connect human beings in social contexts. This rationale is underpinned by behavioural psychology, notably principles of operant conditioning which suggests that new responses can be influenced by events which occur prior to them. In accordance with the theory of operant conditioning, an assumption made within sequence analysis is that behavioural events do not arise randomly or due to chance, they are the product of a set of patterns occurring. As a result, it can be argued that in order to fully understand social events and structures, the timing and order of events occurring within social interactions must be examined by conducting systematic, empirical analyses. Sequence analysis is a likely tool for achieving such analysis, through its offer of a statistical model which is uniquely placed to identify immediate and distant events within a series of behavioural events. In turn, predictions about human behaviour can be made, through the systematic observation of events.

Within the underlying theory of sequence analysis, predictability of human interaction is implied. It is assumed that factors within both individuals and institutions make regular, predictable and sequential social phenomena to occur. This draws parallel to the theoretical work of sociologist Parsons (1951) who stated that social roles, norms, values and reinforced obligations leads to predictability. Broadly, everyday situations are believed to be marked by relatively stable, reinforcing patterns of behaviour which over time, become to be repeated in predictable ways. Thus, sequence analysis is a methodology which lends itself to understanding patterns of social interaction which occur within a given context; an insight which is arguably vital for gaining an insight into human behaviour and facilitating change.

In contrast to this proposed belief concerning social contexts being predictable, challenges to the use of sequence analysis arise through the understanding that social reality emerges through complex events which are both predictable and unpredictable. As a result, contextual factors can change which leads to interactions deviating from relatively stable, predictable sequences. Yet sequence analysis does not ignore these complexities of social interactions; advanced methods to observe and analyse behaviour can be adopted and the focus upon sequences within interactions allows linkages between events to be understood. Thus, by studying social transitions, sequence analysis recognises that events do not operate in isolation, capturing social reality as a complex, dynamic process. Furthermore, Cornwell (2015) suggests this approach actually yields greater reliability than many highly controlled studies using empirical analyses as these tend to focused upon variables reflecting a static state. Consequently, to gain a true insight into complex dynamic social processes and relationships, sequences must be understood in order to gain a better understanding of social relationships and their effect on human interaction and dynamics of social events (Abbott and Tsay 2000). Though focusing upon transitions, processes and ordered social phenomena reflects a shift in paradigm from traditional positivist approaches, sequence analysis has been suggested to be the only way to understand complex social structures and interactions with ecological validity (Bales, 1951; Strauss, 1993; White, 2008).

Though sequence analysis presents an apparent value to understanding complex human behaviour within applied settings, Cornwell (2015) suggests that within contemporary social science the processes of describing and analysing the sequential nature of events is done by a small number of researcher enthusiasts. Yet, despite the small number of researchers choosing to adopt the methodology, Cornwell proposes that interest is growing in analysing the sequential nature of social phenomena due to more effective technologies being developed to capture and analyse this type of data. Sequence analysis can now be used to make increasing contributions to

psychological research and has also been used within sociological research to understand life course events and societal processes.

Specific illustrations of how sequence analysis has been used within more recent psychological research includes a recent study by Townsend, Wadman, Sayal, Armstrong, Harroe, Majumder, Vostanis and Clarke (2016), who used the tool to illuminate patterns of self-harm behaviour within adolescents. Other research, such as that by Bradbury and Fincham (1991) highlight the potential for sequence analysis within the field of applied psychology through their suggestion that true insight into group interaction can only be obtained through drawing specific attention to sequential processes occurring. Abbott (1995) highlighted studies whereby sequence analysis was the chosen methodology for psychological research and praised the methodology for recognising the complex relationships between human behaviours which do not act in isolation from one another. Though a unique method, the prevalence of sequence analysis is growing due to its ability to systematically explore complex human behaviours. Through generating an insight into the interactive processes of how behavioural events unfold over time, patterns in the sequences of human behaviour can be found. Through establishing linked behavioural events, researchers are able to gain a deeper insight into the interdependent relationship between actions and make predictions about human behaviour.

A sequence analysis was used to explore and identify sequences and patterns in interactional processes, through focusing specifically upon the transition between events (processes). This analysis does not attempt to establish causal links, focusing upon only the relationship between observable behaviours occurring within the interaction. Within the current research study, sequence analysis has been chosen in order to reveal the following aspects about Circle of Adults group problem solving intervention:

1. The explicit interaction patterns occurring within a Circle of Adults intervention.
2. The dynamic sequences occurring within a Circle of Adults, demonstrating the multiple events and how they are interrelated.
3. The probability of both typical and atypical patterns of interaction occurring within Circle of Adults intervention.

### 3.8 Establishing trustworthiness

In order to strengthen the perceived trustworthiness of the current research, reliability and validity were actively considered by the researcher. Reliability broadly refers to the consistency of data, whereas validity considers how accurate data is (Cohen, Manion and Morrison, 2008). Specific attention was given to considering the associated limitations of naturalistic observational research, intending to alleviate and overcome potential threats to the data gathered.

#### 3.8.1 Reliability

In consideration of the limitations associated with observational research, the current study intended to minimise threats to reliability through using two observers and assessing their consistency when interpreting observed behaviour. In order to measure the degree to which observer agreement was established within the current study, a Cohen's Kappa score was calculated. This calculation demonstrates the extent to which two independent observers are able to attribute the same behavioural code to a particular set of data. Establishing consistency between coders can be used to signify whether the categorisation system has been used as it was intended. It is through this process of checking that errors can be addressed in order to ensure that trust in the research findings is established to enhance credibility.

The chosen calculation for determining inter-rater consistency is more robust than other methods used; including percentage agreement for example. Kaye, 1980, suggests calculating a Cohen's Kappa score when using nominal or ordinal observational measurements is more effective and accurate as agreement due to chance is considered. Through the ability of a Cohen's Kappa calculation to reflect the observed probability of agreement that exceeds chance, using this statistic will enhance the reliability of the coding system to in turn, increase the overall validity of the findings.

Consultation of literature enables exploration of the boundaries of acceptability for Kappa's Cohen scores. Landis and Koch (1977) characterised Cohen's Kappa scores using the following boundaries: a score of 0 reflects no agreement between observers; 0 – 0.2 a 'slight' agreement; 0.21 – 0.4 'fair' agreement; 0.41 – 0.6 'moderate' agreement; 0.61 – 0.8 shows 'substantial' agreement; and 0.81 – 1 demonstrates an 'almost perfect' score between raters. Though a helpful tool for evaluating observer agreement, Fleiss (1981) criticised Landis and Koch's approach for being too generous, suggesting a more reasonable approach to determining observer agreement. Fleiss suggested that Cohen's Kappa scores falling below 0.4 were indicative of 'poor' agreement scores, 0.4 – 0.75 were 'fair to good' and 0.75 and higher shows 'excellent' inter-rater consistency.

Though both approaches to evaluating observer agreement scores offer clear frameworks for reviewing Cohen's Kappa statistic, they have been critiqued within literature by Bakeman and Quera (2011) and also Gardner (1995) for having no clear rationale for the distinctions and boundaries between scores. Consequently, Bakeman and Quera (2011) pose that agreement scores around 0.8 offer a 'good minimum level' of agreement which researchers should be aiming for. Yet in contrast, Gardner (1995) stated that scores of 0.8 were still 'discouragingly low' if researchers were expecting trustworthiness of their observational study. Instead, Gardner suggests that agreement scores of 0.85 and higher are reasonable goals.

Overall, it is anticipated that through the use of a robust inter-rater assessment, consistency between the researcher and observer will be established prior to data analysis. Through such rigour, it is intended that subsequent interpretations of the observed behaviours will be consistent between observers, indicative of not only reliability within the data set, but also the validity of the coding system.

### 3.8.2 Validity

The current research was conducted within naturalistic contexts, with no researcher manipulation or control. Thus, the ecological (external) validity of data gathered is strong; proving to be a strength of the current study.

Intervention fidelity refers to the chosen intervention being used in an honest manner, as intended by the original guidelines and recommendations. As the host authority used the intervention as part of their capacity building initiative, educational psychologists delivering the Circle of Adults intervention had already been provided with training by the EPS. Following the guidance of Cohen, Manion and Morrison, 2008, by ensuring educational psychologists using the instrument (in this case, Circle of Adults) followed the intended process as intended, treatment integrity is increased. Consequently, threats to internal validity are reduced, increasing the extent to which conclusions of research are accurate within the limits of the chosen research method and participants used (Colman, 2006). In addition to this measure taken to reduce threats to internal validity, information about the intervention process and research methodology was provided by the researcher during a whole EPS meeting. This action intended to further enhance integrity of the instrument being used and minimise threats to the overall accuracy of results obtained.

The researcher did not have a process facilitation role within the circles recorded and thus was not able to directly impact the intergroup processes. This was decided in order to avoid a conflict of interest and to reduce threats

to validity. Furthermore, it was intended that by the researcher not guiding the group process through use of verbal and non-verbal consultative skills, the Hawthorne effect would be minimised. As a result, the likelihood of participants changing their 'typical' behaviour due to their awareness of being part of a research study was reduced and consequently, threats to the external validity were minimised (Colman, 2006).

In further consideration of the internal validity of the research, pre-defined categories arguably risk neglecting aspects of group behaviour; potentially leaving certain behaviours unnoticed or overlooked which proves a potential threat to the internal validity of a study. Yet, though determining the extent to which reliability between observers is established strengthens data gathered within observation research, it is anticipated that high agreement scores are indicative of a coding system which accurately defines and records human behaviour. Moreover, through using an exclusive and exhaustive coding system which has been used frequently within previous research, it is predicted that threats will be minimised through strict data collection and analytic procedures. Bales' IPA is well-documented in a variety of research studies from a range of contexts; Landsberger (1955) used the system to examine discussion from an organisational psychological perspective whilst Mann (1959) used IPA to examine the impact of personality upon human behaviour within small groups. IPA is also used within educational research, indicating its utility. When examining co-operative learning within classrooms, Underwood and Underwood, 1999, used Bales' tool whilst within unpublished doctoral research, IPA has been used to explore inter-professional discussion within schools (Mitchell, 2011). Together, literature supports Bales' IPA coding system to be a well-regarded, robust and objective tool for examining human behaviour within natural contexts.

In summary, the external validity of the current study is enhanced through the naturalistic context for data collection. Through the capturing of real life behaviour, as it occurs in situ, it can be assumed that observations are typical of how interaction would usually occur with the specified context. In addition,

internal validity has also been reinforced through facilitating consistency amongst educational psychologists conducting the intervention. Furthermore, the use of a well-established coding system which is assessed in the current research for inter-rater consistency, it can be assumed that IPA has been used as it was initially intended and reported by Bales and trustworthiness is established.

### 3.9 Ethical considerations

In respect of ethical practice, various ethical codes have been consulted for the purpose of this research. An application to The University of Nottingham Code of Ethics (2013) was made and given approval (appendix 9). In addition, ethical guidelines published by the British Psychological Society (BPS, 2004), Division of Educational and Child Psychology (DECP, 2002) and Health and Care Professions Council (HCPC, 2008) have also been adhered to throughout the research process. Following these processes of ensuring ethical practice was upheld, the research study was also approved by the host Educational Psychology Service. In conjunction with these processes, specific ethical considerations were addressed with predetermined actions being implemented to overcome any potential ethical issues.

An area of particular challenge within this research was related to consent procedures. Fully informed consent was obtained through a three stage process. At each stage, there was no withholding of information; full details of research aims, data collection processes and analysis were given.

Stage 1: head teachers to give their initial consent (in advance of intervention)

Stage 2: parents / legal guardians to give their consent for Circle of Adults taking place for their child to be included (in advance of intervention)

Stage 3: All participants in intervention to give their fully informed consent, following the research being explained verbally (by researcher) and in a

written document. This was done immediately before the intervention was due to start.

Approved by The University of Nottingham Ethics Committee, the researcher followed host education authority service policy by gaining parent / legal guardian consent for the intervention to be included in this study. Therefore, in accordance with this policy, consent from the young person who the intervention was being held for was not sought. This was due to the indirect nature of the intervention and the intention of the process avoiding negative longer term consequences for the focus young person; specifically school exclusion. This was a particular area of tension for the researcher and reflects the notion that ethics are socially constructed; influenced by societal perceptions of young people. This view has been illustrated by Morrow and Richards (1994) who consider how wider constructs of children being vulnerable and relatively powerless in society impacts their role within social research. Therefore, the role of child participants within applied research brings challenges generally within the research community and appears indicative of the complexities within socially constructed beliefs, values and morals. Subsequently, in following host authority policy and practice, the researcher ensured that no harm was placed upon the focus young people by maintaining confidentiality and anonymity throughout data collection, analysis and discussion.

In accordance with ethical guidelines, a full debrief was given to all participants immediately after the Circle of Adults intervention had taken place. This was done verbally and through a written document to be taken away (appendix 8). In addition, the debrief procedure also included a follow up telephone conversation with the SENCo in each participating school. During this conversation, the staff member was reminded of participant's right to withdraw. Further ethical issues have been summarised in Table 8.

## Table 8: An overview of potential ethical issues and actions to overcome

| Ethical issue | Action(s) |
|---|---|
| **Deception** | No details of research were withheld from school staff, parents/carers or educational psychologists. The study did not require any deception and therefore, this ethical guideline has been fully adhered to. |
| **Consent** | See earlier details on page 89 and 90. |
| **Confidentiality** | Confidentiality procedures were outlined by the educational psychologist facilitating the Circle of Adults process before the group started and also during stage 1 of the process. This is a typical procedure for the intervention and therefore, no further actions to ensure confidentiality during the data collection process were required.<br>In consideration of the current research, anonymity was given to participants to ensure that dissemination does not impact those involved. Anonymity was ensured through removal of any identifiable information during transcription to allow for participants to remain anonymous within the research write up. Additionally, any confidential information shared during the intervention was not transcribed; this was decided to not be relevant to the research and therefore not included in the transcription and results analysis.<br>As typical within a Circle of Adults, the potentially sensitive nature of the focus child's circumstance will be carefully managed by process facilitator and also naturally considered through the predefined structure of the intervention (ground rules, confidentiality, safeguarding). |
| **Observational research** | The research required fully informed consent, as it took place in a situation whereby people would not typically expect to be observed. Therefore, by ensuring that fully informed consent was obtained, no breeches to ethical guidelines around observational research were made. |
| **Withdrawal** | Participant right to withdraw made clear to educational psychologists, parents/carers and school staff; they had until February 28th 2017 to remove their data without any reason or justification. No participants requested to withdraw from the research after taking part. |
| **Protection** | Confidentiality and safeguarding procedures were in place and upheld as they would have been in all Circles facilitated by the host EPS. In addition to the actual intervention itself, a debrief following the intervention was offered by educational psychologists following the completion of a Circle of Adults to ensure participants are protected from harm. Another step taken to protect those participating included a follow up conversation being held with the school head teacher within 6 weeks of the intervention taking place. These were typical procedures endorsed by the EPS and therefore, no additional protection was required for the purpose of this research. |
| **Advice** | As the intervention ran as advised in the training manual, following the suggested structure proposed by Wilson and Newton (2006), the role of the educational psychologist is not to give advice during the intervention. This indicates that 'advice giving' was not a concern for the current research. |

| | |
|---|---|
| **Debrief** | As well as a debrief by the educational psychologists facilitating the Circle, a debrief specifically relevant to the research was be provided. This was be done through a participant debrief document (appendix 8) which reiterates research aims at the end of the intervention, as well as each participant's right to withdraw. Moreover, the researcher's and their university supervisor's contact details were provided for requesting further information should it have been required. As with typical practise during a Circle of Adults, participants were able to be directed to appropriate supports should it have been necessary within each specific group context. |
| **Colleagues** | Peer and academic supervision was accessed throughout the research process to ensure that the researcher remained transparent about the research at all times. Specific consideration to ensure that the impact of research was fair and contributed positively to educational psychology practice was actively considered during research supervision. |

## 4. Results

### 4.1 Introduction

Bales Interaction Process Analysis (1951) was used to code a total of five Circle of Adults group problem solving interventions. The coding was assessed for inter-rater reliability using Cohen's Kappa statistic; this showed that there was a high level of agreement between two independent observers. Descriptive statistics were then calculated to show the typical interaction profile within a Circle of Adults, for the whole data set (N=5) and individual interventions recorded.

A Chi Squared test of independence was then performed and found to be significant; suggesting that there are relationships within the data which occur beyond the likelihood which would be expected due to chance. In order to examine these relationships further, a Sequence Analysis was performed on the whole data set and accompanied with a state transition diagram to present findings; specifically the significant event pairs of interactional processes occurring. This process demonstrated that a Circle of Adults is a predictable and functional interaction which involves both emotional and task focused processes within the group interaction.

In addition, a second state transition diagram was produced in order to illuminate how many of the significant event pairs were found across all individual interventions used within the data set. This analysis showed consistencies within the data set, further reinforcing the notion that Circle of Adults is a highly predictable interaction.

### 4.2 Inter-rater reliability

In order to assess the reliability of the chosen coding system, a second observer was used to complete inter-rater reliability checks. The additional observer chosen was an under-graduate Psychology student on placement

within the researcher's host Educational Psychology Service. This person had previous experience completing research related activities and was also involved in a current mixed methods research project being led by the host EPS.

In preparation for coding data, the researcher and second observer met on two occasions for a formative discussion of Bales' IPA coding system. Additionally, during these sessions both the researcher and second observer practised coding example transcripts to further enhance accuracy and consistency between their practises. Techniques for ensuring accuracy were also established during these discussions which were: going to previous or next speaker to determine purpose of speech; listening to audio recording to gain a better insight into the context of the speech; and considering whether speech was task or emotional focused in order to support observational inferences.

To assess inter-rater reliability, one Circle of Adults transcript totalling 40 pages was independently coded by each observer. Totals of each code were calculated before the observer and researcher met to discuss the results. This process highlighted that on some occasions, individual speakers had been coded and therefore, further discussion and clarification ensured that continuous coding had been adhered to (irrespective of speaker). Consequently, any repetitive codes were removed. A confusion matrix was then constructed to show any differing judgements and also agreed judgements. Table 9 provides an illustration of the levels of agreement and disagreement between the researcher and observer

**Table 9: Confusion matrix of inter-observer reliability**

| | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 50 | | 4 | | | 2 | | | | | | |
| **2** | | 40 | | | | 1 | | | | | | |
| **3** | 3 | | 149 | | | 2 | | | | | | |
| **4** | | | | 64 | 2 | 6 | | 1 | 2 | | | |
| **5** | | | 1 | | 119 | 6 | | | | 1 | 2 | |
| **6** | | 1 | | 3 | 5 | 167 | 3 | | | | | 2 |
| **7** | | | | | | 1 | 66 | 1 | | | | |
| **8** | | | | | | | | 38 | | | | |
| **9** | | | | 2 | | | | | 21 | | | |
| **10** | | | | | 2 | | | | | 20 | | |
| **11** | | | | | 2 | | | | | | 43 | |
| **12** | | | | | 1 | | | | | | | 29 |

Table 9 illustrates that 862 codes in total were assigned. Of these, 806 were agreed by the researcher and observer and a difference in coding was found in 56 of the codes assigned. This demonstrates concordance between the researcher and observer to be equal to 0.93; thus 93% of codes assigned were agreed by both persons.

Cohen's Kappa calculations were also performed to observe the agreement in proportion to that expected by chance. This revealed an agreement of 0.92 which in accordance with Fleiss' (1981) guidelines reveals 'excellent' inter-rater consistency (scores > 0.75). In consideration of the requirement for a clearer, more stringent agreement boundary as argued by Bakeman and Quera (2011), the agreement score meets their recommendation of scores > 0.8 offering a 'good minimum level of agreement.' Furthermore, it also meets the strictest criterion as suggested by Gardner (1995) of scores equivalent to or greater than 0.85 offering more reasonable goals for inter-rater consistency measures. It can be concluded that agreement between observers showed high consistency and therefore, reinforces the previously documented reliability of Bales IPA (1951) coding system within the existing literature making it effective and appropriate for use in the current study.

### 4.3 Descriptive statistics

#### 4.3.1 Frequency rates

In total, 4386 interactional processes were observed across five Circle of Adults interventions. The total frequency rates of each of the 12 individual event categories (IPA Bales, 1951) observed across five Circle of Adults interventions have also been calculated. Figure 2 presents the overall numbers of each interaction process observed within the whole data set.

**Figure 2: Frequencies of interactional processes within data set**

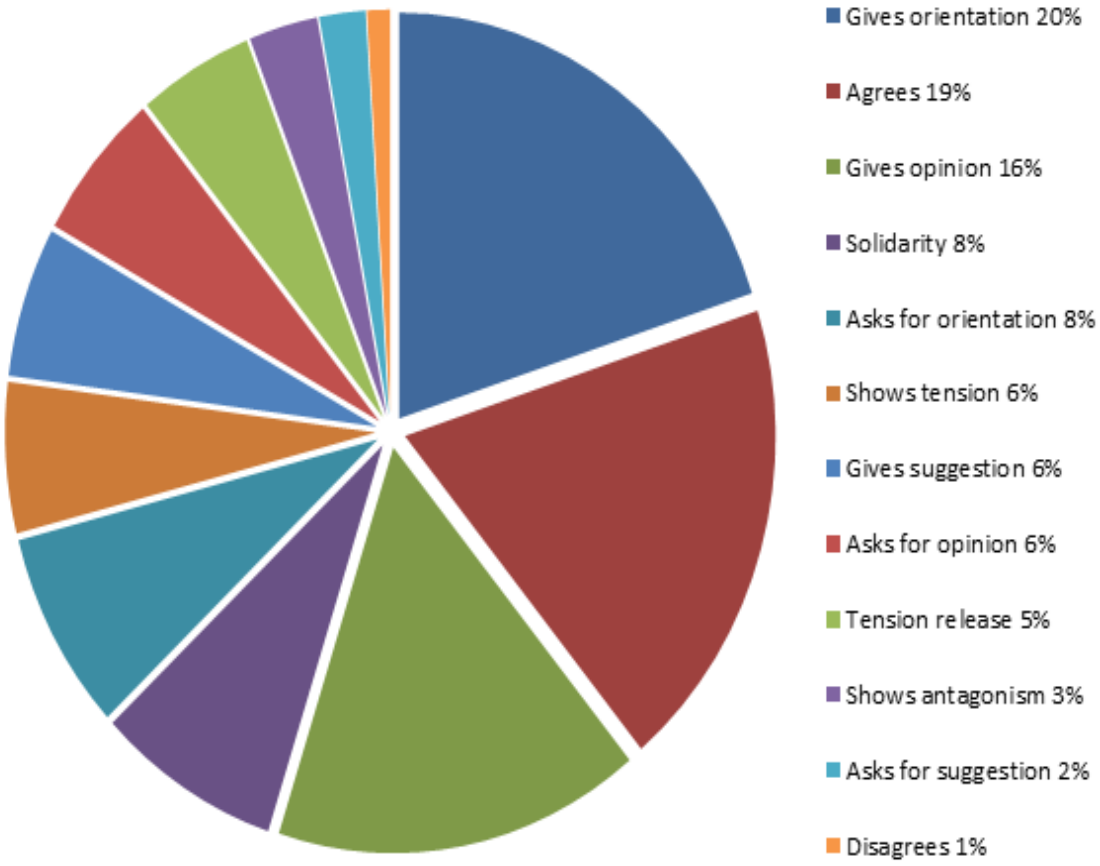



Figure 2 presents that within Circle of Adults the most frequently occurring interactional process observed was 'gives orientation' (20%). According to Bales (1951), this process reflects a task related purpose of communication.

The next most frequently occurring process observed within the data set was 'agrees' which equated to 19% of the observed processes. According to Bales' IPA coding system, showing agreement reflects a positive social-emotional process.

The interaction process found to least frequently occur was 'disagrees' which only accounted for 1% of observations within the data set; defined as a negative social-emotion process. 'Asks for suggestion' also appeared less frequently, occurring in only 2% of the behavioural codes assigned (task related behaviour).

### 4.3.2 Descriptive statistics

All 12 event categories (interactional processes) were analysed using descriptive statistical methods to illustrate; their overall sum within the whole data set (N=5), frequency occurring within each individual circle (raw score and percentage), mean and standard deviation scores are presented in Table 10. This provides an indication of the spread of data across the five circles used for analysis.

**Table 10: Descriptive statistics**

| | | **Total sum** | **Circle 1** | **Circle 2** | **Circle 3** | **Circle 4** | **Circle 5** | **Mean** * | **Standard deviation** (SD, 2dp) |
|---|---|---|---|---|---|---|---|---|---|
| | | **Total processes in Circle** | 810 | 874 | 877 | 1000 | 825 | 877.2 | 74.72 |
| **Interactional processes** | **Code** | **Individual processes observed** | | | | | | | |
| **Solidarity** | 1 | 347 | 61<br>7.5% (1dp) | 81<br>9.3% (1dp) | 63<br>7.2% (1dp) | 84<br>8.4% (1dp) | 58<br>7.0% (1dp) | 69.40 | 12.14 |
| **Tension release** | 2 | 201 | 13<br>1.6% | 46<br>5.3% | 47<br>5.4% | 56<br>5.6% | 39<br>4.7% | 40.20 | 16.36 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Agrees** | 3 | 835 | 127<br>15.7 % | 190<br>21.7 % | 145<br>16.5 % | 225<br>22.5 % | 148<br>17.9 % | 167.00 | 39.80 |
| **Gives suggestion** | 4 | 264 | 61<br>7.5% | 50<br>5.7% | 43<br>4.9% | 44<br>4.4% | 66<br>8.0% | 52.80 | 10.28 |
| **Gives opinion** | 5 | 688 | 155<br>19.1 % | 127<br>14.5 % | 142<br>16.2 % | 140<br>14.0 % | 124<br>15.0 % | 137.60 | 12.50 |
| **Gives orientation** | 6 | 888 | 170<br>21.0 % | 180<br>20.6 % | 182<br>20.6 % | 186<br>18.6 % | 170<br>20.6 % | 177.60 | 7.27 |
| **Asks for orientation** | 7 | 363 | 65<br>8.0% | 50<br>5.7% | 116<br>13.2 % | 68<br>6.8% | 64<br>7.8% | 72.60 | 25.23 |
| **Asks for opinion** | 8 | 253 | 44<br>5.4% | 54<br>6.2% | 48<br>5.5% | 68<br>6.8% | 39<br>4.7% | 50.60 | 11.17 |
| **Asks for suggestion** | 9 | 86 | 26<br>3.2% | 12<br>1.4% | 15<br>1.7% | 11<br>1.1% | 22<br>2.7% | 17.20 | 6.53 |
| **Disagrees** | 10 | 60 | 15<br>1.9% | 10<br>1.1% | 7<br>0.8% | 7<br>0.7% | 21<br>2.5% | 12 | 6.00 |
| **Shows tension** | 11 | 264 | 42<br>5.2% | 53<br>6.1% | 47<br>5.4% | 78<br>7.8% | 44<br>5.3% | 52.80 | 14.69 |
| **Shows antagonism** | 12 | 137 | 31<br>3.8% | 21<br>2.4% | 22<br>2.5% | 33<br>3.3% | 30<br>3.6% | 27.40 | 5.50 |

**N (number of Circle of Adults) = 5*

Table 10 demonstrates that the sums for each interactional process code varied within the data set; the least frequently occurring process (Disagrees) only observed on 60 occasions, whereas the most frequently occurring code (Gives orientation) was observed on 888 instances. This indicates a considerable variation of the total number of contributions each interaction code made within the data set.

Examining the standard deviation scores indicate that for some of the observed interactional processes, there was a broad distribution of scores within the intervention. For instance, the highest deviation of scores around

the mean was found for ‘Agrees’ code; this occurred on 835 occasions with a mean score of 167. However, a standard deviation score of 39.80 suggests that a significant variation around the mean was observed. Another interesting standard deviation score found was for ‘Asks for orientation.’ This behaviour accounted for 363 of the observations made, occurring on average 72.60 times within each Circle of Adults (mean). However, the high standard deviation score of 25.23 indicates that greater variation of this interactional process was found across the data set.

Large standard deviation scores could be explained through contextual differences occurring within each Circle of Adults intervention used within the data set. For instance, data indicates that Circle 4 overall had more interactional processes observed within it. Interestingly, this Circle of Adults had the greatest number of participants from more varied professional roles and also lasted for a longer duration than others recorded. This may account for why the highest frequency of agreement was observed within the whole data set. In addition, the Educational Psychologists facilitating the process for each circle also differed; this may have potentially made an impact upon how the groups verbally interacted and account for some of the variation occurring.

### 4.4 Sequence analysis

An in-depth analytical process was conducted to understand the interactional processes involved within a Circle of Adults. Using sequence analysis, there is an assumption that all events are interdependent and thus, events unfolding over time are examined in order to identify events which are strongly related. Through this analysis, the likelihood of a particular behaviour leading to another beyond that expected due to chance can be established. Thus, sequence analysis is able to identify the potential key transitions between interactional processes which occur within Circle of Adults. Once data was

coded (Bales IPA, 1951) and quantified, event pairs (making up one transition) were put into tables to present the sequences in which they occurred. An example of this process has been provided below; the full coding system and examples of its implementation can be found in appendices 3 and 10.

### 4.4.1 Using Sequence analysis to examine group interaction

**Example extract 3: Circle 1**

Data coding example:

*Yes. He is.* ***(5)***

*I feel like we should mention that Dad used to work here, didn't he?* ***(11)*** *So for a time, Dad was part of D's school and home life.* ***(6)***

*Yes.* ***(3)***

*He talks about Dad's new job, Dad has a new job.* ***(6)***

*Yes.* ***(3)***

*And a lot of that has made him really pleased?* ***(7)***

*Really pleased yes.* ***(6)***

*Ok.* ***(3)***

Once codes were assigned, the data was then inputted into a transition frequency matrix where each cell demonstrates the number of occasions an event pair or transition was observed. This is a two-way contingency table which presents behaviours in terms of the antecedent event and the consequential, or sequitur, event which succeeded it. Transition frequency matrices were completed for each individual intervention (N=5) and then for the whole data set; combining all event pairs in order for one transition frequency matrix to be completed (Table 11). This final matrix has 144 possible event pairs (12x12) and shows the cumulative transitions within the whole data set.

**Table 11: Transition frequency matrix for the whole data set**

| | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** Sol | 0 | 31 | 55 | 79 | 51 | 57 | 16 | 15 | 3 | 2 | 32 | 6 |
| **2** Tens Rel | 20 | 0 | 21 | 12 | 42 | 40 | 26 | 16 | 6 | 4 | 9 | 5 |
| **3** Agree | 58 | 35 | 0 | 58 | 192 | 275 | 46 | 62 | 15 | 11 | 50 | 33 |
| **4** Give Su | 18 | 6 | 60 | 0 | 32 | 63 | 26 | 31 | 16 | 0 | 8 | 4 |
| **5** Give Op | 51 | 41 | 225 | 31 | 0 | 119 | 68 | 40 | 9 | 13 | 63 | 28 |
| **6** Give Or | 59 | 36 | 302 | 53 | 121 | 0 | 138 | 71 | 30 | 16 | 44 | 18 |
| **7** Ask Or | 4 | 3 | 33 | 1 | 25 | 268 | 0 | 1 | 1 | 6 | 13 | 8 |
| **8** Ask Op | 7 | 9 | 12 | 10 | 167 | 8 | 7 | 0 | 1 | 2 | 25 | 5 |
| **9** Ask Su | 3 | 1 | 2 | 43 | 11 | 6 | 4 | 2 | 0 | 2 | 10 | 2 |
| **10** Disagree | 3 | 2 | 19 | 1 | 13 | 3 | 2 | 2 | 1 | 0 | 6 | 8 |
| **11** Sho Ten | 96 | 31 | 48 | 7 | 18 | 21 | 20 | 7 | 1 | 3 | 0 | 12 |
| **12** Sho Ant | 21 | 7 | 50 | 2 | 11 | 13 | 21 | 6 | 0 | 2 | 4 | 0 |

The transition frequency matrix (Table 11) highlights the frequency of event pairs occurring within the data set. Each event pair is known as a 'transition' within a sequence of data. The rows in the table indicate the first interactional process occurring within the event pair, known as the 'antecedent', whereas the columns in the table show which interactional process followed the antecedent within the event pair. This is also known as the 'sequitur' or 'consequent' behaviour. For example, the most frequently occurring event pair, observed 302 times, was found to be 6/3; 6 being the antecedent behaviour (left in the row), 3 being the sequitur (down in the column). This therefore demonstrates that the transition from code 6, 'Gives orientation', was followed by code 3, 'Agrees', the most commonly (302 occasions). There were also event pairs which were less frequently observed or not seen at all, resulting in lower transition frequency scores within Table

11. An example of this includes the transition 12/9 which shows that 'Antagonism' was never followed by 'Asks for a suggestion.' Due to the strategy of continuous coding which was adopted, the same code could never occur as an event pair and thus, no transitions of the same interactional process were observed.

### 4.4.2 Chi-squared analysis

Following completion of the transition frequency matrix, data was input into SPSS where the transitions observed were weighted and statistical analyses were performed. Firstly, a chi-squared test was conducted in order to statistically assess whether there was an association between events within the whole data set. The statistical test examined whether the observed frequencies of transitions were different to what would be expected due to chance. A significant result would imply that events within the data were related, indicative of sequential patterns which should be further explored.

The chi-squared test of independence found a significant interaction within the data set ($\chi^2$ (121) = 3149.81, $p < 0.001$). This significant chi-squared result indicates that there was interdependency between the interactional processes occurring within the whole data set, beyond that expected due to chance.

However, as the Transition Frequency Matrix demonstrated a mix of values within each cells, the original data set did not meet the required assumptions for a chi-squared test of independence. Consequently, it was decided that the event categories would also be lumped together in order to complete a second chi-squared analysis. Using distinctions provided by Bales in the description of the coding system, categories were lumped into the following categories: Problem solving attempts; Questions; Positive reactions; Negative reactions. Table 12 below illustrates how individual codes were lumped into categories.

Table 12: The lumped data categories for further statistical testing

| **Lumped category (Bales, 1954)** | **Individual codes included (Bales, 1954)** |
|---|---|
| Questions | Asks for opinion (8)<br>Asks for orientation (7)<br>Asks for suggestion (9) |
| Problem solving attempts | Gives opinion (5)<br>Gives orientation (6)<br>Gives suggestion (4) |
| Positive reactions | Agrees (3)<br>Tension release (2)<br>Shows solidarity (1) |
| Negative reactions | Disagrees (10)<br>Shows tension (11)<br>Shows antagonism (12) |

A second transition frequency matrix was then completed to enable further statistical analysis, meeting the assumptions required for chi-squared test of independence to be conducted; Table 13, below.

**Table 13: Transition frequency matrix for the lumped data set**

| | Questions | Problem solving | Positive reactions | Negative reactions |
|---|---|---|---|---|
| Questions | 16 | 539 | 74 | 73 |
| Problem solving | 429 | 419 | 798 | 194 |
| Positive reactions | 502 | 806 | 220 | 152 |
| Negative reactions | 60 | 89 | 277 | 35 |

The chi-squared test of independence also found a significant interaction within the lumped data set ($\chi^2$ (9) = 1162.47, $p < 0.001$).This is a further

indication that there was interdependency between the interactional processes occurring within the data set, beyond what would be expected due to chance.

### 4.4.2 Standard Normal Residuals

In order to further examine the sequential relationships occurring within the data set, Standard Normal Residual scores (SNR) were used to identify the event pairs, or transitions, which more strongly contributed to the sequential structure occurring within Circle of Adults. The SNR score indicates points of interest within the data which were occurring more than would be expected due to chance. The SNR is calculated by working out the square root of the observed and expected frequencies. The higher the SNR score, the greater the likelihood that one event occurs following the event of another; in this case, one interaction process follows another.

To determine the SNR scores worthy of consideration, a criterion value is used as a pre-set criterion which determines the significance of the interdependence of two interactional processes (making up an event pair). The selected criterion value for SNR scores for the purpose of this research was >2.0. This is arguably a more stringent criterion research based upon suggestions by Colgan and Smith (1978) who suggest that a value of >1.008 is an appropriate threshold. However, the criterion value for SNR scores was increased based upon how it has been used in current research adopting sequence analysis as the chosen methodology. Specifically, a recent article by Townsend and colleagues (2016) argues that with greater stringency, the most significant transitions can be more clearly presented and given greater presence in the sequential structure identified. In addition, by applying a stricter criterion value, the complexity of the sequential structure is reduced, ensuring that only the most significant transitions are captured to reduce the likelihood of misinterpretation and the acceptance of a false positive result.

In summary, once SNR scores were calculated for all event pairs within the data set (antecedent and consequences), a criterion value of >2.0 was used to determine their magnitude of interdependence and whether the SNR scores for particular transitions were worthy of discussion (appendix 11).

### 4.5 State transition diagrams

State transition diagrams are used to present the sequential structure found within a data set; illustrating the event pairs which met the pre-defined criterion value (SNR). The oval shapes in the diagram represent one interaction process. For ease of interpretation, task and emotional processes have been distinguished using colour; blue ovals denote emotional processes whilst green ovals indicate task focused interactions. The arrows within the diagram demonstrate the links between the interactional processes observed; in this case, the thicker the arrows, the greater the interdependence between interactional processes. The extent of the interdependence has been decided based upon the SNR pre-determined critical value score; suggestive that one event followed another more frequently than expected. The state transition diagrams present first order analyses of events occurring within the Circle of Adults intervention.

There are two stages to the presentation of the sequence analysis data. The first diagram looks at the overall patterns within the whole data set. In total, there were 27 transitions (event pairs) which occurred between 12 different events (interactional processes) and therefore presented in state transition diagram 1. Table 14 also outlines the event pairs found to be strongly related within the data set. Secondly, there is another state transition diagram which looks separately at patterns of event pairs, presenting those which stand out consistently across the individual interventions.

**Table 14: An overview of the transition pairs meeting the criterion value (SNR)**

| Event pair | Code number | Type of process (Bales, 1954) |
|---|---|---|
| Solidarity – Shows tension | 1 - 11 | Positive emotion – Negative emotion |
| Solidarity – Tension release | 1 -2 | Positive emotion - Positive emotion |
| Solidarity – Gives suggestion | 1 -4 | Positive emotion – Problem solving |
| Disagrees - Shows antagonism | 10 – 12 | Negative emotion - Negative emotion |
| Disagrees - Agrees | 10 – 3 | Negative emotion – Positive emotion |
| Shows tension - Shows solidarity | 11 – 1 | Negative emotion - Positive emotion |
| Shows tension - Tension release | 11 – 2 | Negative emotion - Positive emotion |
| Shows antagonism – Solidarity | 12 – 1 | Negative emotion - Positive emotion |
| Shows antagonism – Agrees | 12 – 3 | Negative emotion - Positive emotion |
| Tension release – Gives opinion | 2 – 5 | Positive emotion - Problem solving |
| Tension release – Asks for orientation | 2 – 7 | Positive emotion – Question |
| Agrees – Gives opinion | 3 – 5 | Positive emotion - Problem solving |
| Agrees – Gives orientation | 3 – 6 | Positive emotion - Problem solving |
| Agrees – Asks for opinion | 3 – 8 | Positive emotion – Question |
| Gives suggestion – Asks for opinion | 4 – 8 | Problem solving – Question |
| Gives suggestion – Asks for suggestion | 4 – 9 | Problem solving – Question |
| Gives opinion – Shows tension | 5 – 11 | Problem solving - Negative emotion |
| Gives opinion – Agrees | 5 - 3 | Problem solving – Positive emotion |
| Gives orientation – Agrees | 6 – 3 | Problem solving - Positive emotion |
| Gives orientation – Asks for orientation | 6 – 7 | Problem solving – Question |
| Gives orientation – Asks for opinion | 6 – 8 | Problem solving - Question |
| Gives orientation – Asks for | 6 – 9 | Problem solving – Question |

| | | |
|---|---|---|
| suggestion | | |
| Asks for orientation – Gives orientation | 7 – 6 | Question - Problem solving |
| Asks for opinion – Shows tension | 8 - 11 | Question – Negative emotion |
| Asks for opinion – Gives opinion | 8 – 5 | Question - Problem solving |
| Asks for suggestion – Shows tension | 9 – 11 | Question - Negative emotion |
| Asks for suggestion – Gives suggestion | 9 – 4 | Question - Problem solving |

### 4.5.1 State transition diagram 1

Figure 3 depicts state transition diagram 1 (see page 109). Following all data being amalgamated, there were found to be a total of 27 event pairs with SNR scores found to meet the critical value of equal to or greater than 2.0; a more stringent criteria set as an appropriate cut-off point. This suggests that there was a high level of interdependence within the data set as interactional processes were frequently connected beyond the likelihood expected due to chance. In turn, it would appear that a Circle of Adults intervention is a highly predictable interaction.

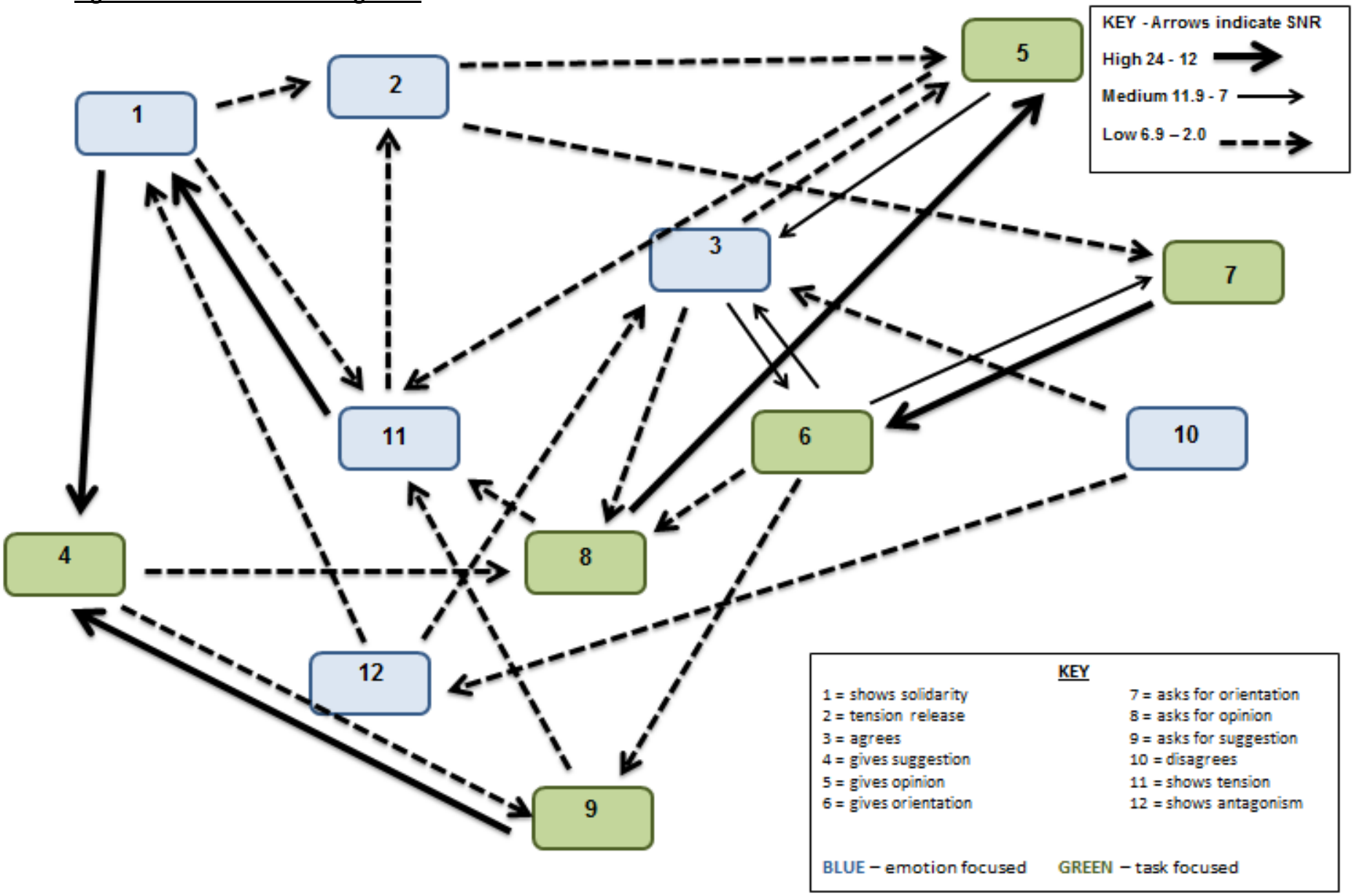
Examination of specific event pairs shows that the intervention also facilitates functional interaction between group members. For instance, interaction processes which show group members asking for and giving specific information is most frequently observed; beyond what would be expected due to chance. A specific example of this includes 'asking for orientation' (code number 7) being followed by 'giving orientation' (code number 6) which was found to have the highest SNR score. The second highest SNR score was found for 'asks for opinion' (code number 8) followed by 'gives opinion' (code number 5). These frequently occurring relationships between event pairs feature heavily within the intervention to indicate that what group members want/ask for, they get; demonstrating an interdependent relationship in that

the presence of one event (asking for…) predicts the next (giving….). Overall, SNR scores indicate that these event pairs characterise a high proportion of a Circle of Adults intervention.

Consideration of specific event pairs also shows some pairs seem to be more strongly related during interactional transactions. For example, 'shows solidarity' (code number 1) and 'shows tension' (code number 11) are interrelated as both appear as antecedents and sequiturs within an event pair. Other related interactional processes include; 'agrees' (code number 3) and 'gives opinion' (code number 5) and 'gives suggestion' (code number 4) 'asks for suggestion' (code number 9). This demonstrates that some observational events are more strongly related than would be expected due to chance; suggesting a reoccurrence of the event pair within the interaction.

Generally, there is a similar number of emotional and task focused processes observed more frequently than expected due to chance. More often, interactional processes making up an event pair share the same purpose; an emotional process is more commonly followed with another emotional process and a task focused process is also more often preceded by another task orientated interaction. Of the event pairs observed which meet the critical value, 9 are both emotional processes and 8 are both task-focused in purpose. This suggests that the intervention facilitates interactions between members which allows for exploration of personal thoughts and feelings, as well as discussion of task and purpose focused information.

**Figure 3: State Transition Diagram 1**



### 4.5.2 Summary

To summarise, Figure 3 demonstrates that:

- There are 27 patterns of transition (event pairs) which met the criterion value within the whole data set.
- Examination of specific event pairs shows that often, group members asking for and giving specific information is observed. This indicates that what group members want/ask for, they get.
- There is a balance between the number of emotional and task focused processes observed more frequently than expected due to chance.
- There are certain interactional processes which appear to be more strongly interconnected; re-occurring in event pairs as the antecedent and consequent behaviour. For example: 4/9 and 9/4.

### 4.5.3 State transition diagram 2

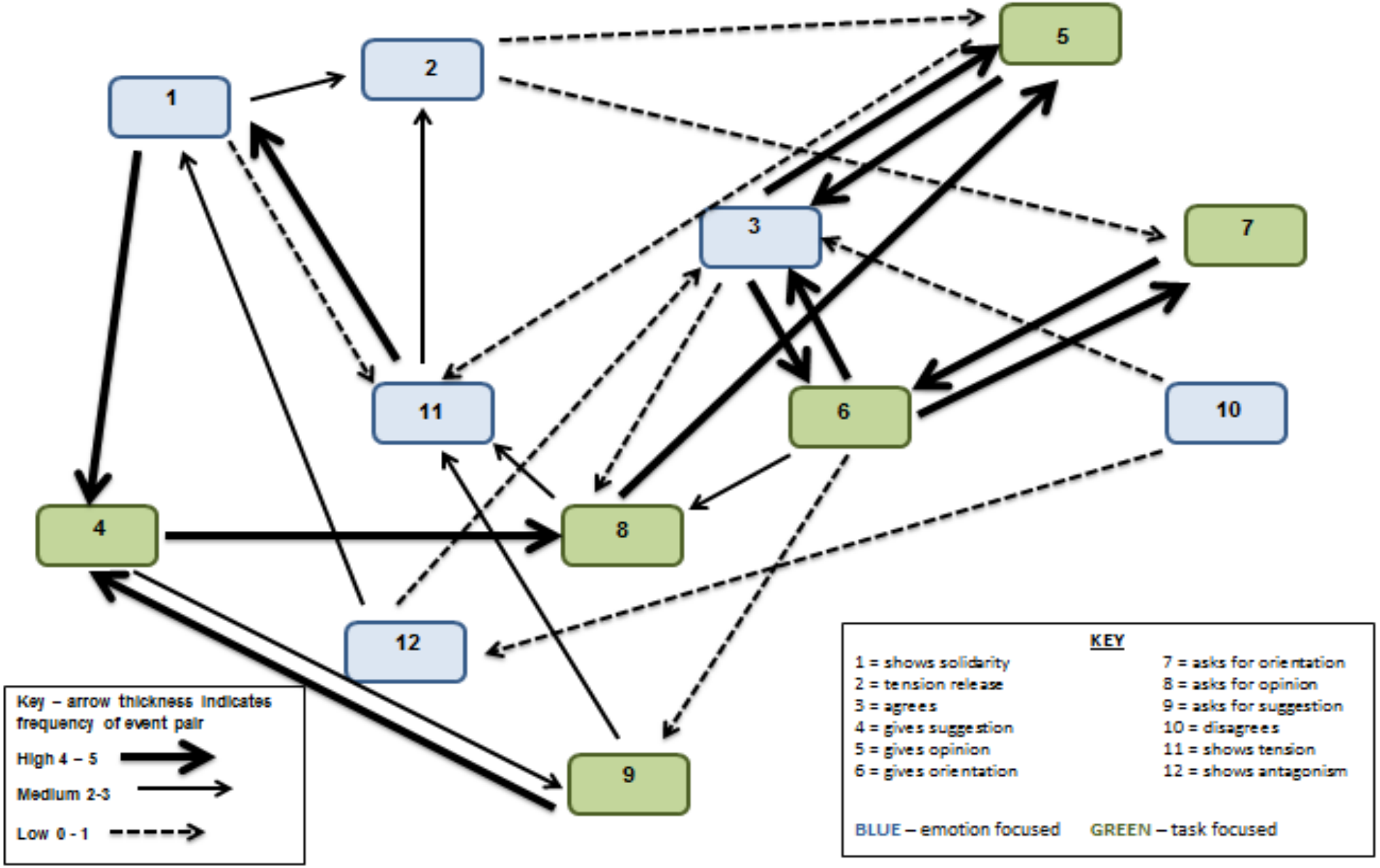
The same process of sequence analysis for event transitions occurring within each Circle of Adults was conducted separately. The same criterion using SNR scores was applied, allowing transition pairs that met the critical value to be identified (greater than or equivalent to 2.0). Finally, the identified pairs were examined to establish whether they occurred consistently in each of the 5 circles. Refer to appendix 10 for individual circles SPSS output which details SNR scores.

A second state transition diagram was completed in order to demonstrate the frequencies of each event pair meeting the pre-defined criterion occurred in those individual Circle of Adults interventions which were included in the final data set (N = 5). Figure 4 depicts state transition diagram 2 (see page 113). The thickness of the arrows corresponds with the number of times each event pair was observed within individual interventions; the thicker the arrow, the more frequently the event pair was observed.

Results show that out of the 27 significant event pairs in the whole data set, there are a total of 8 event pairs occurring in all circles (N = 5). These event pairs were:

- ‘Shows solidarity’ followed by ‘Gives suggestion’ (code numbers 1 – 4)
- ‘Shows tension’ and ‘Shows solidarity’ (code numbers 11 – 1)
- ‘Agrees’ and ‘Gives orientation’ (code numbers 3 – 6)
- ‘Gives opinion’ and ‘Agrees’ (code numbers 5 – 3)
- ‘Gives orientation’ and ‘Asks for orientation’ (code numbers 6 – 7)
- ‘Asks for orientation’ and ‘Gives orientation’ (code numbers 7 – 6)
- ‘Asks for opinion’ and ‘Gives opinion’ (code numbers 8 – 5)
- ‘Asks for suggestion’ and ‘Gives suggestion’ (code numbers 9 – 4)

**Figure 4: State Transition Diagram 2**



Of the 27 event pairs which occur within the whole data set, it appears that there is consistency within individual interventions; indicating similarity across the intervention. In addition, of the 8 event pairs occurring consistently in all 5 interventions used for analysis, it appears that these processes are functional in nature; a large proportion of the intervention involves making specific requests, immediately being followed by the immediate giving of what was requested. As these interactional patterns are present in all circles used in the data set and are occurring more frequently than what would be expected due to chance, further discussion of this will be presented later in the thesis.

Examination of state transition diagram 2 shows that within four of the circles, a further three of the significant event pairs occur consistently: agrees – gives opinion (3-5); gives suggestion – asks for opinion (4-8) and gives orientation – agrees (6-3). Overall, 18 of the 27 'significant' event pairs occurred within two or more of the individual circles used in the whole analysis. Together, this appears to indicate some further consistency within the data set. However in contrast, individual analyses also showed that there are 9 event pairs which occur in one or none of the individual circles. This shows that some of the event pairs are significant within the whole data set when data is amalgamated, as opposed to when examined within individual circles.

Figure 4, also shows that similarly to Figure 3 (state transition diagram 1) which represents the whole data set, there are a number of returning arrows between event pairs; for example event pairs for code numbers 5 – 3 and code numbers 6 - 3. Both state transition diagrams therefore show that there is a greater interdependence between particular interactional processes than would be typically expected.

### 4.5.4 Summary

Overall, results of this further analysis demonstrate that generally, there is some consistency within the data. This reinforces the notion that Circle of Adults intervention is a predictable interaction. Additionally, similar patterns to those observed within the whole data set have been found within individual circles. This is further indicative of reliability within the data collected, enabling further exploration and discussion of patterns observed.

## 5. Discussion

### 5.1 Introduction

This chapter explores the findings that a Circle of Adults contains predictable interactions, which are functional in nature and offer both task and emotional focused discussion. By drawing upon behavioural perspectives, including Social Exchange Theory, an explanation is provided for the consistency and functionality found in the group dynamics occurring within the intervention. Additionally, theoretical perspectives which address the role of emotion within groups are also consulted to illustrate how the facilitation of emotional-focused processes not only offer containment to group members, but also build a cohesive group. It is this strong group identity that yields task focused discussion and the creativity required for generating new solutions when problem solving in complex case work. By thoroughly examining group interaction using a range of psychological perspectives, the discussion offers an original explanation as to why Circle of Adults is a successful problem-solving tool. Following an interpretation of findings, methodological limitations are acknowledged and discussed in this chapter. Finally, wider implications for future research into a Circle of Adults are addressed, as well as the implications for educational psychologists using consultative approaches in their practise.

### 5.2 Overview of study

The aim of this research was to explore the interactional processes which occur within a Circle of Adults group problem solving intervention. The purpose of the investigation was to provide an initial insight into how a group of participants within a Circle of Adults interact. The research intended to do this through illuminating the inter-group processes which occur throughout the problem solving tool. Existing research has indicated that the intervention yields successful outcomes when working collaboratively to support children

and young people presenting with challenging behaviour (Wilson and Newton, 2006; Bennett and Monsen, 2011; Turner, 2014; Grahamslaw and Henson, 2015). Pioneers of the intervention, Wilson and Newton, draw upon the psychodynamic approach to explain the fidelity of the intervention; placing emphasis upon how facilitation of an emotional focused discussion. It is this type of discussion which uncovers group members unconscious thoughts and feelings, enabling them to gain a deeper insight into the focus child and their wider context.

Despite the increase in educational psychologists using group problem solving interventions (Kassel and Wagner, 1993; Vaughn, Hales, Bush and Fox, 1998; Lewis and Newcomer, 2002; Farouk, 2003), the reported success of these interventions (including Circle of Adults) is heavily weighted within qualitative literature. Thus, the existing evidence base lacks the scientific rigor required for understanding the intervention with greater objectivity.

This research used a well-established observational framework, IPA, devised by Bales (1954) to record complex behaviours which occur within a Circle of Adults. Observations were then analysed using Sequence Analysis, a scientifically driven methodology which uses probability to understand complex human phenomenon (Bakeman and Quera, 2011). This analysis has presented a number 'transitions' or event pairs within the data which are worthy of exploration and interpretation. Specifically, these results show that within a Circle of Adults intervention:

- There are a number of transitions which occur more frequently than would be expected due to chance; 27 in total. This indicates that a Circle of Adults contains predictable interactions; also suggestive of the interaction being organised into episodes with a consistent style and purpose.
- The significant transitions, also referred to as event pairs, appear functional in nature in that when something is asked for, it is given.

The intervention appears to facilitate clear, direct communication between participants.

- There is a similar distribution of task and emotional processes occurring. The intervention has been found to facilitate both task and emotional discussion amongst group members.

A fourth finding has also been identified, showing that there are some event pairs which show a recursive nature in that they frequently occur together as both the antecedent and consequent event. Though this finding has not been discussed at length, it is important to identify this pattern of interaction within the Circle of Adults intervention; also to be considered within the analysis of the main findings.

### 5.2.1 Summary of findings

Broadly, findings have shown that there are commonly occurring patterns of interaction present within the Circle of Adults intervention. An interpretation of these findings will follow, examined in the context of psychological theories in order to provide an indication of what may be occurring within the intervention. Through doing this, an understanding of what happens within the group to yield the documented success of the intervention will be offered. As well as this, a critical examination of methodological limitations and suggestion of the possible future directions for research will be presented. Finally, implications for the use of the intervention by local educational authorities, EPS' and also for educational psychologists will be addressed in this chapter.

## 5.3 Interpretation of findings

### 5.3.1 Circle of Adults is a predictable interaction

Findings indicate that Circle of Adults group problem solving intervention contains predictable interactions; as indicated through a number of significant

event pairs being found. This is consistent with current research examining group interaction as despite group behaviour showing fluidity, there is a consistency in how groups perform (Wheelan, 1994; Miller, 2003; and Bonebright, 2010). These findings support the hypotheses that groups follow similar stages as suggested by Tuckman (1965) and specifically, the Circle of Adults intervention facilitates group members to interact with consistency and predictability.

This finding is consistent with Bales' theorizing (1954) that group interactions are structured into episodes with purpose. It is suggested that group behaviours show consistency in the sequencing of interactional processes which occur within problem-solving groups. Irrespective of the given task focus and intended purpose, successful groups are found to behave in similar ways. This was reflected within the current research as across five different staff groups, each with a different 'problem', analysis has demonstrated that they engaged in similar patterns of interaction. Though Bales described the interactional patterns during specific stages to problem solving, this was not considered in the current study. Yet, given the high number of event pairs found within a Circle of Adults, findings indicate that group interaction is characterised by predictable patterns in interactional processes occurring. Subsequently, group behaviour within a Circle of Adults intervention has been found to be similar to that occurring in other working group contexts. This allows for predictions to be made about group behaviour occurring within a Circle of Adults.

Though Circle of Adults is a tool which is used to explore individual cases and therefore, personalised to a specific context, findings have shown that consistencies across individual cases are commonly occurring. To further understand what may make a Circle of Adults a predictable interaction, the predefined 10 stage structure can be explored in the context of psychological literature. Research has illustrated that when groups are observed under highly controlled, rigorous conditions, they perform in ways which show a consistent style (Bales, 1954). Therefore, when given a pre-defined purpose

and boundaries, research supports the theory that groups are predictable. As the structure of a Circle of Adults provides clear boundaries around a working group, members are facilitated to interact and behave in similar ways across various settings.

The role of the wider ecological context upon group performance has been considered by researchers aligning themselves with a systems perspective. Specifically, when examining group context, the impact of having task boundaries has been found to have a direct impact upon group functioning (Alderfer, 1987; Sundstrom, De Meuse and Futrell, 1990). Therefore, to understand how groups complete problem solving tasks and achieve intended outcomes, the 'input' around the group must be considered. Input mechanisms can include components such as boundaries, feedback and structure (Webb, 1982). The role of process facilitators, present within the group to subtly reinforce boundaries has also been found to allow groups to problem solve effectively. The Circle of Adults tool consists of numerous pre-defined input mechanisms which contribute to the consistency in group processes and subsequent predictability found. For instance, boundaries are agreed at the start of the intervention and there are two facilitators who have a clear purpose of managing the group process and reflecting (both verbally and non-verbally) the group discussion back to members. It is this process of constant process facilitation and discreet reinforcing of the boundaries which make Circle of Adults a highly structured interaction, leading to the successful outcomes as illustrated in existing literature (Wilson and Newton, 2006; Bennett and Monsen, 2011; Turner, 2014; Grahamslaw and Henson, 2015).

To gain a deeper insight into what specific contribution task boundaries have upon group functioning, systems theory can be further consulted. Webb (1982) describes that by having clear, consistent boundaries groups are able to establish an in-group identity. It is through this identity formation that members are able to develop relationships between members, going on to work collaboratively. This is pertinent when understanding the predictability of a Circle of Adults as it would indicate that the focus upon a pre-defined

problem is what enables group bonds to be formed. The formation and maintenance of relationships within a group is important for functioning as when groups establish a strong in-group identity they have a shared purpose. In turn, group members experience less variance, giving a sense of similarity between them which allows for collaborative working (Bayazit and Mannix, 2003). This is a vital input factor for groups as similarity amongst members not only enhances in-group identity, but it also allows for containment to be felt. When members feel contained, their thinking capacity is optimised (Soloman and Nashat, 2010). Subsequently, it can be accepted that the contextual factors placed around a group, particularly boundaries, enable greater productivity for working parties. In the context of this research, the task boundaries imposed by a Circle of Adults lead to the group interacting in ways which are predictable across contexts. These boundaries are important in understanding the efficacy of the intervention as they provide group members with a clear structure, purpose and the mechanisms required for relationship building. It is through consistency and group relations that members feel contained and in turn, collaborate successfully.

Having clear boundaries around a given task reflects the body of literature which supports educational psychologists using consultation methods as part of their general practise; whether on a one to one or group basis (Medway and Nagel, 1995; Vaughn, Hales, Bush and Fox, 1998; Farouk, 2003). As an increasingly popular model for educational psychology service delivery, models of consultation are paramount to educational psychologists using consultative skills to effectively problem solve with key adults within a child's 'system' (Hanko, 1985, 1999). Furthermore, research indicates that there are numerous models for consultative working (Ingraham, 2000) suggesting that educational psychologists are able to adapt their practise depending upon the context in which they are working. Therefore, as different models of consultation are used by educational psychologists, this may indicate that it is in fact the structure placed upon the group activity which makes consultation models effective in problem solving. Thus, in accordance with this theorising,

it is the clear structure of a Circle of Adults which facilitates effective collaboration amongst group members.

#### *5.3.1.1 Summary*

To summarise, the predictability of Circle of Adults can be best understood by drawing upon a systems perspective which considers the input mechanisms around a group to understand how successful outputs are achieved. Research shows that when educational psychologists use a model of consultation in their working, stakeholders are provided with a clear structure and boundaries when problem solving. It is through this consistency and clear purpose that groups are found to perform in similar ways; explaining the predictability found within a Circle of Adults. Interestingly, literature explains the wider effect boundaries have upon groups; including enabling an in-group identity to be formed and furnishing cohesiveness between members. This proves to be particularly important for working groups as relationships allow for feelings of containment to be experienced, enhancing overall productivity. It is therefore the highly structured aspect to a Circle of Adults which best explains the predictability found and in turn, makes the tool successful and an increasingly favoured intervention by educational psychologists.

### 5.3.2 The interactional processes occurring are functional

Of the significant event pairs found within this research, a number of pairs appear functional in nature; such that what is requested by group members is given immediately by others. For instance, 'asking for information' is likely to be followed by 'giving information' beyond what would be expected by chance. The functional event pairs found in the current study are indicative of a high amount of information being shared within the intervention; indicative of a number of problem-solving processes occurring. Literature shows that problem solving processes have a cumulative effect in that once occurring within a group, they yield further task focused behaviours to occur (Bales, 1954). This was found within the current study as some problem solving and

questioning processes were found to have a recursive nature. For instance, asking and giving orientation was found to lead to further questioning from members (see state transition diagram 1, code 6 and code 7). The recursive nature of interactions has also been shown by asking and giving suggestions; this was found to lead to further suggestions and ideas being shared by group members (see state transition diagram 1, code 9 and code 4). In addition, there are a number of event pairs which show positive emotions being exchanged between group members. Therefore, it appears that participants within the Circle of Adults group are rewarded through being given what it is they want and receiving support from other members.

The notion that group interaction provides individuals with a sense of reward is suggested by Social Exchange Theory, Kelley (1959). This theory has been described as one of the most influential conceptual paradigms for understanding workplace behaviour (Cropanzano and Mitchell, 2005), indicating that it may be relevant to providing psychological insight into the group interaction occurring with a Circle of Adults.

Explaining group interaction from a behavioural approach, Social Exchange Theory states that individuals within a group work to maximise their own rewards, whilst minimising personal costs. Rewards are given in the form of sharing high amounts of information and a consequent reduction in feelings of uncertainty. Due to rewards being felt, members will begin to feel a sense of interdependence, resulting in ongoing commitment to the group (Kelley, 1959). This theory can provide an insight into group interaction within a Circle of Adults as the intervention has been found to yield high amounts of information sharing; suggestive that this may be a reward to those participating. The intervention also requires longer term commitment from the group as they are required to apply solutions generated after the intervention has occurred. In addition, as Circle of Adults takes place after school day, there are already some possible perceived costs and investment required from all group members. In recognising these potential costs to members within a Circle of Adults, their commitment to the process can be

explained through participants gaining a sense of reward by being given exactly what information they asked for. Therefore, when part of a Circle of Adults, the gaining of new information is needed in order for members to feel a sense of personal benefit and go on to maintain group collaboration.

Results from the current study also show that positive emotions are prevalent within the group interaction; indicative of group cohesion. Similarly, existing qualitative and anecdotal research into a Circle of Adults indicates that the process facilitates effective team work. This aspect to the group interaction can also be explained by Social Exchange Theory as according to this perspective, positive emotions are functional for group productivity. As described by Kelley, group interaction leads to favourable attitudes towards the whole group being developed; creating a positive in group identity. Therefore, it is through the group collaborating positively that their identity is formed. Through the group interacting in such helpful ways, members experience a reduction in their uncertainty and in turn, become interdependent. This proves important for a Circle of Adults as it is this interdependence which leads to ongoing commitment and increases the likelihood of the group maintaining purpose and identity beyond the intervention itself. Therefore, the success of a Circle of Adults can be understood by recognising how the occurrence of emotional processes facilitates the group to develop a strong identity and in turn, work cohesively.

Social Exchange Theory is relevant to understanding how a group within a Circle of Adults interact as it recognises how through the processes of sharing information, uncertainties are reduced and interdependence created, group interactions become predictable. This is pertinent for this study as the intervention was found to show consistency in sequences in group interaction, indicative of predictable behaviours occurring. Thus, Social Exchange Theory seems more appropriate than other behavioural or cognitive explanations of group interaction as the emphasis upon group processes leading to predictability is consistent with the whole findings from this study.

Using Social Exchange Theory, specifically the idea that group members are rewarded, to better understand Circle of Adults seems pertinent in today's educational climate. Existing literature highlights the challenges faced by teaching staff; their perceived lack of resources, time, increased pressure and feelings of lacking competency in addressing social, emotional and mental health in schools (Rhodes, Nevill and Allan, 2004). Such feelings are further exacerbated by staff feeling as though they do not understand the complex lives of their students; Bunting, Lazenbatt and Wallace (2009) found teachers are often unaware of the disaffection outside of school many students experience. These findings reflect those found in previous studies examining group problem solving activities; having dedicated time to discuss a problem, sharing personal experiences, makes group problem solving interventions most effective (Kassel and Wagner, 1993). Consequently, an interpretation of findings from this study is that through open, honest dialogue, educational psychologists who use a Circle of Adults are able to offer staff a safe environment for thorough exploration and solution generating. It is these factors which address a current area of need and dissatisfaction for school staff and therefore, explain the reported efficacy of the intervention. It is through this process which not only provides staff with the information they so desperately require in order to move forward, but by doing so gives feelings of reward.

#### *5.3.2.1 Summary*

To summarise, one further explanation for Circle of Adults being increasingly chosen by educational psychologists to approach the most complex case work is that it facilitates clear, open dialogue whilst encouraging pro-social interaction between members. This allows for problems to be explored thoroughly within a safe and purposeful context. It is through this process that direct answers and information gathering can be obtained by the group. Additionally, the positive interactions enable the group to form a cohesive bond, solidifying an in-group identity. It is through these processes that a functional nature to the Circle of Adults has been found; providing group

members with a sense of reward which reinforces participation within the group. By rewarding members through giving them what it is they ask for in a supportive context, effective collaboration is facilitated by the intervention to enable effective problem-solving to take place.

### 5.3.3 Task and emotional discussion is facilitated

Analysis has indicated that of the event pairs found, there are a similar amount of task and emotional processes occurring within the groups studied. This shows that the Circle of Adults intervention facilitates group interaction which is both task and emotional focused. Though this finding appears consistent with the consensus within literature which describes group interaction (Tuckman and Jenson, 1977), in the context of previous research specific to the intervention, this is a unique finding. Currently, literature generally emphasises the role of emotion within the group during Circle of Adults and the psychological underpinnings have been explained using a psychodynamic perspective. Thus the role of emotional processes occurring within the group is reinforced, notably mentioning the role of unconscious processes being uncovered in order to move forward. Therefore, the findings within this study provide a contrasting picture of what actually happens within the group during the intervention.

In light of these findings, it is appropriate to question the alleged underlying theories being used to explain Circle of Adults on the basis that task orientated events are occurring more frequently than would be expected due to chance. This raises questions about the intervention and more specifically, the interplay of group dynamics occurring within it. In order to understand how this particular finding may explain the group interaction and offer an understanding into the efficacy of the intervention, exploration of literature focusing upon the role of mood and emotion within group dynamics has been consulted.

As findings illustrate a similar amount of task and emotional processes occurring, it is important to consider the role of emotion within Circle of Adults; particularly given its prevalence within the existing evidence base. Emotional behaviours shared within a group provide members with the containment required to proceed in ways which show empathy for the focus child and increase feelings of competency amongst staff (Hanko, 2002). This would suggest that by encouraging members to share their personal thoughts and feelings, a Circle of Adults enables the group to move forward effectively through the empathy and containment generated by emotional discussion. This aspect of a Circle of Adults is consistent with psychodynamic theories previously used to illustrate the interventions efficacy; by raising self-awareness of personal feelings and bringing unconscious thoughts into the conscious, members become equipped to work productively in difficult situations. This degree of emotional focused interaction amongst the group proves to be helpful for productivity as in contrast to recognising emotional processes, ignoring them can in fact hinder productivity (McLeod and Kettner-Polley, 2004). Thus, findings from this study indicate that using the Psychodynamic theory to understanding group functioning within a Circle of Adults has validity. Together, this indicates that a Circle of Adults successfully facilitates emotional focused interaction within a group. It is this emotional aspect to the intervention which provides staff with the intrapersonal components required for problem-solving and in turn, contributes to the success of this consultative tool used by educational psychologists.

Findings from this study have also presented event pairs which are task-focused in nature. The balance between task and emotional processes found can be understood by drawing upon literature which suggests that emotion can hinder group productivity. It has been widely documented that increased emotion can negatively impact decision making (Damasio, 1994). Subsequently, this results in members being perceived as irrational and to lack competency; both of which are to the detriment of group functioning, Ashforth and Humphrey (1995). In the context of the current findings, this

insight into the prevalence of task focused processes may be what helps to balance emotional processes. Through facilitating a balance between task and emotional processes within the group, emotion is controlled which prevents it from acting as a hindrance to group productivity.

In consideration of this explanation of group productivity, within a Circle of Adults it appears that there is an optimal amount of emotional focus required in order for group problem solving to be effective. Additionally, as well as emotional discussion, a Circle of Adults facilitates practical, task-focused discussion amongst members. As found within this study, problem solving processes are important for group productivity as they facilitate further problem solving to occur (Bales, 1954). This indicates that the intervention also offers a solution focused approach to problem solving; through the occurrence of problem solving processes, a high level of information is shared and further problem solving behaviours are shown by members. One way of interpreting this finding is through the notion that by members engaging in emotive discussion, they become more cohesive and solidified as a group. This group cohesion provides containment, allowing personal needs being met which furnishes the innovation and creativity required to engage in practical problem solving (Keltner and Haidt, 1999; Kozlowski and Ilgen, 2006). This understanding of group behaviour suggests that a degree of emotional interaction within a Circle of Adults is required in order for the working group to problem solve effectively. Henceforth, a group are required to experience emotional interactional processes in order for them to collaborate and work in ways which yield innovation and a successful output. The emotional processes occurring within Circle of Adults can be interpreted as being functional in that they hold a unique purpose to allow for task focused discussions to occur.

Using the role of emotion to understand a Circle of Adults raises questions as to why qualitative literature evidences high levels of emotion, despite there being similar amounts of task-orientated discussion occurring. Hamann (2001) summarised the recall of emotional events by stating that '*it has long been*

*known that emotionally arousing events are more likely to be later recollected than similar, neutral events'* (page 394, lines 16-19). Hamann goes on to describe how emotionally engaging events are more readily recalled due to their potential for human adaptivity and subsequent growth. The prevalence of emotion recalled following a Circle of Adults can therefore be understood by recognising that emotional memories are more easily recalled due to the arousal they generate within participants. Such emotion proves to be important for the potential of longer term growth and gains for individuals within the work place. Therefore, the focus on emotional processes occurring within a Circle of Adults is not an indication of little task focused behaviour occurring, rather just the pertinence of emotional memories. Additionally, as previous research has adopted qualitative, self-report methods when investigating a Circle of Adults, the objectivity from using more scientific measures to explore the intervention has illuminated the prevalence of task-focused behaviours occurring. Thus with greater objectivity, a broader insight into the intervention has been provided showing that though participants are more likely to recall emotional processes, there is a fairer balance between task and emotional focused processes occurring. It is this finding which provides a unique contribution to the existing evidence base.

#### *5.3.3.1 Summary*

Overall, findings from this study have shown that Circle of Adults facilitates both task and emotional processes to occur within the group. This can be best understood through the notion that for groups to become solidified and cohesive, a certain degree of emotional interaction and investment is required amongst members. Emotional interaction creates a sense of interdependency, laying the foundations needed for groups to work with innovation and creativity. Thus, the task focused processes found to occur, contributing to the reported success of the intervention, are those which have been facilitated through the emotional interaction between members.

## 5.4 Conclusions

This thesis has demonstrated that Circle of Adults intervention facilitates interaction between group members which is predictable, functional in nature and also involves similar amounts of task and emotional focused discussion. A range of theories have been consulted to explain the group interaction occurring within Circle of Adults, signifying the complex psycho-social interaction which occurs between participants within the intervention.

Drawing upon theories from a behaviourist perspective, analysis has indicated that like other working groups, interaction and group processes within a Circle of Adults show consistency and predictability. This demonstrates that irrespective of the specific case, using this consultative tool generates similar interactions between group members. Psychological theory has shown that it is the controlled conditions of the intervention which allow for such predictability to be established. Furthermore, consultation of systems theory has demonstrated that it is this predictability within a Circle of Adults which proves to be helpful for solidifying an in-group identity and interdependence amongst members; integral for effective problem solving.

Using Social Exchange Theory, the functional nature of the interaction within a Circle of Adults has been understood. By recognising the motivation of group members to maximise their rewards and minimise costs when working in a group, the functionality of being immediately given what it is members ask for during the intervention has been explained. Members within the intervention are rewarded by being given new information. Through this acquisition of information, feelings of uncertainty and of lacking in competence are reduced. Thus, the group become solidified and motivated to continue their cohesive working as it proves to be rewarding.

Finally, analysis has illuminated the similar amounts of task and emotional processes occurring within a Circle of Adults; contrary to prior research which tends to emphasise the role of emotion within this intervention. Instead, this

discussion has presented an argument to suggest that optimal amounts of emotional processes occurring within the intervention allow for task focused processes to occur. It is through the process of emotional interdependence within the group that task focused processes can occur, facilitating the innovation and creativity required for successful problem solving. Interestingly, this contribution has illuminated a more complex interaction of task and emotional processes occurring within the group, offering an alternative explanation as to why the intervention yields reported successes.

In conclusion, by consulting a greater breadth of psychology from a range of paradigms a commentary alongside findings has been provided to interpret how a group within a Circle of Adults interact. This commentary will offer a further insight into the unique contribution the intervention can offer to educational psychology casework. In turn, it is hoped that researchers and applied practitioners will gain a better understanding into what it is about Circle of Adults that yields its reported success for educational psychologists managing complex case work in schools.

### 5.5 The unique contribution offered by this research

This study is the first known research to consider the intergroup interaction within a Circle of Adults. The findings generated offer an original and distinct contribution to the existing evidence base, also opening up the area of group dynamics for future research to explore in greater depth. Most significantly, following the identification of a balance between task and emotional discussion, a contrasting understanding to the group interaction within a Circle of Adults has been presented. Interestingly, it is this aspect to the intervention which may explain the reported success it yields; it is through the emotional discussion that task focused processes are experienced within the group, integral for the innovation and creativity required for effective problem solving. This is an aspect to a Circle of Adults which has not

previously been identified by research and thus, the current study has uncovered an area which future research should investigate, in order to continue to build an understanding of how the intervention works.

More broadly, the findings from this research can be used to highlight the value of educational psychologists working consultatively with groups. By understanding how a group interacts, this research has shown that group problem solving interventions possess the capacity for high amounts of information sharing, development of group cohesion, increasing feelings of competency and generating creative thinking. In an educational climate whereby challenges are becoming increasingly felt when attempting to support children and young people presenting with challenging behaviour, these factors are important in supporting school staff to effectively problem solve. Thus, the study is able to provide a rationale for educational psychologists continuing to work consultively with their stakeholders, moving away from within-child models of working by recognising the wider, systemic context in which behaviour occurs.

### 5.6 Methodological issues

This research applied stringent scientific methods when gathering and analysing data. Despite this however, limitations of the approaches used have been acknowledged in order to consider the generalisability of findings and also wider implications of this research. Such discussion will then be used to inform next steps and the appropriate dissemination of findings.

#### 5.6.1 Observational research

As commonly found within observational research in applied educational settings, a relatively small sample of five group interventions was used in this study (Mertens, 2010). As a result, there is a potential risk that a restricted view of the Circle of Adults intervention has been captured. Thus, it may be

that by using an increased sample size, differences in the patterns of interaction occurring within the intervention are found. In recognition of this, the current research cumulated the event pairs found in each individual intervention to identify their prevalence within the whole data set (State Transition Diagram 2). This showed that a high number of the significant event pairs were found within more than one of the intervention groups, indicative of reliability within the data set. In addition to this, despite the small sample size, there was high variance between each group due to; the differences in their educational context, professional status and role of group members and also the contextual nature of the focus child the intervention was held for. Therefore, the sample used within this research showed diversity. Yet despite this diversity in the sample, similarities were found across the five groups which is further indicative of the intervention having consistent effects across different contexts. Though more research is required to ensure reliability, this study offers an initial insight into the consistent behaviours occurring within a Circle of Adults.

A further caution must be also applied when conducting any observational research due to limitations occurring when a degree of inference is relied upon to code behaviours. Though using an established coding system and inter-rater reliability checks, the intentions and purpose of individual behaviours were not explored. Use of the IPA coding system (Bales, 1954) resulted in only verbal behaviours of participants being captured; it did not examine any non-verbal behaviours. Thus, the researcher was required to construe the intention of the behaviour in order to assign codes and quantify their observations. This may pose potential threats to the validity of findings. In order to overcome limitations associated with using IPA (Bales, 1954), future research should consider using more precise and detailed coding systems in order to measure more complex behaviours shown within group interaction. For instance, SYMLOG (Bales, 1983) could be used. SYMLOG is a practical method for systematically observing group behaviour. The tool focuses on the examination of a wider range of behaviours than other coding

systems; specifically observing internal psychological components such as perceptions and attitudes, non-verbal behaviours such as the use of gestures and the content of communication. Through such detailed observation, Bales (1983) suggests that a higher level of group behaviour is captured which offers researchers a deeper insight into the internal dynamics of individual personalities, relationships between members, dynamics of the group as a whole and the effects of the broader culture of the organisation. In the context of the current study, it would prove particularly helpful to consider individual internal dynamics as this may provide a better indication of how a Circle of Adults effects individual change. Additionally, understanding the effects of school culture would be useful in considering the potential effectiveness of the intervention in each unique context. Despite these limitations however, it is important to acknowledge that this research intended to provide an initial insight into the group interaction within a Circle of Adults. Furthermore, inter-rater reliability measures showed consistency in the application of Bales' coding system was achieved. This is indicative of objectivity when operationalising observational data within this study and implies that the coding system was appropriate for the aims of the research.

The coding system was applied to all speakers within a Circle of Adults, including the educational psychologist acting as the process facilitator. Within this research however, professional role was not considered in the analysis. Other researchers, including Mitchell (2007), found that the role of the speaker was helpful in understanding how one's profession may impact group interaction. In the current study, as participant occupation was not considered, the impact of professional status upon group dynamics has not been explored. This may be an area for future research to consider as role has been shown to have a direct impact upon group dynamics.

Finally, as the research was conducted overtly, ethical guidelines were upheld in that participants were able to provide fully informed consent. Though adding strength to the research process, it should be acknowledged that knowledge of the research and the researcher present as a participant may

have been enough for participants' performance to have been disturbed. Referred to as the 'Hawthorne effect', it may be that engagement with the Circle of Adults may not have been a reflection of usual ability and performance and thus, this poses a threat to the validity of results (Cohen, Manion and Morrison, 2008). Future studies may wish to remove the researcher directly from the process, relying only upon recording equipment to be present for data collection in order to remove possible effects researcher participation has upon the group dynamics.

### 5.6.2 Sequence analysis

The use of sequence analysis to examine and analyse observational data is based upon probability. In this research, sequence analysis has shown that particular patterns arise within the intervention which is an indication of the interdependence between certain behavioural events. More generally, sequence analysis lends itself to research which is exploratory, rather than that which results in linear relationships being found. Consequently, results of this study must be interpreted with caution, ensuring that absolute generalisations or cause and effect relationships are not wrongly attributed to the group interactional processes found to be occurring within Circle of Adults.

In further consideration to how inferences have been made upon the results of this study, caution must be given when interpreting statistical data as a high frequency of events does not immediately indicate a sequential relationship. Failure to recognise this, and wrongly attributing sequential relationships to frequently occurring interactional processes, could lead to a false positive result being accepted. In order to minimise this threat to the validity of the data, a criterion value has been assigned. This means that those event pairs presented within this research are only those which have met stringent criteria, indicating that they are less likely to have occurred due to chance.

Finally, consideration must be given to the use of sequence analysis being used to identify first order events; an antecedent and consequent interactional process, comprising an event pair. Consequently, broader patterns within the intervention have not been identified or analysed within this study. Arguably, this may be interpreted as simplistic as sequence analysis has not been used to look at more complex interactions and sequences, addressing only the first order of events. As this study is intended to be an initial exploration of Circle of Adults, providing an original insight into the intervention, further research in this area should consider analysing the Circle of Adults intervention in further depth. This would provide a deeper insight into more complex chains of interaction which may be present, adding further depth to how the intervention is understood by professionals.

Overall, throughout this research care has been taken to ensure that the exploratory nature and notion of probable behaviour which underpins sequence analysis has been made explicit, reducing the likelihood of a misinterpretation of results. Despite the research not lending itself to making wider generalisations, the implementation of sequence analysis has allowed for a rigorous research design which has not been at the detriment to or compromise of losing highly valid data. In turn, the richness of the data gathered, combined with the rigor of sequence analysis has generated a balance between qualitative and quantitative methodologies to provide a unique and original insight into Circle of Adults.

### 5.6.3 Interpretative nature of findings

When interpreting findings, it is important to acknowledge that this research did not measure outcomes of the intervention. As productivity was not an outcome measure, the research instead draws upon the existing evidence base, comprised of qualitative and anecdotal findings, to assume the efficacy of Circle of Adults. Thus, this research assumes that the intervention is successful and data gathered has been discussed in the context of findings from the evidence base and systematic literature review.

It is also important to highlight that the inferences made in this chapter have been made based upon the researcher's theoretical positioning and consideration of selected theories of group interaction. Therefore, though an objective, systematic methodology was followed, the interpretation of findings has been guided by the researcher. Cohen, Manion and Morrison (2008) refer to this as 'counter-transference' whereby interpretations are affected by one's judgements and preferences. Consequently, a specific focus on a restricted number of psychological theories has been given in order to provide some indication as to what happens within a Circle of Adults. As the researcher has brought their own positioning to the study, interpretation therefore only provides an initial exploration which has been driven by the researcher's theoretical positioning. To ensure reflexivity, no absolute generalisations are presented and recommendations for further research are made in order to establish reliability and validity of the current findings. Consequently, when discussing and interpreting findings, the theories used are just some of those which are indicative of how psychology can be applied in order to understand the complex group behaviour occurring. Irrespective of this however, the research has illuminated consistent patterns of group interaction within a Circle of Adults which have been found through the application of systematic and objective data collection and analysis. This in itself proves insightful for understanding the phenomenon.

### 5.6.4 Consistency of findings

The use of sequence analysis highlighted a number of behaviour events which were related (event pairs), beyond the likelihood that would be expected due to chance. This therefore shows that there is consistency within the data, suggestive of predictable interactions occurring within a Circle of Adults. Despite this finding however, it must be recognised that the entirety of the significant event pairs were not found in every group interaction which was analysed for the purpose of the research. Thus, it has been concluded that there is some consistency within the data and recommended that further research is conducted in order to establish greater reliability.

Though future research can be used to assess reliability of the current findings, it may be that absolute consistency between each Circle of Adults intervention cannot be established, due to the dynamic and evolving nature of group interaction. According to Lewin (1951), all behaviour is the function of the person and their environment; as is suggested in this research, group behaviour is a complex psycho-social process. In turn, the role of context is crucial in understanding group interaction and there are a series of wider factors, such as school culture, which are beyond operationalisation and may affect the ways in which humans behave. This reinforces the ecological context for group behaviour and can be used to explain the fluidity of group behaviour.

Overall, this suggests that when working with work groups, educational psychologists and other applied practitioners must be aware of not only factors within the group, but also those external to group members.

## 5.7 Implications of research

### 5.7.1 Future research

Through the process of critically considering this research, implications for future research are raised. It would prove valuable for further research examining how group members within a Circle of Adults interact to consider the interactional processes and how they compare to other consultative based problem solving tools. This would enable researchers to understand how, if at all, the Circle of Adults intervention may differ from other interventions used by educational psychologists. With this insight, further clarity can be offered to understand the unique contribution a Circle of Adults may make to problem solving processes and complex case work.

To enhance the validity of the research findings, consideration of the group's perceived effectiveness of the intervention would be helpful in determining

whether particular group processes are able to predict greater or more successful outcomes. This could be achieved through using pre and post intervention measures which could also be used to determine the extent to which a Circle of Adults furnishes long term capacity building.

Due to the constraints of applied research, various educational psychologists working as process facilitators were included in the final sample. In order to enhance the reliability of data gathered in future, using a consistent process facilitator may be considered.

### 5.7.2 Dissemination of research findings

This research has provided an original approach to investigating the Circle of Adults intervention. Results have added a unique insight into understanding how a group of participants within the intervention interact. In turn, a deeper insight into patterns of interaction have been illuminated which may be used to aid a deeper understanding into what distinguishes this problem solving tool from other problem solving methods. Results have been shared with the researcher's host local authority and discussed during team meetings by educational psychologists using the intervention in their case work. Additionally, pioneers of the problem solving tool, Wilson and Newton, were informed of this research during initial planning stages and have requested for results to be shared with them.

### 5.7.3 Possible implications for local authorities

In consideration of how this research may add value to local authorities, it has proved particularly insightful for understanding the positive effects group problem solving can have upon supporting those most vulnerable to school exclusion. Through using a Circle of Adults to work collaboratively, this research has showed the potential benefits gained by school staff including; forming a strong in-group identity, resolving ambiguities in knowledge and offering staff the required time and space in order to generate a shared understanding and appropriate solutions for moving forward. It has offered a

further insight into the benefits of working both as part of a group and also systemically, adding to the rationale for educational psychologists moving away from using within-child models of working in their practice. As a result, this research can be used to inform educational authorities as to how they are able to respond strategically in order to promote the inclusion of all children and young people.

### 5.7.4 Possible implications for educational psychologists

The findings from this research can be used by educational psychologists to inform a more thorough understanding of the group interactional processes occurring within the intervention. This insight is enhanced by a theoretical understanding which enables practitioners to understand how the intervention facilitates successful group functioning. Knowledge of group processes and dynamics proves important for applied psychologists as they are able to use relevant psychological theory to optimise conditions required for successful consultation and group problem solving. Specifically, this research has demonstrated the positive effects group work can have upon problem solving. For instance, specific conditions which educational psychologists may want to consider when facilitating group work may include: the context in which group work takes place; application of clear boundaries and using a specified model of consultation as each of these variables have proved to be important for group cohesion and effective problem solving. Through this research, educational psychologists have also been offered an indication of the conditions whereby a Circle of Adults may support case work including; contexts whereby staff lack knowledge of a focus child, where adults are not clear on a forward and when collaboration is needed.

By gaining an insight into the processes occurring consistently within a Circle of Adults, educational psychologists are able to enhance their knowledge regarding why the tool may be successful. In turn, educational psychologists are able to confidently identify when it would be appropriate to use a Circle of Adults over a 'typical' or more traditional one to one consultation. This

research is subsequently able to offer support for increasing consultative working and group approaches to problem solving; an area pertinent for many educational psychologists today who are operating within a consultative model of service model delivery.

In addition to professional practise implications, this research has opened up a pragmatic way of conducting real world research. Whilst retaining the processes of objective research and a scientist-practitioner approach which is integral to the profession, this research has used sequence analysis, a methodology which uses probability to understand behavioural events. In doing this, the methodology encompasses the rigor of scientific methods, whilst appreciating the value of qualitative interpretation to understand behaviour. The use of sequence analysis has illuminated the notion that all behaviour is interconnected and dynamic; reinforcing the importance of understanding that behaviour is complex and a function of the person in their environment. In terms of facilitating group problem solving processes, educational psychologists are able to better understand how the facilitation of problem solving processes within a group is likely to yield further problem solving discussion to take place. Similarly, by recognising the sequential nature of events, this research has indicated that emotional needs within a group should be met in order for more effective problem solving to take place. Thus, the use of sequence analysis has shed a greater insight into group functioning and how it can be enhanced.

Overall, this research has actively considered the shift in paradigm for educational psychologists by recognising the complexity of behaviour not occurring in isolation from the systemic context. This has proved complementary to the practice of today's body of educational psychologists who are expected to work holistically, with the understanding that behaviour does not operate in isolation from surrounding events.

## 6. References


Abbott, A. (1995). Sequence analysis: new methods for old ideas. *Annual Review of Sociology, 21*(1), 93 – 113

Abbott, A. and Tsay, A. (2000). Sequence analysis and optimal matching methods in Sociology: review and prospect. *Sociological Methods and Research,* 29, 3-33

Adler, P. and Adler, P. (1994). Observational Techniques. In Denzin, N. and Lincoln, Y. (editors). *Handbook of Qualitative Research.* London, UK: Sage

Alderfer (1987) cited in Sundstrom, E., De Meuse, K. and Futrell, D. (1990). *Work Teams: Applications and effectiveness. American Psychologist, 45*(2), 120-133

Allison, P. and Pomeroy, E. (2000). How shall we 'know?' Epistemological concerns in research in experiential education. *The Journal of Experiential Education, 23*(2), 91-98

Altmann, J. (1974). Observational study of behaviour: Sampling methods. *Behaviour, 49*(4), 227-267

Annan, M. and Moore, S. (2012). Using the Staff Sharing Scheme within the Targeted Mental health in Schools Pathfinder. *Educational and Child Psychology, 29*(4), 88-108

Ashforth, B. and Humphrey, R. (1995). Emotion in the workplace: A reappraisal. *Human Relations, 48*(2), 97-125

Bakeman, R. and Quera, V. (2011). *Sequential Analysis and Observational Methods for the Behavioural Sciences.* New York, USA: Cambridge University Press

Bales, R. (1951) cited in: Bales, R. (1954). *Social Interaction.* California, USA: The RAND Corporation

Bales, R. F. (1953). *The equilibrium problem in small groups*. In T. Parsons, R. F. Bales, & E. A. Shils (Eds.), Working papers in the theory of action. New York, USA: Free Press

Bales, R. (1954). *Social Interaction.* California, USA: The RAND Corporation

Bales, R. (1983). *Overview of the SYMLOG system*. Retrieved from: file:///C:/Users/lcon/Downloads/SYMLOG.OverviewoftheSYMLOGSystem.pdf

Bayazit, M. and Mannix, E. (2003). Should I stay or should I go? Predicting team members' intent to remain in the team. *Small Group Research, 34*, 290-321

Bell, S. and Morse, S. *(2013).* An Approach to Comparing External and Internal Methods for Analyzing Group Dynamic. *Group Dynamics: Theory, Research, and Practice*, *17*(4), 281–298

Benne, K. and Sheats, P. (1948). Functional roles of group members. *Journal of Social Issues, 4*(2), 41-49

Bennett, S. and Monsen, J. (2011). A critical appraisal of four approaches which support teachers' problem-solving within educational settings. *Educational Psychology in Practice , 27*(1), 19-35

Bonebright, D. A. (2010). 40 years of storming: a historical review of Tuckman's model of small group development, *Human Resource Development International*, *13*(1), 111–120

Boland, A., Cherry, G. and Dickson, R. (2014). *Doing a Systematic Review. A Student's Guide.* London, UK: . SAGE Publications

Booth, A. (2001). Cochrane or cock-eyed? How should we conduct systematic reviews of qualitative research? [Powerpoint slides]. Retrieved from: http://www.leeds.ac.uk/educol/documents/00001724.htm

Bower, G. (1981). Mood and memory. *American Psychologist*, *36,* 129–148

Bozic, N. & Carter, A. (2002). Consultation Groups: Participants' views. *Educational Psychology in Practice , 18*(3), 189-201

Briggs (2007) cited in: Lockwood, C. and Pearson, A. (2013), *A comparison of meta-aggregation and meta-ethonography as qualitative review methods.* Philadelphia, USA: Lippincot, Williams and Wilkins, Joanna Briggs Institute

British Psychological Society. (2002). *Ethical principles for conducting research with human participants.* Leicester, UK: British Psychological Society

Brown, E. and Henderson, L. (2012). Promoting staff support in schools: Solution Circles. *Educational Psychology in Practice, 28*(2), 177-186

Bunting, L., Lazenbatt, A. and Wallace, I. (2009). Information Sharing and Reporting Systems in the UK and Ireland: Professional Barriers to Reporting Child Maltreatment Concerns. *Child Abuse Review, 19,* 187 - 202

Campbell et al (2003) cited in: McDermot, E., Graham, H., and Hamilton, V. (2004). Experiences of being a teenage mother in the UK: A report of a systematic review of qualitative studies. Retrieved from: http://www.sphsu.mrc.ac.uk/Evidence/Research/Review%2010/SR%20Executive%20Summary.pdf

Children's Right Alliance for England (2016). Children's Rights and the Law. Retrieved from: http://www.crae.org.uk/childrens-rights-the-law/laws-protecting-childrens-rights/un-convention-on-the-rights-of-the-child/]

Clarke, D. and Crossland, J. (1985). Action Systems: An introduction into the analysis of complex behaviour. London, UK: Methuen

Cohen, J. (1960) A coefficient of agreement for nominal scales. *Educational and Psychological Measurement* , *20*, 37-46

Cohen, L., Manion, L. and Morrison, K. (2008). *Research Methods in Education.* Abingdon, UK: Routledge

Colgan, P. W. and Smith, T. J. (1978) Multidimensional contingency table analysis. In Colgan, P. W. (ed) Quantitative Ethology. New York, USA: Wiley.

Colman, A. (2006). *The Oxford Dictionary of Psychology: Second Edition.* Oxford, UK: Oxford University Press

Conoley, J. and Conoley, C. (1992). *School Consultation: Practice and Training.* New York, USA: Macmillan

Cornwell, B (2015). *Social Sequence Analysis: Methods and Applications.* New York, USA: Cambridge University Press

Cropanzano, R. and Mitchell, M. (2005). Social Exchange Theory: An Interdisciplinary Review. *Journal of Management, 31*, 874-900

*Cropanzano, R., Byrne, Z., Bobocel, D. and Rupp, D. (2001). Moral virtues, fairness heuristics, social entities and other denizens of organisational justice. Journal of Vocational Behaviour, 58,* 164-209

Damasio (1994) cited in: George, J. (2000). Emotions and leadership: The role of emotional intelligence. *Human relations*, 53(8) 1027 – 1055

Dawson, K. (2013). *An interpretative analysis of key adults' and children's experiences of school and their relationship before and after a Circle of Adults intervention. DEdCPsy thesis, University of Sheffield*. Unpublished manuscript.

Dempsey, K. (2012). *A mixed method study investigating Circle of Adults approach to group work in schools. DEdCPsy thesis, University of Nottingham.* Unpublished manuscript.

Denzin and Lincoln (1994), cited in: Schreiber, R. and Stern, P. (2001). *Using Grounded Theory in Nursing.* New York, USA: Springer Publishing Company

Department for Education (2014). SEND Code of Practice. Retrieved from: https://www.gov.uk/government/publications/send-code-of-practice-0-to-25

Department for Education (2016). Mental Health and Behaviour – Advice of Schools. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/508847/Mental_Health_and_Behaviour_-_advice_for_Schools_160316.pdf

Devine, D., Clayton, L., Phillips, J., Dunford, B. and Melner, S. (1999). Teams in organisations: Prevalence, characteristics, and effectiveness. *Small Group Research, 30*, 678 - 711

Division of Educational and Child Psychology. (2002). *Professional practice guidelines*. Leicester, UK: British Psychological Society:

Dowling, E. and Osbourne, E. (1985). *The Family and School: A Joint Systems Approach to Problems with Children.* London, UK: Routledge and Kegan Paul

Doyle, W. (1977). Paradigms of research for teacher effectiveness. *Review of Research in Education, 5*, 163-198

Egan, G. (2010). The Skilled Helper: A problem management and opportunity development approach to helping. Ninth Edition. Belmont, USA: Brooks/Cole Cengage Learning

Erchul, W. P. (1987). A relational communication analysis of control in school consultation. *Professional School Psychology, 2,* 113-124

Erchul, W. and Martens, B. (2002). School Consultation. Conceptual and Empirical Bases of Practice. New York, USA: Kluwer Academic Publishers

Erchul, W. and Sheriden, S. (2014). *Handbook of research in school consultation: Second edition* [E-reader version]. Retrieved from: http://samples.sainsburysebooks.co.uk/9781136478444_sample_567036.pdf

Evans, S. (2005). The development of a group consultation approach to service delivery. *Educational Psychology in Practice, 21*(2), 131-146

Fagan, T. K., & Wise, P. S. (2007). *School psychology: Past, present, and future* (3rd ed.). Bethesda, MD: National Association of School Psychologists

Fahy, P. (2005). *Online and face to face group interaction processes compared using Bales' Interaction Process Analysis.* Retrieved from: http://www.eurodl.org/materials/contrib/2006/Patrick_J_Fahy.htm

Farouk, S. (2004). Group Work in Schools: A process consultation approach. *Educational Psychology in Practice*, 20(3), 207-220

Farrell, P. and Woods, K. (2015). Reflections on the role of consultation in the delivery of effective educational psychology services. *Educational Psychology Research and Practice, 1*(1), 2-9

Fleiss, J. (1981). *Statistical methods for rates and proportions.* New York, USA: Wiley Publishers

Flick, U. (1998). *An Introduction to Qualitative Research.* London, UK: Sage

Gardner, W. (1995). On the reliability of sequential data: measurement, meaning and correction. In Gottman, J. (Ed). *The Analysis of Change* (pages 339-359). Hillsdale, USA: Lawrence Erlbaum Associates

Gendlin, E.T. (1986). What comes after traditional psychotherapy research? *American Psychologist*, 41, 131-136

George, J. (1991). State or trait: Effects of positive mood on prosocial behaviors at work. *Journal of Applied Psychology*, *76*, 299–307

George, J. (1995). Leader positive mood and group performance: The case of customer service. *Journal of Applied Social Psychology, 25*, 778-794

George, J. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations, 53*(8) 1027 – 1055

Glaser and Strauss 1967 cited in: Heath, H. and Cowley, S. (2004). Developing a Grounded Theory approach: A comparison of Glaser and Strauss. *International Journal of Nursing Studies, 41*, 141-150

Gottman, J. (Ed). *The Analysis of Change* (pages 339-359). Hillsdale, USA: Lawrence Erlbaum Associates

Grahamslaw, L. and Henson, L. (2015). Solving problems through circles. *Educational Psychology in Practice , 31*(2), 111-126

Gutkin, T. B. (1996). Patterns of consultant and consultee verbalisations: Examining communication leadership during initial consultation interviews. *Journal of School Psychology*, 34(3), 199-219

Gutkin, T. B., & Conoley, J. C. (1990). Reconceptualizing school psychology from a service delivery perspective: Implications for practice, training, and research. *Journal of School Psychology*, *28,* 203–223

Hackman, J. (1976). Cited in Hackman, J. and Wageman, R. (2005). A theory of team coaching. *Academy of Management Review, 30,* 269-287

*Hamann, S. (2001). Cognitive and neural mechanisms of emotional memory. TRENDS in Cognitive Sciences,* 5(9), 394-400

Hanko, G. (1985). *Special needs in ordinary classrooms: from staff support to staff development* (3rd edn). London, UK: David Fulton

Hanko, G. (1999). *Increasing competence through collaborative problem solving*. London, UK: David Fulton

Hawkins, P., & Shohet, R. (1989). *Supervision in the helping professions: an individual, group, and organizational approach*. Milton Keynes, UK: Open University Press

Health and Care Professionals Council. (2008). *Standards of conduct, performance and ethics.* London, UK: Health and Care Professionals Council

Hirokowa, R. and Gouran, D. (1989). A critique of prior research and an agenda for future research. *Facilitation of Group Communication, 3*(1), 71-92

House of Commons Health Committee (2014). Children's and Adolescent's Mental Health and CAMHS. Third report of sessions 2014-15 [E-reader version]. Retrieved from: http://www.publications.parliament.uk/pa/cm201415/cmselect/cmhealth/342/342.pdf

Hulusi, H. and Maggs, P. (2015). Containing the containers: Work Discussion Group supervision for teachers – a psychodynamic approach. *Child and Educational Psychology*, 32(3), 30-40

Ingraham, C. (2000). Consultation through a multicultural lens: Multicultural and cross-cultural consultation in schools. *School Psychology Review, 29*(3), 320-343

Isen, A., Daubman, K. and Nowicki, G. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology*, *52*, 1122–1131

Jehn, K. A. (1997). A Qualitative Analysis of Conflict Types and Dimensions in Organizational Groups *Administrative Science Quarterly*, *42*(3), 530-557

Jones, D., Monsen, J. and Franey, J. (2013). Using the Staff Sharing Scheme to support school staff in managing challenging behaviour more effectively. *Educational Psychology in Practice, 29(*3), 258-277

Kassel, J. and Wagner, E. (1993). Processes of change in alcoholics anonymous: A review of possible mechanisms. *Psychotherapy, 30*(2), pages

Kaye, K. (1980). Estimating false alarms and missed events from interobserver agreement: A rationale. *Psychological Bulletin, 88*, 458 – 468

Kelley, H. (1979). *Personal Relationships: Their structures and processes.* Mahwah, NJ: Erlbaum

Keltner, D. and Haidt, J. (1999). Social Functions of Emotions at Four Levels of Analysis. *Cognition and Emotion*, *13*(5), 505 - 521

Kozlowski, S. and Ilgen. D. (2006).Ehancing the effectiveness of work groups and teams. *Psychological Science in the Public Interest, 7*(3), 77 - 124

Landis, J. and Koch, G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33,* 159-174

Landsberger, H. (1955). Interaction process analysis of the mediation of labor-management disputes. *The Journal of Abnormal and Social Psychology,* 51(3), 552-558.

Lau, D., and Murnighan, J. (1998). Demographic diversity and faultlines: The compositional dynamics of organisational groups. *Academy of Management Review*, 23, 325-340

Lawler, E., Thye, S. and Yoon,J. (2000). Emotion and group cohesion in productive exchange. *American Journal of Sociology, 106*(3), 616-657

Lewin, K. (1951). *Field Theory in social science.* New York, USA: Harper

Lewis and Newcomer (2008) Examining the Efficacy of School-Based Consultation: Recommendations for Improving Outcomes. *Child & Family Behavior Therapy*, *24*(1-2) 165-181

Lincoln, Y. and Guba, E. (1985). *Naturalistic Enquiry.* California, USA: Sage Publications Inc

Lockwood, C. and Pearson, A. (2013), *A comparison of meta-aggregation and meta-ethonography as qualitative review methods.* Philadelphia, USA: Lippincot, Williams and Wilkins, Joanna Briggs Institute

Loftland, J. (1971). *Analysing Social Settings* [E-reader version]. Retrieved from: http://isites.harvard.edu/fs/docs/icb.topic536759.files/lofland_lofland.pdf

Lyubomirsky, S., King, L. and Diener, E. (2005). The Benefits of Frequent Positive Affect: Does Happiness Lead to Success? *Psychological Bulletin*, *131*(6), 803–855

Mann, R. (1959). A review of the relationship between personality and performance in small groups. *Psychological Bulletin, 56*(4), 241-270

*McLeod and Kettner-Polley. (2004).* Contributions of Psychodynamic Theories to Understanding Small Groups. *Small Group Research, 35*(3), 333-361

Mead (1934) cited in: Cohen, L., Manion, L. and Morrison, K. (2008). *Research Methods in Education.* Abingdon, UK: Routledge

Medway and Nagel (1995) cited in: Watkins, C. and Wagner, P. (2000). *Improving School Behaviour* [E-reader version]. Retrieved from: http://www.myilibrary.com?ID=262329

Mertens, D. (2010). *Research and evaluation in education and psychology.* London, UK: SAGE publications:

Meyers, J., Parsons, D. and Martin, R. (1979). Mental health consultation in the schools. *Psychology in the Schools, 17*(3), 420-422

Miller, D. (2003). The stages of group development: A retrospective study of dynamic team processes. *Canadian Journal of Administrative Sciences*, *20*(2), 121–43

Mitchell, J. (2011). *Inter-professional case discussion: A systematic and sequential analysis.* Unpublished manuscript.

Morrow, V. and Richards, M. (1994). The ethics of social research with children: An overview. *Children and Society, 10,* 90-105

Moyles, J. (2002) Observation as a research tool. In Coleman, M. and Briggs, A. (eds). *Research Methods in Educational Leadership.* London, UK: Paul Chapman

*Moxnes, (1999).* Understanding roles: a psychodynamic model for role differentiation in groups. *Group Dynamics: theory, research and practice, 3(*2), 99 – 113

NASEN, (2016). *Resources* [E-reader version]. Retrieved from: www.nasen.org.uk/.../download.29628CBA-F6C6-4F3E-87EE43D23B1F757E.html [accessed: 02.06.2016]

Nielson, Sundstrom and Halfhill (2005) cited in Wheelan, S. (1994). *Group Processes: A developmental perspective. Second edition.* Michigan, USA: Allyn and Bacon

Noyes, J., Popay, J., Pearson, A., Hannes, K., and Booth, A. (2011) cited in Higgins, J. and Green, S. (2011).*Cochrane Handbook for Systematic Reviews of Interventions* [E-reader version]. Retrieved from: http://handbook.cochrane.org/

Nugent, M., Jones, V., McElroy, D., Peelo, M., Thornton, T. and Tierney, T. (2014). Consulting with groups of teachers. Evaluation of a pilot project in Ireland. *Educational Psychology in Practice, 30*(3), 255-271

Parsons, T. (1951). *The Social System.* New York, USA: Free Press

Petticrew, M. and Roberts, H. (2010). *Systematic Reviews in the Social Sciences. A Practical Guide.* Oxford, UK: Blackwell Publishing

Pryzwansky, W. (1977). Collaboration or consultation: Is there a difference? *Journal of Special Education*, 11, 179-182

Rex, J. (1974). *Approaches to Sociology: An introduction to major trends in British sociology.* London, UK: Routledge and Kegan Paul

Rhodes, C., Nevill, A., and Allan, J. (2004). Valuing and Supporting Teachers: A survey of teacher satisfaction, dissatisfaction, morale and retention in an English local education authority. *Research in Education, 71,* 67-80

Roberts, A. H. and Rust, J. O. (1994). Role and Function of School Psychologists 1992–1993: A Comparative Study. *Psychology in the Schools, 31,* 113 – 119

Robson, C. (2002). *Real World Research second edition.* Oxford, UK: Blackwell

Rosenhan, D, Salovey, P. and Hargis, K. (1981). The joys of helping: Focus of attention mediates the impact of positive affect on altruism. *Journal of Personality and Social Psychology*, *40*, 899–905

Shaughnessy, J., Zechmeister, E. and Zechmeister, L. (2003). *Research Methods in Psychology* [E-reader version]. Retrieved from: https://steladhima.files.wordpress.com/2014/03/john-j-shaughnessy-eugene-b-zechmeister-jeanne-s-zechmeister-research-methods-in-psychology-2012.pdf

Sheridan, s. and Cowan, R. (2004). Consultation with school personnel. *Educational Psychology Papers and Publications, 32,* 599-615

Sherwood, G. (1999). Meta-synthesis: Merging qualitative studies to develop nursing knowledge. *International Journal for Human Caring, 3*, 32-42

Silverman, S. (1966). An ethnographic approach to social stratification: Prestige in a central Italian community. *American Anthropologist*, *68*, 899- 921

Strauss, A. (1993). *Continual Permutations of Action* [E-reader version]. Retrieved from: https://books.google.co.uk/books?id=VdCWXXjdqxYC&pg=PR4&lpg=PR4&dq=Strauss,+A.+(1993).+Continual+Permutations+of+Action.+Walter+De+Gruyter:+New+York,+USA&source=bl&ots=WRVsiLPqhc&sig=vdKR6njL_2ydniXRg-VtTkoFhVA&hl=en&sa=X&ved=0ahUKEwjM9u-zvbDRAhVFRCYKHQqICgkQ6AEIGjAA#v=onepage&q=Strauss%2C%20A.%20(1993).%20Continual%20Permutations%20of%20Action.%20Walter%20De%20Gruyter%3A%20New%20York%2C%20USA&f=false

Sundstrom, E., De Meuse, K. and Futrell, D. (1990). Work Teams: Applications and effectiveness. *American Psychologist, 45*(2), 120-133

The University of Nottingham Code of Ethics. (2013). *Code of research conduct and research ethics* [E-reader version]. Retrieved from: http://www.nottingham.ac.uk/fabs/rgs/documents/code-of-research-conduct-and-research-ethics-approved-january-2010.pdf

Tong et al (2012) cited in: Boland, A., Cherry, G. and Dickson, R. (2014). *Doing a Systematic Review. A Student's Guide.* London, UK: SAGE Publications

Townsend, E., Wadman, R., Sayal, K., Armstrong, M., Harroe,C., Majumder, P, Vostanis, P. and Clarke, D. (2016). Uncovering key patterns in self-harm in adolescents: Sequence analysis using the Card Sort Task for Self-Harm (CaTS). *Journal of Affective Disorders, 206,* 161-168

Tuckman, B. W. (1965). Developmental Sequence in Small Groups. *Psychological Bulletin*, *63*(6), 384-399

Tuckman, B.W., and M.A. Jensen. 1977. Stages of small-group development revisited. *Group and Organization Studies, 2*(4), 419–27

Turner, J. (2014). *Evaluating the outcomes of the 'Circles of Adults' intervention on adults supporting looked after children at risk of exclusion*, *DAppEdPsy thesis, University of Nottingham*. Unpublished manuscript.

Turner, J. C. (1991). *Social Influence.* Belmont, USA: Wadsworth

Underwood, J. and Underwood, G. (1999). *Learning with Computers: Analysing Productive Interaction* [E-reader version]. Retrieved from: https://books.google.co.uk/books?hl=en&lr=&id=4XsfFkUMkZgC&oi=fnd&pg=PA10&dq=underwood+and+underwood+1999+cooperative+learning&ots=ZmspkOqWKa&sig=qPHNx1gQbGU9L_pchl02iZggNv0#v=onepage&q=underwood%20and%20underwood%201999%20cooperative%20learning&f=false

Vaughn, K., Hales, C., Bush, M., & Fox, J. (1998). East Tennessee State University's "Make a difference" project: Using a team-based consultative model to conduct functional behavioural assessments. *Preventing School Failure*, *43*, 24-30.

Wagner, P. (2000). Consultation: Developing a comprehensive approach to service delivery. *Educational Psychology in Practice, 16*(1), 9-18

Watkins, C. and Wagner, P. (2000). *Improving School Behaviour* [E-reader version]. Retrieved from <http://www.myilibrary.com?ID=262329>

Wayne, S. J., Shore, L. M., and Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management journal, 40*(1), 82-111.

Webb, N. (1982). Student interaction and learning in small groups. *Review of Educational Research, 52*, 421-445

White, H. (2003). *Identity and Control: How Social Formations Emerge.* New Jersey, USA: Princeton University Press

Wilson, D. and Newton, C. (2006). *Circles of Adults: A team approach to problem-solving around challenging behaviour and emotional needs.* Nottingham, UK: Inclusive Solutions:

Wheelan, S. (1994). *Group Processes: A developmental perspective.* Michigan, USA: Allyn and Bacon

Woods, K. (1992) cited in Cohen, L., Manion, L. and Morrison, K. (2008). *Research Methods in Education.* Abingdon, UK: Routledge

## 7. Appendices

### 7.1 Appendix 1 – An overview of Circle of Adults 10 step process *

Stage 1: Ground rules

The group agree ground rules to follow throughout the intervention.

Stage 2: Case presentation

One person from the group presents the current context for the focus child. They offer information about the child's appearance, school history, family life, strengths and areas of difficulty.

Stage 3: Relationships (Desert island)

To explore the focus child's relationships with adults in school, the group are asked how they would feel if they were left on a desert island with the child.

Stage 4: Organisational factors

The group are asked to share what school based factors they feel are helping and hindering the child's current development.

Stage 5: Voice of the child

One member of the group is asked to represent the voice of the child. By using 'I' statements, they state how they feel, what they like, dislike etc.. This can be prompted by the process facilitator who will direct questions to the child.

Stage 6: Synthesis

The graphic facilitator synthesises the information gathered so far by the group. They highlight any areas of tension or ambiguity.

Stage 7: Hypotheses

The group develop hypotheses to explain the focus child's behaviour.

Stage 8: Strategies

Strategies are then developed to support each hypothesis. These are 'blue sky' thinking, suggesting smaller and bigger strategies to begin initial idea generating.

Stage 9: First steps

From the strategies gathered, the group agree upon some initial first steps. They are required to state who will be responsible for implementing/organising each step to

take place and the time by which it will be achieved. A 'buddy' is also decided; this is the person who will support the lead person in implementing the agreed strategy.

Stage 10: Closing words

The group each state one word to summarise how they have felt about the whole Circle of Adults process for the focus child.

***Taken from:*** Wilson, D. and Newton, C. (2006). Circles of Adults: A team approach to problem-solving around challenging behaviour and emotional needs. Inclusive Solutions: Nottingham, UK

## 7.2 Appendix 2 – Systematic review search terms and output

**PsycARTICLES**

- **"collaborative problem solving"** – 188 results, 0 meeting criteria
- **"collaborative problem solving" AND "school staff"** – 8 results, 0 relevant*
- **"collaborative problem solving" AND "educational psychology"** – 76 results, 0 relevant
- **"collaborative problem solving" AND "group dynamics"** – 23 results, 0 relevant
- **"collaborative problem solving" AND "interaction*al processes"** – 6 results, 0 relevant
- **"collaborative problem solving" AND "effectiveness"** – 146 results, 0 relevant
- **"collaborative problem solving" AND "experience"** – 213 results, 0 relevant
- **"collaborative problem solving" AND "qualitative method*ology"** – 2 results, 0 relevant
- **"collaborative problem solving" AND "group process*es"** – 27 results, 0 relevant
- **"collaborative problem solving" AND "circle"** – 29, 0 relevant
- **"group consultation"** – 45 results, 0 relevant
- **"group consultation" AND "school staff"**- 4 results, 0 relevant
- **"group consultation" AND "educational psychology"** – 11 results, 0 relevant
- **"group consultation" AND "group dynamics"** – 5 results, 0 relevant
- **"group consultation" AND "interaction*al processes"** – 0 results

**Psycinfo**

- **"collaborative problem solving"** – 497 results, 1 relevant

Bennett, S. and Monsen, J. (2011). A critical appraisal of four approaches which support teachers' problem-solving within educational settings. *Educational Psychology in Practice ,* 27(1), 19-35

- **"collaborative problem solving" AND "school staff"** – 11 results, 6 relevant

Bartle, D. and Trevis, A. (2015). An evaluation of group supervision in a specialist provision supporting young people with mental health needs: A social constructionist perspective. *Educational and child psychology,* 32(3), 78-89

Hulusi, H. and Maggs, P. (2015). Containing the containers: Work Discussion Group supervision for teachers – a psychodynamic approach. *Child and Educational Psychology,* 32(3), 30-40

Grahamslaw, L. and Henson, L. (2015). Solving problems through circles. *Educational Psychology in Practice ,* 31(2), 111-126

Jones, D., Monsen, J. and Franey, J. (2013). Using the Staff Sharing Scheme to support school staff in managing challenging behaviour more effectively. *Educational Psychology in Practice ,* 29(3), 258-277

Brown, E. and Henderson, L. (2012). Promoting staff support in schools: Solution Circles. *Educational Psychology in Practice ,* 28(2), 177-186

Bennett, S. and Monsen, J. (2011). A critical appraisal of four approaches which support teachers' problem-solving within educational settings. *Educational Psychology in Practice ,* 27(1), 19-35

- **"collaborative problem solving" AND "educational psychology"** – 803 results, 10 relevant

Soni, A. (2015). A case study on the use of group supervision with learning mentors. Educational and Child Psychology. 32. 65-77

Hulusi, H. and Maggs, P. (2015). Containing the containers: Work Discussion Group supervision for teachers – a psychodynamic approach. *Child and Educational Psychology,* 32(3), 30-40

Grahamslaw, L. and Henson, L. (2015). Solving problems through circles. *Educational Psychology in Practice ,* 31(2), 111-126

Jones, D., Monsen, J. and Franey, J. (2013). Using the Staff Sharing Scheme to support school staff in managing challenging behaviour more effectively. *Educational Psychology in Practice ,* 29(3), 258-277

Annan, M. and Moore, S. (2012). Using the Staff Sharing Scheme within the Targeted Mental health in Schools Pathfinder. *Educational and Child Psychology,* 29(4), 88-108

Brown, E. and Henderson, L. (2012). Promoting staff support in schools: Solution Circles. *Educational Psychology in Practice ,* 28(2), 177-186

Bennett, S. and Monsen, J. (2011). A critical appraisal of four approaches which support teachers' problem-solving within educational settings. *Educational Psychology in Practice ,* 27(1), 19-35

Moreland (2006). Review of Circles of adults: A team approach to problem-solving around challenging behaviour and emotional needs. *Educational Psychology in Practice* , 22(4), 379-380

Farouk, S. (2004). Group Work in Schools: A process consultation approach. *Educational Psychology in Practice* , 20(3), 207-220

Bozic, N. & Carter, A. (2002). Consultation Groups: Participants' views. *Educational Psychology in Practice ,* 18(3), 189-201

- **"collaborative problem solving" AND "group dynamics"** - 103 results, 1 relevant

Soni, A. (2015). A case study on the use of group supervision with learning mentors. Educational and Child Psychology. 32. 65-77

- **"collaborative problem solving" AND "interaction*al processes"** – 8 results, 0 relevant
- **"collaborative problem solving" AND "effectiveness"-** 544 results, 1 relevant

Annan, M. and Moore, S. (2012). Using the Staff Sharing Scheme within the Targeted Mental health in Schools Pathfinder. *Educational and Child Psychology,* 29(4), 88-108

- **“collaborative problem solving” AND “qualitative method*ology”** - 0 results
- **“collaborative problem solving” AND “experience”** – 575 results, 0 relevant
- **“collaborative problem solving” AND “group process*es”** – 118 results, 0 relevant
- **“collaborative problem solving” AND “circle”** – 61 results, 1 relevant

Grahamslaw, L. and Henson, L. (2015). Solving problems through circles. *Educational Psychology in Practice ,* 31(2), 111-126

- **“group consultation”** – 105 results, 5 relevant

Nugent, M., Jones, V., McElroy, D., Peelo, M., Thornton, T. and Tierney, T. (2014). Consulting with groups of teachers. Evaluation of a pilot project in Ireland. *Educational Psychology in Practice ,* 30(3), 255-271

Evans, S. (2005). The Development of a Group Consultation Approach to Service Delivery. *Educational Psychology in Practice* , 21(2),

Farouk, S. (2004). Group Work in Schools: A process consultation approach. *Educational Psychology in Practice* , 20(3), 207-220

Bozic, N. & Carter, A. (2002). Consultation Groups: Participants’ views. *Educational Psychology in Practice ,* 18(3), 189-201

Group consultation with mainstream teachers. Educational and child psychology [0267-1611] Hanko, Gerda yr:1987 vol:4 iss:3-4 pg:123

- **“group consultation” AND “school staff”** – 7 results, relevant

Hulusi, H. and Maggs, P. (2015). Containing the containers: Work Discussion Group supervision for teachers – a psychodynamic approach. *Child and Educational Psychology,* 32(3), 30-40

Brown, E. and Henderson, L. (2012). Promoting staff support in schools: Solution Circles. *Educational Psychology in Practice ,* 28(2), 177-186

Bennett, S. and Monsen, J. (2011). A critical appraisal of four approaches which support teachers’ problem-solving within educational settings. *Educational Psychology in Practice ,* 27(1), 19-35

- **“group consultation” AND “educational psychology”** – 33 results, 8 relevant

Soni, A. (2015). A case study on the use of group supervision with learning mentors. Educational and Child Psychology. 32. 65-77

Hulusi, H. and Maggs, P. (2015). Containing the containers: Work Discussion Group supervision for teachers – a psychodynamic approach. *Child and Educational Psychology,* 32(3), 30-40

Nugent, M., Jones, V., McElroy, D., Peelo, M., Thornton, T. and Tierney, T. (2014). Consulting with groups of teachers. Evaluation of a pilot project in Ireland. *Educational Psychology in Practice ,* 30(3), 255-271

Masse, L., Couture, C., Levesque, V. and Begin, J. (2013). Impact of a school consulting programme aimed at helping teachers integrate students with behavioural difficulties into secondary school: Actors' points of view. *Emotional and Behavioural Difficulties*, 18 (3), 327-343

Brown, E. and Henderson, L. (2012). Promoting staff support in schools: Solution Circles. *Educational Psychology in Practice ,* 28(2), 177-186

Bennett, S. and Monsen, J. (2011). A critical appraisal of four approaches which support teachers' problem-solving within educational settings. *Educational Psychology in Practice ,* 27(1), 19-35

Farouk, S. (2004). Group Work in Schools: A process consultation approach. *Educational Psychology in Practice* , 20(3), 207-220

Bozic, N. & Carter, A. (2002). Consultation Groups: Participants' views. *Educational Psychology in Practice ,* 18(3), 189-201

- **"group consultation" AND "group dynamics"** – 12 results, 1 relevant

Soni, A. (2015). A case study on the use of group supervision with learning mentors. Educational and Child Psychology. 32. 65-77

- **"group consultation" AND "interaction*al processes"** - 1 results, 0 relevant

**Embase**

- **"collaborative problem solving"** – 124 results, 0 relevant for criteria
- **"collaborative problem solving" AND "school staff"** – 0 results
- **"collaborative problem solving" AND "educational psychology"** – 1, 0 relevant
- **"collaborative problem solving" AND "group dynamics"** - 2 results, 0 relevant
- **"collaborative problem solving" AND "interaction*al processes"** – 0 results
- **"collaborative problem solving" AND "effectiveness"** – 8 results, 0 relevant
- **"collaborative problem solving" AND "experience"** – 11 results, relevant
- **"collaborative problem solving" AND "qualitative method*ology"** – 0 results
- **"collaborative problem solving" AND "group process*es"** – 0 results, 0 relevant
- **"collaborative problem solving" AND "circle"** – 1, not relevant
- **"group consultation"** – 69 results, 1 relevant

Masse, L., Couture, C., Levesque, V. and Begin, J. (2013). Impact of a school consulting programme aimed at helping teachers integrate students with behavioural difficulties into secondary school: Actors' points of view. *Emotional and Behavioural Difficulties*, 18 (3), 327-343

- **"group consultation" AND "school staff"** – 0 results
- **"group consultation" AND "educational psychology"** – 1 results, 0 relevant
- **"group consultation" AND "group dynamics"** – 3 results, 0 relevant
- **"group consultation" AND "interaction*al processes"** – 0 results

**EBSCO**

- **"collaborative problem solving"** – 67 results, 0 relevant
- **"collaborative problem solving" AND "school staff"** - 4 results, 0 relevant
- **"collaborative problem solving" AND "educational psychology"** - 1 results, 0 relevant
- **"collaborative problem solving" AND "group dynamics"** - 13 results, 0 relevant
- **"collaborative problem solving" AND "interaction*al processes"** - 1 results, 0 relevant
- **"collaborative problem solving" AND "effectiveness"** – 3 results, 0 relevant
- **"collaborative problem solving" AND "experience"** – 5 results, 0 relevant
- **"collaborative problem solving" AND "qualitative method*ology"** - 1 results, 0 relevant
- **"collaborative problem solving" AND "group process*es"** - 2 results, 0 relevant
- **"collaborative problem solving" AND "circle"** – 3, 1 relevant

Bennett, S. and Monsen, J. (2011). A critical appraisal of four approaches which support teachers' problem-solving within educational settings. *Educational Psychology in Practice ,* 27(1), 19-35

- **"group consultation"** - 22 results, 0 relevant
- **"group consultation" AND "school staff"** - 1 results, 0 relevant
- **"group consultation" AND "educational psychology"**- 1 results, 0 relevant
- "**group consultation" AND "group dynamics"** - 1 results, 0 relevant
- **"group consultation" AND "interaction*al processes"** – 0 results

***Relevant refers to studies initially meeting pre-defined inclusion and exclusion criteria, before any further analysis***

## 7.3 Appendix 3 – Detailed summary of quality assurance process

A table to illustrate a detailed summary of the quality assurance process for reviewing literature included in the systematic review

| EPPI centre guidelines | Annan & Moore (2012) | Nugent, Jones, McElroy, Peelo, Thornton & Tierney (2014) | Bozic & Carter, 2002 | Bennett & Monsen (2011) | Grahamslaw & Henson (2015) | Jones, Monsen & Franey (2013) | Farouk (2004) | Brown & Henderson (2012) | Hulusi & Maggs (2015) | Evans (2005) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Group Experience** | A – Emphasis upon how staff experienced the intervention | A – Emphasis upon how staff experienced the intervention | A – Emphasis upon group experience and self-reports | D – Not focused on self-reports of the group experience | A – Emphasis on what participants gained | A – Emphasis on participant views | D – Not focused on self-reports of the group experience | A – Focus on how staff experienced the process | D – Not focused on self-reports of the group experience | A – Focus on group experience |
| **Clear rationale for study** | A – Consideration of context for group problem solving tools in UK / | A – Consideration of context for schools in Northern Ireland and specific | A – Linked to role of educational psychologist and the paradigm | *Not applicable*<br><br>*Removed from review process* | A – Relevant to EP role and gaps in evidence base | A – Linked to EP role and evidence base | *Not applicable*<br><br>*Removed from review process* | A – Links to legislation, current school climate and the evidence base | *Not applicable*<br><br>*Removed from review process* | A – National and local context addressed, links to educational psychologist |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Educational Psychology | Educational Psychology Service | shift in service delivery models | | | | | | | role |
| **Aims and objectives outlined** | A – Linked to evidence informed interventions | A – Linked to the role of educational psychologists in using consultative approaches | A – Clearly defined in wider context and context of research | *Not applicable* | A – Clearly stated in text and then addressed in discussion | A – Clearly presented and discussed | *Not applicable* | B – Implicit in write up, not clearly stated | *Not applicable* | B – Aims stated broadly |
| **Context described including problem solving tool** | B – Tool explicitly described, context for 17 groups is not made explicit | A – Both group consultation process and setting context are made clear<br><br>22 groups used in total | A – 4 groups using the approach, clearly described process and context | *Not applicable* | A – Solution Circles and Circle of Adults, context in which these were carried out is clearly described | B – Staff sharing scheme, case study<br><br>Limited overview of intervention implementation | *Not applicable* | B – One secondary school and one primary school, no further details. Solution Circles clearly defined. | *Not applicable* | C – Stakeholders referred to as 16 'schools' with no clarification, some reference to consultation approach used. |
| **Sample** | C – Limited details of sample | A – Clear details | A – Details provided | *Not applicable* | A – Details provided | B – Some details provided | *Not applicable* | C – Limited details of sample | *Not applicable* | C - Limited information |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | provided |
| **Method detailed** | C – Overview given however specific details lacked | B – Some extracts of questions, whole questionnaires not included in text or appendices | B – Mixed methods, questionnaire detailed in results section but no full copy available | *Not applicable* | A – Questionnaire followed by thematic analysis, full details provided | A - Questionnaire – both qualitative and quantitative<br><br>Thematic analysis used to analyse qualitative data | *Not applicable* | B – Mixed methods using questionnaire, focus group and SWOT analysis | *Not applicable* | B – Mixed method - session evaluation used open and closed questionnaire, observation notes and ongoing records |
| **Reliability and validity addressed** | B – Critical reflections explicitly discussed | B – Lessons learnt discussed and used to inform next steps | C – Implicitly discussed, not explicit in discussion | *Not applicable* | A – Limitations discussed and used to direct future research | A – Pilot study, Cronbach's Alpha used, limitations discussed | *Not applicable* | B – Limitations addressed | *Not applicable* | B – Considered in context of educational psychologist role |
| **Data presentation clear and inferences logical** | A – Supplemented by appendices | A – Mixed methods data used to present and support themes | B – Quantitative data presented clearly, | *Not applicable* | A – Themes supported by quotes and | A – Appendices used to supplement main text, | *Not applicable* | B – Details of data gathered included in main text, | *Not applicable* | B – Data included in main text, extracts of |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | extracts of qualitative data to illustrate themes | | evidence of the process of reducing themes | questionnaire included | | whole data not included | | qualitative data to support themes presented |
| **Overall grade** | **B** | **B** | **B** | **D** | **A** | **A** | **D** | **B** | **D** | **B** |

## 7.4 Appendix 4 – IPA (Bales, 1954) categories and descriptors *

1. Shows solidarity

This includes: raising other's status, giving help, rewarding others

2. Shows tension release

This includes: telling jokes, laughing, showing satisfaction

3. Agrees

This includes: showing passive acceptance to others, understanding others, concurring and complying

4. Gives suggestion

This includes: giving direction, implying autonomy for others

5. Gives opinion

This includes: evaluating, analysing, expressing personal feelings/wishes

6. Gives orientation

This includes: giving information, repeating information, giving clarification, confirming

7. Asks for orientation

This includes: asking for information repetition, requesting confirmation and clarity

8. Asks for opinion

This includes: asking for an evaluation, analysis, asking for an expression of feeling(s) from others

9. Asks for suggestion

This includes: asking for direction or possible ways of action from others

10. Disagrees

This includes: showing passive rejection, using formality, withholding help

11. Shows tension

This includes: asking for help, withdrawing out of field

12. Shows antagonism

This includes: deflating others' status, defending or asserting self

*Codes 1-3 and 10-12 are social emotional processes (positive or negative)*

*Codes 4-9 – are task related (problem solving processes EG: asking questions and giving information)*

***Taken from:*** Bales, R. (1954). *Social Interaction.* The RAND Corporation: California

**7.5 Appendix 5 – Invitation to head teachers to participate**

Ref: *Circle of Adults*

t: direct line *0115 846 7303*

e: lpanr@nottingham.ac.uk

The University of Nottingham
UNITED KINGDOM • CHINA • MALAYSIA

School of Psychology
The University of Nottingham
University Park
Nottingham
NG7 2RD

T: +44 (0)115 8467403 or (0)115 9534344

December 2016

Dear head teacher / SENCo

Subject: Circle of Adults – Invitation to take part in research

I am writing to you as a third year Trainee Educational Psychologist at The University of Nottingham, currently on placement with Warwickshire Educational Psychology Service. I am looking for schools to participate in my doctoral research project, investigating the interactional processes which occur within 'Circle of Adults.' I would be grateful for the opportunity to meet with you, or relevant person(s) in school, to discuss my research further and answer any questions you may have.

As part of this study, I wish to analyse the processes which occur during group problem solving activities. I understand that your school is going to be involved in a Circle of Adults intervention; therefore I would like to use this opportunity to contribute to my doctoral research. This research will involve my voice recording the Circle of Adults group you have recently scheduled with your Educational Psychologist. Staff participating in the group, your school and pupils would not be identifiable in the research and there would not be any additional requests made upon staff participating as no further involvement would be required. I have attached a more detailed description of the research process; please refer to this for further explanation.

This research has been given approval by the Ethics Committee at the School of Psychology at Nottingham University (Reference number: 839R) and, in line with ethical practice, I would ensure that all parties involved in the research

are fully informed of the study aims and procedures. Should you wish to take part, I can discuss this further with you.

I have attached further information, however should you have any queries, please do not hesitate to contact me or your Educational Psychologist who will be able to provide further information.

Yours sincerely,



Lauren Connor (nee Freemantle), *Educational Psychologist in Doctoral Training*

lpxljf@nottingham.ac.uk

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Supervised by Mr Neil Ryrie, The University of Nottingham

## 7.6 Appendix 6 – Consent form

Ref: *Circle of Adults*

Supervised by Mr Neil Ryrie

t: *0115 846 7303*

e: lpanr@nottingham.ac.uk

Researcher Lauren Connor (nee Freemantle)

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### Consent form

**Title of study: A sequential analysis of the processes within 'Circle of Adults' group problem solving**

Researcher: Lauren Connor (nee Freemantle), Educational Psychologist in training at The University of Nottingham

Please complete this form by circling the relevant answers and signing below.

1. I have read and understood the information sheet YES NO

2. I have been able to asks questions and/or discuss the study
   YES NO

3. I feel as though my questions have been answered fully YES NO

4. I know that I am able to withdraw from this study at any time, without having to give any reasoning or explanation to do so
   YES NO

5. I know that following participation, I am able to withdraw my data up until 31st December 2016
   YES NO

6. I agree to take part in this study YES NO

*The details of this study have been explained to me and I agree to take part. I also know that I am able to withdraw from the study.*

**Signed**: ……..

**Date**: ……

**Name**: ……

## 7.7 Appendix 7 – Parent / carer information and consent

Ref: *Circle of Adults*

t: direct line *0115 846 7303*

e: lpanr@nottingham.ac.uk




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December 2016

Dear parent / carer

**Subject: Circle of Adults**

I am a Trainee Educational Psychologist at The University of Nottingham, on placement with Warwickshire Educational Psychology Service. As part of my training, I am researching how school staff work together in a group to support children and young people. The research will look at group processes as I am interested in how things are said in a group discussion.

It has recently been agreed for a Circle of Adults to run in school to support your child's learning. As a Circle of Adults requires a group of adults to work together, with your permission I would like to use this as part of my research.

What the research would involve:

- Circle of Adults to run as agreed.
- The discussion happening during Circle of Adults would be audio recorded (using a dictaphone).
- I would type the discussion within 6 weeks of the recording.
- Any information about your child, the school or staff would not be typed up to make sure that no participants would be identifiable in my research.
- Audio recording would then be destroyed.
- You would have the right to withdraw your information from the research up until 31st December 2016.

The information will be then used by:

- Coding the typed up information based upon how something was said, not what was said
- Analysed using statistical methods using a computer programme
- Reported in the research in the form of numerical (frequency and probability) data

This research has been given ethical approval by The University of Nottingham Ethics Committee (Reference number 839R). If you would like the Circle of Adults for your child to be included in this research, please give your permission by signing the consent form attached.
I have included my contact details if you would like to talk more about my research.

Yours sincerely,



Lauren Connor (nee Freemantle), *Educational Psychologist in Doctoral Training*
lpxljf@nottingham.ac.uk
laurenconnor@warwickshire.gov.uk
Supervised by Mr Neil Ryrie, The University of Nottingham

## 7.8 Appendix 8 – Staff standardised information

Ref: *Circle of Adults*

t: direct line *0115 846 7303*

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September 2016

This research is exploring the processes which occur during group problem solving activities. I understand that you are going to be involved in a Circle of Adults intervention; therefore I would like to use this opportunity to contribute to my doctoral research. This information sheet provides further details of the study, please take the time to read the information provided.

The aim of this study is to explore the processes which occur within the 'Circle of Adults.' Processes refer to what is happening within the group, as opposed to what was actually said. This aim will achieved by:

- Describing the frequency of processes occurring during the whole group activity
- Describing the frequency of processes occurring during each stage of the activity (there are 10 stages in Circle of Adults)
- Illustrating the most and least frequent patterns of processes occurring within the group
- Inferring what makes good, effective practice for a Circle of Adults group

<u>This is important for Educational Psychologists to know because:</u>

This research will contribute to the existing evidence base. It is believed that by making this contribution, Educational Psychologists will have an insight into processes which influence the reported successfulness of the Circle of Adults intervention.

Ethical considerations:

- This study has been given ethical approval by The University of Nottingham's code of ethics committee (839R reference number).
- The study adheres to British Psychological Society, Health and Care Professionals Council and Division Educational and Child Psychology ethical guidelines also
- Your involvement, your school, community, or students will not be identifiable in the final research project
- All data transcribed will ensure anonymity of yourself, role, school, colleagues and students as it will be left out, or if needed, pseudonyms will be used
- This study has the support of the local EPS
- The researcher receives regular supervision, throughout the research process

You will be asked to:

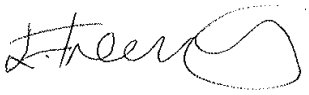
- Participate in the Circle of Adults as 'normally' would be expected, with the presence of a voice recorder in the room
- Provide your signed, written consent to take part

The data will be used in the following ways:

- Transcribed (omitting any information making individuals or the school identifiable)
- Coded based upon the interactional process used (how something was said, not what was said)
- Analysed using various statistical methods using a computer software programme
- Reported in the final study in the form of frequency and probability data

I hope that you feel you are able to participate in this study; should you wish to participate, you are given the right to withdraw from the research at any time. In additional, following data collection, you have the right to withdraw your data up until December 31st 2016.

Should you have any further questions, please do not hesitate to contact me. Alternatively, you can discuss this study further with your school link Educational Psychologist. Thank you very much for your time.



Lauren Freemantle, *Educational Psychologist in Doctoral Training*

lpxljf@nottingham.ac.uk or laurenfreemantle@warwickshire.gov.uk

Research supervisor, Mr Neil Ryrie, The University of Nottingham

Ref: *Circle of Adults*

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November 2016

Thank you for taking part in this study exploring the processes which occur within a 'Circle of Adults' group problem solving intervention. The recording from this group will now be transcribed, ensuring full anonymity of all participants and then coded. The coding system used will concentrate on the processes occurring within the group, rather than what was actually said.

The data gathered will then be used to:

- Describe the frequency of processes occurring during the whole group activity
- Describe the frequency of processes occurring during each stage of the activity (there are 10 stages in Circle of Adults)
- Illustrate the most and least frequent patterns of processes occurring within the group
- Infer what makes good, effective practice for a Circle of Adults group

This research will contribute to the existing evidence base. It is believed that by making this contribution, Educational Psychologists will have an insight into processes which influence the reported successfulness of the Circle of Adults intervention.

You are reminded that you have the right to withdraw your data until 31st December 2016. If you have any questions or would like to discuss the results of this study, please contact:

Lauren Connor, Trainee Educational Psychologist - lpxljf@nottingham.ac.uk or laurenconnor@warwickshire.gov.uk Or alternatively, project supervisor, Mr Neil Ryrie at The University of Nottingham.

Thank you again for your participation.



Lauren Connor

## 7.9 Appendix 9 – Ethical approval

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SJ/wb
Ref: 839R

Wednesday, 18 May 2016

Dear Lauren Freemantle & Neil Ryrie,

**Ethics Committee Review**

Thank you for submitting an account of your proposed research 'A sequential analysis of the interactional processes occurring within Circle of Adults: An exploratory study'.

That proposal has now been reviewed by the Ethics Committee and I am pleased to tell you that your submission has met with the committee's approval.

Final responsibility for ethical conduct of your research rests with you or your supervisor. The Codes of Practice setting out these responsibilities have been published by the British Psychological Society and the University Research Ethics Committee. If you have any concerns whatever during the conduct of your research then you should consult those Codes of Practice. The Committee should be informed immediately should any participant complaints or adverse events arise during the study.

Independently of the Ethics Committee procedures, supervisors also have responsibilities for the risk assessment of projects as detailed in the safety pages of the University web site. Ethics Committee approval does not alter, replace, or remove those responsibilities, nor does it certify that they have been met.

Yours sincerely



*Professor Stephen Jackson*
*Chair, Ethics Committee*

## 7.10 Appendix 10 – Coded data transcript

**Circle 1**

This discussion feels safe and useful for everyone, so we need ground rules for this discussion and us working together, any suggestions? (8)

Honesty (5)

Be honest (6)

Respect people's views (5)

Yep (3) absolutely (1)

Time out, if you need to (5)

Definitely (3) so we know this process can be emotive for some people, so yep, please do take time out, as you need it (6) Thank you, any others (8) Can I add one in? So if we add confidentially (4) so what we talk about his afternoon, erm I want that to build faith and it is shared in this room only (1) When it comes to next steps and strategies, those are things that we are agreeing with moving forward but in terms of the nitty gritty, of the discussion and what we're recording, I want that to be confidential for this afternoon, so you will keep this at the end of our session but I will ask you to keep it somewhere safe (5) Erm and that you end up taking these bits forward and the rest, your mindful that it's been a part of a confidential discussion (6) Any others? (8)

The only one I was thinking of was that, now this is about D and not about assigning blame or accountability of any of our actions or lack of actions (5) so if you get a lightbulb and go oh no I've done that or I did that exact thing which we've now just decided isn't helping for him. That's ok is it? (11) That's the whole point in doing this? So that we do get this right for D. It's not about beating ourselves up or worrying that we've done things wrong or not put things in place for him (12)

Yeah, that sounds good, lovely. Ok. (3)

Is anyone going to respond for D? (7)

Not for D, no. (6)

So for the next bit, I'm going to ask, erm, for a couple of, erm, volunteers. I'm going to ask V, if you would mind, being the problem presenter for the next session, so I will guide you through this bit, (4) but I would also like someone else to volunteer when we get to step 5, and be the voice for the child and it will become clearer when we get there, it will be talking for a couple of minutes, erm, thinking about what D might be thinking and feeling at the time as it will just be a short reflection at that

point.  So can I ask for someone to volunteer, when we get to that point, when we get to step 5. (9)

I don't mind doing it (5)

Lovely, thank you very much S (1) Ok so back to you V, so for this next bit I'm going to ask you to erm talk about D and prompt you with erm questions, I'm going to ask the rest of you just to listen, and not interrupt at this moment, we just want to find out more about D and share that. Does that sound ok? (4)

That's fine yes. (3)

So, tell us some facts about D, like how old he is, erm what he likes to do at school. (6)

Ok, is probably average height for his age, I would say. He is, erm, thirteen. Wears glasses, short hair, loves wrestling, that's his latest obsession and anything to do with wrestling. Erm, he also likes looking at books, sharing books with people, talking to adults as well, he wants to be friends with people, (5) he is actually quite a friendly child and wants to be friends, he just struggles with those social interactions. (6)

Ok (3)

He likes control over his environment as well. (5)

And in school, what's he good at in school? (8)

He's erm, good at arty type things, even though he doesn't like getting messy, he likes the non-messy arty type things like drawing which I think he's good at because he can achieve at it. And he wants to do more, he wants to fit in with it.  I think he's also good at, he's good at reading as well, good at reading. (5)

Yes. (3)

Ok, and tell me how is he in school, how does he present in a typical day? (8)

He is very up and down, he is almost like a completely different child at different points in the day, so he can be very happy, very friendly, very helpful in one sort of part of the day, and then it can change very quickly. (5) To incredibly anxious and erm angry. (12)

So a real mixture, all within one day? (7)

Yes. (6)

And tell me, since the start of term about what's been happening since the start of term. (9)

So he had a really good first few couple of weeks, when he settled in and responded well to boundaries which we put in place and seemed very happy and then the

honeymoon period was over and he started to struggle with things (12). So he is struggling with other people in the classroom and what they are doing, he is concerned about or what he feels, is that he needs to tell people, what they can and can't do, which we've been working with him on that he doesn't need to tell people, he doesn't need to do that. (6)

So he's really anxious. (4)

Very anxious yeah (3), about what other people are doing. (5)

And how do you see that anxiety? How does it play out in terms of him? (7)

He will start shouting and it could be as far as he'll shout and he'll slam the door, normally that door, and he'll slam it quite hard. Sometimes he'll just go up to that person and tell them. Sometimes very aggressively and sometime you know, tell them the normal way that he doesn't like what they're doing or they shouldn't be doing that, (5) and it's a range of how he reacts, to what is going on around him. (6)

So different reactions, at different times? (7)

You can't kind of predict how is going to react, because the same situation can almost happen and he will react in a completely different way, (6) so it's almost what's going on inside his head, I suppose.

It feels unpredictable. (5)

It feels very unpredictable. (1)

It feels really unpredictable. (3) Ok, anything else, that anyone would like to add in terms of what we see of D in school at the moment.(4)

I think he's quite caring. (5)

Ok. (3)

I think he does care about people and he cares what other people think of him as well. (6)

So it is important to him? (7)

It important that to him that you like him. (3) He does like to know, that you like him. (1)

And that's with adults, or other children? (8)

Everyone really. (5)

Everyone. (3)

He wants to, he wants to do the right thing. (5)

He wants to. (3)

If he does the wrong thing, he apologizes because he realises that he's done the wrong thing.

And he wants to put it right straight away. (6)

Ok, so it matters to him what you think about him? (7)

He wants to share information with you, and he wants something positive said about him,(5) so he's done this or he's done that or if he's done something with his family, (6) he likes to tell you and he likes the attention as well, you know. (5)

So he enjoys. (6)

He loves to talk about Dad. (5)

He loves to talk about Dad ok. (3)

And tell me what does everyone know about, you know D's family and home life? (9)

So he lives with Dad and step mum. He sees mum some of the time but not very often. (4)

On weekends. (5)

And Mum's just moved house. (6)

And the house isn't very good is it, he talks about his mums health, either she is or isn't very well.

He talks about his brother B, who's in the army, and M who I believe, that is his son. (5)

Yeah. (3)

He talks about him, (6) not always positively. (5)

Ok. (3)

No, like today he really wasn't very positive about him (6) – was he? (11)

No, no. (1)

Where does he live? (7)

With them, with him and Dad.

At home its D, Dad, M and Step Mum. (6)

He doesn't talk about anyone else at home, I think that's it. (3) Then mum's got T. (6)

Yeah. (3)

T, who's the daughter that's with mum.

Who lives with? (7)

Mum, in mums new flat that is only has two rooms, so when he visits he is in the bedroom with mum.

Ah, so T is D's half-sister. (6)

I don't know. (11)

Ok. (3)

He's said it as if he's his sister T, but I don't know in what way she is his sister. (1)

Ok. (3) And he sees mum every other weekend. (7)

Every other weekend. (6)

But all last week he stayed with her didn't he. (10)

Oh, because it was half term. (3)

At half term, so L could go to work, he stayed with mum and helped her move. And he felt quite proud of that, that he helped her move. (6)

Having helped, ok. (3)  And what else do we know about home life? And how home life is? (8)

We know about mum having her own learning difficulties (6) and she has her own difficulties with speech. (5)

Is this mum or daughter? (7)

Mum is the same as D, she struggles to articulate herself. (5) And has some particular processing abilities and has word finding difficulties etc.  (6) We know that Dad had a difficult childhood himself and has a coloured history. (5)

Ok.(3)

Coloured past. He has taken his own steps to know more, about his own life, his own emotions, his own feelings and special needs in general to support D. (5)

D is proud of Dad isn't he? (8)

Yes. He is. (5)

I feel like we should mention that Dad used to work here, didn't he? (11) So for a time, Dad was part of D's school and home life. (6)

Yes. (3)

He talks about Dad's new job, Dad has a new job. (6)

Yes. (3)

And a lot of that has made him really pleased. (7)

Really pleased yes. (6)

Ok. (3)

He does long hours, that's really hard. (5)

New contract, ha-ha (laughs). (2)

So I'm sensing he really likes to talk about that. (6) Ok, and that's how you know lots about his family. (7)

He seems to quite like V as well, she seems quite calming. (5)

Yes, yes. (3)

And when I take him out every day to V, she's always really positive with him. (6)

V? The Step mum. (7)

Yes, yes. (6)

But we do know over the years that there always hasn't been a consistent relationship. That V, has come and gone, they have broken up over a time and got back together again. (12)

So she hasn't always lived with them? Ok. (6)

And do we know, what else do we know about D's history, in terms of when and how much mum has been in terms of his life? (4) I can help with this if you're not sure. Ok, so I can help. (1) So, D was born to, and this is a little bit stepping out of my facilitating role to fill in the bits that I'm aware of. So, D was born, two and a half months early, he spent the first month of his life in special care and then he was looked after by mum and dad. So mum and Dad separated in 2007, so D would have been five. So for the first five years of his life, he lived with mum and dad. (6) And what dad has reflected since, was that he shared concerns with the care that D had in those first five years of D's life. He explained that he was working, and that Mum found that really difficult, so Dad's concerns are that D spent a lot of time in the car seat or in the buggy and that there wasn't lots of interaction in those early years, because mum found that difficult, so he looked back and had worries of what those first years would had been like. (12) Do we know many more things? (8) Ok so I'm aware after they separated in 2007, D had no contact with his mum until 2012. So there was a gap when he didn't see Mum and then mum came back and that was the time I become involved. And Dad was saying that, because they haven't seen each other in a while they're starting off slowly, and he's spending a little bit of time with mum and it is hoped that will built up. Yeah, there was a period when she wasn't involved and then a gradual, her becoming more involved. (6) Ok, so, are there any

other activities in terms of out of school, anything he enjoys out of school, clubs, hobbies or things he enjoys? (9)

He talks about playing PlayStation quite a lot. (4)

Does he go to any clubs? (7)

Not to my knowledge. (6)

Ok.

He hasn't mentioned any.(3)

He has a new interest, potentially, of going to the gym. He wants to do it after Christmas to build up his muscles. (5)

Build up his muscles. (7)

He told us that today. (6)

Yep.(3)

He is becoming more aware of himself as a teenager.(5)

Yes. (3)

Ok, and aware of how he wants to look.(7)

Yes.

Yep, he wants a six-pack. (6)

He's starting to notice his height and width I feel. (5)

Puberty. (4)

Yep. (3)

And he wants to do wrestling, he likes wrestling. (5)

Oh yep. (3)

He wants to look like a wrestler. (6)

Oh yes. (1)

Ok. Thank you. (3)

I think it's probably safe to say that in the bubble, (11) there have been safeguarding concerns about the home situation. That have been previously investigated. (12)

Ok, concerns about the level of care at home? (1)

Yes, in terms of parenting and the level of care. (6)

Ok. (3)

And potential abuse. (6)

Ok, that has been investigated. (7)

Historic and current. (6)

From Dad? (7)

From Dad. (6)

Did we ever get to a clear understanding of what happened? (7)

The case was closed. (6)

Ok. (3)

So there was no outcome. (11)

There are no current concerns, or evidence for current concerns. (1)

Ok, thank you, (3) thank you, that's important to share. (1)

Also, before we move on, so we understand his needs, D has an EHC, (4) what do we know in terms of medication and diagnosis? (8)

He's got ASD. (5)

Which question? (7)

It's on his list.

ADHD is on his list. (6)

So he's had some recent involvement from CAMHS? (7)

So, AHD, ADHD, sleep disorder, learning difficulties, anxiety and the latest one is obsessional idealation. (6)

That's a new one. (5)

Not had that one before. (3) It's an interesting one.

It's interesting one.

Honestly, if you google it, you'll find it.

I almost diagnosed a child as normal, when we realised that it didn't exist, but yeah, sorry I shouldn't speak. (2)

So yes he is on medication, he does take medication. (6)

There has been a recent change to medication? (7)

Yes.

Yes, from Doctor G. (6)

Ok, thank you very much that was a really helpful start. (1)

Now, we go onto the next stage. So were looking at relationships and I'm going to ask you to first V think about your relationship with D (4) So if I was a fly on the wall, what would I see in terms of how you and him relate to each other. How does it feel for you? (8)

Can I say I've only known him a few months? (11)

Yes, that's ok. (1)

There's been a lot of history and its developing. (5)

So it's been a developing relationship. (7)

To be completely honest, on the inside, I'm nervous all the time with him. (12)

Ok. (3)

Because of his unpredictability, and obviously I'm still getting to know him, and get to know his triggers and things. (6) I think our relationship is developing, he wants my approval. So he wants to show me things, he wants to share things with me. But I don't think I'm a safe person, I'm not a person he would go to when he's really anxious. (5)

Ok. (3)

I'm not the calming influence. (5)

So he wants to show things, he wants to show good things about him but you're not yet a safe person, that if he was feeling difficult then, then he would go to you. (6)

We're still working towards that. (3)

Ok and bear with me (11) I know this is an unusual question laughs. (2) It says exploring relationships, if you imagine that you and D, were on a desert island, just you and him – how would that be? (8)

You know, if it was just the two of us, and he's away from other people, he's lovely,(1) because I think a lot of his issues come from others around him. If it is just the two of us, then he is full control of the environment. (5)

He'd have a whale of a time. (3)

He'd have the one on one attention. (6)

So he's got the one on one attention, we would like that? (7)

Yeah, he would like that, (3) you would see a different person. (5)

The nice side of D, all of the time. (1)

So, that would highlight his strengths. (7)

Yes, I think so. (3)

If you imagine what you'd be doing, so say you were building a sandcastle, how would that be working, (4) who would be doing which bits, how would you be working together? (8)

I see it as if I was doing it with my child. We would do a bit each, we would let them lead but then join in and take their lead, you know. (5)

So would he be leading? (8)

I think we would be sharing but I would take his lead, so if he wanted to do a certain thing than I would follow. (5)

Ok. (3)

But then I might help out and offer a suggestion. He would be kind of. (5)

Guiding it? (4)

Yeah. (3)

Ok, ok. So does D remind you of anyone? Anyone that you've worked with or met before? (8)

No. (5)

He feels like a new. (6)

I've come from mainstream, so you know. (11)

Ok. (3) It feels like an unfamiliar, like a new kind of relationship. (6)

I have no relationships, with other students, to get ideas from. I've got nothing in my tool belt kind of thing, so I'm literally thinking as I'm going along, finding ways to help him. (12)

So, its feeling new. (1)

Very new. (6)

Ok, so I'd love hear how your thoughts on D are, how does what V's just shared relate to how you think your relationships with D are, (4) so do some feel new or feel different? (8)

Mines different, because before I started in February, but before I knew that I knew his Dad. (5) We'll sort of knew him where we used to socialise and I knew him from the club I used to go to and he used to go to the same club, this was a couple of years ago now. (6) So I was quite shocked, the transformation, A was made when I came to work here, he was a totally different person. (5)

And did you know D in that time? (7)

No, I knew he had a son, and he had children, but not till I came here, I put two and two together. (6)

And D knows you knew Dad? (7)

Well yes, when I started he knew I was in Dragon class, they were told that I'd be coming and Aidyn said that I know Jackie from the pub. So when I started, he said, you know my Dad. (6)

Ah. (3)

We may be used to go out drinking but I didn't used to know him, you know. (5)

So you worked with him last year? (7)

Yes, I did yes. (6)

So did you work with him last year? (7)

No (6)

So you worked with him last year and the rest are newer faces to D. (7)

Well I only knew him in February when he moved Dragon class. (6)

So not quite a year. (3)

Just before colleagues then go, oh blimey that special school they've only moved one person, just in case, I feel I need to justify this. (12)

That's ok. (1)

The class teacher no longer works at the school, there were no other people, which left just one person in the class, she didn't moved, he did instead and Jackie moved with D. I need to justify this.(11)

We know that we're…(5)

I'm conscious that… (11)

It's ok. (1)

He did have someone that he know, we did do a transition period at Easter. (6)

Ok. (3)

It wasn't easy was it, the transition wasn't easy. I must admit, when I saw my name saying come up here, I thought, I don't want to come. (12)

Ok. (3)

Not until I've spoken to anyone I know, because we had a difficult transition. It wasn't too bad and it gradually got more difficult before the summer, the transition was particularity difficult with his behaviour and his unpredictable behaviour. And he got really difficult then with the children and then it got really hard, (12) so then honestly I thought, I'd be coming away you know. Then when I found out about September and moving to another class, and I'd be coming up with him, I was, you know, so it wouldn't had been on top of my list, no. (5)

So that relationship felt difficult. (1)

Yes it did. (3) Very difficult yes. (5)

If you we're on a desert island with D. (4)

It's difficult, yes, because I've come to terms with it and I've got the support of the staff, if you know, things go wrong, I will talk with them. (12) But on a desert island, I just think we'll just on, just chill out, it will be alright, if it is just the two of us, you know, because we do know each other, you know. We would talk to each other and we do have a pretty good relationship. (1)

Ok, and tell me how would we describe that relationship between you and D, you've had that relationship longer than others? (8)

I think he's had things we've shared, he's sees me as a familiar face, as I'm friends with his Dad. So he sees me as, you know, as a bit of a mate, and so he has to tell me what's been going on. And I used to work at Harris and his brother, his brother goes to Harris. So I know his brother, I know M, you know M, you know. (5)

Ok. (3)

And he approaches me quite easily. (5)

So when V said, I'm not sure if I'm a safe person, we wouldn't go to you if things were tricky – would he go to you? (8)

He has done yes, (5) and sometimes, he'll use the room, and he'll like to tell me, that somethings happened or he's had a good morning or I'm only in school till 12, or I've done something well, so he will tell us. (6)

So he will feel ok to tell you that, he will seek you out? (7)

Yes, yes, I think so, (6) what do you think? (11)

I think so. (1)

I don't feel anxious round him at all, I think it's because I've been here longer than most and I've had a lot of students that are similarish. Obviously no one is quite the same, but he doesn't worry me. (2)

So he does remind you of other students? (8)

Aspects of him, (3) there is no one who is quite like him but I've had students who have been trickier than him. (2)

Ok. (3)

So, you know, I'm not afraid of him. I'm not afraid of him at all and I think he knows that. (2) And he knows where he stands with me. He get on really well, I've got quite a good relationship with him and he will talk to me. (5)

And he'll carry on telling you things. (7)

Yes, ok. (6)

I think you're a really calming influence as well, when he's really angry, I think sometimes you can bring him down. (1)

Bring him down. (3)

Ok. Thank you, anything else to add? (9)

I've only had one session with him, but I was pleasantly surprised by how much he wanted to get involved with the activities, which I was doing. (1) I was expecting him to be quite resistant, but he really. (5)

He wants to please you. (6)

Yes, he does. (3) So we were doing, some getting to know you kind of games, he was quite, when we were getting involved, he was quiet happy. (6)

So he can really want that, he really wanted to engage in that. (7)

Yeah, yes, I've got kids in mainstream who I'm trying to draw out, and he really wants to do, he really wants to work on his behaviours and he was very clear with that. (6)

That he wants to be different? (7)

That he wants to do the right thing, yes. (6)

And you can talk things through with him, (5) afterwards you can sit down with him and he can explain to you, what he did and why he did. (6)

So he has these moments where things are difficult. (7)

Yes. (3)

But then afterwards, with a familiar person.(7)

Yes. (3)

He will reflect and talk about it. (7)

Yes, (3) you can say, so why did you do this? And you can have a really good conversation with him about this. (6)

He is aware that he doesn't want this happening? (8)

He is saying about those big moments,(5) that he doesn't want those to happen. (6)

No. (10)

And there was this thing, about some fire alarm, and what was the other thing? (9)

He liked the, (5) S was quite like, it was very erm. (11)

Matter of fact? (4)

Like, I won't be happy if you did that, let's not try and do that anymore. (6) And he's quite like erm. (11)

Like with the fire alarm, I know were going off track here but when he set the fire alarm off, afterwards he explained to me that when he'd done something wrong, he knew he was wrong, so he had to get away. So if he presses the fire alarm, he knew you had to go outside. (6)

Ahhhh. (3)

So that's why he presses the fire alarm when he goes outside, to get out, to get away. (5)

The problem is the noise of the fire alarm. (6)

And then he knows he's done wrong, he knows he's pressed the fire alarm. He's like oh my god, I've done something else wrong, he's next answer is to get away completely. So his next answer is to get away completely, and that's when I've said to him, you can do that now, but I'm not going to chase you around the street. But he said, we'll I'll get run over, but I said we'll I'm not chasing you anymore. And he now says well, maybe I won't run away then. (5)

Oh. (3)

So whether it's been two weeks, whether he will press it again, I'm under no illusion they he won't press it again but I don't know. (5)

But how interesting, that he finds it uncomfortable when he knows he done something wrong. (4)

But he doesn't know how to put it right does he? (9)

And you're following him? (7)

I followed him because he went on to the street,(6) I don't want him to run on the street. (5)

But when he knew that wasn't going to happen, he was less. (7)

He's now going to wait at the gate.

But he haven't been to that point yet, so. (6)

Ok. (3)

But whether that will work, I don't know. (11)

Ok. (3)

There is an explanation into why he presses it, and why he does run away.(4)

I can see the logic in that. (5)

So you've kind of made a different agreement. This is how it could work, ok. (6)

So we're going to move onto step 4. So this is where we think about organisational factors, so thinking about B school factors, things about B schools physical factors, how it is set up and how it is organised. Things that are helpful for D, and things that are difficult for D, so helpful factors and hindering organisational factors. (4) So let's start with helpful factors, how B school is set up physically and the organisational environment. (8)

Consistent staff. (5)

So that you're all in here, every day. (6) Ok, what else is helpful? (8)

All of us singing from the same hymn sheet as well. (5)

Yeah.

Ok, ok. (3)

Being consistent, repeating the same.

So he knows he can't play one of us against the other. (1)

So getting the same. (3)

So we look at each other and ask each other to check. (6)

He did it today didn't he? (11)

He asked one of us, and they said no, so he went to the next one. So we're with that one now. (1)

Ah. (3)

Give each other a nod and wink. (2)

So really consistent. (6)

And he knows that now, he's learnt that one, he knows. (5)

Yeah.

Yeah. (3)

His own space.

His own space and his own things. (5)

Ah ok.

Own space and own things.

I think that's really helpful. (3)

And the fact we've got that room. (5)

Yeah

Yes.

It's a nice, safe space.

We call it his, he knows he can go in that room. (3)

So he has an agreed space he can go to. (7)

Just that room really, any of them can. It's not just him. (10)

Yes.

Yeah he's got that. (3)

There are other safe spaces, depending on where he is.

Lunchtime safe space.

And the outside one as well. (6)

Outside safe space as well yeah. (3)

Ok, and the tick sheet. (5)

Yes. (3)

And that's feedback for how things are going? (7)

Broken down. (6)

He really likes It. (5)

Yes. (3)

And he doesn't have a problem when he doesn't get it. (8)

He'll quite often say, I shouldn't get that tick. (5)

Ah. (3)

He understands it. (5)

He likes then, he has to pay back, to finish, he pays back time and he's happy to do that, so it's finished, it's done with. (6)

Ah. (3)

He likes that.

Consistency.(5)

And that kind of we're moving on now it's finished. (7)

And over and done with. (6)

Yes, right, ok. (3)  What else? (8)

Practical learning, practical functional learning, because that's his strength as well. (5)

What about hindering factors? (9)

That would be the other children. (5)  Because it's the social, he miss-understands social context.

And it's the social interactions he struggles the most with. (6)

Every other student is a hindrance to D. (5)

And the spending time with other students. (3)

But he wants to, he actually wants to, but he doesn't know how to

How to. (5)

So it's difficult. (12)

And it's not just in here, we joke with him that he's like a chief inspector, he wants to know exactly what's going on anywhere. (2) If he hears something next door, he wants to get out his seat and find out what's going on. (6)

It's not just in here, its anywhere. (5)

Is it a hindering factor, that it is just the real lifeness of real schools, the other students might be, we might be able to hear what is going on with the other students. (11)

Yes, but he needs to go out and. (1)

Its special school, so there are difficulties but his year group are an incredibly challenging year group. Way more so than, other year groups. (12)

So unsettled peers. (6)

Yeah, he is in a challenging year group. (3)

Also, kids, around his area. (5)

Yes. (3)

But today one of the children was having some difficulties, he was quite loud and he said that actually I do need to move and so he moved away. (10)

Ok. (3)

So he has got that, I've done the right thing haven't I. (6)

So he wanted that praise. (7)

He was really good. (5)

But the reality is that there are other children in his year group that are unsettled. (10)

In here, there is another student in here that causes anxiety. As well. (5)

Ok. (3)

And he sits on that table there. (6) And that doesn't help situations either. (5)

Ok, so one of his classmates, (6) anything else? (8)

I think sometimes, it can be hindering that it's a nurturing school. (10) So there is a lot of staff, so it's ok for staff to look at each other and check something. But D can walk down the corridor to check an answer, to a question. But as a school, we're very open so we're going to answer it, and that itself can be very inconsistent to what he's been told by the class staff. (5)

And he likes to do that. (6)

That is kind of wrapped up in that, sometimes he knows too much, or he hears too much, just by the open dialogue of what's going on. (5)

So that's about a large number of staff, of whom not all of them know him, as well as, you all know him? (7)

Yep.

Yes, and no matter what anyone is talking about, he automatically assumes it is about him. It could be anyone talking in the corridor but he always thinks they are talking about him, all of the time. (6)

He is very aware of what is going on. (3)

He is very aware, even the students having a conversation, he thinks it is a negativity about him. (5)

Anything else? (9)

Outside play. (4) Again, he can find that very difficult. (5)

The large group inside, is the same problem.

The routine, that he goes outside and there are lots of other students around.

The noise.

He has a choice, and he wants to go out. (6)

Quite often, he wants to go out. (10)

He wants to play with them? (8)

He chooses the wrong ones out there, causing more anxiety. (5)

Anything else for helping or hindering? (8)

I would say, that there is a fear factor, (5) there are other students and there are other staff, who are scared of D. (12)

Yes. (3)

Particularly if he is having a tricky time. (5)

And equally he is quite frightened of other people. If there is another child, he acts like he is terrified. (12)

And he actually isn't. (10)

I think he can appear more scary now, because he is getting bigger, he is the same size as us, whereas before he was smaller and it is more difficult as he you can see he's quite stronger.

And the fear factor in here, since he's had more issues, so they've seen his behaviours, they are getting more scared of him, they are shaking and jumping, physically jumping. (12)

Yes. (3)

If he comes up to them during snack time, in a very friendly manner, they are reacting. (6)

Yes. (3)

So this has impacted on his relationships with peers, as they are more unsure. (6) Are we saying that relationships with adults are more unsure too as they feel things are getting more difficult? (8)

Yes. (5)

Ok I think that's good to acknowledge. (1)

I think that a positive thing is that he has got safe adults in the class. (10) That he is bonding with, and he is being more open and trying to reflect on his feelings and he has got a lot of access to that, and I think that's a real positive thing. (5)

He's got time and opportunity to spend time with those safe adults. (3)

And to add to that, I think you all being willing, and committed to giving up your Wednesday evening, is a definite helping factor – that you've given your time to be a part of this process today, linked to what you've said is a helping factor.

And again, its fine for D to have an individual provision, that's a positive within school, it's absolutely fine for him to be doing different lessons, different sessions, with support, without support, we want to get that provision right for D. (1)

Being able to adapt things. (5)

Absolutely

And being able to look at setting. (3)

And I know that in other places setting might be a hindrance, but it's not here, it's celebrated.(1)

He doesn't always like to think he's doing something that's different, he likes to think he's doing something that is the same as everyone else. (5) So actually it's a little bit difficult, because sometimes you want to take him for some time out, but he doesn't want to come with you. (6)

He wants to be here.

He wanted to fit in.

He wants to be a part of the class team.

But when it's linked to a job, he's fine. (1)

Last year he had a lot of tap back and hand massage, where this year, we've offered him that and he doesn't want it, does he? (11)

And he wants adult time, doesn't he? (6)

You call it adult time? (7)

Adult time, yes. Just to sit and talk to him, you know. (6)

Thank you, (1) so we're going to move onto step 5. This is where we come back to you S, and we ask you just for a couple of minutes, to think about what D would be thinking, if he were he, what he would be saying if he were here. What would he be saying to us? And I'd ask you to phrase it as in the first person, so for example, I like, or I feel and to speak and share D's voice. (4) Does that make sense? (8)

Yes, (3) I like coming to school. I want to do the right thing. I want to be with my friends, and with staff and the students. (1) What else shall I say? (11)

It's good, it's good. (2)

Yeah, that's true. (3)

I feel scared? (1)

Yeah, I do, I do feel scared when other people are doing the wrong thing. I don't like them to break the rules. I like rules, and I like to know what is expected of me. And what I should always be doing. I don't like it when other people shout and get angry. I like to go and find out why they are doing that. I want to make everyone happy, and everyone calm. I don't want people not to like me. I want to go outside to play, because I want to see my friends out there. I want to have my time to eat my dinner and I want to have my time to meet my special friend in the hall. And I definitely want to be back on full time, I don't want to be back on half days anymore. I don't like going home at dinner. (12)

And what would you say about home? (8)

I like being at home, but sometimes I don't like my brother M because he's rude to me and he calls me names, (5) and some people call me the devils son because my name is D. And I don't like that, because I'm not the devils son. I just want to be D. (12)

M do you think that's ok? (11)

We talked about that today actually, we were writing our names down and I said to him, do you have a middle name? And he said 666, well that's what my Dad says, you

know the Devil's son. And he came to you didn't he, and he told me about it, I am, I am. He wants to share that with you. (12)

I am proud of my Dad. (5)

Yes, yes. (3)

And I like to tell everyone what my Dads doing. I want to talk about Dad to everyone I pass. (5)

Yes. (3)

And I like to tell everybody, when I've done something wrong, I like to tell every person in the school. (5)

Thank you S that was beautifully done. (1)

So this is the next step, (4) thank you M, (1) so in a moment we're going to ask M to reflect back our discussion so far and start to make some sense of it. (4)

I missed that last point.

Can someone just. (7)

I want to say sorry to everybody. (6)

Thank you, I knew it was important I was just trying to keep it mind. (2)

I think I want to say sorry to everyone, because I want people to tell me it's ok. (6)

It's ok. (3)

And I still like you.(5)

Yes. (3)

And he hasn't always had that reaction has he? (11)

And did you get all that – I want people to say I still like you? (7)

Yes. (6)

Can I add anything, (9) I think he might say, I don't always understand. I don't always understand what you're saying because of the language. (4)

I don't always listen to what you've got to say. (12)

And I don't always understand what is going on in a situation, but he wouldn't be able to articulate it into those words. (5)

That's ok. (3)

He doesn't always understand. (6)

And the thing that I've noticed is, from lunchtime today, when she always starts with him, she always starts with – I need you to listen to what I am going to say. When she wants to tell him something and he'll go ok. So I've been saying that from now on, I'm going to tell you something important so I need you to listen with both ears. Because I think that when you talk to him, he listens to the first bit. (1) And I said to him the other week, no not now and he just go no, and that just blew it up. (6)

Yeah, yeah. (3)

So I do say to him now, listen very carefully, both ears. (5)

45:50 – Irrelevant conversation regarding a personal call.

46:11 Re-start.

So the summary, I knew nothing about this, apart from I was coming in to B school this afternoon, to help R and it was a about a boy, so it really was a blank sheet. (1) So we've got D who is 13 years old. He lives at home with his Dad, his step Mum and his brother, he likes his brother but they don't always get along. His Dad has been on a journey through his life, and D is very proud of his Dad, but his Dad is still continuing on that journey as well. He does see his mum, he's got a younger half-sister as well. His mums got her own needs, both physically and learning needs as well. D had a difficult start to life, he was born premature, he has difficulties that go along with that. When he was 5 years old, Mum and Dad split up, but there were question marks about that and how many positive interaction experiences he had around that and how many nurturing experiences, that he had in that critical stage of development. Mum stepped out of his life for 5 years and came back 2012 and gradually he has had more visits with her, including last week when he spent the whole week with her helping her to move house. (6) The other thing to bear in mind concerning his early history and his journey up to now is that is some historical safeguarding concerns but there was nothing ever taken forward and that was there as well. (12) He is at a special school, so he does have an EHC plan and he is supported by CAMMS, so he is supported by CAMMS and he has multiple diagnosis. (6) He loves wrestling, I was going to try and draw a wrestling outfit with the Mexican mask and everything but I didn't. I'm not an artist, (2) he loves wrestling and he is beginning to take interest in the gym which is probably associated with that, and he loves playing on his PlayStation and he's good at reading. Other things he is good at.

Interruption 48:38 – Another child enters room.

51:14 Re-start:

So he loves wrestling, he is good a reading. He is also good at his art, he is very caring of other people and he is very proud of his other achievements. (6) He likes to share his achievements between home and school, and from what I'm picking up, it's both ways. In terms of his behaviour, it can be very up and down, within one day, it can be very very low and then he can be very very happy. (5)

That's within like, a session. (12)

Yes. (3)

It could be within like, 10 minutes.

0 to 10.

0 to 10, yeah, and back again. (12)

And that can be unpredictable and that in terms of some relationships can cause some anxiety, and people developing relationships with him because you never quite know where you stand with him. You never quite know, what is happening. And you never quite know that he gets very anxious with things, and he gets very anxious with people who aren't doing the right thing. But afterwards, he is always able to say sorry, more importantly he has learnt how to reflect. (1) So he hasn't just learnt to say the word sorry, he also knows how to reflect on what's happened and why, and that's really important. (5) Lots of relationships that are going on in the classroom as well, some of them are still developing, some of them have been going for longer. But mostly they are more positive, than not. Even though there are some in the past that are a bit unstable, this year, they seem to be a bit more settled with that. And another word that kept coming up, what about him sharing. And I said a minute ago, about him sharing his achievements on what he is doing. He is good at sharing things. (6) Another key part of D, that kept coming out was about his need to be in control, and that can often relate to the anxiety, that need to be in control. (5) Lots of different things going on, in terms of organisational factors, we feel he is in a very positive place that can meet and adapt to his needs quickly for him. The hindering factor really focussed around other people and his ability to cope with other people's needs, and other people's needs really and what they need. And he's got to sit alongside that. (6) And his voice, there was a lot that came around, I want to do the right thing, I want other people to like me, but he's worried, he's anxious around – do people like me? And that takes up a lot of his voice and that takes up a lot of his mental space. Oh one thing I also put up on here was about him being hyper vigilant, him needing to know what's going on and why it's going on as well. When he's anxious hell run away and when he's anxious he'll find a way to run away. So he's breaking the rules, he feels more anxious when other people break the rules as well. But there are lots of positives here as well, he wants to go to school full time, he wants other people to be happy. He's proud of his Dad, he likes being at home and he wants people to be friends, you know, he wants that, he finds it really important. (5)

Thank you M, thank you. (1)

I think sometimes he, when something first happens, his first reaction is to lash out. And then he's done it, you see the panic on his face. (5)

He's done it, before he's realised he's done it. That's what we've got to stop D.

And that's what we've got to stop D.

And sometimes people do just go sorry, but he is sorry he's done it.

He's done it before he's realised. (12)

I was going to say M, we've talked about the unpredictability of D, and everyone likes him so much, so were keeping things positive (1) but the run away, the flight, the problem is the fight and what we actually haven't covered there (10) is his hitting and hurting a lot of people. All the staff who are working with him, he's hit them, he's physical with them, he's hit other students, he's hit parents.

Everybody.

It's not fight or flight with D, its fight and flight. And everyone and anyone, he lashes out physically in a very aggressive way. (12)

Yesterday. (6)

Is it get in my way or is it I'm passing you so. (5)

No, they are not in his way and I'm just passing you, it's I feel this and I need to give it someone so I can cope with this.

It's like, I'll could run that way, but there's no one there, so I'll run this way so I can pass people who are stood that way. Its fight and flight. (10)

It's not us, he doesn't target us, and then it's anyone. (5)

I don't believe he knows who is going to target. (10)

I don't think it matters. (5)

No it doesn't matter.

We'll he's done it to people he doesn't even know. (10)

When he is really not feeling ok, he is I am not feeling ok. (6)

And again, when J, when you said, in terms of moving up with him, when we de-briefed, a lot of that concern wasn't for D, it wasn't for you, it was for the other students. (1)

The safety. (6)

The safety and you're feeling of. (7)

Yeah. (3)

Your feeling of I'm accountable. (6)

I am going to protect these children, you know.

Something that he said to me, after the last time, the last major incident, he hit S in the wheelchair, and when I talked him through it the next day, I said to him, you can't hit S, because S can't run away. When you go to other people, they can get out of your way, but his answer was, but she can move her chair. She's got a button and she can move her chair, and he actually thought, I don't think he sees her as any different to the others, because she can get away, she's got a chair but I said to him, but no, she can't. And he said she can, she can go past in her chair, you know and that was. (12)

Yeah, ok. (3) And I think it was helpful that you added that ok. (1)

I had a query and I don't know if it's right or wrong about when he's in distress (11) , setting the fire alarm off, yes he wants to get away but like with the hitting, does he want other people to feel his distress. Because it is a very distressing time for a lot of people at this school, so it's something that I've just been thinking (5) and I don't know whether its right or wrong, as I don't know him as well as the other people but it is something that's been in the back of my head. (11)

Well hold on to that Emma, (4) because that links really nicely onto the next step. (1) So we're thinking really nicely together about what might be happening. Where we are hypothesising and thinking with all of this insight, how do we understand what is going on for D at this point? (4) And at this point were just looking for lots of ideas, so at this point, you may have a hypothesis around what those moments are about, so it's generating explanations, what is happening for D at the moment. (9) So shall we have that as the first one? (7)

Yes. (6)

You were saying, at times of real distress. (7)

Yeah, erm, he's setting off the fire alarm and he's hitting, it distressed him, the fire alarm, the noise itself but do you think he knows that it will help him get other people into his level of distress. (6) Does he want to pass on that distress to other people? (11)

That he is sharing the distress? (7)

Yes, yes, because that's quite similar to him hitting, because I've seen him go through like 4 people in one incident and he's just gone. Hes causing them distress because he's feeling distress. (6)

Hes having a really difficult moment, and he's not able to manage or regulate that. But your response is that, he is looking to pass it on, or share it with other people. Because on his own, he is not able to manage that and make things better. (7)

Yes. (6)

Yes, ok, (3) are the any other hypotheses? What is going on for D? (9)

I think it's confusing sometimes. (4)

Ok so thinking that he is confused? (7)

I think he just doesn't know what to do. (5)

Yeah. (3)

He just doesn't know, how to get out the situation he's in and it just escalates.

He reacts with aggression and hurts others. (6)

And why might he be unsure about what's going on and how to manage it? (8)

I think it's the level of emotion, he just can't deal with that level of emotion. (5)

He kind of wants you, but he doesn't want you at the same time. (6)

Like when he's really anxious, he's let me give me a hug or something and the next things he's like hit me. He doesn't really know. (1)

So again with emotions, he's not sure what to do with them, or how to manage them? (7)

His emotional skills are very poor. (6)

And why does he find that so difficult. (8)

I think that there's been attachment that obviously has been thrown around, I don't think he's learnt. (5)

It's not difficult is it? (11)

I don't think he's learnt, I think some of his role models maybe, have not shown him how to deal with his, well there not dealing with their emotions and he's mirroring that. (5)

Yeah, yeah. (3)

So his model of how we understand and regulate our emotions have been difficult, so the key people in his life have struggled to manage and make sense of the world. So he's struggled how to do that. (6)

He might have learnt negative ways of doing that. (4)

He also has limited self-soothing such as.

Well he's also said to us, that he had anger problems and his Dad at a similar age had lots and lots of problems. (6)

Yeah and that's why he's keen to get D as much help as he can. (1)

Because he didn't get it as a child.

And he didn't have those key people around and it was difficult for him.

I do feel the parents, really want to help him as well. (5)

Oh yes.

I think they really do. (3)

But if they're still learning themselves then they can't manage that and it's difficult to model.

And he doesn't always want them to know. (12)

Sometimes if difficult because sometimes he wants you to tell them about what's happened at school and other times he doesn't want you to tell them. So it's difficult. (5)

But then he tells them anyway. (6)

Yeah. (3)

He does actually want to tell them. (10)

That sense of what we've talked about, about things being on his terms and a sense of control, (4) how do we understand that? Why is that important to D? (8)

Because it brings anxiety. (5)

Yes. (3)

He is always at a heightened state of anxiety. (6)

And why is he so anxious? (8)

Well today he was particularly high, because he knew we were going to have this meeting. (5) He knew, he spoke to you this morning didn't he? (11)

Because he doesn't have secure attachments. (5)

Yes, ok, so in not having secure attachments, he is anxious, (6) well do you think he is anxious about how relationships in the world work? (8)

If you agree with the ASD diagnosis then that in itself would say that he doesn't, he lacks understanding of every single social situation which is the world. He does have a cognitive learning disability, so he's going to have difficulties understanding speech and language with or without ASD.

The processing. (6)

Ok.

And the processing.

Yeah, yeah. (3)

So the feeling safe in the world, it can feel difficult? Confusing? (9)

Yeah because he was told before half term, he was going to be on a part time contract thing and that it was going to be reviewed on Friday. That is massive in his mind. (4)

He can think of nothing else this minute. (6)

So I've got a big concern that it is quite. (5)

He doesn't know where he is? (7)

He doesn't know, we don't know.

And that's all he's talked about today. (6)

Its because he sees it as our opinion of him, so we might say to him, your going to go back full time, even though were not saying, because you've been good, in his head, that's how he sees it. Its black and white you know. (5)

I'm either good or not. (6)

So we've talked a lot about, that he wants people to like him and think good things of him, he often assumes conversations are about him, or he's interpreted it as if I can't stay, it's a negative reflection of me. (4) What is that about? (9)

Low self-esteem. (4)

And why has he got low self-esteem, why doesn't he know that we might think good things about him? (8)

Negative life experiences and he failed in mainstream.

And he hasn't got the friendships here.

His perception, is he failed in mainstream and paperwork would also say that he failed in mainstream and at some point he was moved to a special school. (5)

Hes had difficult experiences in terms of relationships in his own life, he's had time in school which was difficult. (6) And what did you say? (7)

And the fact that, his friendships, he struggles with them and I think that he knows that they don't really like him. (6)

And he has you know, and they don't really like him, they don't want to play with him, they don't want to be with him. (5)

He's got the cognitive ability to understand and to perceive, that people are scared and are worried and that he's a threat, people don't really like him. But he doesn't have the cognitive ability to fix it. (6)

And he does try, like at break time, he does pull his chair up next to the others and to be fair, most the time, they don't walk away from him. (1)

They don't really interact with him either though.

They sit there with him. (5)

Maybe they're too scared to move away from him.

He said to C, can I sit with you, she said yes. And she was like, yes, you know it's automatic. (6)

So he's aware that people are wary of him? (7)

Yes. (6)

And at the same time, he wants people to like him? (7)

Of course, yes, (6)

So he's not quite where he wants to be with that? (4)

He's quite clever in that he knows who to avoid. He knows people that won't stand it and would probably give him a punch back. And he doesn't tend to go for those ones. (6)

No he don't. (3)

So if he's really sure it's not going to go well, he'll avoid it. But for the rest he'll try and have a go. Ok we're nearly there, you're doing great. (6) With these hypothesise in mind, think about, with D in mind, what things we might want to do, what strategies, practical things that we might want to add to what's happening. (4) And at this point, were not saying were going to do them all, they're not finished, polished, we're just generating ideas, with this thinking in mind. What might we want to do with this thinking, going forward? (9)

Shall we list what we're doing as well as. (7)

Just go for new. (6)

For new? (7)

Yes, so what we're going to add or change about what we're doing. (6)

It could take another hour.

I know. (2)

I think some kind of structured play, so we could support him. (5) Finding a friend basically, some supported play and sharing, a game or something like that.

So positive time with peers. (6)

There was a thought that if he does the right thing in the hall, at lunch, because I'm in the hall every day, sits there, eats his lunch, doesn't get involved in other people's business, he can have the last 5 minutes, he can have a friend, he can choose a friend from the hall to come and sit with him. (5) But unfortunately he doesn't choose the best person. Because it's difficult to break that now, because he is desperate to have that one person. (12) It's not the best person and I'm trying to explain to him now that this person is not the best person and he doesn't always have the best lunch either, so therefore sometimes he might not be able to sit with you, and it's not your fault but he can't see that. That's the problem at the minute, we need to find someone who we know isn't going to have bad lunch, who we know is willing to come and sit with D. (5)

There is one, A, (4) but I think A sits with him because he is afraid of him. And is too frightened to say no. (5)

And it is a difficult situation really. (11)

He was with K last year, (5) wasn't he? (11)

But I think that's broke off that one. (1)

But it's a positive in that, he loves that 5 minutes, to sit with him and do what he wants, but as I said it's difficult.

I think that for D, a lot of his thoughts are about friendships, and he's at a special school so they've all got their own difficulties, so I think it's about us finding a way of helping the others find a way to understand him, so that they continue to be tolerant of him, less fearful of him and supportive of him. (5) But it's about putting that across in a way that they can understand. (4)

And what kind of things could that include or what could that look like? (9)

Well we talked about a circle of friends, which I guess is a pupil version of this. (4)

Ok. (3)

In a much smaller way. (5)

We've tried talking to the students haven't we? (11)

Yes. (3)

We did that more of a de-brief as well, after the incident. (6)

They were still quite petrified of him.

There was quite a fallout from that, wasn't there. (5)

So talking about what is happening, and how we can help them understand it. (9)

We're trying to position ourselves differently in the class, to try and do the best we can to make sure there. (4)

It makes them feel secure, doesn't it? (11)

So helping them know that you're…

There for them. (7)

Yes. We've spoken a lot yes, haven't we? (6)

Maybe like, having sessions, like that me and S are doing, introducing like a friend, to join in with that session. (4) Because he's quite reflective on his own worries and the different kind of reflections that were doing. And maybe they will see him in a different light. (6)

Ahh.

Yes. (3)

So introduce somebody, maybe just one person into the group. (7)

Maybe not all of the time, but like some of the times. (6)

They'll see him being the nice D won't they? (8)

Yeah. (5)

We tried to encourage him to join sessions with the group, but he doesn't want to. (6)

But the other way round of having a session that is his, and having other people who join it might work. (4)

Yeah, yeah. (3)

What about, if we were saying some of these hypothesis is about, the world being a confusing place, not bring sure what people think of me, how the world works and whether I'm ok. (6) What about things we could support him, letting me know he is ok, and that the world is a safe and ok place to be? (9)

It's difficult isn't it, especially when he wants to say sorry, and saying things are ok, because actually sometimes it's not ok, sometimes we do have to challenge him. On some of his behaviours and choices. (12)

I suppose it's the use of language, so like, I like lots about you, but I don't like this behaviour that you've been displaying. (1) How can we sort that out? (9)

So something about consistent language that everyone feels happy for them to use. (4) I think it's a really valid point actually that we want him to know, that what he has done isn't ok, but we'll see him tomorrow and to have a good day. (5)

He likes that.

He does.

He does like you saying that. (3) He'll go, I know I really hurt you yesterday, you know, I'm really sorry, do you like me again now? And I'll go, well I never didn't like you, I wasn't happy with you but I still like you. (6)

Ok (3) so you've got some kind of. (6)

So you know, he does like to apologise to you, so we don't want him to go around the whole school.

And it's difficult because the students aren't able to react like that, to respond like that. (5)

Yes.

Yes, that right, (3) because they'll just go.

If he doesn't get the response he wants, then he'll just go, and he'll lash out again.

So now when he does something wrong, he wants to go around everyone in the whole school.

We've said to him, we'll send an e-mail, we'll send an e-mail and everyone can have it. (6) He accepts that doesn't he. (11)

It saves him saying sorry and repeating it, over and over again.(1)

The thing that causes anxiety never goes away.

Well he wants to get everyone's permission that it was alright. He seems to accept the e-mail thing doesn't he. (6)

What I'm struggling with, is how we teach him, self-soothing strategies. (11)

And lets definitely talk about that, (1) the suggestion is some kind of shared language or script around how things are finished and that were moving on from them, but were not necessarily saying its ok for you to hit me, I didn't like that but see you tomorrow.

Try not to carry it on the next day.

It's finished, that was just today. (4)

V has said that whatever happens at school, stays at school. You can't bring it into the home, or vice versa. (6)

His attaching work is about self-worth, about being a good and a bad boy, and he's learnt that and so with that language and with him understanding everyone has a

variety or emotions and a variety of behaviours. Hopefully his anxiety will lessen because he's got it wrong in the way he's thinking. (5)

We want him not to make that link between I'm only ok when I'm good because we want him to be ok, to know we like him even though something happened. (6)

And that type of thing and the self-soothing strategies are what we're trying to cover. (9)

Let's talk about self-soothing. (4)

So I've already started giving some of the emotional literacy activities we are doing in his session but for S to do.

I'm going to do it some mornings, not every morning but every couple of mornings, just get the cards out and talk about the different emotions. Try and relate it to something he has done and what we could if done differently.

Exploring things that he could of done differently, to support him in managing his own behaviours.

And I've got one that is like warning signs, triggers, coping strategies, stress behaviours. (6)

Ok. (3)

Kind of, I'll do that and we've got that thing, set up, for him to use in the classroom, as a way of processing some of his emotions, reflecting on his emotions. (4)

Ok. (3)

Also doing little stories, with S and with myself and with whoever. (4)

Sometimes distracting him, distracting him from what is going on at the time, as a strategy. (5) Like the little wrestler behind you, the coloured cards, when he gets angry he has to change card. Today it was on red wasn't it, he was angry and I just went what colour is it? Ooo and then he quickly changed it and his anger had gone, it had completely gone. (6) Not that it works all the time but saying something different or saying something to make him laugh because he said to me today, you say really silly things to me. (4)

Yes. (3)

But saying something that is silly, it just calms him. (6)

Playing games, so we were playing games, sometimes to do with the wrestling, as a distraction, so again, building up his toolkit of distractions. As a coping strategy. (4)

If we just pause.

78:49 – 79:25 EP's M and L swap roles.

So just to capture that, it sounds like we're looking at teaching him, or what he can do. Or we can do, to prevent things from escalating, or I'm just wondering if there is a strategy or action around consistency or everyone doing the same, or implementing the same approach. (6) So is there something that we can ensure is always happening in the classroom – when you're not there, you all are there. (4)

Inaudible

So we then share it with the girls.

A's been like there, then we'll share it with the girls, we're developing together the kind of strategies to bring back into the classroom. (6)

He needs a lot of input. (5)

Hmm, yes. (3)

Although he doesn't want you to be with him, he needs you to be with him. (5)

And when we spoke about self-soothing, my impression was that we're right to teach him about, how to manage his emotions but I'm also thinking he might be at this stage where he needs us to co-regulate his. (11)

Yeah, yeah. (1)

For us to be involved, to distract him with a story or a funny joke, to help bring him back.

He almost needs that person to sit next to him.

All the time, yes. (4)

When we talk about learning those skills, we always talk abbot that skill of co-regulating together before we go and do it independently. So are we saying that we're at the stage where developmentally he is starting to do it but he's not yet ready to do it on his own? It's pitching our teaching, where he knows. (6)

We can do it together. (5)

All the time.

Constant.

Constant reassurance.

Constant. (3)

And we try, but the nature of the class, we can't.

I can't do it.

We can't (10)

We try, we juggle.

You know, because we've got a couple of others who need it. (1)

But he is better, with someone sitting there. (5)

Well we saying that some of what he finds difficult is his low self-esteem, so interpreting things in a difficult way. (6) For dealing with it, or him thinking that people are thinking about him in a difficult way. Are there any other suggestions around that? (9)

That is quite difficult because he does always think that everyone is talking about him. (11)

That's where it needs that person, because if you pick up on it quickly enough. (5)

You can distract it.

Or you can be reassure him on what's going on.

What's actually happened and if you get that early on, early enough, it's when we don't manage to get there quick enough. It escalates and turns into something bigger, that it didn't need to be.

If he hears something else that is going outside, he wants to be out there, but if you're sitting there, you tell him it's don't your job this time, then he laughs and he's forgotten about it. If you're not there, then he's gone, and he's out there trying to sort it out. (6)

So were trying to reassure him straight away.

Being there to assure him.

All the time. (3)

And it's like.

Going outside on the playground, he desperately, desperately wants to be out there on the playground and I personally think he needs to be out there to learn how to be out there and how to interact with other people,(5) rather than just sitting there over lunch and not having any interaction. (12)

But he almost needs that person glued to him. So that as soon as you can see a problem starting, you can almost step in there. (11)

We try to have staff outside.

We do, we do try to make sure staff are out there. (1)

I'm just thinking, is there anything we can think, we try to step in there quickly (4) because we know that helps.

And that reassures the other students as well. (9)

Yep.

Yes. (3)

That they know were there and were keeping our eye on him the whole time. That makes them feel safer. (5)

If he's feeling unsure, I'm just wondering if there is anything else we want to think about, how we help him get the feedback that makes him feel ok. If we haven't spotted it straight away, I guess we want him to be asking us, or inviting us appropriately. (9)

I was thinking of doing positive qualities, maybe with the whole class and then all having to write or put pictures or something on a sheet of paper so their opinions of that person are like stuck on his wall and then if he's feeling like low, that nobody likes him, then maybe he can be pointed to a picture and reminded of that, this person thinks that your good at blah, blah, blah. This person thinks, because you can't always have a person to say oh your this, oh your that. But if you can have something that tells him that, oh yeah I am that. That might act as another way. (4)

So something tangible, that is a positive reminder. (6)

Anything else that you want to add before we look at things that you want to make a start with. (8)

(10 second pause)

Shall we move on? So for next steps, what we're looking for here is just two or three things that were going to make a start with, so that when we come back to it, in the next week we can do, so they need to be small steps, doable steps, in the next week. So something that we want to take forward. (4)

I think the intervention.

I think doing the cards. The emotion cards and things. (5)

Yes. (3)

Every other day, I think if we did it every day, it would be too much for him. (5)

So this is daily practise of the things he's doing with you.

And not making it, only picking out the ones that are relevant, you could look at them and pick to the ones that you think are relevant. Things that have happened that you can talk through. (6)

And who's going to do that? (9) Would that be you S? (4)

On a Wednesday.

On a Wednesday.

Just on a Wednesday morning. (6)

Ok.

Trial that during the morning sessions. (3)

And we know that is helpful, if we are going to do it and someone's going to check up on us. So shall we say by the end of the week S, you're going to set up daily sessions, (6) and can I ask someone to be there, so you can check that, that's in place by Friday. (9)

We've only got tomorrow really, because Friday is a (inaudible). (11)

Ohh, so shall we say Tuesday next week, that, that's been. (1)

Yep. (3)

What else do we want to take forward? (9)

Can we do a friends session (4) – is he ready do that? Or is it too early? (11)

We can do, but what is everyone's thoughts about that? As I've suggested it and I've not kind of. (8)

Well it depends if there's a purpose to that. (5)

So are you thinking that that's a negative thing or it shouldn't be done yet? (7)

You would have to pick the friend carefully. (6)

Yes. (3)

A passive friend. (5)

We well are artificially saying that we are doing things by next Tuesday, if that's something you want to explore then you might want to talk to the class team about who might be a potential friend for the future. (4)

I'm just mindful that he has only met me a few times and he's done one session with both of us, and I want to get that sessions quite. (11)

Established.

The routine quite established. (6)

And I think that's fine, if you're doing something to begin to establish. (1)

A decision has to be made tomorrow about time, as at the moment he's on mornings only.

And how to communicate that with him. (4)

He will be anxious the minute he comes in tomorrow. (5)

Let's definitively talk about that, because I think you're right but just following on from these because I know your right. (1) Is there a third thing, we want to take forward? (8)

I think that if he are saying that he needs an adult to co-regulate his emotions and if that's not always possible, due to the nature of the students then I think we need to look at timetable and staffing. (5) To identify where that won't always be possible, because if he is at special swimming or whatever, I'm going to have to look at staffing. (4)

Ok. (3)

Ok, it is tricky isn't it? (11)

And what would that look like? What would that involve? (7)

It, that would involve looking a high needs panel, the actual funding that is attached to D, the funding to recruit an additional TA to the class. Given that I was told this morning that the staff to student ratio is about 2:1. 1:2 for every one staff, we have two pupils. Across the board as you do it as a single figure.(6)

So a first step, is you two looking at the timetable and deciding.

Looking at the timetable.

By Tuesday? That ok? (4)

End of Tuesday yes.

Ok (3)

And if we leave the rest here, my reflection was really around the peers and if he know that it really matters to him, what people think of him, if we just leave these here, I'm wondering if they would need revisiting at a later stage.

I think that, if they can see his behaviour improving, they will feel happier and that might gradually. (5)

Safer.

Feel safer. (6)

Yes. (3)

R, do you have the information on circle of friends. Can you pass that information to V? (11)

Shall we add that as another action? (7)

Yes.

R to e-mail you with some information on circle of friends. (6)

Ok. (3)

It was a long time ago but I've know adapted it to make it relevant to a class.

And they all ended up with a sheet, which was about him, which was positive.

So I could past that, but we are wondering in terms of future steps, something involving the class, so they understand D and that D getting some positive feelings about him. Yep, ok. (6) So really brilliant, some really tangible things that we can be getting on with. (1) So how'd you want to do this? Is there something tomorrow or shall we finish and then have that conversation? (8)

Finish. (5)

Ok. (3)

So, for the final part of this we are going to do a round of closing words, so I am going to ask each of you to share one word which reflects how you feel about the process. This is about having spent this afternoon working through this circle of adult's session. (4) So one word that reflects how you feel about the process – does that make sense? (8)

Can I start with you V? (4)

I'd say productive. (5)

Productive yes. (2)

A (8)

I'm a bit neutral at the moment to be honest. (11)

Neutral. (6)

Reflective

I think I feel quite positive about it.

Interesting. (5)

I just wanted to say though, I actually think, I know we've had all this but he's actually come on, when I look back, I didn't have him last year but when I used to see him, I've seen him for a number of years round the school, but I actually think he's moved on quite a bit, he are being quite tight with him, but when I think about all the things that used to happen and what we used to do and where he used to be. (1)

He used to have a lot of safe school.

I think he's moved on. (5)

Can you remind me of your word – was it positive? (7)

L. (8)

Very supportive.  Very supportive. (1)

And I'm going to add one.  I'm going to add complex. (5)  That there is layers to what is happening.  Where we are at and where different members of staff are at in their working. (6)

So we would of asked M for a word at this point but that has brought us to an end of our 10 steps.  Thank you very much for staying and spending your own time. (1)  I will leave this as yours and it would be so great if you can check up on each other for Tuesdays actions and I would encourage you to read this later in the term and get it out and think about if there is anything to add – is that ok? (4) And shall we finish with a discussion about what would be helpful about tomorrow, before we go home? (1)

## 7.11 Appendix 11 – SNR scores SPSS output

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Ante * Cons | 4472 | 100.0% | 0 | 0.0% | 4472 | 100.0% |

**Ante * Cons Crosstabulation**

| | | | Cons | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 10 | 11 | 12 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Total |
| Ante | 1 | Count | 0 | 4 | 39 | 14 | 38 | 59 | 96 | 55 | 72 | 22 | 16 | 5 | 420 |
| | | Expected Count | 32.0 | 5.9 | 25.6 | 13.0 | 19.6 | 78.5 | 29.6 | 64.4 | 83.3 | 36.0 | 24.0 | 8.0 | 420.0 |
| | | % of Total | 0.0% | 0.1% | 0.9% | 0.3% | 0.8% | 1.3% | 2.1% | 1.2% | 1.6% | 0.5% | 0.4% | 0.1% | 9.4% |
| | | Std. Residual | -5.7 | -.8 | 2.6 | .3 | 4.1 | -2.2 | 12.2 | -1.2 | -1.2 | -2.3 | -1.6 | -1.1 | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | Count | 3 | 0 | 6 | 8 | 2 | 19 | 1 | 13 | 3 | 2 | 2 | 1 | 60 |
| | Expected Count | 4.6 | .8 | 3.7 | 1.9 | 2.8 | 11.2 | 4.2 | 9.2 | 11.9 | 5.1 | 3.4 | 1.1 | 60.0 |
| | % of Total | 0.1% | 0.0% | 0.1% | 0.2% | 0.0% | 0.4% | 0.0% | 0.3% | 0.1% | 0.0% | 0.0% | 0.0% | 1.3% |
| | Std. Residual | -.7 | -.9 | 1.2 | 4.5 | -.5 | 2.3 | -1.6 | 1.3 | -2.6 | -1.4 | -.8 | -.1 | |
| 11 | Count | 96 | 3 | 0 | 12 | 31 | 48 | 7 | 18 | 21 | 20 | 7 | 1 | 264 |
| | Expected Count | 20.1 | 3.7 | 16.1 | 8.1 | 12.3 | 49.4 | 18.6 | 40.5 | 52.4 | 22.6 | 15.1 | 5.0 | 264.0 |
| | % of Total | 2.1% | 0.1% | 0.0% | 0.3% | 0.7% | 1.1% | 0.2% | 0.4% | 0.5% | 0.4% | 0.2% | 0.0% | 5.9% |
| | Std. Residual | 16.9 | -.4 | -4.0 | 1.4 | 5.3 | -.2 | -2.7 | -3.5 | -4.3 | -.5 | -2.1 | -1.8 | |
| 12 | Count | 21 | 2 | 4 | 0 | 7 | 50 | 2 | 11 | 13 | 21 | 6 | 0 | 137 |
| | Expected Count | 10.4 | 1.9 | 8.4 | 4.2 | 6.4 | 25.6 | 9.7 | 21.0 | 27.2 | 11.7 | 7.8 | 2.6 | 137.0 |
| | % of Total | 0.5% | 0.0% | 0.1% | 0.0% | 0.2% | 1.1% | 0.0% | 0.2% | 0.3% | 0.5% | 0.1% | 0.0% | 3.1% |
| | Std. Residual | 3.3 | .1 | -1.5 | -2.1 | .2 | 4.8 | -2.5 | -2.2 | -2.7 | 2.7 | -.7 | -1.6 | |
| 2 | Count | 21 | 4 | 10 | 6 | 0 | 22 | 13 | 44 | 42 | 27 | 19 | 6 | 214 |
| | Expected Count | 16.3 | 3.0 | 13.1 | 6.6 | 10.0 | 40.0 | 15.1 | 32.8 | 42.4 | 18.3 | 12.3 | 4.1 | 214.0 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % of Total | 0.5% | 0.1% | 0.2% | 0.1% | 0.0% | 0.5% | 0.3% | 1.0% | 0.9% | 0.6% | 0.4% | 0.1% | 4.8% |
| | Std. Residual | 1.2 | .6 | -.8 | -.2 | -3.2 | -2.8 | -.5 | 2.0 | -.1 | 2.0 | 1.9 | 1.0 | |
| 3 | Count | 58 | 11 | 50 | 33 | 35 | 0 | 58 | 189 | 269 | 46 | 61 | 15 | 825 |
| | Expected Count | 62.9 | 11.6 | 50.4 | 25.5 | 38.6 | 154.2 | 58.1 | 126.6 | 163.6 | 70.7 | 47.2 | 15.7 | 825.0 |
| | % of Total | 1.3% | 0.2% | 1.1% | 0.7% | 0.8% | 0.0% | 1.3% | 4.2% | 6.0% | 1.0% | 1.4% | 0.3% | 18.4% |
| | Std. Residual | -.6 | -.2 | -.1 | 1.5 | -.6 | -12.4 | .0 | 5.6 | 8.2 | -2.9 | 2.0 | -.2 | |
| 4 | Count | 18 | 0 | 8 | 4 | 6 | 60 | 0 | 32 | 63 | 27 | 31 | 16 | 265 |
| | Expected Count | 20.2 | 3.7 | 16.2 | 8.2 | 12.4 | 49.5 | 18.7 | 40.7 | 52.6 | 22.7 | 15.2 | 5.0 | 265.0 |
| | % of Total | 0.4% | 0.0% | 0.2% | 0.1% | 0.1% | 1.3% | 0.0% | 0.7% | 1.4% | 0.6% | 0.7% | 0.4% | 5.9% |
| | Std. Residual | -.5 | -1.9 | -2.0 | -1.5 | -1.8 | 1.5 | -4.3 | -1.4 | 1.4 | .9 | 4.1 | 4.9 | |
| 5 | Count | 51 | 13 | 64 | 28 | 41 | 229 | 31 | 0 | 121 | 69 | 40 | 9 | 696 |
| | Expected Count | 53.1 | 9.8 | 42.5 | 21.5 | 32.5 | 130.1 | 49.0 | 106.8 | 138.0 | 59.6 | 39.8 | 13.2 | 696.0 |
| | % of Total | 1.1% | 0.3% | 1.4% | 0.6% | 0.9% | 5.1% | 0.7% | 0.0% | 2.7% | 1.5% | 0.9% | 0.2% | 15.6% |
| | Std. Residual | -.3 | 1.0 | 3.3 | 1.4 | 1.5 | 8.7 | -2.6 | -10.3 | -1.5 | 1.2 | .0 | -1.2 | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | Count | 59 | 16 | 44 | 18 | 36 | 302 | 53 | 121 | 0 | 138 | 71 | 30 | 888 |
| | | Expected Count | 67.7 | 12.5 | 54.2 | 27.4 | 41.5 | 166.0 | 62.5 | 136.2 | 176.1 | 76.1 | 50.8 | 16.9 | 888.0 |
| | | % of Total | 1.3% | 0.4% | 1.0% | 0.4% | 0.8% | 6.8% | 1.2% | 2.7% | 0.0% | 3.1% | 1.6% | 0.7% | 19.9% |
| | | Std. Residual | -1.1 | 1.0 | -1.4 | -1.8 | -.9 | 10.6 | -1.2 | -1.3 | -13.3 | 7.1 | 2.8 | 3.2 | |
| | 7 | Count | 4 | 6 | 13 | 8 | 3 | 33 | 1 | 25 | 269 | 0 | 1 | 1 | 364 |
| | | Expected Count | 27.8 | 5.1 | 22.2 | 11.2 | 17.0 | 68.0 | 25.6 | 55.8 | 72.2 | 31.2 | 20.8 | 6.9 | 364.0 |
| | | % of Total | 0.1% | 0.1% | 0.3% | 0.2% | 0.1% | 0.7% | 0.0% | 0.6% | 6.0% | 0.0% | 0.0% | 0.0% | 8.1% |
| | | Std. Residual | -4.5 | .4 | -2.0 | -1.0 | -3.4 | -4.2 | -4.9 | -4.1 | 23.2 | -5.6 | -4.3 | -2.3 | |
| | 8 | Count | 7 | 2 | 25 | 5 | 9 | 12 | 10 | 167 | 8 | 7 | 0 | 1 | 253 |
| | | Expected Count | 19.3 | 3.6 | 15.4 | 7.8 | 11.8 | 47.3 | 17.8 | 38.8 | 50.2 | 21.7 | 14.5 | 4.8 | 253.0 |
| | | % of Total | 0.2% | 0.0% | 0.6% | 0.1% | 0.2% | 0.3% | 0.2% | 3.7% | 0.2% | 0.2% | 0.0% | 0.0% | 5.7% |
| | | Std. Residual | -2.8 | -.8 | 2.4 | -1.0 | -.8 | -5.1 | -1.9 | 20.6 | -6.0 | -3.2 | -3.8 | -1.7 | |
| | 9 | Count | 3 | 2 | 10 | 2 | 1 | 2 | 43 | 11 | 6 | 4 | 2 | 0 | 86 |
| | | Expected Count | 6.6 | 1.2 | 5.3 | 2.7 | 4.0 | 16.1 | 6.1 | 13.2 | 17.1 | 7.4 | 4.9 | 1.6 | 86.0 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % of Total | 0.1% | 0.0% | 0.2% | 0.0% | 0.0% | 0.0% | 1.0% | 0.2% | 0.1% | 0.1% | 0.0% | 0.0% | 1.9% |
| | Std. Residual | -1.4 | .7 | 2.1 | -.4 | -1.5 | -3.5 | 15.0 | -.6 | -2.7 | -1.2 | -1.3 | -1.3 | |
| Total | Count | 341 | 63 | 273 | 138 | 209 | 836 | 315 | 686 | 887 | 383 | 256 | 85 | 4472 |
| | Expected Count | 341.0 | 63.0 | 273.0 | 138.0 | 209.0 | 836.0 | 315.0 | 686.0 | 887.0 | 383.0 | 256.0 | 85.0 | 4472.0 |
| | % of Total | 7.6% | 1.4% | 6.1% | 3.1% | 4.7% | 18.7% | 7.0% | 15.3% | 19.8% | 8.6% | 5.7% | 1.9% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 3149.810[a] | 121 | .000 |
| Likelihood Ratio | 3017.346 | 121 | .000 |
| N of Valid Cases | 4472 | | |

a. 22 cells (15.3%) have expected count less than 5. The minimum expected count is .85.