

**EXPLORING THE INFLUENCE OF PET ASSISTED
ACTIVITIES ON AGGRESSIVE BEHAVIOUR
AMONGST GRADE R LEARNERS**

by

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Thesis presented in partial fulfilment of the requirements

for the degree of

Master of Education in Educational Support

in the Faculty of Education



Stellenbosch University

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December 2012

DECLARATION

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ABSTRACT

As a grade R teacher in South Africa, the researcher was disturbed by the extent of aggressive behaviour amongst children (aged 4 years to 6 years). Other teachers involved with the same class were of the opinion that the aggressive behaviour had a detrimental effect on their instructional time and motivation. Schools, teachers and other support personnel of staff have developed many cognitive and social support programmes to encourage positive behaviour, including reducing aggressiveness. Some programmes are in individual format and others in group format. However, the problem with these types of support programmes is that they are hard to come by due to cost and lack of knowledge among personnel. A child's full development is influenced negatively when in a negative atmosphere or situation (which includes abuse, aggression or discouragement). During 2011, the researcher took her dog to visit her class informally. It started when the class was having a discussion on pets and the researcher wanted to show the class how to groom and take care of a pet dog. The school's staff and the researcher noticed a calmer and friendlier atmosphere amongst the children after the visits. This positive experience led to reading related literature and the researcher found substantial recent literature that increased her interest in the subject. The literature review suggested that the positive effects of animals in classrooms and on children should be explored and shared with teachers and schools, hence this study. The question arose whether this method could possibly provide the type of support South African children need to become caring, empathic and understanding of the world around them and each other. This research study was undertaken to explore the influence of the visits of a dog on the learners' aggressive behaviour and teachers' opinions, which were of great value.

This qualitative study took place within an interpretive paradigm. A case study design was used, as the focus was on an in-depth explanation of how a dog influenced the aggressive behaviour in the grade R class as a single bounded system. The study took place over a period of eight successive weeks. The data collection methods employed were questionnaires to gather biographical data, individual semi-structured interviews and observation during free play. Data were analysed by means of content analysis.

Research findings indicated a positive influence on the learners' aggressive behaviour after eight weeks of the P.A.T. (Pet Assisted Therapy) dog visits. Positive behaviour in general was also witnessed and, most importantly, the participating teachers were of the opinion that the

class was easier to manage and more time could be spent on instruction. The participating teachers provided different perspectives as they were involved in the class in different ways. However, the conclusion was that the positive influence of PAA on the learners' aggressive behaviour was mainly due to how some individual learners were influenced, which changed the interaction among all the learners. It is recommended that further studies be done on the time available to teachers to address aggressive behaviour to achieve a long-term result compared to just solving the problem at the occurrence of aggressive behaviour, and how PAA influences the learners in their other microsystems as well.

Key terms: Grade R, aggressive behaviour, pet assisted activities, class management.

OPSOMMING

Die navorser, 'n graad R opvoeder, vind die intensiteit en die hoeveelheid van aggressiewe gedrag onder graad R leerders kommerwekkend. Ander onderwysers betrokke by dieselfde klas se opinie was dat die aggressiewe gedrag onder die leerders 'n uiters negatiewe impak op die opvoeding van die leerders het. Verskeie kognitiewe en sosiale ondersteuningsprogramme vir die aanmoediging van positiewe gedrag in die klaskamer is reeds deur opvoeders, skole en ondersteunende personeel ontwikkel. Die navorser is egter van mening dat die finansiële omstandighede van verskeie skole en die kennis van die onderwysers wat moontlik die strategieë moet implementeer, die gebruik van sulke programme beperk. Leerders wat in negatiewe opvoedingsomstandighede (wat misbruik, aggressiwiteit of ontmoediging insluit) geplaas is, word negatief beïnvloed. Die navorser het gedurende 2011 haar eie hond skool toe geneem om by die weeklikse tema oor 'diere' aan te sluit. Die doel was om aspekte van hoe 'n mens na jou hond omsien met die leerders te bespreek. Die skoolpersoneel en die navorser (as opvoeder) het opgelet dat 'n kalmer atmosfeer onder die leerders geheers het nadat die navorser se troeteldier die klas besoek het. Dit het daartoe gelei dat die navorser leeswerk oor die onderwerp onderneem het. Vele onlangse bevindinge wat die onderwerp nog meer interessant gemaak het, is opgespoor. Een van die klasse in die betrokke skool het aggressiewe gedrag onder die leerders ervaar wat die onderwyser se motivering om te onderrig negatief beïnvloed het. Dit het gelei tot die gevallestudie wat die gebruik van 'n hond in die klaskamer as 'n moontlike metode om Suid-Afrikaanse kinders te motiveer om 'n gevoel van omgee, empatie en begrip van die wêreld om hulle en ander te ontwikkel. Die navorsing het die moontlike invloed van gestruktureerde besoeke deur 'n hond op die gevallestudieklas ondersoek. Omdat die aggressiewe gedrag ook deur die onderwysers ondervind word en dit hul opvoedingstaak affekteer, was hulle opinies van groot belang.

Die kwalitatiewe studie is onder die interpretatiewe paradigma onderneem. 'n Gevallestudieformaat is gebruik en was daarop gerig om die invloed van die hond op die leerders se aggressiewe gedrag grondig te verstaan. Die studie het oor 'n tydperk van agt opeenvolgende weke plaasgevind. Kwalitatiewe navorsingsmetodologie is gebruik. Dit het 'n doelbewuste streekproef van deelnemers, vraelyste vir biografiese data, individuele semi-gestruktureerde onderhoude, observasies om die informasie wat uit die onderhoude verkry is, te ondersteun en inhoudsanalise vir die ontleding van die data (veldwerknotas) omvat.

Die navorsingsbevindinge het 'n afname in aggressiewe gedrag onder die leerders na die agt weke van die intervensie (hond se besoeke) getoon. Algemene positiewe gedrag is waargeneem en die belangrikste bevinding was dat die deelnemende onderwysers van mening was dat die klas meer hanteerbaar was en meer tyd tot hul beskikking vir die opvoeding van leerders toegelaat het. Die onderwysers kon verskeie perspektiewe uitlig aangesien elk op 'n ander manier by die klas betrokke was. Daar was 'n duidelike kommentaar dat PAA 'n invloed op individuele leerders uitgeoefen het en dit het die interaksie onder die leerders in die klas beïnvloed. Die navorser stel voor dat verdere studies onderneem word om te bepaal hoeveel tyd onderwysers benodig om 'n langdurige positiewe effek op leerders se aggressiewe gedrag te bewerkstellig, eerder as om telkens wanneer 'n probleem opduik 'n oplossing te vind wat moontlik nie op die lang duur effektief sal wees nie. Verder kan ondersoek ingestel word na hoe PAA die leerders se gedrag buite die klas beïnvloed.

Terme: Graad R, aggressiewegegdrag, troeteldier ondersteunende aktiwiteite, klashantering.

ACKNOWLEDGMENTS

Many people have assisted me in completing this research study. I would like to sincerely thank the following persons:

My father and mother, for being patient, loving, supportive, and for being my mom and dad. You guided me emotionally and academically.

My sisters, for just being you and there under stressful circumstances. I love all of you!

My supervisor, Ms Charmaine Louw. You equipped me with guidelines and support, more than what I could have hoped for! Thank you for being friendly and patient.

To Ms Sarie Wilbers in the library, for your friendly help and rapid responses.

To my colleagues and the participating school. You all are my friends; you always motivated me and are the best teachers. I love all of you!

To my friends, for being interested and for your motivation to accomplish this goal.

To the P.A.T. organisation, specifically Avril, Marianna and the volunteer and her dog. The impact P.A.T. has on other's lives is greater than anyone can imagine.

To my fiancé, Uys Kruger: You motivated me, supported me, showed interest in the study and made the process fun and exciting. Thank you for being understanding and loving. To Uys's family for always being interested and supportive.

To Opi and Bee, my two favourite dogs and my special gift from God. I wish you knew how grateful I am for your unconditional love.

Most importantly, God receives all the praise!

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CHAPTER 1

CONTEXTUALISATION, BACKGROUND AND RELEVANCE

1.1 INTRODUCTION

According to the SAPS annual report, 2.1 million criminal cases were reported in 2009 – 2010 (SAPS's annual report, 2010). Crime is often associated with aggressive behaviour, with the intention to harm. The roots of this overt aggressive behaviour are often situated in childhood and aggression amongst children is often an indication of future violent behaviour. Csibi and Csibi (2011) found that aggressive children tend to act violently towards their peers, which in turn could have an impact on their cognitive and emotional wellbeing. In addition, aggression is a disruptive force in the classroom and may also negatively influence learning. Anger is listed as one of the most commonly found emotions in the young child, next to fear, jealousy, curiosity, happiness, sadness and love (De Witt, 2009). In the young child, anger is usually expressed through temper tantrums, characterised by the stamping of feet, jumping, falling to the ground, crying, kicking and screaming (De Witt, 2009). The control of anger is a problem for the young child (age 0 to 9 years) and these expressions of anger are seen when the child is in conflict with others. Although anger and aggressive behaviour are part of human development, teachers and schools play an important role in the social experiences of learners as they can provide guidelines with regard to appropriate social reactions to others. Schools, as microsystems and being in direct contact with learners, should attempt to reduce aggressive behaviour amongst learners, as this can lead to more serious violence and crime (Wilson, Lipsey & Derzon, 2003).

Animal assisted activities (AAA) is a therapeutic technique which can facilitate, educate, counsel and support children and adults. Pet assisted activities (PAA) have the same facilitating techniques, but household pets are used. Other therapeutic usage of animals is called animal assisted therapy (AAT) and animal assisted interventions (AAI). AAA (including PAA), AAT and AAI have shown positive effects on learners' emotional, cognitive, physical, social and moral development (Melson & Fine, 2010). The researcher shall further refer to PAA in this research document as a pet (dog) was used for the animal assisted activities during the research. Further clarification of the above terms is addressed in section 1.8.

1.2 BACKGROUND AND CONTEXT

Bandura (1973) defines aggressive behaviour as behaviour which is harmful and violates social norms. Aggressive behaviour may be due to various reasons and causes. Vogel (2002, p.23) highlights the main causes of violent behaviour as “genetic and acquired brain disease, locus of control, level of functioning, stress, family structures” and, specifically, “a lack of empathy”.

Using pets in activities has been shown to be a positive method in developing empathy and self-esteem (see section 2.4.2), but specifically Hergovich, Monshi, Semmler and Ziegler (2002), found that children who had exposure to a dog, showed greater self-confidence, social competence and increased empathy. It has also been found that aggressive behaviour is less in children who have greater self-esteem and higher with children who have lower self-esteem (Kaplan, 2006) and children with greater empathy show greater prosocial behaviour (including less aggressiveness) (Bjorkqvist & Fry, 1997). Louw, Van Ede and Ferns (1998) mention that social interaction is one of the key elements in developing less aggressive behaviour amongst children and AAA, PAA and AAT provides an opportunity for social interaction and feeling part of a group. Melson and Fine (2010) supports this with the suggestion that activities with animals and pets motivate children to talk about the animals and work together and thus motivates social interaction. The theoretical framework of this research study supports this viewpoint of encouraging non-aggressive behaviour by providing positive contextual interventions. The research was aimed at working within a theoretical framework, the ecosystemic approach, which moves away from the medical model that was based on thinking that aggressive behaviour in a child could be changed through working 'on' the child, to rather changing the circumstances and supporting a child through changing the environment (Swart & Pettipher, 2005, and Donald, Lazarus & Lolwana, 2010).

Aggressive behaviour amongst young learners is a growing concern (Moretti & Obsuth, 2009) as it may contribute to a general culture of violence in schools (Farmer, Farmer, Estell & Hutchins, 2007). From personal experience, and informal interviews with teachers, aggressive behaviour and anger amongst learners place a damper on the motivation to teach. Aggressive situations and bullying behaviour is time consuming for the teacher to solve and difficult to change without placing too much emphasis on the child as the 'problem'. Bullying is often a term associated with aggression. Bullying, a form of violent behaviour that develops from early childhood, is a form of peer harassment and is an indication that a child is likely to develop into a violent adult (Vogel, 2002).

In South Africa, studies on the effects of AAT and AAA, PAA and AAT on individual learners with barriers to learning is a growing phenomenon. However, in South Africa the potential advantages associated with use of AAA (including PAA) in classrooms (with focus on the whole), has not yet been explored to its full potential. It is a low cost, easy accessible and a humane method of supporting learners and therefore is, in the researcher's view, worth examining further.

1.3 RESEARCH PROBLEMS AND AIMS

According to Wilson *et al.* (2003), aggressive behaviour in schools, even when not overtly violent, may inhibit learning and create interpersonal problems amongst learners. According to The Bill of Rights (Republic of South Africa, Constitution of South African Act No. 108, 1996), learning and education in school in South Africa is a fundamental human right. This right suffers under such circumstances as aggressive behaviour in schools. Schools have the responsibility to implement education and need to reduce aggressive behaviour to prevent the development of a climate which is detrimental to education. One such method is through school-based interventions. However, not all schools have the facilities, services and finances to provide direct social intervention (Vogel, 2002). Vogel further states the importance of addressing aggressive behaviour early in a child's life through intervention and prevention strategies at schools, as this could have a long-lasting and positive effect on the aggressive behaviour (Vogel, 2002).

An alternative to the direct social intervention is found in Chandler's (2005) study. She found that students exhibited fewer behaviour problems and improved attention to lessons when the teacher's dog was present. Activities with a dog (in the classroom) could thus potentially have a positive impact on aggressive behaviour in the class. If so, it could assist in addressing the growing problem of school violence in South Africa.

There is literature (many in the *Anthrozoös* journal) which, within an international context, explains how pet assisted activities could support learners with disruptive behaviour; learners with educational barriers; learners in need of emotional and physical support and learners diagnosed with a learning difficulty. However, the researcher could not find any research which explains the mechanism(s) by which AAA (including PAA) could benefit the typical grade R class in South Africa.

The aim of this study was therefore to explore the influence of PAA on the aggressive behaviour of a grade R class at a school in the Western Cape in South Africa. The researcher aimed to provide qualitative information with regard to the opinions of the teachers on the influence of PAA as well as observations of learners' reactions to each other when PAA is implemented. The researcher envisaged that the information provided on this study could perhaps assist in further studies on the influence of AAA and PAA on a class, as a whole, and/or possibly provide information which can be used to develop a supportive programme which could be used in South African schools. P.A.T. is an organisation that provides voluntary AAA visits to schools, homes for the elderly and other institutes wishing for a visit by a dog and volunteer in South Africa. A P.A.T. dog is an ordinary house pet that is assessed by P.A.T. members to provide assistance in the voluntary visits (About us, n.d.)

1.4 RESEARCH QUESTIONS

The primary aim of this study was to explore the influence of pet assisted activities (PAA) on learners in a grade R class, who demonstrated aggressive behaviour towards each other. More specifically, answers were sought on the following secondary questions:

- i. What are the teachers' perceptions with regard to aggressive behaviour amongst grade R learners and the effect on learning?
- ii. How do the teachers experience aggressive behaviour amongst the learners?
- iii. What methods/ways of dealing with aggressive behaviour do the teachers find to be effective?
- iv. What are the children's reactions to the P.A.T. dog?
- v. What are the teachers' experiences after the P.A.T. visits in terms of the aggressive behaviour amongst the learners and the effect on class management?

1.5 RESEARCH PERSPECTIVES

The aim of this section is to provide a short clarification on this research paradigm, methodology and methods used.

1.5.1 Research paradigm

Babbie (2010, p.33) defines paradigms in studies as the “fundamental models or frames of reference we use to organize our observation and reasoning”. To determine the paradigm in a research,

Henning, Van Rensburg and Smit (2004, p.15) state that ontology, epistemology and methodology are the three dimensions to reflect on. Ontology focuses on the nature of the subject that is being studied; epistemology highlights the relationship between the researcher and the knowledge that can be obtained in the study; and methodology specifies how and in which manner (methods) the researcher intends to study the subject (Mertens, 2005).

The methods of data gathering (interviewing and observations) in this case study supported the paradigm of interpretative research, as the focus was on the reality and lived experiences of the learners and teachers (Henning *et al.*, 2004). Furthermore, the methods provided a concurrent collection of qualitative data to facilitate an analysis of the influence of pet assisted activities in the classroom as a method to influence aggressive behaviour in class. The mode of enquiry was based on understanding the teachers' thoughts on aggressive behaviour amongst the learners and the influence pet assisted activities could possibly have. The design and methods used to understand and explore the teachers' opinions of the influence of pet assisted activities was centralised in the knowledge that the teachers constructed their own realities in this regard. Hence, in this study, the interpretive paradigm was followed in order to understand the subjective interpretation of the teachers' experiences.

Babbie (2010) refers to the above approach as a qualitative approach. With 'qualitative' is meant that the aim is to understand the social phenomena in which the teachers find themselves ("their natural world"), to use "multiple methods that are interactive and humanistic, it focuses on the context, it is emergent rather than tightly prefigured and it is fundamentally interpretive" (Marshall & Rossman, 2011, p.3). The paradigm, and its connection to the overall research design, will be discussed in more depth in section 3.4.

1.5.2 Research design

The research design is the strategic framework which connects the research questions to the process of the research (Durrheim, 2006). This was a qualitative study in which the focus was on understanding and explaining the meaning of a social phenomenon i.e. the influence of pet assisted activities on the learners' aggression towards each other in a grade R class (its natural setting) (Marshall & Rossman, 2011). According to Merriam (1998, p.10), five types of qualitative research are commonly found in educational studies: "The basic or generic study, ethnography, phenomenology, grounded theory and the case study." More recently, Babbie (2010, p.303) has elaborated on types of qualitative studies and refers to "naturalism, ethnomethodology, grounded

theory, case studies and the extended case method, institutional ethnography, and participatory action research”. Based on the aims of the research, the theoretical paradigm of the research, the context and situation in which this research was completed and on the methods used, the appropriate definition for the proposed study is that of a case study (Durrheim, 2006).

1.5.3 Research methodology

In this study the research was not done 'on' the teachers but rather 'with' the teachers in order to explore the influence of pet assisted activities on a specific class and to possibly provide information for further studies or developmental programs. According to Marshall and Rossman (2011, p.267), a case study “focuses in-depth and in detail on specific instances of a phenomenon” and the focus is on “to explore an example of an activity”. The aim of the research was not to confirm an impact or effect of pet assisted activities on learners’ aggression towards peers in grade R, but rather to explore the possible influence pet assisted activities may have on aggression on one single bounded/defined system (also their context), to provide an intensive description over time (Flyvbjerg, 2011).

One grade R class was focused on intensively as a defined and ring-fenced system being studied. In addition, there was distinct partnership between the researcher and the teachers in the research (or those contributing to the research). General deductions or conclusions are not necessarily possible, but the information gathered in this research could perhaps be constructively used to expand the current knowledge of the subject.

1.5.4 Research methods

1.5.4.1 Research context and selection criteria

The participants were selected to take part in the study, due to the context of the research. The grade R class forms part of a school in the northern suburbs of Cape Town, Western Cape. This specific grade R class was chosen for the study due to the aggressive behaviour the teacher had experienced, which she felt impinged on instruction time. The teachers involved in the class were selected to participate as they provided an information rich source about the learners in the class and their interactions. For more information see section 3.5.2 for the contextualisation of the research.

The research design directs a researcher to the sources (which provide the data) that are to be used for research (Denzin & Lincoln, 2005). Because of this particular study's design, purposeful

sampling was used (rather than random selection). According to Babbie (2010, p.193), “sometimes it's appropriate to select a sample on the basis of knowledge of a population, its elements, and the purpose of the study. This type of study is called purposeful or judgmental sampling”. A source is purposefully sampled in a qualitative study when the aim is “enriching the understanding of an experience” and when “fertile exemplars” are needed for the study (Polkinghorne, 2005, p.140). Regarding case studies, Minichiello and Kottler (2010, p.115) state that purposeful sampling is used when “cases are selected because of their specific characteristic” and in some case studies, the cases are selected by the researcher and thus this sampling technique is used frequently in case studies.

The information-rich participants in this research were the teachers involved in the class. They were the class primary teacher, the class assistant, the school principal and the class music teacher. The goal was to explore the influence of pet assisted activities, as directly experienced by the teachers, of one specific class. The criteria for the selection of the teachers were that they had to be involved with this specific class and experience a concern regarding the children's aggressive behaviour amongst one another and the damper it placed on the education process.

1.5.4.2 Data collection instruments and methods

The instruments and methods used to gather data in a case study should not only aim to provide information on the topic under study, it should also describe and support the methodology being used. Reflection and clear choices of methods are thus important (Henning, Van Rensburg & Smit, 2008). Qualitative data sampling aims to provide understanding and evidence of an experience and the specific research techniques that support qualitative research mainly are interviews, observations and documents (Polkinghorne, 2005). Denzin and Lincoln (2005) further add the analysis of visual data and personal experiences as techniques used in qualitative research.

The methods used in this study to gather data were questionnaires, semi-structured individual interviews, and observations. The questionnaires were used to gather demographic and biographical data, information of the participants and to obtain insight into the teachers' perceptions on aggressive behaviour in the class (up to date). This enabled the researcher to identify, evaluate and formulate the research problem (Hein, 2009). The completed questionnaires provided details on the backgrounds of the participating teachers and their insights into the topic. Marshall and Rossman (2011) refer to the semi-structured interview as a guided interview in which the interviewer asks questions to guide the responses through specific questions to ultimately answer the research

questions of the study. Thus, adaptation during the interview process could take place as the questions for the interview function as a reference to guide the interviewer and the interviewee. The aims of the study were to, if possible, provide support for teachers through further studies and possible programme development. Thus teachers' opinions were important to provide information on the influence of pet-assisted activities on aggressive behaviour. Fieldwork notes were written during observations to obtain further clarification of data derived from the semi-structured interviews (Polkinghorne, 2005). This secondary method of gathering data was aimed at providing insight into the teachers' opinions on the influence of pet assisted activities on the aggressive behaviour of the class and to establish whether what had been observed, correlated with what the teachers experienced.

1.5.4.3 Data analysis

The researcher was responsible for transcribing the observations, however, a scribe was engaged to transcribe the individual interviews from the audio recorder used in the interviews. Patton's (2002) advice on organising and structuring raw data is to revise and check the data once all the data have been gathered. This approach was followed in this research. Patton (2002) explains the importance of case study data analysis by placing emphasis on the careful collection of all the raw data. Following the collection, all data have to be arranged in a chronological order and a case record is then compiled from the answered questionnaires, field notes, and the transcripts of the individual semi-structured interviews (Patton, 2002).

Marshall and Rossman (2011, p.207) refer to data analysis as “bringing order, structure, and interpretation to a mass of collected data...”. Henning *et al.*(2004) mention that content analysis is the most often used method of analysis in qualitative studies; in this study it was used to analyse the questionnaires, field notes and transcripts. Through content analysis, certain themes and patterns that arise from the raw data can be recognised and then discussed. To discover these themes and patterns, open coding is used whereby the data is broken down, categorised and then conceptualised. This method of data analysis provides the researcher with an opportunity to discover themes and patterns through all the raw data (whatever the manner in which it was obtained). The process of content analysis is discussed in depth in Section 3.5.4.1.

1.5.4.4 Data verification

Marshall and Rossman (2011) emphasise that key issues and considerations of a qualitative study is to validate the trustworthiness of a study. Truthful and valid results are what researchers should constantly aim for (Mouton, 2001). Tashakkori and Teddlie (2003) state that no matter the type of research (quantitative, qualitative or mixed method design), the concept of credibility is the process to determine whether the results of the research is accurate and whether they provide an effective and correct description of the data.

From the above it is clear that validating results is essential for data analysis in any research. It is essential that the researcher should be confident that he or she can rely on the data and the process of analysis to ensure that peers will be able to replicate the research and come to similar conclusions. Marshall and Rossman (2011, p.41) state that, to ensure validity and reliability in a qualitative study, the four aspects of “transferability”, “credibility”, “dependability” and “confirmability”, should be addressed. This will be discussed in more depth in section 3.5.5.

Transferability:

Transferability refers to the possibility of this study’s findings being used in other “settings, populations and contexts” (Jackson, 2003, p.183). The participants and other relevant information about the participants, subjects and objects in the research, were described and discussed in depth in order to provide an opportunity for possible **transferability** (or generalisation). By discussing data in depth, other researchers wishing to use this data, can decide for themselves whether the data is transferable to their own study.

Credibility:

Credibility can be seen as the “accuracy of the description of the phenomenon under investigation” (Jackson, 2003, p.182). In this study, fieldwork over an extended period of time was done (through interviews and observations). Multiple data gathering methods were used and this provided different information on the same subject or phenomena, which is also referred to as triangulation. Triangulation increases the **credibility** of a research (Flick, 2004).

Dependability:

Dependability refers to the extent of trackability and stability of changes in data during the time of the research (Jackson, 2003). Trust and **dependability** were increased during data gathering when participants' contributions were documented accurately and directly from the information gathered

by typing transcripts from the audio tapes made during interviews and writing field notes directly after observations. Direct quotations from the participants and/or references were used to improve consistency and retain the original atmosphere of the quote.

Confirmability:

Conformability refers to ensuring that data are objective (Jackson, 2003). The process of data gathering and data analysis were placed in chronological order. Each step in the process is discussed in section 3.5, in order to encourage reflection on each step of the data gathering and analysis processes and to establish whether the report is indeed representative of the raw data. Finally, the researcher was committed to a series of self-reflections regarding the data, data analysis and the discussion of findings in order to prevent bias. This enhanced **confirmability**.

1.6 ETHICAL CONCERNS

Mouton (2001, p.243) mentions that, when working with people in their environment, important rights should be addressed: “The right to privacy (including to refuse to take part), the right to anonymity and confidentiality, the right to full disclosure about the research (informed consent) and the right not to be harmed in any matter.”

In brief, the participants (the children, the teachers and the P.A.T. volunteer) were informed of these rights on their individual informed consent forms. The Scribe also agreed to give consent regarding protecting identities if any would be revealed in the interviews. However, it is important to note that Mouton (2001, p.245) also states that, when working with children as a “vulnerable group”, special actions should be taken to inform and protect them. Ethical concerns and practices regarding the children, school, parents, teachers and the P.A.T. volunteer are discussed more in depth in section 3.6. Ethical clearance was obtained from Research Ethics Committee: Human Research (Humanities) of the University of Stellenbosch (protocol number: HS760/2011). Further details with regard to the ethical concerns are discussed in section 3.6.

1.7 ROLE OF THE RESEARCHER

Marshall and Rossman (2011, p.112) discuss the role of the researcher under four topics. These topics are; “technical considerations”, “interpersonal considerations”, “reciprocity” and “ethics”.

Technical considerations

The researcher planned the research and all its technical considerations during the proposal stage of this research. The following aspects were addressed more specifically: The degree of 'participantness', 'revealedness', 'intensiveness' and 'extensiveness' was considered. The researcher planned to act as an observer during this research. The 'revealedness' was considered through planning to which extent the participants should know about the topic of the research. It was decided that all participants, except for the participating children, would have full disclosure. The researcher's role regarding 'intensiveness' and 'extensiveness' was considered and the amount of time spent as an observer, interviewer and data analyst was decided on during the preparation of the research proposal. Other technical considerations addressed were that of entry into the school, easing tensions and efficiency. This was done to obtain formal permission to observe a class and to enter the school during the planning stage of this research, to provide a place to work efficiently and safely on data analysis and the production of this report. The researcher works at the participating school and thus the formal permission for entering and providing a place of work was sufficient. Decisions on how the researcher could deploy all the available resources and the effective use thereof to provide the best possible information, was made during the planning stage of this research (Marshall & Rossman, 2011).

Interpersonal considerations

Interpersonal considerations when building trust with the participants include empathy skills; maintaining good relations with participants; respecting norms of reciprocity of participants; sensitivity considering ethical issues for participants and biases; and the academic armour to use was defined in advance during the planning stage of this research. Sensitivity towards all participants and contexts were maintained by being aware of possible situations which may require specific sensitivity. Bias was prevented through reflection and being aware how bias could shape and influence the research findings. Being empathic towards the participants contributes to a better conversation in interviews and, in turn, gains more in-depth information regarding the participants' thoughts. The researcher considered these interpersonal skills and maintained these skills throughout this research.

Reciprocity

Prior planning regarding reciprocity was made during the planning stage of the research. Here the decision was made that the researcher would fulfil the role of presenter of the findings to the participants.

Ethics

Lastly, the researcher's role was defined by his/her consideration of the ethical issues (discussed in section 3.6) surrounding the participants and the moral activities involved. During the planning process, informed consent and maintenance of other roles (discussed above) were defined and kept in consideration throughout this research.

Merriam (1998) states three topics for discussion regarding the role of the researcher. They are *tolerance for ambiguity*, *sensitivity* and *being a good communicator*. During the planning of the research, the data gathering, the data analysis and in writing a report, directions may change due to unforeseen situations. This is one of the characteristics of qualitative research and discreet decisions regarding these processes were made. Tolerance for these uncertain situations was practised. Sensitivity as a researcher refers to being sensitive while gathering data, analysing data and to be sensitive and aware of possible bias. Sensitivity was practised in this research study as the contexts in which observations and interviews were conducted, were 'read' to anticipate when participants had had enough. Being a good communicator refers to being empathic, having good listening skills and being able to write up necessary detail. With listening is meant that information should be gathered from the context by listening to what people are saying, but also 'listening' to the environment and the context by looking. Qualitative research demands extensive documenting with attention to fine detail. To be a researcher with good communication skills, documenting should be done in fine detail (Merriam, 1998). All the above-mentioned characteristics, together with being a passive onlooker and not a participant, were adopted for this study.

1.8 KEY TERMS

1.8.1 Animal Assisted Therapy

AAT is a goal-directed intervention aimed at improving people's physical, social, emotional and/or cognitive functioning. Animals are used to meet specific criteria as part of a treatment process (Animal-Assisted Activities/Therapy 101, n.d.; Kruger, & Serpell, 2010).

1.8.2 Animal Assisted Activities

Animal assisted activities (AAA) is an intervention involving an animal without a specific protocol (Friedmann, Son,& Tsai, 2010). Any animal that is assessed by an animal behaviourist as being capable and fit to be used in specific therapeutic situations can be used. These animals are mostly

household pets like cats, dogs, rabbits or birds. The intervention involves activities with the animal which are less goal-directed than during intense therapy.

1.8.3 Pet Assisted Activities

Pet assisted Activities (PAA) consist of the same activities as AAA, but the term “pet” places emphasis on the involvement of a household pet, in this study, a dog. Since this research study focuses on involving a pet, the researcher will refer to PAA for the remainder of this research document instead of the well known term AAA.

1.8.4 Pets as Therapy (The Organisation) (P.A.T.)

Pets As Therapy is a free, non-profitable organisation. Volunteers and their dogs are assessed and placed at appropriate institutions. This organisation arranges visits to institutions like schools, homes for the elderly and any other organisation wishing to apply (About us, n.d.). Pets As Therapy is also commonly known as P.A.T. and will be referred to as P.A.T. throughout this research study.

1.8.5 Aggressive Behaviour

Aggressive behaviour is a response exhibited by people because of a reaction to a feeling, like anger. Aggressive behaviour is behaviour a person displays with the intention to verbally or physically harm another or something else (Breet, Myburgh & Poggenpoel, 2010). It is important to note that aggressive reactions are part of human development (De Witt, 2009). See section 2.4 for a more extensive discussion.

1.8.6 Interventions

According to The Oxford School Dictionary (1994), to 'intervene' means to disrupt something, to come in between events or to stop or to change a result. Intervention can be primary, secondary or tertiary. Primary intervention takes place even before a problem has occurred. Secondary intervention is an intervention that starts when a developing problem is noticeable. Tertiary intervention is an intervention that is put in place when a problem has already manifested (Vogel, 2002).

1.8.7 Grade R

Grade R is the grade before Grade 1 in South Africa. A child enrolled in grade R normally is 5 years old and turns 6 years old during his/her year in grade R. Grade R mainly focuses on the development of sub skills needed for formal learning, like pencil control, but it also includes social skills, following class rules and handling and portraying emotions (Access to education, n.d.).

1.9 CONCLUSION

The topics discussed in this chapter provide a description of the study, which include the questions that support the research question; the problem and reason for the research was contextualized; a summary of the methodology and methods used in the research was provided; the ethical considerations for the research and the role of the researcher were clarified. Lastly, important terms used in this study were defined.

1.10 CHAPTER OVERVIEW

Chapter 1 serves as a broad overview and introduction to this research.

Chapter 2 provides the theoretical framework of the study, a literature review and existing information and research findings on the topic of aggressive behaviour and AAA, PAA and AAT.

Chapter 3 consists of an in-depth discussion of the research paradigm, research design and methodology, and research methods used in this research.

Chapter 4 is focused on presenting the findings of the research.

Chapter 5 consists of a discussion on the findings of the research.

CHAPTER 2

LITERATURE STUDY

2.1 INTRODUCTION

All therapeutic interventions involving animals rest on a powerful assumption: There is something about animals that powerfully attracts and motivates humans. This assumption seems particularly compelling when children are involved. (Melson & Fine, 2010, p.223)

From personal experience and informal interviews, it became clear to the researcher that there is growing concern regarding aggressive behaviour amongst young children. Aggressive behaviour is viewed as disruptive behaviour which influences learning and emotional wellbeing (Csibi & Csibi, 2011) and could lead to violent behaviour as an adolescent and adult. As every person has the right to education (Republic of South Africa, Constitution of South African Act No. 108, 1996), the researcher is inclined to think that teachers and schools have the responsibility to provide this opportunity and guarantee that every child has an equal opportunity. From personal experience, the researcher found that teachers, when managing difficult behaviour, feel discouraged when time is limited and the behaviour is complex. Pet assisted activities (PAA) provide possible interventions to deal with aggressive behaviour and which can be used for managing aggressive behaviour in a whole class or individually.

In this chapter the researcher aims to build on the argument formulated in Chapter 1, through exploring the existing literature on the phenomena. This chapter also provides the framework and guideline for the interpretation of data collected in this research (Henning *et al.*, 2008). The theoretical framework is discussed and what it implies for this research is explained. This is followed by a description of the young child's development as an individual in totality. Literature on aggressive behaviour, specifically in the classroom and in the young child, is followed by literature on AAA and AAT, which is also used to define PAA. Towards the end of the chapter literature on the relationship between PAA and aggressive behaviour is discussed.

2.2 THEORETICAL FRAMEWORK

Teachers' management of aggressive behaviour has taken many forms within different paradigms. According to Naicker (1999, p.82), a paradigm is “a framework for identifying, explaining and solving problems. In a large sense, the term has come to signify an all-encompassing framework for understanding and interpreting the world and all one's experiences”. The way teachers dealt with difficult classroom behaviours and understood barriers to learning in the early 1900 differs from the paradigm in which the teachers have worked since 1970. This change in paradigm is called a paradigm shift and implies a change in the way teachers viewed how to deal with and how to use sources for difficult classroom behaviour. Specifically in education, there was a shift from the medical deficit model to the social systems approach (Swart & Pettipher, 2005).

2.2.1 The Medical Model

In the early 1900s, the medical model was a popular way of viewing an individual. It focussed on diagnosis and treatment of problems in individuals (with emphasis on the focus of the problem and solving it in a specific way) (Swart & Pettipher, 2005). When applying this model to education, learners who experienced any type of difficulty to learn or exhibited behaviour that did not comply with the norm were singled out and 'fixed', as the view maintained that the problem lay within the person (Engelbrecht, 2001). From a teacher's perspective, it was assumed that when a class was difficult to manage, it could be due to problem learners and the individual learners were regarded as the problem. Furthermore, it was viewed that the teachers (as other professionals) were the answer to 'fixing' this problem and had the knowledge which was needed to 'fix' the problem without any need for collaboration with other professionals (Engelbrecht, 2001).

Even though the above approach is subjected to much criticism today, Sheridan and Gutkin (2000) state that, for the assessment, diagnosis and treatment of any barrier to learning, clinical work, which may be confined in the medical mode, is needed, but is still too restricted. Their further criticism is that no teacher (even as other professionals) function in isolation and thus 'fixing' or dealing with a problem cannot be done in isolation, because every individual is influenced by and apart of multiple systems (Sheriden & Gutkin, 2000).

These multiple systems stand against the idea of isolation and are discussed in Section 2.2.2. Bronfenbrenner's ecological systems theory supports this paradigm shift in terms if a more holistic

view of individuals. A brief look at what this theory signifies and how it is relevant for understanding influencing learners' aggressive reactions follows.

2.2.2 Bronfenbrenner's Ecological Framework

In the field of education, Bronfenbrenner's ecological and bioecological model emphasises the importance of recognising the influence that an individual's surroundings and contexts have on learning and development (Swart & Pettipher, 2005). For this research, specifically, the researcher would like to place emphasis on the word 'individual' in the above sentence as referring to learners and teachers. Ecological theories are based on the idea that an individual is interdependent on his/her physical environment. An individual is surrounded by different systems and these systems impact on their understanding of the world, their development and their social and emotional wellbeing. The interaction amongst the systems is as able to influence a person's life as the systems themselves. Microsystems are the person's proximal systems, like family, school and the child's peers. The exosystem is the interaction between these microsystems. Exosystems are those systems which do not directly influence the individual, but are involved in the lives of those in the microsystems. Hence, exosystems have an indirect impact on the individual's total development. The macrosystems are those systems which involve dominant social and economic structures like belief and values which influence all the other social systems. The chronosystem is the system which highlights the effect of time on all the systems (Donald *et al.*, 2010).

A few concepts are important in understanding the relevance of this framework. Firstly, children are not influenced by their related systems only; to understand children, their perceptions and the views that they have on their own contexts are important. This will provide a better understanding of the reasons behind their interactions with peers and their environment (Swart & Pettipher, 2005). It must be noted secondly, that, due to the fact that systems are influenced by a change in another system, imbalance is created. To maintain a dynamic balance, all systems aim at achieving a sense of balance (Swart & Pettipher, 2005). The third concept is that of 'circular casualty'. This entails that a change in one system will affect the other system, even if it is not noticeable immediately, but over time. This is an important concept for a study in education, as change in the intervention of aggressive behaviour will influence the other systems in the school, too, and the systems of the learners. The possible influence that PAA could have on the aggressive behaviour of the learners would also influence their functioning and experience, which would also reflect in other systems of the school and the learner's own microsystems (Swart & Pettipher, 2005). Lastly, it is important to remember that a whole system is greater than the sum of its parts. This means that classrooms and

schools that encourage relationships with other systems, like the family structures and professional organisations, would function more effectively than systems that do not have relationships with other systems (Swart & Pettipher, 2005).

For teachers, the implication of this theory in general is to remember that a change in one system in an individual's life will influence other systems (Donald *et al.*, 2010). As the need for this research arose from the growing concern around aggressive behaviour amongst grade R learners, the implications of this theory for this research is summarised:

1. Every individual learner is a 'result' of the interactions of different systems. Individuals do not and will not grow in isolation.
2. Aggressive behaviour is a part of normal development, but every individual is influenced by the interactions amongst one another and their separate and conjoined systems.
3. Harsh discipline and 'fixing' a class dynamic does not mean addressing one or two learners, but rather supporting positive behaviour through motivational and collaborative techniques and aiming at the interaction rather than the individuals.
4. Interventions take time and systems are influenced through time, not by means of a quick 'fix' for intervening in individuals' lives.
5. Schools are made up of many layers of functioning (systems within the school system), when attitudes and methods change, it will filter through to other school systems and the learners' microsystems.

2.3 EARLY CHILD DEVELOPMENT

When a study about children, their development, as well as theories regarding their development, is undertaken, it is important to discuss early child development, as it gives the reader a greater perspective on children's perceptions and needs. As discussed in section 2.2.2, this correlates with the importance of understanding and studying children in their entire context and as individuals shaped and influenced by different ecological systems. These different systems, like the physical, cognitive, emotional, social, moral-normative and personality development should be considered, specifically with regard to the young child in this study. Children are neither one nor the other, but a collection of all the areas of development (a view of totality) (Cilliers, 2006).

2.3.1 Physical and Motor Development

From infant to school beginner and further, the human body develops and changes. De Witt (2009) elaborates on the stages through which children grow. The 'neonatal phase' starts at birth and ends when a child is 2 weeks to 4 weeks old. According to Berk (2007) the average body weight at birth is 3 kg to 3.55 kg and the length 40 cm to 56 cm. During this stage, the baby's respiratory system, circulatory system and digestive system are completely developed (De Witt, 2009). The next phase is the 'infant phase', which lasts until the end of the first year of life. Here, rapid physical growth is noticeable. During this phase temporary teeth appears and the body weight may triple from the previous phase (De Witt, 2009). The 'toddler phase' follows the infant phase. During the 'toddler phase' the child typically starts to walk and talk. Toddlers' gross motor skills, including coordination, show rapid development and movement seems easier. One of the characteristics of this phase is that children want to play more and learn through playing (De Witt, 2009). Regarding sensory development, children at this age are able to hear soft sounds just as well as an adult (Botha, Van Ede, Louw, Louw & Ferns, 1998). The next phase is characterised by steady growth in height, mass, body limbs, bone, muscle and teeth. This phase is known as the 'pre-schooler' or 'child under five phase'. Bone structure development is underway and children tend to have more control over their body movements and coordination. Heart rate slows down and the temporary teeth are fully developed (De Witt, 2009). Berk (2007) states that the growth of the muscle and bone structures contribute to the obvious differences in physical appearance compared to the previous stages. In the 'school beginner phase' (6 years to 9 years) fine motor skills develop rapidly, coordination is much improved and normal sleeping, eating and toilet patterns are established. Environments are explored, but children's cognitive development may differ from one another as the physical development of some children may not allow them to explore their environment in the same way as other children (who are perhaps physically more developed). Height and body weight increase and milk teeth (temporary teeth) are replaced by permanent teeth. Other physical skills, like distinguishing left from right and refined hand muscle movement (for example to write in a more structured way) develop quickly during this stage (De Witt, 2009). It is noticeable that children's general speed of growth seems to slow down at this stage, in comparison to the previous years of development (Louw *et al.*, 1998).

It is important to remember that each child's reactions and emotions, in this study aggressive reaction, specifically, cannot be separated from their physical development. The physical development influences the learner's emotional, cognitive and social wellbeing and, to understand any of these dynamics, the physical development and capabilities should be borne in mind (Cilliers,

2006). In this study, the social reactions of children between 5 years and 6 years old are explored: how their physical development contributes to the way that they communicate with others, move around each other, their cognitive development and their self-confidence (contributing to social interactions).

2.3.2 Cognitive Development

Jean Piaget's (1896 – 1980) theory on children's cognitive development is studied all over the world and forms the basis of other theoretical research (Slater & Brenner, 2003). Piaget's theory of cognitive development elaborates on his view of how people actively construct knowledge. People actively construct knowledge through engaging in the process of their knowledge adaptation. This adaptation implies that the construction of new knowledge occurs through attaching meaning to life experiences. These adaptation processes occur through the process of assimilation (new information that can easily fit into the child's existing knowledge), accommodation (where existing information is changed to accommodate the new information) and equilibration (when there is a balance found between the new knowledge and the existing knowledge) (Donald *et al.*, 2010).

Piaget defined the cognitive development of a child through the following stages: The sensory motor stage (birth to 2 years) is the first phase where the child learns through exploring the environment and using the processes of assimilation, accommodation and equilibration. Following this is the preoperational stage (2 years to 7 years). During this stage, children are able to have an inner representation of the outer reality. The next stage is the concrete operational stage (7 years to 11 years). During this time, children are less egocentric, think more logically and are less dominated by their perceptions. The last stage is called the formal operational stage (11 years and upwards). Children at these ages are capable of more abstract thinking and participate in abstract relationships (Donald *et al.*, 2010).

Another theorist who made a great contribution with regard to the understanding of the cognitive development of children is Vygotsky. Vygotsky (1896 - 1934) holds that children learn through social situations and the meaning they attach to social situations. Language and its use is of great importance to Vygotsky as it plays the central role in cognitive development and is used in thinking, reasoning and communicating in social situations. Vygotsky also illustrates that mediation through interaction is like the 'engine' that drives the development and the learning process. The child's Zone of Proximal Development is the 'area' or concept which the child is not yet ready to understand on

his / her own, but with the help and mediation of another person the child may understand the concept (Donald *et al.*, 2010). His theory thus has a significant implication for educators and parents, as their roles in children's cognitive development are highlighted in the support they should provide with mediation.

Cognitive development can be discussed in more depth, although Piaget's theory provides a foundation for cognitive development for this study. De Witt (2009) compiled an in depth summary on the cognitive development of children ages 0 to 9 years old. This summary, together with a few other referenced researchers is provided briefly:

From the ages of 1 month to 6 months the child shows interest in his/her surroundings. Bodily awareness develops and they show interest in new objects and examine them. Even at 5 months, children examine new objects with more concentration. Children at this age understand and follow routines. Children of 6 months manage to draw the conclusion that, for instance, making sounds will draw attention (De Witt, 2009). During months 7 to 11 a child knows his/her own name and begins to attach meaning to sounds heard before. They want to show independence and try to do some things by themselves. They can concentrate on an object at 8 months and understand the word "no". At 9 months they have learned the skill to laugh at appropriate times and things. They know games that have been played before and can anticipate movements from others and self. The child in this stage of development will also react to his/her name at 9 months. At 10 months, the child attaches familiar movements to familiar situations, like holding up his/her arms to put on a dress or a shirt. Toys are remembered and searched for, and they remember games. At 11 months the concept of "here" and "there" is developed and they can demonstrate a need by pointing or making other movements (De Witt, 2009). Myelin sheaths on the neurons in the brain assist neurons in sending impulses to the brain. Myelination and the development of sheaths is not complete at this age and affects their memory as information cannot be sent to the brain as rapidly and efficiently as after the completion of myelination and development of sheaths (Alessi & Ballard, 2001).

Between 1 and 2 years, it was found that children connect a movement to concepts like "yes" and "no". They develop a sense for jokes and tend to respond correctly, they understand and respond to simple, previously heard questions and enjoy objects being pointed out to them. At 1 year and 3 months, the child can fetch things via verbal instruction (if it is a repeated instruction); they can mimic animals from their environment and they can name some parts of their bodies. They are also able to distinguish between a real object/thing and its printed/toy representation. At 1 year 6 months, the child can carry out requests which demand concentration and memory (De Witt, 2009).

Children at 1 year 7 months of age are able to remember and recall certain information (Alessi & Ballard, 2001). From 1 year and 9 months the child is able to ask for certain basic needs to be met, like food, drink and toys (De Witt, 2009).

Children between 2 years and 3 years of age are eager to learn and ask for help in using the bathroom. They can remember a few songs or rhymes and sing or say it along with other people. They imitate adults, but they also know why adults do the actions which they are imitating. They know a few colours and could possibly count three objects. They can also discuss pictures and talk about books (De Witt, 2009). During the age of 3 years to 4 years children tend to show greater memory ability and can refer to the past. They show knowledge of their own gender and can count to ten (De Witt, 2009). At this age, until 6 years of age, the child can use language to describe what they remember (Botha *et al.*, 1998). From 4 years to 5 years children like to listen to stories and tell their own stories or repeat a story. They elaborate on fantasy games and like to play along. The duration of their concentration has increased when focusing on a task at hand, but they may still change their body postures frequently (De Witt, 2009). They are very eager to learn, ask frequent questions and they also enjoy stories out of the ordinary (like stories of strong and mighty people). Although meta-cognition (the knowledge of one's own cognition and its processes) develops throughout life, there is proof that children in this stage of their lives have developed a sense of meta-cognition (Louw, Van Ede & Ferns, 1998).

Between the ages of 6 and 9 years, the child still enjoys stories, but also shows interest in reading and writing. Their vocabulary grows and they talk freely (De Witt, 2009). Children from this age until the age of 12 years show an increase in working memory (which is the memory used in complex cognitive tasks) (Louw, Van Ede, Louw & Ferns, 1998). These children are also able to plan projects and show less dependency on adults, but still need help in implementing such projects. They are able to read and write by themselves and construct their own stories (De Witt, 2009). As children grow older, they generally show increased development in their psyche-theory (their knowledge of the psyche and how it works), which is due to a better developed meta-cognition (the awareness of their own cognitive processes) and better meta-memory (knowledge and memory control) (Louw, Van Ede, Louw & Ferns, 1998).

As derived from the above, the development of cognition and cognitive processes influence learners' understanding of behaviour and behaviour that is learned is remembered through cognitive processes. Cognitive development and learning is greatly influenced by mediation. Other aspects, like self-regulation and control of behaviour, are developmental aspects that could also be mediated

(Cilliers, 2006). Learners' behaviour is thus inseparable from their cognitive processes. The implication for this study is to understand that cognition not only influences the learners' behaviour, but their behaviour (specifically aggressive behaviour) can be shaped and mediated through cognitive processes. This study, however, proposed to provide information to assist an alternative method to cognitive processes to support and build on positive behaviour amongst peers.

2.3.3 Emotional Development

Basic human emotions are already present at birth, but emotions are complex and develop gradually and over time (Berk, 2006). There are several theories on children's emotional development. Piaget stated that emotions are inseparable from cognition, as a child's emotion is the source of energy for exploring new situations, which then is a basis which assists in cognitive growth (De Witt, 2009). According to Freud's theory, the child's core personality is formed before the age of six years. This development progresses through a series of psychosexual stages. The emotional issues shape the personality traits observed later in life. Freud's theory highlights that behaviour (including aggressive behaviour) is the outcome of wishes, desires and feelings (which people are not necessarily aware of) (Grieve, Van Deventer & Mojabelo-Batka, 2006). According to Grieve *et al.* (2006), Freud's theory is in some instances not correct. However, there are psychologists who still embrace the theory (Grieve *et al.*, 2006). From Freud's theory, Grieve *et al.* (2006) derived the opinion that emotion is a form of energy which 'pushes' a person to attain a state of equilibrium. A state of equilibrium is attained because of emotion that disorganises or disequilibrates the person and the ego.

Erikson (1902-1994), a Danish psychologist, defines eight stages of psychosocial development in a person's life. According to Erikson's Stages of Psychosocial Development, a person will master/develop one of the mentioned life tasks and incorporate it into his/her personality as follows; trust vs distrust (0 to 1 years of age), autonomy vs shame and doubt (1 to 2 years of age), initiative vs guilt (3 to 5 years of age), industry vs inferiority (6 to 11 years), identity vs role confusion (12 years to 19 years of age), intimacy vs isolation (20s and 30s for males only; and 12 years and 19 years of age for females), generativity (generative) vs stagnation (40s and 50s) and integrity vs despair (60 years and over). For successful emotional functioning, a person should incorporate the positive quality (of the two qualities mentioned above in Erikson's life stages, for example the 'trust' quality and not the 'distrust' quality) into personality. The ego could be damaged if a negative quality (of the two qualities mentioned above in Erikson's life stages) is incorporated in the

personality. Outsiders should understand that every child's social context (the social realm in which they socialise and function) has an influence on their development because of the difference in these social contexts (Donald *et al.*, 2010).

De Witt (2009) compiled a list of the characteristics of the young child's emotional development using other sources. These, and other references, show the following:

From birth to 4 months the child may become distressed when he/she is moved too quickly or when experiencing loud sounds. At 4 months a baby can change moods quickly from being happy to sad, and may get excited when hearing his or her mother. Facial expressions and body movements change to also show pleasure. Feelings of aggression, sadness and astonishment also develop at this age (De Witt, 2009).

It has been found that babies develop fear, shyness, fright and separation anxiety from 5 months to 1 year of age. They can express anger and eagerness with body movements and facial expressions. The first signs of jealousy are also shown. At the age of 1 year the baby specifically shows signs of becoming impatient and intense anger may be expressed. Moods during this developmental stage do not change as rapidly as before and babies tend to show shyness towards strangers. They are inquisitive, generally friendly and full of self-confidence (De Witt, 2009). At 2 years of age, children cry easily, especially when a need is not satisfied. They tend to be jealous, touch everything and are prone to tantrums. A remarkable observation is that, during this stage, they wish to be more independent but are still very dependent on their parents (especially the mother). They are very egocentric and start to show more complex emotions (De Witt, 2009). According to Flavell, Miller and Miller (2002) it is between the ages of 2 years and 3 years that children begin to develop 'theory of mind'. 'Theory of mind' is the understanding that other people also have their own emotions, thoughts, beliefs, desires, intentions and perceptions.

Between the ages of 3 years and 4 years, the child is still dependent on the mother and is inclined to be stubborn. An enormous difference from the previous age is that they do show an understanding of their parents' emotions. They show greater self-control in general and they also have better language control. Emotions are expressed in a more acceptable manner and uncertainty is often expressed as shyness (De Witt, 2009). Children from 4 years on tend to boast about their abilities and share it with others. They feel more secure with leaving their protective environment, but also learn how to accept their limits. They are more self-confident, single minded and approach problems rationally (when treated fairly). In general, emotions are more stable at this age (De Witt,

2009), but they do show more intense fear than in the older stages (i.e. fear of the unknown) (Broeren & Muris, 2009).

At the age of 5 years, the child can make small decisions and seem to be able to look after him-/herself in the mother's absence. Children are more stable regarding emotions and are full of self-confidence. They are proud of their achievements and creations and enjoy the limitations set by rules (De Witt, 2009). Emotions like happiness, anger and fear are seen in children before the age of 2 years, but by the age of 5 years, children show more complex emotions, like guilt, shyness and being proud (Botha *et al.*, 1998). During the 6th year of development, quick mood swings between love and hate is witnessed. Children tend to become self-centred, rebellious and aggressive. But, in the right circumstances, they could be loving, friendly, enthusiastic and cooperative (De Witt, 2009). Strayer and Roberts (2004) found that children at the age of 5 years, experience anger, aggression and exhibit aggressive reactions to each other., Strayer and Roberts (2004) furthermore came to the conclusion that empathy in children (at the age of 5 years) is positively associated with prosocial/good behaviour, but negatively associated with aggression.

Between 7 years and 9 years of development, children tend to be self-critical, stable and independent. They are not yet able to control their energy, which may lead to over tiredness or irritated behaviour. They can differentiate between facts and fantasies and become more consistent in their emotional expressions. They seem to achieve greater emotional differentiation, which provides them with the skill to express their feelings (Botha *et al.*, 1998). Even though children at this age show less 'fear for the unknown', Broeren and Muris (2009) found that they do show higher generalised anxiety. Muris, Merckelbach, Gadet and Moulart (2000) support these findings as they found that children at a young age (before 6 years) show more infantile fears and, as they grow older, the infantile fears decrease and the generalised fears increase.

Graziano, Keane and Calkins (2010) studied the emotional regulation skills of children specifically for the reactive control of behavioural impulsivity (including intrusive/aggressive behaviour). They found that toddlers (age 2) who had emotional regulation skills illustrated high initial levels of reactive control (including behavioural impulsivity control). Thus, toddlers with a lack of emotional regulation skills have lower levels of reactive control (including behavioural impulsivity). As children mature, so do their emotional control, but, as Graziano *et al.* (2010) conclude, intervention at a young age is important.

As indicated above, aggression is an emotion expressed early in the emotional development of children and children tend to find the control of emotions difficult throughout all the development stages. Specifically in grade R (the age range of children in grade R in South Africa is 5 years to 6 years old), the connection between empathy and aggression is noticeable. The complex emotions that develop during this time, together with the difficulty to control emotions, not only affect children's social development, but also contribute to the understanding of this age groups' aggressive reactions. This study could possibly contribute to a better understanding of alternative interventions to positively influence this emotional control and behaviour impulsivity (specifically aggressive reactions) of children in a grade R class. Further discussions on aggressive behaviour will follow in section 2.8.

2.3.4 Social Development

Children are surrounded by people who constantly mould their social skills. Children learn social skills from interacting with other children and need to have the opportunities to socialise to develop these social skills (Drew, 2007).

Social interaction and social skills are not important for the development of a repertoire of efficient acceptable social skills only, but also for cognitive learning. As discussed in section 2.3.2, Vygotsky places emphasis on the cognitive development of children through social interaction, specifically through mediation (Donald *et al.*, 2010). Regarding learning social skills, Bandura (another social learning theorist) places more emphasis on learning from others. Bandura (1973) is of opinion that children learn through modelling. Here children observe others' behaviour and social skills, and model it when placed in a similar situation. Social behaviour is thus mainly learned through environmental influences, whereas genetic factors play a minor role (De Witt, 2009).

When a person thinks of social development, the concepts of prosocial and antisocial behaviour arise. Prosocial behaviour is behaviour which is associated with positive social interaction. "It includes, amongst other things, cooperation, helpfulness and a willingness to give" (De Witt, 2009, p.31). Antisocial behaviour often also occurs during a child's preschool years (3 years to 6 years) and involves actions like aggressive behaviour. Antisocial behaviour amongst members of a family is prevalent and this antisocial behaviour could also be seen in young children (6 years) when in interaction with others who are not their siblings (Ensor, Marks, Jacobs & Hughes, 2010).

De Witt (2009) summarised social skills development in the young child. From birth to three months, the baby responds to its mother with various physical movements and seems to be the happiest when nursed against the mother's body. At 3 months the baby shows signs of recognising the mother's voice and watches/studies her face. Pleasure can be shown through smiling or kicking its legs and the baby starts to show interest in other people's movements (De Witt, 2009). From 4 to 6 months, the baby responds to people by smiling and does not like to be left alone for too long as babies crave social interaction. By this time they also know their family members. The baby will, at 6 months, indicate that he or she wants to be picked up by appropriate gestures (like holding out arms) and enjoys and looks for close relationships with others. Between 7 and 9 months the baby may respond to its name and reach out to touch other babies and look at them. They can also play games that they have learned to play before and which involve more than one person (De Witt, 2009).

As in emotional development, the baby may be cautious of or frightened by strangers from 9 months until 1 year of age. Anger is also seen in situations where a toy is taken away. They are able to remember and practise certain social rituals, like saying 'bye-bye' in a certain way. From 1 year of development, social interaction with others who are not seen as part of the family, will start to occur. Babies, during this age, will play alongside but not necessarily with another baby. Every now and again they will respond to the baby in a socially negative manner like biting, but at other times handing the other a toy. They tend to show friendliness towards friendly adults, like giving them a toy, and at this age enjoy social gatherings and like to watch adults. Here they learn their first words and social behaviour is modelled to them. Love towards things and people that are close to him or her is shown in various ways (De Witt, 2009).

During the 2nd year of development, as in the first year, babies may rather play alongside other babies than with them. Through long observations of adults in their 1st year, babies will now imitate adults' social behaviour and also know the reason for doing things. They do have difficulty sharing as they are egocentric and often tend to compete with others. The need for independence becomes evident, but they will ask for the mother's approval (De Witt, 2009).

During the 3rd year of development, sharing and unselfishness are developed. They enjoy playing with others and show interest in developing friendships. Sympathy is also noticeable at this young age and children tend to project their experiences onto dolls and other toys. There is an expectation of young children to act accordingly, and being in control of the bathroom routine is part of acting accordingly. This is expected by the age of 3 years (Louw *et al.*, 1998). At 4 years, taking turns is a

new concept. Empathy is shown with children who are not feeling well. They can communicate better at this stage and seem to develop the idea of a 'best friend'. Children may find it difficult to adjust to a new baby born into the direct family and they are still attached to the primary caretakers (Botha *et al.*, 1998).

At 5 years of age, children are able to play on their own and with others for longer periods of time. Games that are directed at fantasies or competitive games seem to enhance their socialisation. They are still dependent on adult approval. Possessiveness and fighting with others, even though they also want to play together, makes its appearance in the 6th year of development (De Witt, 2009). According to Botha *et al.* (1998), it is very important for children to socialise with peers at this age (six years), as they, through this interaction, learn what behaviour is appropriate and learn skills like working together and managing aggressive behaviour. From 7 years to 9 years, children seem to be more independent of their parents and are able to do projects with others, even though they still need arbitration from adults (De Witt, 2009). One of the remarkable characteristics of this age's social development is that they no longer only see children as neighbours as friends, but they develop a sense of a true friend and they choose their friends (Louw, van Ede & Ferns in Louw *et al.*, 1998).

The above discussion highlights the importance of learning social skills and the development of prosocial behaviour (instead of antisocial behaviour) at a young age. In order to understand social interaction and how social interaction influences other areas of development (like cognitive development), the development of social skills should be understood. Studies like this are necessary to support the knowledge of influences that possibly could assist in developing prosocial behaviour, for the reason that prosocial behaviour and antisocial behaviour (including aggressive behaviour) influence other areas of development. In this study, social interaction, and the aggressive reactions occurring in such interaction, is used to determine the influence of PAA.

2.3.5 Moral-Normative Development

A baby is not born with the skill to distinguish between what is right and what is wrong, but is born with the potential to make that distinction. It is not clear precisely at what age a child develops a moral sense as parents and other role models in every individual child's life play a role in the development of this moral-normative skill. Jean Piaget and Lawrence Kohlberg are the two well-known theorists when discussing moral-normative development in children (De Witt, 2009; Louw, Van Ede, Ferns, 1998).

Piaget's opinion was that moral development takes place through stages and occurs in close correlation with cognitive development. Piaget labelled children under the age of 5 years as premoral. During this stage, children of 5 years and younger would not bear moral rules in mind while playing because their focus is more on the manipulation of material or discovering material than on following game rules. According to Piaget, the following stage in a child's moral-normative development is the stage of moral-realism (6 years to 9 years). Children in this stage accept rules, but they also do not believe in 'bending' the rules for any reason (moral absolutism). Another moral characteristic which children develop in this phase is called "immanent justice". This characteristic entails that children believe that they receive indirect punishment for wrong behaviour, like falling over a rock after being rude to a friend (the falling is an indirect punishment for being rude) (De Witt, 2009).

Kohlberg's work was mostly inspired by Piaget, hence some similarities are evident, like the influence of cognitive development on moral development and that moral development proceeds through stages. However, Kohlberg did not agree with Piaget that moral development ends at middle childhood, but believed that children continue to grow morally after this age. Kohlberg stated that, because cognitive development takes place throughout life, moral development occurs past the age of 9 years. He reasoned that, as children's cognitive development grows, they are able to attach reason to their behaviour and make judgements on their behaviour. Through reaching this cognitive disequilibrium, the moral development grows (De Witt, 2009).

De Witt (2009) developed a well-rounded summary of the young child's moral-normative development;

From birth to 2 years, children are pre-moral and pre-religious. They generally lack moral judgment even though they can learn right from wrong (but this is due to pain and pleasure reactions). Norms are accepted without any questioning because it indirectly provides a feeling of safety for the young child. All their moral judgments are purely according to that of their parents. From two to three years the child fully trusts the parents for moral judgement and the establishment of norms. When establishing a connection with a god (according to their parents' religions and beliefs), they react because of feeling and not because of facts. When establishing norms and rules, repetition is very important as their memory, at this age, is not well developed. The concept of punishment and reward play a role as it helps them to make the distinction between right and wrong (De Witt, 2009).

At age 3 to 5 correct moral behaviour is driven mainly by the child's wish to avoid punishment. The right behaviour is also reinforced by parents and the right behaviour and wrong behaviour mainly reflect the views of the parents. This is also why some children only do wrong things when the parents cannot see them. Their cognitive development during the previous two stages enables children to realise what behaviour may please the educator and will act accordingly. They may find it difficult to understand why a rule is for one situation but not for another. Regarding their religious development, children at this age do not yet transfer the lessons learned from religious scripts, but see it in the same light as fairy-tales and fables (De Witt, 2009).

From 5 to 9 years of age, children are able to differentiate between good and bad, but this differentiation is greatly determined by the values of rewards. Children at this age start to judge others on the basis of the norms they have been taught (parents' norms). Manners, independence and responsibility make their appearance and children are shown to have a sense of duty and appreciation. Even though children learn to control their behaviour at this stage; they also show a sense of guilt for wrong behaviour (De Witt, 2009).

The connection between moral development and aggressive reactions amongst young children is prevalent. According to Koenig, Cicchetti and Rogosch (2004), there are two types of behaviour that signify moral development. These behaviours are to engage in prosocial activities and behaviour which aims to benefit others and the inhibition of antisocial behaviour (including aggressive reactions). Furthermore, according to Woolfolk (2007), the 'theory of mind' (see section 2.3.3) develops during the pre-school years. Gehlbach (2004) elaborates on this and states that developing an understanding for others' feelings is important for moral development, promoting positive social behaviour and reducing prejudiced behaviour. As stated above, De Witt (2009) holds that children are able to distinguish between wrong and right behaviour at the age of 5 years. For this study, it implies that, even though aggressive behaviour is part of normal child development, children at the age of 5 years can distinguish between correct and incorrect behaviour. Thus, the occurrence of aggressive reactions is not due to typical normal human development only, but partly also purposeful and with intention. This supports the reason for the exploration of possible positive methods (as in this study) to promote prosocial behaviour (less aggressiveness).

2.3.6 Personality Development

Personality is a person's psychological, social, moral and physical characteristics integrated with each other, to make expressions to the environment and specifically other people (De Witt, 2009).

According to De Witt (2009), many research findings point to the idea that personality development starts at infancy in the form of temperament. Temperament is the “result of interaction between genetic and environmental factors” (De Witt, 2009, p.38). Gender-role identity and self-concept are the two important topics in the discussion of personality development. Children develop their personalities based on their sex and the role they are socially taught to portray. The development of self-concept is parallel to personality development because, as children evaluate themselves and evaluate others to develop personality, self-esteem develops (which in turn is a major contribution to personality traits) (De Witt, 2009). Regarding the development of the self-concept, it is interesting to note that babies are able to recognise themselves in the mirror, together with other basic attributes like being a male or a female. Children between the ages of 2 and 5 years are able to discuss their inner characteristics (Botha *et al.*, 1998). Furthermore, from the age of 6 years to 12 years, the development of the self-concept is rapid. At this stage they have an ideal self and a true self (Louw, Van Ede & Ferns, 1998). Personality is partly due to genetics and partly due to life experiences (Louw, Van Ede & Ferns, 1998).

Aggressive reactions to peers are mostly due to a feeling, but personality and self-concept play an important role in the execution of these reactions (De Witt, 2009). Even though the aim of this study is not to determine *why* and *how* the aggressive reactions take place, it is interesting to note that children at the age of 5 years are aware of their personality characteristics and they are aware of wrong and right behaviour. This supports the necessity of this exploration of possible positive interventions for overt aggressive behaviour as children of 5 years in age can be in control of their behavioural actions and the actions cannot just be negated as a part of normal development.

2.4 AGGRESSIVE BEHAVIOUR

The sections that follow are focused on different aspects of aggressive behaviour exhibited by young children. Aggressive behaviour is defined, followed by a discussion on aggressive behaviour in children and aggressive behaviour in the classroom.

2.4.1 Defining Aggressive Behaviour

“Aggressive behaviour forms part of the everyday life of individuals in society. People of all ages, cultures, and both genders express their frustrations and emotions in variable aggressive ways” (Breet *et al.*, 2010, p.511). Studies have indicated that aggressive behaviour manifests during childhood and, if no intervention takes place, such aggressive behaviour may peak during

adolescence and probably decrease when reaching adulthood (Dodge & McCourt, 2010). Aggressive behaviour may have various definitions but it is generally described as behaviour aimed at harming another person (verbally and physically) (Breet *et al.*, 2010). Furthermore, Marsee *et al.*, (2011, p.792) state that, even though the broad definition for aggressive behaviour is “the intent to harm”, aggressive behaviour could be defined more specifically by looking at the purpose of the behaviour and the way the behaviour is expressed (the form of aggressiveness). When defining aggression by these characteristics, overt and relational aggression can be distinguished from each other. Overt aggression includes physical and verbal aggression and is intended to harm another person through these methods, whereas relational aggression aims at harming others through “damaging friendships, relationships or feelings” (Marsee *et al.*, 2011, p.793). Both these aggressive reactions can be traced back to childhood. Children who have to cope with anger and pursue their social goals by harming others (or relationships) via gossip and social exclusion, are at risk of peer rejection and adjustment problems (Underwood, 2005). Violence is a term generally associated with aggressive behaviour. It is “a force that does harm or damage” (The Oxford School Dictionary, 1994).

In conclusion, aggressive behaviour can be expressed in many forms as “physical and social, verbal and nonverbal, reactive and proactive behaviour” (Fraser *et al.*, 2005, p.1045) but the behaviour is characterised by the aim to harm or injure another person (Coie & Dodge cited in Fraser *et al.*, 2005). The question that arises, though, concerns what is entailed by aggression during childhood.

2.4.2 Aggressive Behaviour and Children

2.4.2.1 Nature of aggressive behaviour

To define aggressive behaviour, the two subtypes of aggressive behaviour amongst children can be described. This distinction between the two types of aggression is made by investigating the motivation behind the behaviour. Proactive aggression is behaviour shown to reach a goal. Here the individual focuses on reaching a desired goal, for example to take a toy from a friend. Reactive aggression occurs when a child responds to a threat or frustration, but it is not as goal-directed as proactive aggression (Fite, Schwartz & Hendrikson, 2012). Hardman, Drew and Egan (2011) state that a characteristic of children with EBD (emotional and behavioural disorders) is aggressive behaviour towards peers. In this case they suggest early intervention for children at a young age. Violent behaviour and bullying is a term also linked to aggressive behaviour associated with children. Bully behaviour is behaviour that possibly poses a risk to the well-being of others and the

perpetrator (Arseneault, Bowes, & Shakoor, 2010) and learners who show “high-externalizing behaviour, low social skill, and few friends, are rated high with reference to relational aggression and peer victimization” (Fraser *et al.*, 2005, p.1046).

Mash and Wolfe (2005) highlight the difference in the expression of anger between different cultures. They confirm that there is a dramatic difference in the way children react to feelings of anger. Without making the distinction between cultures, Csibi and Csibi (2011) state that aggressive children tend to act violently towards their peers. In contrast with Fite *et al.*'s (2012) description of types of aggressive behaviour, Breet *et al.* (2010) describe aggressive behaviour in children as behaviour that manifests in three forms. These forms are physical aggression, verbal aggression and indirect aggression. Physical aggression (also known as overt aggression) includes destructive behaviour like hitting, kicking and other forms of physically hurting another or property. Aggression can also occur in the form of emotional or psychological harm done to someone else by means of communication and the use of words (verbal aggression). Indirect aggression involves attacking another person through ways such as excluding a person, or by other social manipulative behaviour, without the other person knowing about the social 'attack' (Breet *et al.*, 2010). Indirect and verbal aggression are also known as covert aggression. Fraser *et al.* (2005) also referred to indirect aggression as 'social aggression'. A combination of these aggressive behaviour patterns could define a high risk personality (Fraser *et al.*, 2005).

2.4.2.2 Course of aggressive development

Aggressive behaviour develops throughout a child's developmental years. According to De Witt (2009), aggressive behaviour is noticeable during the early years of development and can be witnessed through the way children play with peers. Handling aggressive impulses are of key importance, specifically at the age of 4 years. At this stage, children will act out television characters in their games and there will possibly be 'bad guys' and 'good guys'. During these games a 'safe place' will typically be developed for the 'good guys'. Unbridled aggression also scares the shy pre-schooler, which will typically make him/her act inappropriately, for instance by swearing. While children at the age of 5 years will express feelings of aggression through fantasy games, they can differentiate between fantasy and real-life games by the age of 6. Thus, if not taught the appropriate way to deal with aggressive feelings, the child may act inappropriately during fantasy games and real-life situations. Children develop a sense of their own intentions from the age of 2 years. As they grow older towards pre-school and the 'theory of mind' (see section 2.3.3) develops, children start to understand that others also have intentions and typically should be able to

differentiate between intentional and unintentional actions by others and start to act accordingly. However, aggressive children have difficulty with differentiating the intentions of others (Woolfolk, 2007). Gehlbach (2004) highlights the importance of the development of 'theory of mind' to promote positive interactions amongst peers; Woolfolk (2007) and De Witt (2009), however, mention that aggression still occurs at age 5 years and thus the research comes to the conclusion that 'theory of mind' is not the only developmental need for less aggressiveness.

Mash and Wolfe (2005) hold that most children display aggression at the age of 2 years, as mentioned above, but inhibit this aggression by the time the learners enter school (at 5 or 6 years). They further state that some anti-social behaviour (including aggressive behaviour) decreases with age while other types of anti-social behaviour increase.

2.4.2.3 Gender differences

In 2006, Schaffer *et al.* found that boys were typically more aggressive than girls, but girls do display aggressive actions. Kim, Kim and Kamphaus (2010) also found that boys were typically more aggressive than girls. Mash and Wolfe (2005) support these statements in that they hold that boys show more commonly anti-social behaviour (including aggression) compared to girls. However, this difference does decrease by adolescence in normal development (Mash & Wolfe, 2005). Hanish, Sallquist, DiDonato, Fabes and Martin (2012) and Berk (2006) state that girls are more likely to be relationally aggressive towards both genders and boys are more likely to be physically aggressive towards boys. Csibi and Csibi (2011) support this finding in that they are of the opinion that boys tend to exhibit aggressive behaviour more often in the form of physical and oral aggression, whereas girls tend to exhibit aggressive behaviour in the forms of calling others names or gossiping. Woolfolk (2007), however, holds that both boys and girls before the age of 8 years show relational aggression. It is only after 8 years of age that girls tend to act more relationally aggressive than boys. Brody *et al.* (2003) found that boys, but not girls, who tend to be aggressive during elementary school, are at risk of continuing with aggressive behaviour even in adolescence.

The focus of the current research was to explore the aggressive interaction amongst learners in a typical grade R class, thus gender differentiation is not necessary and the common aggressive behaviour of a specific gender is not applicable, as overt and relational aggressive behaviour were seen in both genders in this case study and both are types of aggression. As Hanish *et al.* (in press, p.1) state: "Thus, there is no reason to believe that there is variation in the behavioural interaction patterns that typify girls' and boys' same- and other gender aggression." Hanish *et al.* (in press) hold

that even though researchers tend to make a distinction between the aggressive behaviour of the different genders, this distinction is made due to the way the gender usually plays. Rough play is mostly seen in boys and girls tend to play quietly, hence the expectation of physical aggression and indirect aggression respectively, although, they further state that girls, especially those of higher social status, often take part in physical aggression. Even though aggressive behaviour is part of human development, environmental factors, like television, influence values, beliefs and social conduct to influence aggressive behaviour amongst children (De Witt, 2009).

2.4.2.4 Influence of television

As mentioned, mass communication, like television, has an influence on the aggression of the young 4 year-old. Firstly, it provides an additional activity to playing with a peer, which dampers the development of appropriate social skills. Secondly, the children's creativity is influenced and this could damage the growth of the child's personality. Thirdly, television could specifically arouse aggression because learners identify and model the behaviour of their aggressive hero on the television screen, specifically learning new aggressive skills. Fourth, it may increase the learner's appetite for more violence in his/her life and, lastly, the child may develop a fear of becoming a victim of violence as seen on television and be conditioned to act aggressively (De Witt, 2009). Mash and Wolfe (2005) state that the influence television has on aggressive behaviour is indisputable. They make an important statement, however, saying that it is unlikely that television is the only contributing factor towards aggression.

Huesmann, Moise-Titus, Podolski and Eron (2003) hold that watching television does show an increase in aggressive behaviour. They came to a conclusion watching violence on television during childhood predicts aggressive adults in later life; children tend to act like the characters they see on the television screen. Woolfolk (2007) broadens this concern and states that referring to television is too narrow; the problem, on the contrary, involves mass media like newspaper, games and DVDs as well.

2.4.2.5 Causes of aggressive behaviour

Vogel (2002, p.23 - 25) and Botha *et al.* (1998) highlight the main causes of violent behaviour in children and adults as: Genetic and possible brain disease, biological factors, locus of control, level of functioning, stress, family structures, cognitive skills, basic social skills and specifically a lack of empathy. A lack of empathy means that someone is unable to put him or herself in another's shoes

(Melson, 2007). A lack of empathy could thus be connected to violent behaviour amongst children and adults.

2.4.2.6 Intervention

Aggressive behaviour is seen early in a child's life and can last until adulthood, but it can also be reduced under the right circumstances. Children, even at the age of 2 years, may show some aggressive reactions to each other but they will quickly find that it is unacceptable behaviour when they attend a day care or kindergarten where interventions take place to control aggressive behaviour. This helps children as they grow older to develop emotional control, which can possibly, in turn, reduce aggressive behaviour (Botha *et al.*, 1998).

As stated in the above paragraphs, aggression is part of basic human development. However, children with high levels of aggression in a structured environment, like a classroom where aggression amongst the learners is prevalent, can be negatively affected in their basic development. Even children at primary school who show high levels of aggressive behaviour are at high risk of continued aggressive behavioural problems and other cognitive and social problems, like failure at school and social isolation (Hinshaw & Lee, 2003). Addressing aggressive behaviour is thus of paramount importance (Botha *et al.*, 1998) and Woolfolk (2003, p.79) states “as early as preschool, children need to learn how to negotiate social relations without resorting to aggression”. Mash and Wolfe (2005, p.160) elaborate and state that conduct problems (including aggression) can be treated more easily and effectively in young children than in older children. By providing positive experiences through “strengthening protective factors” a person can limit the facets that may contribute to an escalating aggression problem. Lastly, they state that, over time, preventing aggressive problems at a young age would be more cost effective than treating aggression later in life (Mash & Wolfe, 2005). Through this study, the researcher aimed to, if possible, provide information for further research which could contribute to dealing with aggressive behaviour in the classroom. The ecological framework is also supported as the focus is on providing possible interventions for a class as a microsystem and not the individual learners.

2.4.3 Aggressive Behaviour in the Classroom

The experiences and situations that children are exposed to early in their lives involve the skills and knowledge that they may use at school. The use of these skills and knowledge in social situations provides opportunities for learners to develop appropriate social skills. Social behaviour problems

will thus be obvious during their time at primary school and this provides the best time and setting to expose learners to interventions regarding difficult social behaviour, if necessary (Boxer & Dubow, 2002; Mostow, Izard, Fine & Trentacosta, 2002 cited in Fraser *et al.*, 2005). Mash and Wolfe (2005) agree that a young age is the best time for prevention or intervention. As mentioned above, Mash and Wolfe (2005) hold that prevention at a young age is important for effective prevention and for financial reasons.

“Aggressive behaviour in schools can have far-reaching adverse consequences for the child exhibiting the behaviour and create a stressful environment for peers and teachers” (Chan, 2010). Although aggressive behaviour may be normal in a child's development, teachers, caretakers and parents need to help children to learn to control their behaviour (Botha *et al.* in Louw *et al.*, 1998). Since aggressive behaviour starts to develop at a young age, it may manifest during adolescence, hence the necessity for intervention by schools, teachers, caretakers and/or parents (Botha *et al.*, 1998). Arseneault *et al.* (2010) recommend that interventions should start before entering the formal school setting as lifelong manifestations can occur in those exhibiting the aggressive behaviour, but also for those experiencing the aggressive behaviour, and that families should be included in the interventions that schools may undertake. The necessity for addressing this is not for the sake of those showing the aggressive behaviour only, but also for those who are the victims. Woolfolk (2007) mentions how aggressive behaviour in young children affects the victim of the aggression and may develop low-esteem, anxiety, insecurity and unhappiness. Osher, Dwyer and Jackson (2003) emphasise the necessity of schools to address and deal with the factors that lead to aggressive behaviour.

Thomas, Bierman and Powers (2011) conducted research on the effects of aggression on classroom climate and aggressive disruptive behaviour. They hold that being placed in 1st grade amongst aggressive children promotes aggressive actions and have enduring effects. Also, the classroom climate managed by the teacher could enhance or reduce the aggressive behaviour amongst the learners. Further they found that classrooms with aggressive characteristics make it difficult for teachers to foster positive relationships with their learners and, in turn, affects the management of the classroom behaviour. Classroom aggression thus has an effect on the classroom management and vice versa. This highlights the importance of intervention or prevention.

It is important to note that, according to the theoretical framework of this study, the aim is not to address the individual aggressive behaviour problems, but to investigate the possibility of providing contextual interventions where there is no fixation on the underlying problem.

2.4.4 Dealing with Aggressive Behaviour in the Classroom

“As violence increases, so does pressure for safe and orderly schools. Schools around the world are struggling with ways to prevent violence amongst learners” (Vogel, 2002, p.23). Teachers and schools not only have responsibility for a safe environment, their main purpose is to provide education. From personal experience, aggressive behaviour places a damper on educating the learners. Walker (2010, p.594) stresses that schools and the classrooms “provide one of the very best settings available for addressing this phenomenon [aggressive behaviour]”. However true this is, the problem is that, if schools, in spite of providing the best setting, are finding it hard to prevent violence, surely the prevention and intervention strategies should be revised. The necessity to prevent aggressive behaviour is important as aggressive behaviour in class is likely to prevent learners from reaching their full potential in the class and school settings (Bowen & Bowen, 1999).

Verlinden, Hersen and Thomas (2000) state that not only is a wide variety of methods needed to prevent and intervene in aggressive behaviour, but primary prevention and secondary intervention also is important. Primary prevention concerns implementing an intervention programme before the troubling behaviour even starts. Secondary intervention concerns early intervention as soon as a possible problem arises (Vogel, 2002). Vogel further suggests methods of intervention for aggressive and violent behaviour that are person-centred, such as counselling, conflict resolution and social instruction, and will enhance a systematic social learning process (no harsh discipline, as it is about changing the children's perceptions). Harsh discipline is not only the most unsuccessful way of providing prevention or intervention for aggressive behaviour; it can also cause antisocial behaviour (Vogel, 2002). Woolfolk (2007) provides guidelines for the teacher for dealing with aggressive behaviour amongst learners. She states that the teacher should model the correct behaviour for the learners, make sure the classroom is spacious and there is enough material for all the learners, ensure that learners do not profit from aggressive behaviours, teach positive and appropriate behaviour directly and provide opportunities to develop tolerance and cooperation. Teaching appropriate behaviour directly is also a part of cognitive behavioural strategies and is preferable to be used in modification of behavioural difficulties.

Fraser *et al.* (2005) list the sequence of steps which they took to modify social cognitive perception (the learners' perceptions and cognitive understandings of social situations) of grade 3 children in their study. They were (a) understanding and regulating emotions; (b) encoding social and environment cues; (c) interpreting cues and intentions; (d) setting relational goals; (e) formulating alternative social strategies; (f) selecting prosocial settings; and (g) enacting and selecting strategy.

The focus in this is on promoting social competence (Fraser *et al.*, 2005). In Fraser *et al.*'s (2005) social cognitive intervention (MC program) study, the intervention group (the MC classroom) showed an improvement in social competence and social contact compared to the group that received no intervention and who followed the normal school programme. Bender and Emslie (2010), on the other hand, used schools to gather data on their opinions on the prevention and intervention in aggressive and violent behaviour in schools. Some of the related opinions of the participating schools, parents and learners were that teachers should make time to teach specific ways and methods of respecting each other; that schools should provide supervision; that good communication between the microsystems is important; and that secondary interventions could enhance the prevention of violent behaviour in schools (Bender & Emslie, 2010).

According to Farrington and Tfofi (2009), there are many prevention approaches to modify bully behaviour, but the outcomes are disappointing. Cunningham, Cunningham, Ratcliffe and Vaillancourt (2010) mention that, even though the understanding of bully behaviour has progressed and grown, there is a need to improve the prevention and the intervention programmes aimed at addressing bullying. Furthermore, regarding intervention and prevention strategies for bullying and aggressive behaviour, Cunningham *et al.*'s (2010) research focussed on understanding and exploring children's (grade 5 to grade 8) opinions on interventions for bullying at school. They are of the opinion that a way to possibly reduce bully behaviour is by restructuring high-risk settings at school, organising recess activities, increasing the supervision at school, mandating school uniforms, including isolated students, restructuring peer groups, mobilisation of older student influences, teaching social skills and improving parenting.

The Cohen-Mansfield Agitation Inventory (CMAI) (n.d.) and Crick, Casas and Mosher's (1997) preschool behaviour Scale (TSBS-T) provide a checklist for determining the frequency of aggressive behaviour. These can be used to determine the kind of intervention to deal with aggressive interactions amongst young learners. Both of these behaviour scales can be used by teachers, although CMAI recommends training via the CMAI manual. By determining the frequency of aggressive behaviour, the teacher can evaluate his/her intervention and provide the necessary support needed to influence the learners' aggressive reactions amongst one another. For the purpose of observing behaviour in this case, these scales' aggressive actions were noted.

The literature discussed above provides examples of possible prevention and interventions; however, Cunningham *et al.* (2009) suggest that educators preferred to implement programmes (to address bully and aggressive behaviour) that require less training and time to implement. PAA does

require less training for the teachers than cognitive behaviour programmes or other prevention and intervention programmes focussing on behavioural modification. Furthermore, not only can PAA possibly provide an easy, less time-consuming method for teachers, but PAA also provides time for social skills development in the classroom.

2.5 PET ASSISTED ACTIVITIES (PAA)

In the following sections animal-human activities are divined followed by a discussion on the development of the human-animal bond and the benefits of the use of animals and the use of animals in the classroom. The last section focuses on the connection between animals and human aggression.

2.5.1 Definitions

The contact of humans and animals is used in creating AAT which includes interventions such as Animal Assisted Interventions (AAI), Animal Assisted Education (AAE) and AAA (Hart in Fine, 2010). AAT, AAI, AAE and AAA can be used within the child's microsystems, either individually or in groups. For example, a neighbourhood or class/school can be used in addition to the individual approach. AAA refers to a general category of interventions without a common protocol (Friedmann *et al.*, 2010) and it is the less formal therapy method. In this case, neither the handler (or volunteer) nor the pet needs specialised training.

The Delta Society is a society based in the United States and it provides AAT, other related services and companion animals with the aim of developing people's health (Delta Society, n.d.). According to the Delta Society (n.d.) AAT is an intervention which is goal-directed and used to promote improvement in human physical, social, emotional and or cognitive functioning (compared to AAA where the activities with animals are either in groups or with an individual, but does not have to be overseen by a healthcare professional and where the volunteer and the dog do not work towards a specific goal). AAA, AAT and AAI are executed with a volunteering person and an animal. This team is defined as a Pet Partner Team. The Delta Society defines the Pet Partner Team as a team consisting of the volunteer and his/her dog, which has been evaluated by the necessary overseeing structures to show appropriate behaviour (Roehm, 2010). Hence the fact that the Delta Society is under the process of name change to Pet Partners.

In this research the influence of specific PAA is explored. PAA consists of the same activities as AAA in that it is 'social and unstructured' (Pets as Therapy, n.d.), but the term 'pet' places emphasis on the usage of a household pet and, in the case of this study, specifically a dog.

2.5.2 Development of the Human-Dog Relationship

Using dogs for therapy is a relatively new concept in South Africa. The dog and human relationship started as far back as Ancient Greece (1500 to 2000 BC), but dogs were first domesticated for specific service purposes in the 1400's (Clutton-Brock in Serpell, 1995). Dogs were bred to coexist in human lives and for filling many roles like guarding, herding, hunting, fishing and being our friend (Clutton-Brock in Serpell, 1995). The theory of Biophilia originated in Edward Wilson's work in 1984. This theory claims that people are drawn to any other forms of life in order to sustain their own existence. Born (2008) states that, as religions changed over time, the way people viewed animals and their interaction with animals also changed. The ancient Greeks used dogs for therapeutic purposes in their healing temples to cure diseases. Dogs assisted disabled people in Belgium during the ninth century and in 1790 dogs were used in England for treatments that focused on the development of 'love' and 'understanding' of others. In 1859, the influential Florence Nightingale documented that pets, like birds and dogs, helped to develop a positive outlook for chronically ill patients. In 1919, dogs were introduced in hospitals in Washington DC. In both World Wars, dogs were used in a therapeutic way to provide support to soldiers to gain confidence after injury (Frits, n.d; Lutwack-Bloom, Wijewickrama, & Smith, 2005). Dr Boris Levinson (an American psychologist) used his dog in therapy sessions after he noticed that a child seemed to 'open up' more than usual with the dog in the therapy sessions and he introduced AAT into the mental health field (Frits, n.d; Born, 2008). Organisations, like People for the Ethical Treatment of Animals (PETA), came into being in order to protect animals, maintain animal rights and to ensure that animals were treated with compassion (Born, 2008).

In South Africa, the late Professor Johannes Odendaal researched animal therapy and its influences. Dorothy Bernstein developed a programme for disabled and blind children to learn more about and to bond with dogs, Ms Ashford began 'Pets in Active Therapy' and Deirdre Kruger used pets to facilitate the recovery of post trauma patients in 1994 (Frits, n.d). Pets As Therapy (P.A.T.) and Paws for People are two of the well-known non-profitable South African organisations using pets for therapy. P.A.T. was launched in Cape Town, South Africa in 2001. P.A.T.'s slogan reads: "*It is all about enriching lives through animal companionship*". P.A.T. provides therapeutic visits from pets and their owners. They mainly use dogs and provide visits to children's homes, homes for the

elderly and hospitals. They operate from the belief that organisations such as themselves provide company, support, comfort, pleasure, stress relief and stimulation to those permanently or temporarily enrolled in care facilities such as children's homes, hospitals and schools (About us, n.d.). P.A.T provides an opportunity for people to be exposed to the various benefits of interaction with animals through introducing a pet in their contexts and exosystems.

2.5.3 Benefits of AA, PAA and AAT to people

2.5.3.1 Physical and psychological health benefits

Research which examines children's interactions with animals has demonstrated marked benefits for children physiologically (Odendaal, 2000). According to the literature, the human-animal bond has various health, social and emotional benefits (Beck, 2002b; Born, 2008, Friedman *et al.*, 2010; Hart, 1995; Odendaal & Meintjies, 2003).

In the research on 18 human adults by Odendaal en Meintjies (2003), the effects of stroking a pet showed an increase in beta-endorphins, oxytocin, prolactin, phenylacetic acid and dopamine, which decrease blood pressure in humans. Beta-endorphins are involved in learning, memory and blood pressure, while dopamine provides a 'pleasurable sensation' (Brown cited in Odendaal en Meintjies 2003). Other health advantages were psychological benefits and Hart (1995) noted that petting a dog fostered two major needs i.e. affiliation and self-esteem, and a feeling of calmness. Animals also appear to be beneficial as a buffering factor during stressful life circumstances (Hart, 1995). Hart (1995) further mentions that the positive development in people's psyche is due to the idea that dogs 'give' and 'accept' love, nurture people, and provide emotional security to people. Friedman *et al.* (2010) found that, in Kaminski's study on the effects of an AAA group and a child-life therapy group, in 2002, concentration increased and stress decreased amongst the human participants. Beck (2002a) mentions that, due to the nature of pets that require exercise, the owners also participate in exercise, which is an important health benefit. Research on the inclusion of animals in the treatment of eating disorders are limited, although it has been shown that animals can encourage and motivate a patient to take part in the activities that may treat the disorder (Born, 2008).

2.5.3.2 Social benefits

Chandler (2005) is of opinion that interaction between people and dogs can improve a person's social skills. Furthermore, in Chandler's study on juveniles' rehabilitation with the help of dogs, it was found that other skills which indirectly influence a person's social skills are also developed

through this interaction. These skills included self-esteem, compassion, gentleness, good and clear verbal and nonverbal communication, the sense of self-worth, teamwork, reducing general anxiety, concentration, motivation and self-efficacy. Beck (2002a) states that in certain social situations, people may experience a rise in blood pressure and anxiousness. Pets could be used to improve our affiliation with others and stimulate a conversation, which will improve the social interaction and help to reduce stress. Chandler highlights the fact that dogs could be used in accompanying people in developing the positive quality (skill) of Erikson's stages of Psychosocial Development (discussed in section 2.3.3) by just being present during skills development. Having a dog present for scheduled visits could thus have an influence on the development of a learners' social skills (including aggressive actions and interactions). The above-mentioned statement by Chandler (2005) supports the theoretical framework of this study through the idea that AAA (including PAA) places further emphasis on developing and supporting social skills by providing an opportunity in learners' contexts for interaction with a dog.

People are referred for therapy and counselling for many reasons, but some individuals may distrust the therapist (Chandler, 2005). Chandler (2005) mentions that dogs can be used in the sense that the clients can observe the therapist with his or her dog and the trust relationship between them. This can help to overcome distrust– the observer can see the trust between the dog and therapist and hence overcome his or her own distrust. Thus dogs are sometimes used in therapy for social skills development as the client is able to gain first-hand experience through observing a true trustful relationship.

2.5.3.3 Emotional benefits

Beck (2002b) holds that the companionship of animals (including a dog), decreases loneliness and stimulates conversations with other people. Furthermore, Beck (2002b) mentions that, because pets are sometimes the centre of attention, they often make humans laugh. Dogs provide an external pleasant focus of attention and this, in turn, decreases anxiety and provides a feeling of safety and a source of contact and comfort (Friedmann, 1995). Oxytocin increases with effective bonding in both dogs and humans. Bonding with animals (including a dog) can initiate various benefits; Animals provide an opportunity for persons experiencing emotional difficulties to talk and to discuss problems with non-judgmental animals. In this regard animals are used as a refuge and allow for vocally expressing problems that a person may have. Problems can include feeling fearful in an unfamiliar place, as in a new environment like a class or therapy room (Chandler, 2005). There is reason to believe that the emotional wellbeing of a person is affected by a person's

relationships with others and from this perspective, pets can be the other 'person' with whom a person in need may have a relationship. In this relationship pets provide unconditional and perfect love, such as provided by the ideal mother (Hanselman, 2002). In Antonioli and Reveley's (2005) study on depression, it was found that people in the experimental group, who were diagnosed with depression, showed a decrease in the levels of depression after the interaction with a dolphin, when compared to the control group who did not receive the AAA (i.e. the interaction with the dolphin).

The health of a human's heart not only depends on factors like genetics, diet and the amount and type of exercise, but also on the emotional and social wellbeing of the person (Lynch, 1977). It is important to note that AAA, PAA and AAT not only have psychological benefits as mentioned in the preceding paragraph, but also provide motivation for a person to take part in physical activities aimed at developing various skills (Born, 2008). As Chandler (2005) found, dogs have a natural desire to play and this contributes the motivation for children to play along. Macauley and Guterrez (2004) conducted a study on children exposed to pets in activities and therapy. They found that children and parents were excited about the therapy and this, in turn, made the attendance of the therapy sessions easier and more regular.

2.6 AAA, PAA AND AAT AND CHILDREN

Various benefits that AAA, PAA and AAT have for people were discussed above, but since this study is exploring the effect of PAA on children, a discussion on the benefits of animals on this vulnerable group is important.

2.6.1 Emotions and children

AAA, PAA and AAT with children are used in small groups (including individually), but it can also be used in larger groups. Evidence that activities with pets can reduce stress in small groups was studied by Nagengast, Baun, Megel and Leibowitz (1997). They found that the blood pressure and heart rates of 2- to 6-year-old children were reduced when interacting with a friendly dog as opposed to those who did not have the benefit of such interaction. In larger groups, a dog visiting hospitalised children resulted in the observation that the children were happier than before the visit (Friedmann *et al.*, 2010). Fine (2010) found that children over the age of 5 years use pets as an emotional buffer to reduce stress and as a coping mechanism to deal with stressful situations. Melson (2007) found that young children playing with a dog were introduced to an experience which provided them with opportunities to develop emotional 'self-regulation'. He showed that

children who are exposed to pets have the opportunity to have a dialogue with pets that are non-judgmental and, in turn, provide the child with a chance to express feelings and reduce stress. Reduced stress was also observed in children who read to a dog, as opposed to children who were reading aloud to a friend (Melson, 2007). Specific indicators for a dog reducing stress amongst participants in a group have not yet been detected, but an increase in attention span and general positive spirits amongst children in a group exposed to activities with a dog have been observed (Melson, 2007). Pets were also observed to provide emotional comfort and support for children whose parents were going through a divorce (Beck, 2002b). The interaction also assists in the development of a sense of responsibility, in addition to being a method of sharing emotions (Fine, 2010).

2.6.2 Responsibility and children

Beck (2002b) mentions the behavioural benefit that the relationship between pets and people specifically has for children. Children are taught to be responsible for and to nurture their pets. Many teachers and parents find that having pets (or a pet) in the classroom or at home provides an opportunity for children to develop a sense of responsibility, besides nurturing abilities and experiencing comfort (Melson, 2007).

2.6.3 Social skills and children

Some literature places emphasis on the specific benefits of PAA and the development of children's social competence and skills. "The unique interaction between children and a dog may offer children a form of social and emotional support in an educational setting" (Friesen, 2009, p.1). The social and emotional development of learners influences all other developmental skills of a child, including aggressive reactions. As discussed in section 2.3 and considering the theoretical framework of this research, a child should be viewed in totality and supported in totality; hence this unique interaction could support the development of a child in totality. "The experience of talking and playing with a pet, especially a dog, may educate a child in some of the subtleties of social relationships" (Hart, 1995, p.167). Social relationships are the interactions which could possibly lead to the development of aggression and children could thus potentially have an opportunity to develop the correct skills for these social interactions at school through the exposure to a dog. This is supported by Roehm (2010), who holds that the use of a therapeutic animal can be useful in children's development in the sense that it provides opportunities to learn appropriate peer interaction and problem solving skills.

Daly and Morton (2006) found that children who are in contact with animals appeared to have an increase in the development of empathy, but it is not clear *how* it impacts on social skills or interactions with others. However, there was a visible impact. This visible impact was explored in this study, through exploring the influence PAA could have on the aggressive action amongst the learners that the teachers experience on a daily basis and which places a damper on the education process. Fine (2010) pointed out that research involving activities with animals with groups of children, as in schools and classes, is limited and such research should be undertaken, hence this investigation aimed at providing information on the influence that PAA could have on a group's aggressive interaction amongst one another, which could also have potential benefit for further studies or programme development to assist teachers in the classrooms.

2.7 AAA, PAA AND AAT AND THE CLASSROOM

The benefits of AAA, PAA and AAT is clear from the above discussions. However, following we will discover the use of AAA, PAA and AAT in the classroom.

2.7.1 AAA, PAA and AAT in the classroom

Animal Assisted therapy and activities suggest that the interaction between children and a dog in a classroom could help develop social interaction, and thus social skills, as the dog is viewed and as non-judgemental by the children (Friesen, 2009). Cooper (2002) has highlighted that destructive/intrusive/aggressive behaviour amongst children in schools, are increasing. It is a big concern as it interferes with teaching and learning in school. Daly and Morton (2009) and Melson (2007) found that children involved with pets are more sympathetic than those who are not involved with pets. Children involved with pets also showed greater skill in predicting others' feelings. These skills are the essential foundation for learner development into a non-intrusive adult. Prevention programmes need to be introduced early in life, especially with youths living in high risk areas such as cities. Programmes beginning as early as the elementary school years and continuing while they serve as social and psychological support to these young people, will be the most effective in the long run (Vogel, 2002).

Vogel (2002) further mentions types of interventions: Primary prevention, secondary intervention and tertiary prevention. Primary prevention comprises prevention/intervention before any troubled behaviour has even started. Here it is about providing an environment in which the children can feel safe. Secondary intervention follows the early identification of a problem and then providing the

necessary support. Tertiary intervention is introduced when a problem has already come into existence and support, like counselling, is provided.

Animals and pets that are brought into a class to be class pets are referred to as a “companionable Zoo” (Melson, 2007). Melson’s (2007) article describes how Dr Aaron Katcher developed the concept of a “companionable Zoo”. Here small animals were brought into the treatment centre where boys were being treated for severe conduct disorders, emotional illness, poor impulse control and out of control aggression. After six months’ exposure to the “companionable zoo”, all the boys showed significant improvement in their behaviour.

Pets have previously been used to gain and capture children's attention in class in the foundation phase. Katcher and Wilkens (2000) mentioned the significant impact of AAA on children in the classroom and children diagnosed with ADHD. Their study resulted in positive results, including: capturing the attention of the children; decreasing anxiety levels; a more positive attitude towards others; more nurturing and affectionate play (even in children who were typically aggressive); and an increase in children's self-esteem. Jalongo, Astorino and Bombay (2004) found that, where animals and their handlers go to schools to assist in reading lessons, children who struggle with reading showed more confidence and less anxiety when reading to the animal. Chandler (2005) found that students had fewer behaviour problems and paid more attention to lessons when the teacher’s dog was present.

In 1996, Heindl's research was based on the question whether AAA could be a useful intervention in a community-based children's treatment programme. In this research, the experimental group participated in a 1-hour-per-week pet therapy intervention for six weeks. Significant differences were found between the experimental group and the control group regarding behavioural problems, including social behaviour, amongst the learners. The experimental group showed a decrease in behavioural problems compared to the control group after the six-week intervention (Chandler, 2005). According to Chandler (2005) there are many treatment goals for AAA, PAA and AAT. Goals related to this topic are to improve social skills, self-esteem, and self-worth, cooperation, to brighten the mood, to decrease manipulative behaviour, to improve the ability to express feelings and to reduce abusive behaviour. All of the above goals provide a positive and supportive learning environment. With a dog present in the classroom, children's attentiveness, social cohesion, self-confidence and social competence showed greater development compared to a control group of children who did not have a dog in the class (Kotrschal & Ortbauer, 2003; Hergovichet *al.*, 2002). In Born's (2008) study, respect, as a necessary social skill, also improved when therapy involved

animals. Lind (2009) in her book describes that during her 27-years' experience in working with mentally handicapped persons and specifically with children over the last few years, she found that performing animal therapy visits made the children respond well to concepts of "taking turns" i.e. sharing and consideration. Tissen, Hergovich & Spiel (2007) conducted research on the effects that different training methods (with and without dogs) had on social behaviour, empathy and aggression in children. The results showed that the interventions had a significant positive impact on children's social behaviour and empathy. Greater empathy was observed specifically in the children who had the dog's presence in the classroom (Hergovich *et al.*, 2002). Born's (2008) study regarding the human-animal bond, recorded that, when a dog was involved (in the therapy), it gave the client an opportunity to develop empathy (which is necessary when animals are involved in a study). Empathy can be a major 'driving skill' for less aggressive behaviour. The question arises whether this could possibly also occur in a typical grade R class in South Africa, and what the teachers' opinions on the influence PAA could possibly have would be.

Roehm (2010), in her study of AAT and the development of fine motor skills, concludes that her study showed improved writing skills and independence with BADL (Basic activities of daily living). The children also gave better attention to the task, participated more and gave better cooperation. On the other hand, Jenkins (2009) undertook a study on the impact of an AAT dog on the emotional, educational and social actualisation of young children in school settings. The result of this quantitative study appears to differ from the study discussed above. No difference was noted regarding the emotional, educational and social skills of the children (who were part of the experimental group) but they did note an attachment to the therapy dog. I think it is important to note that the impact of AAA and AAT specifically on children is also about intrinsic motivation, as AAA is not goal-directed and planned particularly; the mere presence of the dog could motivate learners to take part in activities. In Roehm's study (2010) on AAT and fine motor development, the assumption was that AAT could provide intrinsic motivation to take part in activities, which would, in turn, focus on the development of the skill that needs to be learned.

2.7.2 Impact of AAA, PAA and AAT on aggressive behaviour

The relationship between empathy and aggression and empathy and activities with animals has been mentioned before. In the study by Hergovich *et al.* (2002), on the development of empathy amongst children who were exposed to pets, it was found that such children developed greater empathy skills. Daly and Morton (2009) state that it is not surprising to come to a conclusion that dogs have a positive effect on children's empathy skills, as research indicate greater social skill development in

children who have relationships with dogs. Furthermore, Vogel (2002) found that a lack of empathy resulted in aggressive behaviour, hence there is a possibility that AAT will be beneficial for these children.

Parish-Plass (2008) found that AAT improved the emotional issues of (abused) children. She found that these children's self-esteem and social interactions showed healthy development in the right direction. A reason for this, according to Jenkins (2009), is that animals can provide a less threatening environment and in turn increase the development of social skills. The use of dogs is supported by Daly and Morton as they found that dogs were shown to have a more pronounced effect on children than other domesticated animals (for example cats) (Daly & Morton, 2009). More research specifically on the relationship between aggressive behaviour and animal-assisted activities is needed, hence this research on the possible influence of a dog in pet-assisted activities, with regard to aggressive behaviour in a South African grade R class.

2.8 CONCLUSION

In conclusion, the opinion of Chandler (2005) speaks for itself: "The pet practitioner does little but be itself and has the client's trust well before the client trusts the human therapist."

Given the above discussions and also the probable benefit from AAA, PAA and AAT, this study was dedicated to exploring the possible impact of using pets in the classroom as an influence on aggressive behaviour amongst grade R children. With the hypothesis being that it can potentially have an influence, the research could contribute to programme development and further research.

In the next chapter, the research design and methodology used is discussed. Specific attention is given to the aim and purpose of the research, research questions, research paradigms and designs, research methodology and ethical considerations.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In this chapter, the researcher discusses the framework for the research, which includes the research design and methodology used in this research study. According to Marshall and Rossman (2011), the design and the methodology should respond to the research questions. This means that the framework for the research (the design and the methodology) provides a connection between the implementation of the research, through the method and design, and answering the research questions. The researcher will attempt to explain how the design and methodology was used to answer the research questions. Furthermore, the techniques of data gathering and data analysis, which are also aimed at answering research questions, will be discussed (Henning *et al.*, 2008).

For this research project a case study design was used. It was implemented through qualitative methods and the methodology of an interpretative paradigm. Case studies normally aim to “provide an in-depth description of a small number of cases” (Mouton, 2001, p.149) or provide a “detailed examination of a single example” (Flyvbjerg, 2011, p.301). The aim of the research was to explore the influence of pet assisted activities (PAA), specifically involving a dog, on a grade R class (as a single example) and the aggressive interaction among one another of the children (in the class). The findings were expected to support other research studies on the subject or assist in developing an intervention programme for using pets in a classroom.

3.2 AIMS AND PURPOSE OF THE RESEARCH

There is an increasing amount of literature on the general positive effects of animals and pets on children and their development. Although some research studies have been undertaken in South Africa, which were focused on the use of animals as intervention in homes for the elderly, children with special needs and assisting children in reading programmes, few have been done with the aim of possibly assisting in class structures and teachers for classroom management of difficult behaviour. The aim of this study was to explore the possible influences PAA could have on the aggressive interactions amongst 5 to 6 year old children in a grade R class in South Africa.

3.3 RESEARCH QUESTIONS

The primary research question in this study was directed to explore the influences of PAA on the aggressive behaviour of grade R children. As mentioned before (see section 1.4), the specific questions that guided the research were:

- i. What are the teachers' perceptions with regard to aggressive behaviour amongst grade R learners and the effect on learning?
- ii. How do the teachers experience aggressive behaviour amongst the learners?
- iii. What methods/ways of dealing with aggressive behaviour do the teachers find to be effective?
- iv. What are the children's reactions to the P.A.T. dog?
- v. What are the teachers' experiences with regard to the P.A.T. visits and the effect on class management?

However, due to the limited scope of this research, the purpose of the research was not to determine how or why there is or is not an influence on the learners' aggressive reactions (due to PAA as intervention), but rather to explore the teachers' experiences, perceptions and understanding of the possible influence of PAA. The reason was that aggressive reactions and their effect on classroom management were experienced by the participating teachers at that time and their perceptions provided information to understand these phenomena.

3.4 RESEARCH PARADIGM AND DESIGN

The research paradigm aims to guide the research process and provides the reader with the framework of the way of thinking about the study. One class, as a single bounded system, is studied and discussed as the research design in section 3.4.2.

3.4.1 Research Paradigm

A research paradigm plays two important roles in research. Firstly, a research paradigm comprises a “set of beliefs and feelings about the world and how it should be understood and studied”. This guides the researcher regarding the procedures to use to conduct the research (Denzin & Lincoln, 2000, p.19) and, secondly, explains to the reader the researcher's intended way of looking at the world (or that being studied) (Mertens, 2005). In this research, the interpretative paradigm was

used. Merriam (1998, p.5) describes the interpretative paradigm as an aim to make meaning of the “lived experience”. Henning *et al.* (2004, p.20) elaborate on this concept. They state that the interpretative paradigm provides a frame to explore reality and meaning. This entails a description of “people's intentions, beliefs, values and reasoning, meaning making and self-understanding”.

Lincoln and Guba, (2000, cited in Mertens, 2005), explains that there are three questions/concepts that provide a framework in defining a paradigm. These are ontology, epistemology and methodology:

Ontology: The questions asked with regard to ontology are, “What is the nature of reality?” and “What kind of being is the human being?” (Denzin & Lincoln, 2000, p.19). For this research it was accepted that the participating teachers have their own individual, subjective understanding, and that this was the nature of their realities. The aim was to explore and to gain understanding of the participating teachers' realities regarding the topic, even though their realities exist independently from the social world. These realities can only be understood through the interpretation of the opinions of the participating teachers themselves. Therefore, the study explored the teachers' experiences (as their reality) of the PAA intervention on the class' aggressive behaviour.

Epistemology: The epistemological questions to ask concern “How we come to know?” (Henning *et al.*, 2004, p.15) and “What is the relationship between the knower and this knowledge to be known?” (Denzin & Lincoln, 2000, p.19). That which is known regarding the topic, is discussed in chapter two and that which the researcher wished to know was the aim of the research. “Knowledge is constructed in the act of critique in a dialectical process of deconstructing and reconstructing the world” (Denzin & Lincoln, 2000, p.23). Thus, to answer the epistemological questions, awareness of the existing knowledge and the awareness of the researcher's belief in the nature of the reality, should be taken into account while exploring the reality. Exploring reality is a process of reflecting on old knowledge, new knowledge and knowledge to be known.

Methodology: The methodological questions asked are “How do we know the world?” and “How do we gain knowledge of it?” (Denzin & Lincoln, 2000, p.19). The methodology describes how and with what methods the researcher obtained the necessary knowledge which she/he believed could be known (Henning *et al.*, 2008). The methods that are used aim to provide insight into the understandings of the teachers and their realities regarding the topic. Specific explanations regarding the methodology in this research are discussed in the next section (section 3.5).

This qualitative study was performed within the interpretive paradigm. Jackson (2003) lists some assumptions and facts to remember regarding the interpretive paradigm: Individuals develop their own perspectives, thus the focus is on the interpretation of the meaning people put to their actions and how they interact with others. The researcher's aim in an interpretive paradigm is to gain knowledge and understanding of how a person perceives social actions and what meaning is attached to a specific event. Although the interpretive paradigm is criticised for its lack in transferability, the aim of research in the interpretive paradigm should not be to provide an opportunity for generalisation (transferability) but to provide insight “and to understand how people make sense of their lives and how they define their situation” (Jackson, 2003, p.9).

The possibility of the influence of PAA on aggressive behaviour, was experienced by the participating teachers. Thus, their understanding of the phenomenon provided the necessary information and data. The interpretive paradigm provided the framework for understanding the participating teachers' subjective opinions and their lived experiences.

3.4.2 Research Design

Everyday people make sense of the worlds they live in through unplanned observations, but when doing research, this observation differs and is planned. These planned observations are called “systematic observations” (Durrheim, 2006, p.34). A research design provides the framework for systematic observations and connects the research questions with the planned implementation of a research study (Durrheim, 2006). As mentioned before, a case study was used as the design that guided the implementation of this research study. Stake (2005) states that a case study design is generally used for research studies aiming at providing detailed and rich information on a specific context.

3.4.2.1 Case study

Qualitative case studies, like other qualitative research designs, aim at searching for meaning and understanding of a phenomenon. But case studies are undertaken to specifically search for understanding a single bounded system (Henning *et al.*, 2004). A case study furthermore is a study of a single bounded system, and aims to provide an “intensive” and “holistic description and analysis” (Merriam, 2002, p.12; Babbie & Mouton, 2001) of the bounded system and it provides an in-depth description of a specific phenomenon in a case (Mouton, 2001). Babbie (2010, p.309) refers to this bounded system as a “single instance of a social phenomenon”. Johnson and

Christensen (2008) also refer to case studies as a 'bounded system', but elaborate by placing emphasis on this bounded system as a system consisting of interrelated elements. The 'boundedness' refers to the outline of the system. However, Stark and Torrance (2005, p.33) describe it further as an in-depth study (“to provide a definitive account of a case rather a series of readings of a case”) that engages with the reporting of a complex social activity and aims to provide a rich description of a specific phenomenon (Stark & Torrance, 2005; Babbie, 2010). As Henning *et al.* (2004, p.32) state, the aim of case studies is not just to describe a specific case, but it places emphasis on discovering “patterns, relationships and dynamics”. It is important to note that Babbie (2010) refers to case studies which are implemented as aiming to only understand one specific case, but in this research, the aim was not to understand this one case only, but to, if possible, provide information for further research or provide information towards developing programmes for the use of PAA.

Mouton (2001) notes that a case study's strengths are that of high validity and the in-depth insights into a phenomenon, but it has limitations due to a lack of generalisability of the results (in this case lack of *inference* from 'findings'). Maturation of participants also provides a weakness that limits the inference, as the research is done over time, which entails that the participants mature over time (Mertens, 2005). However, Merriam (2002) states that much could be learned from a specific case; since a case is explained and described, the case can be transferred to a similar situation/case. Stark and Torrance (2005) have elaborated on this, and claim that a case study chooses in-depth descriptions rather than broader coverage and the transferability is in the capacity of the reader to determine whether the aspects of their own case could be linked to the aspects of another case. Flyvbjerg (2011, p.301) describes this aspect further, concluding that a case study does have the ability to provide “reliable information about the broader class”.

A case study was seen as the most appropriate design for this research as the influence of PAA on aggressive behaviour of a grade R class (bounded system) was to be explored to provide in-depth understanding and rich data. Babbie and Mouton (2001) refer to the unit of analysis as that which is being studied. In this case study, a grade R class in South Africa was the unit of investigation. The interactions amongst the learners were explored, as were the teachers' perceptions on the possible influence of PAA on their aggressive interactions. Researchers using case studies as the research design use various methods to gain data in order to answer the research questions (Johnson & Christensen, 2008). In the following section, the methods used to provide this data will be discussed.

3.5 RESEARCH METHODOLOGY

Since this research was done from an interpretive paradigm, this research comprises a qualitative research study. Qualitative studies are descriptive and explore and present the reality of the participants and their views (Henning *et al.*, 2004). It implies that this research study was aimed at gathering data from teachers in their specific context (the grade R class) to provide an understanding of their perspectives and opinions regarding the topic being studied (Henning *et al.*, 2008). Marshall and Rossman (2011, p.3) refer to five characteristics of qualitative research: 1. “It takes place in the natural world.” 2. “Uses multiple methods that are interactive and humanistic.” 3. “Focuses on context.” 4. “Is emergent rather than tightly prefigured.” 5. “Is fundamentally interpretive.” Babbie (2010, p.296) further refers to qualitative field research, which he defines as the act to “do field research to observe or participate in social behaviour to try to understand it”. This kind of research aims to gain qualitative data, which are mostly observations, and cannot be reduced to numbers for quantitative use (Babbie, 2010).

Referring to the above criteria, it is thus clear that this research is a qualitative type of research study, due to the nature of this research design (case study), the methods used for gathering the data and the aim of the research. Since research methodology provides the backdrop to choosing the methods to use for gathering data and how these methods are used (Silverman, 2000) in a specific research design (case study), the following sections provide a description of the participants and the data gathering techniques.

3.5.1 Selection of Participants and Selection Criteria

According to Merriam (1998), the selection of participants in a qualitative study usually is non-random, thus purposeful, and small. Sampling is a term used to refer to participants used in a study. These selected participants are chosen because they can provide information regarding the topic (Polkinghorne, 2005). The selection of participants in this study could not be left to chance as it had to be sought out to provide the necessary information about the case study class (Polkinghorne, 2005). More recently, Babbie (2010, p.193) has stated that purposeful sampling is called “purposive or judgmental sampling”. Judgmental sampling is part of non-probability sampling. Non-probability sampling is “any technique where samples are selected in some way not suggested by probability theory” (Babbie, 2010, p.192). Since this research was a case study and aimed to provide in-depth understanding, a specific sample was selected to provide the most information possible on the phenomenon. The volunteers were purposefully selected because they had specific knowledge and

characteristics which were of interest for this research study to answer the research questions (Johnson & Christensen, 2008; Minichiello & Kottler, 2010). Thus, the teachers involved in the specific grade R class were asked to volunteer to provide data for this research. The class exhibited the desired criteria for participation (Henning *et al.*, 2004). The requirements were that the teachers understand the dynamics of this specific grade R class, experience and work with the children in the specific grade R class and had been working with this specific grade R class since the beginning of the school year in 2012. The specific grade R class was selected because they demonstrated aggressive behaviour which the teacher felt was more than normal and affected their education. According to Mash and Wolfe (2005), aggressive behaviour differs in different cultures. It is thus important to mention that all the learners in the class used for the case study belonged to from the same culture.

It is important to note that the context and participants of the research (grade R class) were studied because the researcher aimed to provide information for further studies on influencing aggressive behaviour before formal schooling (grade 1) and, as Vogel (2002) has stated, intervention or prevention connected to formal schooling should be introduced at an early age. The P.A.T. volunteer and dog were assigned to the study by the P.A.T. organisation to prevent biases on this regard.

3.5.2 Research Contextualisation

Since this research was conducted by means of a case study, one class was used to explore the influence of PAA on learners' aggressive reactions. For case study research, Mertens (2005) says that the sample size can comprise one case only, or multiple cases. This grade R class is an Afrikaans speaking class at the participating school. The participating school is situated in the middle-to upper-class northern suburbs area of the Western Cape and is an active participant in the CAPS (the new curriculum: Curriculum Assessment Policy Statement¹) implementation. The class consists of 28 learners between the ages of 5 and 6 years, except for 5 children who are turning 7 years this year. These older children received permission to repeat grade R in 2012, due to late birthdays which often results in a cognitive and emotional 'younger age' and in need of further development to proceed to grade 1. At the time of the research, these older learners were still 6 years old. There are 12 girls and 16 boys in the class. Refer to section 2.4.1 for literature on the difference in aggression amongst different genders.

¹CAPS is a "single, comprehensive, and concise policy document" for the new national school curriculum for grade R-12. It replaces the National Curriculum Statement (NCS) for grade R-12. Gr R CAPS has three subjects, namely Literacy, Mathematics and Life Skills. (<http://www.education.gov.za/curriculum/curriculumassessmentpolicystatements/tabid/419/default.aspx>)

This class has one primary teacher (participant 1: P:1), one assistant teacher (participant 2: P:2) and one music teacher (who teaches the class once a week) (participant 3: P:3). The principal (participant 4: P:4) is involved in all the classes as she discusses difficult behaviour with the involved teachers. All the teachers are females. As indicated in the previous section, the primary teacher experienced difficulties with girls and boys being overtly and relationally aggressive towards each other, which she felt impinged on their instructional and learning time. The class starts at 08:15 and ends at 12:45. During this time they have topic discussion, mathematical discussions and creative mathematical work, literacy discussions and creative literacy work, free play and story time. Music and physical education is incorporated once a week. Freeplay time varies from day to day, as the school programme varies from day to day. Freeplay mostly occurs outside, but when there is not enough supervision or it is too cold or raining, the learners play freely inside. Freeplay is distinguished from other types of interaction in the sense that this is the time where learners can choose with whom they wish to group and what games they wish to play. It is thus not controlled, but is supervised by the teacher.

The P.A.T. dog visits took place once a week during free play. For more information on P.A.T. as the organisation, refer to section 2.5.2. Regarding the volunteer and dog from P.A.T., the following information can be given: The volunteer is a female in her 30s and the dog was a Jack Russell of 2 years old. This P.A.T. team was evaluated to be fit (by the P.A.T. EXCO (executive committee)) for visits to groups of children and activities like grooming the dog; walking the dog on the lead; informal conversations about dogs; playing with the dog; giving the dog treats; asking the dog to perform tricks; and spontaneous informal conversations, usually on pets, took place. These visits occurred under strict P.A.T. rules and regulations (drafted by the P.A.T. organisation) as the dog was always kept on her lead, was tick and flea free and the dog's comfort level was borne in mind as visiting dogs do tend to get tired.

A scribe was used to transcribe the interviews. She was asked to complete a consent form (see Addendum B:5) specifying the protection of identities.

3.5.3 Data Production Techniques

Merriam (1998, p.7) explains that the “researcher is the primary instrument for data collection and analysis”. Henning *et al.* (2008) go further in explaining that by “primary instrument” is meant that the researcher is the main instrument for gathering and analysing data, and also to mediate the findings from the data. In this research, human experience data were collected, analysed and mediated through the researcher. Polkinghorne (2005, p.138) states that qualitative research aims to

“describe” and “clarify” this experience. To describe and clarify these experiences, qualitative methods were used to investigate the phenomena. Through the methods, the researcher intended to gather data to provide evidence for the experience of the participants. Three major methods in qualitative data collection are “interviews, observation and documents” (Polkinghorne, 2005, p.141). Marshall and Rossman (2011, p.137) more recently named four primary methods in qualitative research: “participating in the setting, observing directly, interviewing in depth and analysing documents”.

Denzin and Lincoln (2000, cited in Polkinghorne, 2005) are of opinion that qualitative methods have been in use since the earlier periods of the development of research methods. Since then, these old methods were not discarded but are still used today. This implies that these methods are composed of “different disciplines, different traditions and is the basis of different ideas of science” (Polkinghorne, 2005, p.137). Jackson (2003) states that it is typical of qualitative research to use more than one data collection method. The methods used to collect data in this study were questionnaires (to provide biographical data), observations, and semi-structured individual interviews.

3.5.3.1 Questionnaires

According to Jackson (2003, p.571), a questionnaire is a “series of set questions which either provide a space for an answer or offer a number of fixed alternatives from which the respondent makes a choice”. Mertens (2005) gives guidelines on formatting your own questionnaire for the purpose of a research project. These guidelines involve outlining the topics you wish to include; to be able to explain reasons for asking the questions; to decide whether open-ended or closed-ended questions should be used; to avoid questions that could be psychologically threatening; to make questions clear and concise; to make the questions short; to refrain from asking more than one question where there is space for one answer only; to avoid negative wording; to make sure the language is understandable for the participant asked to complete the questionnaire; not to use leading questions to receive answers you may feel you wish the participant to give, and to emphasise important or critical words. These guidelines were followed in developing this research study's questionnaire. The questionnaire (see Addendum C:1) in this study was designed to gather demographic and biographical data, information about the participants and insight into the teachers' perceptions of aggressive behaviour in the class up to date. Questions about the participants' qualifications, years of experience and experience specifically in grade R and previously experienced aggressive behaviour in the class were asked. These questions provided information

necessary for drawing conclusions from the findings of the research. The four participating teachers, described in section 3.5.1, completed the same, but individually answered, questionnaires on the first Monday of the 8week P.A.T. visits.

3.5.3.2 Observations

Silverman (2000) describes qualitative observations as the base/foundation for understanding another group of people. Observation is a term which entails a “variety of activities, like hanging around in the settings, getting to know people, and learning the routines to using strict time sampling to record actions and interactions and using a checklist to tick off pre-established actions” (Marshall & Rossman, 2011, p.139). Since qualitative research is aimed at understanding the meaning people have constructed and their experiences (Merriam, 1998), the instrument for observation is the researcher and not a measurement scale (Durrheim, 2006). The reasons for doing observations in this research were, firstly, to clarify data derived from the semi-structured interviews (see section 3.5.3.3) and to facilitate meaning making of the information the participants provided during the semi-structured interviews (Polkinghorne, 2005); secondly, to provide more information, if possible (aimed to provide better understanding), than was obtained from the participants during the semi-structured interviews.

In qualitative research there are mainly two types of researcher-observation relationships: simple observations, during which the researcher is an onlooker and outside observer, and observations in which the researcher is a member of the group and thus influences what is being observed (Babbie & Mouton, 2001). In this case study observation process the researcher was an onlooker (outside observer), thus being completely separated from the activities being observed and playing the role of a spectator during observations. The researcher, also the observer, had brief interactions with the participants being observed during the time of observations. This supported the researcher’s objectivity (Johnson & Christensen, 2008). The researcher was the one to decide what was to be observed and is thus viewed as the main data-production instrument (Johnson & Christensen, 2008). The observations were overt, which indicates that the participants (specifically the learners that were observed) were aware that they were being observed and taking part in a study. Learner participants, however, had not been informed of what behaviour was being observed; full disclosure to the learners was avoided to prevent behaviour being changed for these reasons.

The observation schedule

An observation schedule (see Addendum C:2) was used to ensure that information was gathered to answer the research questions and to explore the real-life actions amongst the learners (Henning *et al.*, 2004). Henning *et al.* (2004) describe an observation schedule in which the items to be observed are determined before the observation takes place to ensure that there is a focus on what needs to be observed.

Observation data were collected through the method of documenting what was observed during observation time (field-notes). The observations were done three times a week for 90 minutes per day for eight consecutive weeks. As aggressive interaction had been observed during free play, the observations were done during times when the learners were given the opportunity to play. The free play time was sometimes inside the class (due to cold weather or lack of supervision) or outside on the playground. The criterion was that the learners had control over what and with whom to play. Outside, the researcher placed herself near the sand pit to have a full view of the whole playground. When free play took place in the classroom, the researcher sat inside the class in a corner near the bathroom for a full view of the indoor setting. Specific attention was given to the following information, which also informed the schedule of what was observed:

1. The setting; the human-social environment
2. The P.A.T. activities and the participants' behaviour during these visits
3. Informal interactions, unplanned activities
4. The occurrence of aggressive behaviour (specifically such as mentioned in the Cohen-Mansfield Agitation Inventory and Casas and Moshler's Preschool Behaviour Scale) (see section 2.4.4)
5. Any other important related observations and informal interviews.

The aim was to compile a detailed account of the participants' behaviours, including verbal and non-verbal communication amongst the participants. Babbie's (2010) guidelines for completing field notes were followed when the researcher's memory was not trusted and notes were recorded of every aspect, even though it was not considered to be relevant at the time. Notes were made in chronological order and details of what was observed were recorded.

3.5.3.3 Semi-structured interviews

An interview is a conversation which consists of a two-way dialect during which the interviewer guides the conversation to allow the interviewee to provide the information that the interviewer wishes to obtain (Polkinghorne, 2005). Babbie (2010, p.318-319) refers to a qualitative interview as “an interaction between the interviewer and a respondent in which the interviewer has a general plan of inquiry, including the topics to be covered, but not a set of questions that must be asked with particular order” and as a conversation where the “interviewer establishes a general direction for the conversation and pursues specific topics raised by the respondent”. A structured interview, on the other hand, has a predetermined sequence of questions and the interviewer follows a strict protocol to stay within these bounded questions (Henning *et al.*, 2004). Semi-structured interviews were used in this research. This implies that, even though there was a structure to be followed, the interviewer was not bound to these structured questions. With a semi-structured interview, the interviewer could adjust the questions as new topics arose during the interview, to gather data which were desired at that point in time.

Important techniques used during interviews (other than the adjustment of the structure) is to

listen more than to speak, follow the conversation and the answers the interviewee is giving, ask questions on a topic the researcher may not understand, but to be careful to lead the answers which the researcher wish the participant would give, to ask open questions, to not disrupt the participant, to keep the participant focussed and ask to rephrase answers if needed and accept silence reactions and reflections from the interviewee.(Seidman, cited in Terre Blanche & Durrheim, 1999, p.130).

Not only did the researcher (also the interviewer) adhere to the above recommended techniques, but the interviewee was encouraged to be open and share feelings and as much information as possible. The interviewer used skilled judgements to maintain the interviewee's confidence and helped the interviewee to discuss the experience (Polkinghorne, 2005). All the teacher participants (discussed in section 3.5.1) were interviewed at the end of the intervention period, by means of a semi-structured interview. The conversations were recorded on an audio tape recorder. These interviews were recorded in a private office in the participating school. The recordings were then transcribed. Marshall and Rossman (2011) note that some problems regarding transcribing interviews are linked to the requirement that an interviewer (in this case also the researcher) should take caution in transcribing linguistic patterns, portraying the conversation in written paragraphs and including

punctuation. To prevent these possible problems, the recordings were transcribed exactly as the conversation progressed, and no paragraphs were formulated where one person was speaking. The whole interview was guided by a semi-structured interview guide.

Semi-structured interview guide

The construction of an interview guide/schedule is an important process in research. An interview schedule guides a semi-structured interview. It provides a guideline for questions to be asked and for the order in which to ask these questions (Hennik, cited in Jackson, 2003). Questions are specifically designed to provide the interviewer with possible guidelines on what questions to ask and when, but can be changed as the conversation with the interviewee progresses. Since more than one participant is interviewed, adaptations of the questions put to the individual participants would occur as the conversations progress (Henning *et al.*, 2004). The aim is thus to provide information to answer the research questions.

In the interview guide for this research study (Addendum C:3), open-ended questions were used in order to indirectly motivate the participants to share their experiences during the interview. Open-ended questions allow the participants to provide insights into their experiences and prevent the researcher from shaping the questions in order to arrive at a desired answer (Hatch, 2002; Johnson & Christensen, 2008). The interviews were conducted in Afrikaans, as it is the first language of the participants and no jargon was used to make sure the meaning was clear. The research schedule contained 10 questions ranging from introductory questions to questions specifically designed to provide information on the research questions. The questions were designed to be as clear and productive as possible.

3.5.4 Data Analysis

Data analysis involves breaking up the data gathered through data gathering methods, and placing it into “manageable themes, patterns, trends and relationships”. The aim of data analysis is to understand the data gathered through paying attention to the relationships between concepts and to then determine whether any themes (information) arise from the data (Mouton, 2001, p.108). In this study, content analysis was used to analyse data derived from the questionnaires, observations and interviews.

3.5.4.1 Content analysis

Content analysis is the process whereby “raw” data is converted into patterns of meaning. It involves the analysis of the content of the data gathered (Henning *et al.*, 2004). Content analysis aims to extract the messages and characteristics from data (Jackson, 2003). To refine the content into these patterns, meanings, messages and characteristics, the process of coding was used. According to Nieuwenhuis (2007), coding is described as the procedure whereby units of information are identified and assigned labels.

During this research study the data analysis involved the following processes: 1. The questionnaires, observations and interviews were transcribed separately. 2. All transcripts were read through more than once to get an overall sense of the data. 3. In the process of coding, phrases were used to name the codings. 4. These codings were not fixed, but could be adjusted as the coding process proceeded. 5. The codings were categorised and used to discuss the findings of the data gathering methods.

As seen from above, the process of coding followed the transcription of the observations (see Addendum E:1) and interviews (see Addendum E:2). A scribe was used to transcribe the interviews from the audiotapes. Afterwards, sections in the transcripts (observations and interviews) were assigned themes/codes. Themes which were related or appeared to be connected to one another were categorised together. On the transcripts, the themes were colour-coded so as to know under which category to place it. The information was thus separated into categories. On the master list, columns were used to represent the categories and the themes/codes from the transcripts, which were then placed under each category (see Addendum E:3). The aim was to ‘breakup’ the information into themes and place related themes together in categories to provide a layout for using the information in discussions and to derive a conclusion (Silverman, 2002). It is important to remember that, even though this was an inductive process, the aim was to provide a holistic view of the information, but in another 'form' (in the categories and not the transcripts). The interpretation of the holistic view led to the discussion and conclusions (Henning *et al.*, 2008).

To elaborate on the holistic view, Marshall and Rossman (2011) state that the researcher places the concepts (also known as themes) together to establish a patterned sequence that occurs in the data. This enables the researcher to portray the findings in a discussion. Henning *et al.* (2008, p.6) provide the following questions for viewing the coding holistically:

What are the relationships between the categories? What meaning do they provide together? What does one category say about another? What is missing in the categories and what category is missing? How do the categories connect to the information that I already know? What is the most important aspect that is found through the analysis? What aspects are not viewed as not that important? What other data should be analysed?

Nieuwenhuis (2007) recommends that, through the process of coding, the researcher should also engage in the process of writing memos. This implies that the researcher should also record his/her impressions, insights, interpretation of and reflections on the findings in the data. These impressions, insights, interpretations and reflections could be useful when reviewing the categories and the relationships between the codes.

3.5.5 Data Verification

According to Henning *et al.* (2004, p.147), determining validity is to “answer questions whether the researcher is measuring what he/she is supposed to measure and whether the methods used allow the researcher to investigate what he/she says is being investigated”. Marshall and Rossman (2011) refer to data verification as determining whether data and findings are trustworthy and sound. Here the questions that are asked concern the following:

How credible are the particular findings of the study? And by what criteria can we judge them? How transferable and applicable are these findings to another setting or group of people? How can we be reasonably sure that the findings would be replicated if the study were conducted with the same participants in the same context? How can we be sure that the findings reflect the participants and the inquiry itself rather than a fabrication from the researcher's biases or prejudice? (Marshall & Rossman, 2011, p.251).

According to Marshall and Rossman (2011, p.41) the terms used to explore the above questions in a qualitative investigation are reliability, validity, objectivity and generalisability, but in this qualitative research study the terms credibility, dependability, confirmability and transferability are appropriate.

3.5.5.1 Credibility

Jackson (2003, p.381) states that the measure of whether a research study is credible with regard to the participants of the research, to the readers of the study and to the other researchers, rests on the indication whether the research did in fact measure what it was supposed to or planned to measure. Shenton (2004) mentions the following guidelines to ensure increased credibility: enhancing the probability by means of triangulation, spending enough time and detail on the data, reflection by the researcher and reviewing by outsiders. In this research, the research procedures were described in depth to enhance triangulation (discussed in section 3.5.6.1) by employing three data-gathering techniques for gathering data, which provided a broader, more holistic interpretation. Enough time was spent on data gathering, data transcription, data analysis and data interpretation. Note that, with enough time is also meant that care was taken during these processes and the focus was on the processes. The scribe who was used signed the consent form declaring that she typed the interviews exactly as on the audio type and thus provided care of correct data transcriptions. The researcher reflected throughout the processes of data gathering to formulate the research findings. These processes were also completed under supervision.

3.5.5.2 Dependability

Jackson (2003, p.183) states that dependability refers to two concepts; firstly, to the “stability” of data and, secondly, “the trackability of changes in the data over time and conditions”. Specifically in qualitative research, dependability reflects the reality that conditions change constantly and people's realities differ from one another. Marshall and Rossman (2011, p.253) hold that dependability shows the ways “by which the researcher plans to account for changing conditions in the phenomenon chosen for study and changes in the design created by an increasingly refined understanding of the setting”. According to Jackson (2003), dependability of a research study can be 'measured' by determining whether another researcher, with the same knowledge of the field under study and with similar methodological training, would make the same observations and come to the same conclusions. Shenton (2004, p.71-72) states that dependability of research can be enhanced through triangulation, reflection by the researcher, review by outsiders and an 'audit trail'. Triangulation, reflection and review are addressed in the manner mentioned below (see section 5.5.6). An audit trail signifies that the researcher audits the process of the research by documenting all the raw data, including the analysis (Jackson, 2003). The 'audit trail' in this study was documented (see Addendum D).

3.5.5.3 Confirmability

Jackson (2003, p.183) describes the concept of confirmability as the “objectivity of the data”. Thus, the conclusions and discussions of data depend on the subjects and the conditions of the research and not the researcher (Jackson, 2003). Shenton (2004, p.72) refers to confirmability as “objectivity” to be maintained by the researcher. Since qualitative research leans towards subjectivity, care should be taken to be objective. To be objective, the researcher should be aware of his/her own opinions regarding the research and what it entails (Shenton, 2004) and to be “explicit about how personal biases, assumptions, and values may have come into play in the study” (Jackson, 2003, p.184). Marshall and Rossman (2011, p.253) argue that, to address the confirmability issue, the researcher should ask him-/herself whether the findings of a study would be the same if researched by another person. To address the issue of confirmability, triangulation, reflection and the audit trail should be used (Jackson, 2003). Flyvbjerg (Denzin & Lincoln, 2011) states that the issue of biases is not just applicable to case studies, but to all qualitative methods and care should be taken. In this research, triangulation was assured through the usage of multiple data gathering methods and by comparing the findings in these different techniques. Reflection was adhered to throughout the process through making field notes of the observation and the interviews and then reflecting afterwards on the true nature of the field notes.

3.5.5.4 Transferability

Transferability refers to the generalisability of the research to any other setting, population and context. When reflecting on research transferability, the researcher hopes to find that the research is not context bound (Jackson, 2003). As stated in section 3.4.2.1, case studies generally lack transferability, since a bounded system is studied. Jackson (2003) states that this is generally an issue for qualitative research, but more recently Marshall and Rossman (2011, p.252) came to the conclusion that the knowledge and findings could be transferred to another situation or context for research, and it “rests more on the researcher who would make the transfer than with the original researcher”. This implies that, when research techniques, contexts, participants and designs are discussed in depth, it is for a researcher wishing to use the findings to decide whether the findings in this research can be transferred to his/her own study. This, in turn, expects from this research to present, in depth and step by step, the processes leading to concluding the findings. Flyvbjerg (2011, p.305) states that it is a misinterpretation of case studies to think that one cannot generalize a case study. It can be generalized in a qualitative study since “formal generalization is overvalued as a source of scientific development” (which involves more quantitative research), “whereas the force

of example and transferability are underestimated” (Flyvbjerg, 2011, p.305). To address the issue of transferability in this research, contexts of the research are described in depth.

3.5.6 Data Verification Strategies

3.5.6.1 Triangulation

Triangulation is the “process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation” (Stake, 2002, p.443). Marshall and Rossman (2011) explain that to encourage triangulation, the researcher should build on the process as soon as the research starts, through data collection strategies (more than one) which will, in turn, show the reader that the researcher did interpret the participants' true views and authentic behaviour. Also, according to Shenton (2004), the process of triangulation is enhanced by using different data gathering techniques. More recently, a shift in defining triangulation took place, with triangulation being identified as any approach combining and using two or more techniques with the aim to increase validity (Rothbauer, 2008).

In this research, three data gathering techniques were used. These were observations, to clarify data derived from the semi-structured interviews and to provide insight (understanding) into the information the participants provided during the semi-structured interviews (Polkinghorne, 2005); semi-structured interviews to provide insight and understanding of the teachers' experiences and opinions; and questionnaires to provide biographical data of the participating teachers and their experiences to date of aggressive behaviour in the classroom.

3.5.6.2 Outsider reviews

Supervision and review are central processes of research. Supervision and reviews by the supervisor were used and integrated in the research process. Shenton (2004) states that reviews and supervision from others are forms of data verification, as outsider perspectives are gained.

3.5.6.3 Reflections

As the researcher played a central role in this research, it was important for the researcher to remain aware of personal views and opinions. Awareness of this possible interference and the way it could influence the research outcomes and interpretation, was maintained through reflection from the start to the end of this research study.

3.5.6.4 Audit trail

The “audit trail” (see section 3.5.6.2) allows anyone to retrace the logic of the research findings. This was done through documentation and record keeping of processes used in the research, specifically data gathering (Marshall & Rossman, 2011). In this research, the data gathering and management of data may be traced and reflected upon as all information is attached as addenda. This chapter also provides a guideline to explain the processes to which this research was subjected. This, in turn, enhances the trackability of the research.

3.6 ETHICAL CONSIDERATIONS

The primary reason involving ethical issues in this research was to protect the participants. This research was cleared (ethical clearance) by the Stellenbosch University's Research Ethical Committee (REC) (Protocol number: HS760/2011) (see Addendum A:1). Since learners and teachers in a Western Cape Education Department (WCED) school were involved, permission was obtained from the WCED and cleared with the specification that the research was not to be conducted in the fourth term (hence the fieldwork took place during the second term) (see Addendum A:2).

According to Jackson (2003), the rules for resolving ethical issues regarding the participants involve protecting all participants' confidentiality; not pressurising participants into participating; ensuring that the process of participation is without risk or pain; clarifying the sponsors; explaining on what basis the participants were selected; having no hidden identification codes in the questionnaires; honouring promises with regard to providing research reports; adhering to informed consent; and debriefing the subjects.

Informed consent was gathered from all selected participants. Wassenaar (in Terre Blanche *et al.*, 2006) state that informed consent should provide appropriate information in a way that the participants can understand, have freedom to decline and to participate voluntarily. The informed consent should be given in writing and should be signed. In this study, informed consent was received from the participating learner's parents (see Addendum B:2), the teachers (see Addendum B:1), the P.A.T. volunteer (see Addendum B:4) and the scribe used to transcribe the interviews (see Addendum B:5). Assent forms were completed by the participating learners and the school gave formal permission to allow the research to be done in the grade R class (see Addendum B:3).

To protect the confidentiality of the participants in this research study, great care was taken to maintain the anonymity of teachers, the school and the learners. The learners were never referred to as individuals (i.e. by their names), since the focus was on the class. This protected their right to confidentiality. The teachers were asked not to refer to the learners as individuals in interviews, nor were individual learners' names used in observations. No visual recordings were used, thus no ethical concerns regarding visual confidentiality needed to be addressed. Marshall and Rossman (2011, p.47) refer to protection of confidentiality as respecting the participants. The researcher did respect the participants' "privacy, their anonymity and their right to participate". They were not placed under any pressure to take part in the study and they could withdraw at any time, as stated in the consent form (see Addendum B:1). All the learners' parents gave consent on the basis of this knowledge. Only relevant information was selected to be gathered by means of the questionnaires, interviews and observations. No physical harm, or emotional distress, was expected in this research and, as stated in the consent forms, the participating learners or teachers had the right to withdraw from the research if they felt distress or discomfort in any way. There was no sponsorship involved in this research, thus there was no ethical concern in this regard. Although the organisation used in this research (P.A.T.) was mentioned in the consent forms, they were not sponsors of this research. In the consent forms completed by the parents of the participating learners, the reason for choosing the specific class for the case study was mentioned (see Addendum B:2). They were informed why this specific class was selected for the case study. No hidden codes were used on the questionnaires with an aim to gather identification from the completed questionnaire. The participating teachers who completed the questionnaires, had to provide biographical information. These teachers knew that the researcher knows which teacher completed which form, as the researcher asked them herself to complete it. As promised in the consent forms, to teachers, the P.A.T. volunteer and the learners' parents, a presentation regarding the research report will be given when the research report has been completed and examined by the external examiner. The informed consent was detailed and issues of how situations will be dealt with and the aim and purpose of the research were discussed. The learners completed an assent form, but were not notified of the specific behaviour that was being observed to prevent bias. During the non-compulsory presentation, the specific behaviour that was observed will be clarified. In summary, all these ethical issues could be related to being respectful towards participants (Wassenaar,2006)

Jackson (2003) mentions the following ethical points regarding social research: Distinction between science and advocacy, the research should not 'scan' data to extract pleasing findings, the researcher should be aware of potential sources and influences in bias; all literature should be presented fairly -

the aim is to do the best possible research, to acknowledge all the sources used and to seek advice regarding ethical concerns.

To address the above concern, ; the aim of this research study was not to provide scientific evidence to convince readers of some position, but rather to explore the influence of PAA on aggressive behaviour amongst grade R learners, to provide information for further research and possible programme development and/or intervention strategies. Data was 'scanned' to look for pleasing findings and the process of data collection, analysis and interpretation was documented through the 'audit trail' and could thus be reviewed by external sources, if needed. Marshall and Rossman (2011) state that the researcher can prevent bias through the discussion of his/her views, understanding and interpretation in the research report, because, when it is out in the open, it is easy to assess how these elements affected the research. In this research, work was reported on fairly and the researcher spent time on reflecting throughout the process to avoid bias as much as possible. Through the 'audit trail', external sources may also determine how true the findings were. The researcher's conclusion in Chapter 5 may easily be compared to the 'audit trail' findings. All findings were reported on, to avoid the possible problem of reporting only on a selection of findings, which would indicate that the literature is not represented fairly. The researcher is passionate about the topic of the research study and aimed to do the best possible research and acknowledge sources through references. Guidelines on ethical concerns were obtained through the literature and the professional advice of this researcher's supervisor.

3.7 SUMMARY

The aim of this chapter was to provide information regarding the design of the research and the methodology used. The data gathering methods, data verification and ethical concerns were discussed and possible uncertainties regarding this research methodology were cleared. The reasons for chosen methodological concerns were connected to the aim of this specific case study.

In Chapter 4, the findings of the research will be discussed as the implementation of the methodology.

CHAPTER 4

FINDINGS

4.1 INTRODUCTION

The purpose of the research was to provide data to answer the research questions introduced in section 1.4. This chapter presents and discusses the findings according to the themes that emerged from the data analysis. All the findings will first be presented, followed by a section focused on discussing the findings in relation to the literature review in Chapter 2.

4.2 PARTICIPANTS, SETTINGS AND PROCEDURES

As discussed in section 1.5.4.1 and section 3.5.1, participants were purposefully selected on the criterion that they were teachers involved with the class selected for the case study. The case study grade R class was used because this class presented with aggressive behaviour which the teachers felt required intervention to address the learners' aggressive behaviour. The following data collection methods were employed:

Observations

The observational data were gathered during times when learners were playing freely and under no external control with regard to what and with whom they played. It mainly occurred out of doors, unless the teacher felt it was too cold, when it was raining, or when there was not enough supervision. In these situations, the learners were allowed to play freely in the classroom.

Semi-structured individual interviews

The semi-structured individual interviews took place in a private office in the participating school at the end of the eight week intervention. Any information that arose from the data gathering which could possibly threaten the anonymity of the participants, the learners, teachers, P.A.T. volunteer or the school, was deleted and replaced with a descriptive term in square brackets.

Questionnaires

The purpose of the questionnaires was to obtain demographical and biographical data. The demographical data focused on providing a perception of the participating teachers' years of experiences in grade R, years of experience in education in general and to confirm their

involvement with this specific class since the beginning of 2012. The biographical data are presented with the aim of providing the reader with an understanding of the participants' qualifications and their personal experiences with regard to aggressive behaviour in the class prior to the date on which PAA was started. The questionnaires were completed on the first Monday before the P.A.T. visits.

Table 4.1 presents the demographic and biographical information of the participating teachers:

Table 4.1: Demographical and biographical information of the participating teachers

Participant	Qualifications	Years of experience in teaching	Years of experience in educating grade R	Since January 2012 involved in this specific class?
P- 1	BEd Foundation Phase	5	2	Yes
P- 2	Gr 12	16	3	Yes
P- 3	H.E.D (instrumental music and theory of music)	28	15	Yes
P- 4	E.D.2, H.E.D.	22	22	Yes

The following codes represent the methods and sources used in gathering the data:

Participants: The participants are presented as P:1 (participant 1), P:2 (participant 2), P:3 (participant 3) and P:4 (participant 4).

Questionnaires: These are represented by the letter Q. When referring to a participant, it is presented as follows: P-1 = Q/P:1; P-2= Q/P:2; P-3= Q/P:3; P-4= Q/P:4.

Observations: These are represented by the letter O. When referring to specific observations it will be represented by the observation number, as follows: O:3 (for observation number three).

Individual semi-structured interviews with participants: This is presented by the letter I. When referring to specific interviews these will be represented with the participant number, as follows: I/P:1 (for the semi-structured interview of participant number one).

When a quote is used, the line number is indicated, for example, I/P:1/L138. Refer to Addenda E for examples of the data (gathered field notes) and analysis.²

²All the questionnaires, observations and semi-structured interviews can be made available on request.

4.3 TEACHERS' PERCEPTIONS AND EXPERIENCES OF AGGRESSIVE BEHAVIOUR

In this section, the researcher aims to report on the perceptions and experiences of the teachers, but observational findings are incorporated where it may support or differ from these perceptions and experiences. The following table (Table 4.2) presents a summary of the main themes and categories that emerged with regard to the types of aggressive behaviour, which will be discussed later in this section.

Table 4.2: Findings with regard to aggressive behaviour

Themes	Categories	Data provided by:				Influenced by PAA		
		Participant/ Researcher (R)	Interview (I)	Questionnaire (Q)	Observation (O)	Yes (Y) / No(N)	Revealed in	
Relational aggression	Teasing	R			√	Y	I and O	
	Excluding others	R			√			
	Disrupting others activity	R			√			
	Threatening to withhold friendship	R			√			
Physical aggression	Pushing	P:1,P:2, P:3 and R	√	√	√	Y	O	
	Hitting	P:1, P:2 and R	√	√	√			
	Tantrums	P:2	√		√			
	Grabbing	P:1, P:2, P:3 and R	√	√	√			
	Screaming	P:3 and R	√					
	Rough play	P:3	√					
	General physical aggression	P:3, P:4	√	√				
	Biting	P:1, P:2, P:4 and R			√			√
	Throwing things	R			√			
	Destroying others' things	R			√			
	Stabbing	R			√			
	Tripping	R			√			
	Kicking	R			√			
	Spitting	R			√			
	Not giving each other turns	R			√			
Middle finger gesture	R			√				

Table 4.2 (cont.)

Themes	Categories	Data provided by:				Influenced by PAA	
		Participant/ Researcher (R)	Interview (I)	Questionnaire (Q)	Observation (O)	Yes (Y) / No(N)	Revealed in
Verbal aggression	Strangling	R			√		
	Sticking tongue out	R			√		
	Pulls others' pants down	R			√		
	Saying rude things	P:1, P:4 and R		√	√	Y	I and O
	Teasing	R			√		
	Loud, disrespectful voice	R			√		

In section 2.4 aggression amongst young learners was described. According to De Witt (2009), aggressive behaviour amongst grade R learners is witnessed in many forms. Relational aggression, verbal aggression and physical aggression is seen in boys and in girls at this age (Csibi & Csibi, 2011). The participating teachers were asked about their opinions on aggressive behaviour in general. They mentioned that aggressive behaviour in this age group is characterised by pushing, kicking, hitting, rough play and verbal abuse (I/P:1) aimed at other children and sometimes at teachers (I/P:4). Relational aggression is also a type of aggression (Breet *et al.*, 2010) which, according to the teacher, is typically seen in this age group (I/P:4). However, one teacher felt that verbal aggression occurs most frequently (I/P:2).

The teachers were of the opinion that a lack of social skills (I/P:2) inhibits the learners' ability to deal effectively with confrontation. They also referred to some learners' backgrounds and situations the children may have witnessed (I/P:1; I/P:4); working parents which may lead to learners to seeking attention (I/P:1; I/P:4); conflicting personality characteristics (I/P:1/L33); and the influence of television (I/P:4) as possible causes of aggressive behaviour. Although the teachers were of the opinion that aggressive behaviour amongst 5- to 6-year-old children is relational, physical and verbal, it was important, however, to establish the teachers' experiences and perceptions of the effect of aggressive behaviour on learning and the types of aggressive behaviour experienced in the class. This was expected to clarify and deepen the understanding of the influence of PAA as experienced by the teachers.

The teachers held the view that some learners do not want to come to school due to aggressive actions in the class (I/P:1) and that school was not fun for learners (I/P:1). This affected their eagerness to learn and to be present at school. P:4 explained that aggressive behaviour has a negative impact on the learners on the “receiving end” (I/P:4/L108). This was noted during observations when it could be seen that learners on the receiving end responded by crying (O:5; O:4). Aggressive actions by a few learners would influence all the learners negatively (I/P:3). All of the participating teachers were of the opinion that one of the primary effects of aggressive behaviour on learning is the negative impact it has on instructional time. The teachers felt that dealing with aggression eroded the instructional time (I/P:1; I/P:2; I/P:3; I/P:4). This was also observed when the teachers had to continue with lessons due to time constraints and aggressive behaviour was not addressed (O:1).

Regarding aggressive actions amongst the learners in the class, the teachers' opinions were that girls tend to be relationally and verbally aggressive towards others (I/P:1, I/P:2, I/P:2, I/P:4). Teasing as a form of relational aggression was observed (O:2, O:3, O:7, O:11, O:15, O:21). Boys tended to be physically aggressive, e.g. by pushing and hitting each other (I/P:1) and having temper tantrums (I/P:2, O:15, O:5). Both genders grabbed things from teachers and others (I/P:3), which was also observed (O:2, O:1, O:5, O:6, O:8, O:9, O:10, O:13, O:14, O:15); both genders screamed at one another (I/P:3, O:2, O:4, O:5, O:6, O:7, O:8, O:10, O:11, O:12, O:13, O:16, O:19, O:22); rough play occurred, which then ended in another learner getting hurt (I/P:3); pushing took place (I/P:3, O:1, O:2, O:7, O:4, O:5, O:6, O:8, O:11, O:17, O:20); as well as general physical aggression amongst both genders (I/P:4). However, one participant found that girls were more aggressive towards others than the boys (I/P:1). In contrast to the teachers' experiences, hitting by both genders and not just boys was observed (O:2, O:1, O:3, O:4, O:6, O:7, O:13, O:15, O:17, O:18, O:21, O:22, O:23). In the questionnaires, participants were asked to give examples of aggressive behaviour in this class prior to the intervention. Examples included verbal aggression (Q/P:1, Q/P:4), which was also seen amongst both genders during observations (O:10, O:1, O:4, O:5, O:7, O:10, O:13, O:17) but stated by one participant as specifically amongst the girls (Q/P:4), hitting (Q/P:1, Q/P:2), pushing (Q/P:1, Q/P:3, Q/P:2), grabbing (Q/P:1, Q/P:2), biting (Q/P:1, Q/P:2, Q/P:4), which was also observed, (O:4, O:9) and fighting and hurting others (Q/P:4, Q/P:3). The two participants who were involved with the class everyday noted that they experienced these aggressive behaviours daily (Q/P:1, Q/P:2) The music teacher, who is with the class for thirty minutes once a week, noted that she experienced the aggressive behaviour weekly (Q/P:3) and the principal, who is asked for help when the teachers find situations getting out of control, stated that she experienced dealing with aggressive actions monthly (Q/P:4).

Aggressive behaviour which was observed but which the teachers did not mention included the following: throwing things (O:2; O:12; O:13; O:18), excluding others (O:2, O:10, O:1, O:6, O:12, O:15, O:16, O:22), disrupting the activities of others (O:2, O:4, O:3, O:13, O:18), destroying others' things (O:3, O:13), stabbing another with an object (O:14), tripping another (O:16), kicking (O:17, O:2, O:4, O:5, O:6, O:7), spitting at people (O:17), not giving each other turns (O:19), showing the middle finger to another (O:9), threatening another, (O:8), strangling another (O:7), talking in a loud disrespectful manner to a teacher (O:4), sticking the tongue out at another (O:3), pulling down another's pants (O:2) and threatening the loss of friendship (O:2, O:9, O:10).

It is clear that more specific aggressive actions were witnessed during the observations, even though the data from interviews provide a broader, more general perspective and experiences of aggressive actions. However, the reason for more general descriptions of aggressive actions could be linked to the observed phenomenon that not all aggressive actions were noted by the teacher or that she had not been informed. During the observations it became clear that not all cases were reported to the teachers by the learners (O:1, O:5, O:6, O:7, O:7, O:8, O:9, O:10, O:11, O:12, O:13, O:14, O:15, O:19, O:21, O:22, O:23), while some cases were reported to the teacher by the learners (O:2, O:4, O:6, O:7, O:8, O:9, O:10, O:11, O:13, O:15, O:16, O:17, O:18, O:21). Some teachers noticed aggressive actions (O:1, O:4, O:10, O:13, O:15, O:16, O:17, O:18, O:19) and some teachers did not notice the aggressive action even when they provided the supervision (O:1, O:2, O:3, O:4, O:5, O:6). When these aggressive actions were witnessed or when the teachers were informed about these aggressive actions, they had different ways of dealing with the aggressive behaviour.

4.4 METHODS AND WAYS OF DEALING WITH AGGRESSIVE BEHAVIOUR

One participant provided an explanation for the general feeling of the teachers regarding dealing with aggressive behaviour. She stated that it is difficult to deal with aggressive behaviour in the sense that it brings the teacher 'down', but teachers do seem to raise their spirits again after aggressive situations (I/P:2). All the participants felt that there are various ways to deal with aggressive behaviour. The participants felt that involving the principal (I/P:1, I.P:4, O:8) is beneficial, but the principal was of the opinion that not all learners relate this to the teacher's way of addressing the behaviour (punishment). Some children laugh when they are sent to the office due to aggressive behaviour (I/P:4), although some do view this as punishment. When they are sent to the office, the principal motivates them to 'think' about their unacceptable behaviour (I/P:4). The class teacher found that role-playing of aggressive behaviour and teaching the learners how situations should have been handled works for dealing with the aggressive behaviour (I/P:1). Discussing the

behaviour with the involved learners and clarifying the appropriate behaviour is also used (I/P:1). However, another participant, while agreeing with the discussion of behaviour with a child, mentioned how time consuming it is (I/P:4, O:1, O:4). During such verbal discussion, the behaviour would be talked about specifically and the teacher would encourage them to apologise (I/P:4, O:13, O:15, O:16, O:18, O:19, O:21). During observations it was seen that these discussions were used the most (O:2, O:3, O:5, O:6, O:9, O:10, O:11, O:13, O:15, O:16/23/L42, O:17). The 'thinking chair' for thinking about wrong behaviour (I/P:1, I/P:2) was also used to deal with behaviour. However, one participant was of the opinion that the thinking chair was inapplicable in serious cases of aggressive behaviour (I/P:2). This method was used five times during the eight weeks' observation (O:2, O:4, O:9, O:15). The term 'time out' was used as punishment four times during the observations, but it was not mentioned during the interviews (O:2, O:5, O:17). The term 'time out' was seen as punishment whereas the 'thinking chair' was meant to encourage learners to correct their own mistakes.

One participant felt that the above-mentioned methods mostly deal with the situation in the short term (I/P:1), but P:2 thought that some of these methods could have a long-lasting effect on learners, but it depended on the individual learner (I/P:2). P:1 felt that long-term positive influence on aggressive behaviour is needed (I/P:1) and teachers should be consistent (I/P:1). Three participants highlighted the importance of assistants and other teachers in discussing problems amongst each other and providing support to each other (I/P:1, I/P:2, I/P:3). These discussions occurred twice during the observations (O:2, O:4). The teachers thought of involving parents, although P:4 held that this method is used in cases where aggressive behaviour is a frequent occurrence (I/P:1, I/P:2, I/P:4, O:4). At the same time, however, the principal felt that parents should be contacted immediately (I/P:4) and that the teachers should be in regular contact with the parents (I/P:4). Besides punishment or placing children on the 'thinking chair', P:3 stops the activity the children are busy with when aggressive behaviour occurs (I/P:3), but she has also found that she avoids using this method as it consumes instructional time (I/P:3). Participants also used the method of taking away the privilege of playing with an object (O:2) or taking part in an activity (O:18, O:19, O:22, O:23) as a kind of punishment (I/P:3/L61). Interfering in their group dynamics is also used (I/P:3, O:5).

A participant is of opinion that gaining knowledge on how to deal with aggressive behaviour comes with experience (I/P:1) and the current methods used to deal with aggressive behaviour developed from own knowledge (I/P:2). Another participant mentioned that she is sometimes unsure of how to deal with the situations (I/P:2) and that professionals may be able to provide more guidelines (I/P:1)

and, possibly, courses to provide more insight (I/P:2), although P:4 felt that this is expensive (I/P:4). She recommended that the Department of Education provide more free therapists, for instance, a play therapist (I/P:4). A participant mentioned that her previous workplace used churches as resources for courses (I/P:2). One participant held the view that, in severe cases, some children would behave better in smaller classes in other schools, where there may be less sensory stimulation. This would be a possible encouragement to avoid aggressive actions (I/P:4), but in the researcher's opinion, would be counter to inclusive education.

The principal once came to the class to talk to the whole class about inappropriate bullying behaviour (O:13) after a parent had informed the teacher about an incident, but none of the participating teachers mentioned this as a method. One participant was adamant that a possible positive effect from dealing with aggressive behaviour could be achieved by teachers standing together and handling situations in the same way. She explained that it sometimes happens that one teacher would comfort a child, while another put him/her on the 'thinking chair'. Management strategies amongst the teachers could be more consistent to provide a possible stronger impact (I/P:2).

4.5 TEACHERS' REACTIONS TO PAA

Since the study was focused on providing information for further research and/or programme development for the use of PAA in a class, the teachers' reactions were important as it could provide information on possible usage in a class. The participants felt that they, as the teachers, experienced PAA as fun (I/P:1) and they felt that it was positive because the children in the class seemed happier (I/P:1) and because the children were relaxed (I/P:2). P:4 even described PAA as an enormous positive experience ("ongelooflike positiewe ervaarings") (I/P:4/L261). During observations, it was noted that P:1 and P:2 seemed to like the visits (O:23) and they appeared to be happy as they were smiling (O:23). P:3 confirmed she had no reaction as she only saw the children for thirty minutes per week and not on the days when the visits took place. P:2 was also of the opinion that she would have liked the visits to continue because of her positive experience of it (I/P:2).

The teachers also felt that these dog visits could continue for a longer period of time and it could form part of the daily routine (I/P:1). One teacher specified that this kind of intervention could be introduced in the daily programme as in the case of the music and drama lessons which are introduced once a week (I/P:1). Teachers also felt that these visits could be continued because learners liked it as a part of their weekly routine (I/P:1, I/P:3, I/P:4). P:2 agreed that these visits

could be introduced in the daily programme, and she was of the opinion that it would definitely have a stronger influence if provided more than once a week (I/P:2). P:3 advised that PAA should be introduced in small groups. It had been introduced in small groups but this participant never witnessed the visits (I/P:3). P:4 specified that PAA could be introduced everyday as the dog had a positive effect with regard to the learners' aggressive behaviour (I/P:4), and that it could be transferred to other classes as well, as she thought it would have the same impact (I/P:4).

4.6 LEARNERS' REACTIONS TO PAA

“Excitement” and “positive” were the terms mostly used to describe the learners' reactions to PAA (I/P:1/L145, I/P:2/L186, I/P:3/L135, I/P:4/L261, O:3, O:5, O:8, O:11, O:14, O:20, O:23) and no negative reactions were recorded (I/P:2). During one visit, a group of learners did not show any reaction during the PAA visits (O:3). P:1 also stated that the learners were enthusiastic about the dog visiting the class (I/P:1, O:5, O:11 O:14, O:17, O:18, O:20, O:23) and even those learners who were in contact with a dog at home every day were excited about the visits to the whole class (I/P:1). Learners smiling and laughing was an indication of happiness during these visits (O:3, O:5, O:8, O:11 O:14, O:17, O:20, O:23). P:1 described the children's expressions as “beaming” (“gesiggies het gestraal”) (I/P:1/L174). A parent once walked to the researcher and told the researcher how the child continuously talked about the dog in PAA at home (O:8) and one boy's family decided to get a puppy like the dog used in PAA and he was extremely excited about it (O:12, O:13).

The learners took part in the activities group by group (O:5, O:8, O:11, O:14, O:17, O:20, O:23). While other groups were busy with the activity it was clear that those whose group was not participating at the moment were still interested in the dog and the activity that the other group was engaged in with the dog (O:3, O:5, O:8, O:11, O:14, O:17, O:20, O:23) and the learners were eager to touch the dog (O:14, O:17, O:23), but careful not to hurt the dog (O:5, O:11). The learners did not want PAA to stop (O:14, O:17, O:20, O:23) and were sad on the last day of PAA (O:23).

At the beginning of PAA ,the learners greeted the P.A.T. volunteer and dog and also thanked her (O:3, O:5, O:8, O:11, O:14, O:17, O: 20, O:23). They were paying great attention to the dog during PAA activities (O:8, O:11). During the first two visits some children did show some discomfort (O:3, O:5) and blushing was observed (O:8, O:11, O:14). There was one girl who did not want to take part and on days of not partaking, she seemed fearful and unsure (I/P:1), but observations revealed that this girl did participate as there were times when all the learners participated (O:8,

O:11, O:14, O:17, O:20, O:20, O:23) or other times when those who seemed nervous did take part (O:14, O:20). However, there were times when some learners did not want to participate (O:11, O:17, O:20, O:23) and one boy who did not take part as regularly as the other learners, reverted to aggressive actions twice during the PAA hour (O:14, O:23). A previously shy boy took part and showed control while performing the activities (O:20). General behaviour differentiations and changes in classroom management are discussed in the next section (section 4.7).

4.7 INFLUENCE ON GENERAL POSITIVE BEHAVIOUR AND CLASS MANAGEMENT

The study was aimed at exploring the influence PAA had on aggressive behaviour. However, some interesting observations and findings were obtained which can provide an explanation for the decreased occurrence of aggressive behaviour. Table 4.3 presents the types of positive behaviour that were observed and referred to by teachers during PAA. Furthermore, PAA was shown to have a positive influence on most of these behaviours. Table 4.3 is discussed in this section, while elaborating on these aspects.

Table 4.3: Positive behaviour that emerged during PAA

Behaviour	Data provided by:				Positive influence of PAA (Y/N/No influence)
	Participant (P) Researcher (R)	Interviews (I)	Questionnaire (Q)	Observation (O)	
Responsibility	P:4	√			Y
Independence	P:4 and R	√		√	Y
Maturity	P:4	√			Y
Control over actions	R			√	Y
Relaxed	P:2 and R	√		√	Y
Consideration of other	P:4 and R	√		√	Y
Confidence	R			√	Y
Group work	R			√	Y
Friendly rough play	R			√	Y
Appropriate response to aggressive actions	R			√	Y
Inclusion of others	R			√	Y
Pushing each other on the swing	R			√	Y
Seeking guidance from teacher	R			√	No influence
Comforting each other	R			√	Y
Prevention of possible situations	R			√	Y

Table 4.3 (cont.)

Behaviour	Data provided by:				Positive influence of PAA (Y/N/No influence)
	Participant (P) Researcher (R)	Interviews (I)	Questionnaire (Q)	Observation (O)	
Verbal discussions	R			√	Y
Holding hands/ hugging	R			√	Y
Friendly play	R			√	Y
Sportsmanship	R			√	No influence
Sharing	R			√	Y
Taking turns	R			√	Y
Discussing anger	R			√	Y
Solving social problems	R			√	Y
Sharing feelings with teacher	R			√	Y
Following school rules on their own	R			√	Y
Correcting wrong behaviour by themselves	R			√	Y

Specifically on the days of the dog visits, P:4 felt that the learners developed a feeling of responsibility and they acted like older, more responsible learners (I/P:4). P:4 more specifically made an interesting statement that classroom management in general was easier for the teachers because learners acted more independently (“selfstandig”) and maturely (“volwasse”) (I/P:4/L300-304). P:4 also stated that, because of learners behaving well (“soeter”) on the days of PAA, the experience was positive for the teachers as management was easier (I/P:4/L293). It did seemed as though the learners were more in control of their actions (O:11). P:2 felt that the learners were relaxed and calm (“geen sturnisse”) on the specific days when the dog came to visit (I/P:2/L207). Calmness was also observed while touching the dog (O:8, O:11) or even just having the dog present in the classroom (O:23). This made it easier for the teacher to manage the children on those days (I/P:2). The teachers “enjoyed” (“geniet”) the class on the visiting days as they felt the class was easier to manage (I/P:4/L332-335) and the learners listened attentively to the teacher during the visits (O:3, O:11). During PAA, the learners also took part in spontaneous informal discussions, showed good skills of attentiveness and focus (O:3, O:5, O:8, O:11, O:14, O:17, O:20, O:23) and were quiet and calm (O:14, O:17, O:20, O:23). It was also clear that the learners were being considerate of each other and giving each other turns (O:3, O:5, O:8). Those who had to wait for their group's turn quietly continued with their activities (O:5, O:8). On these visiting days it was also apparent that the learners were gentle with the dog and more gentle with others than on the

days when the visits did not take place (O:8, O:14, O:20). Confidence was also noted during the visits (O:8) and increased as the weeks passed (O:17, O:20, O:23). Positive group work amongst the learners was observed (O:8, O:11), as well as friendly interaction with the volunteer and dog (O:11). During the visits the learners were given opportunities to act independently. This showed growth in the last four weeks of PAA (O:14, O:17, O:20). During O:14, learners walked the dog on a lead and their body language showed a sense of pride. Hugging the dog as a friendly gesture was observed (O:14, O:20, O:23). During the first two visits, some children's responses showed that they were uncomfortable (O:3, O:5), but most seemed to be more comfortable towards the end of the eight visits (O:14).

P:1 noticed that a girl who did not want to take part at the beginning of the visits, did look for attention from the dog when her parents were overseas (I/P:1). P:2 further stated that those learners who were looking for attention had an opportunity to benefit from these visits and in that sense it was positive (I/P:2). The word "better" ("beter") was used to describe the difference in managing the learners before and after the eight weeks' intervention (I/P:2/236; I/P:3/L216). One of the reasons for this 'better' management of situations was that there was more time due to having fewer problematic situations to solve (I/P:2, I/P:3). P:4 also felt that there was more time to spend on instruction time and the curriculum (I/P:4). P:4 also referred to the whole class as being positive (I/P:4). P:2 was of the opinion that she was unsure whether the effect of the visits would be sustainable over a longer period of time (I/P:2).

When general behaviour during the first four weeks was compared to the last four weeks of the intervention, a specific positive change was indicated. This could possibly be the contribution made to "better" classroom management experienced by the teachers. Friendly rough play was observed seventeen times in the first four weeks (O:2, O:3, O:6, O:7, O:9, O:10, O:11) and twenty-three times in the last four weeks (O:12, O:13, O:14, O:15, O:16, O:17, O:19, O:20, O:21, O:22, O:23). During the first four weeks the learners only once responded correctly to an aggressive or negative situation, like walking away (O:5), but responded correctly thirteen times over the last four weeks (O:12, O:15, O:16, O:17, O:18, O:21, O:22). It was observed that the learners included others seven times during free play in the first four weeks (O:6, O:8, O:10, O:11), but including others increased in the last four weeks to fourteen times (O:12, O:13, O:15, O:16, O:17, O:18, O:19, O:21, O:23). Pushing each other on the swing as a gesture of general kindness was witnessed six times in the first four weeks (O:7, O:8, O:9, O:10, O:11) and ten times over the last four weeks (O:12, O:13, O:14, O:15, O:16, O:19, O:20, O:22). Working together as a group was only noted during the first four weeks (O:8) and it was observed that the learners helped one another once in the first four weeks

(O:9) and once in the last four weeks (O:21). Confidence was noted six times in one day of the last four weeks (O:20).

The learners tended to play a chasing game in the last four weeks (forty-three times) (O:12, O:13, O:14, O:15, O:16, O:18, O:19, O:20, O:21, O:22) whereas this was only noted four times in the first four weeks (O:10, O:11). Learners sought guidance from the teacher to handle situations four times during the first four weeks and also four times during the last four weeks (O:3, O:10, O:16, O:21, O:22). It was noticeable that the learners started to comfort and help each other more during the last four weeks (seven times in O:21, O:13, O:14, O:15, O:17, O:20, O:22), compared to the first four weeks (once in O:10). The learners also prevented possible situations by informing the teacher more often during the last four weeks (three times in O:12& O:15), compared to the first four weeks (once in O:10). Verbal discussion as a method to communicate between the learners increased from the first four weeks (nine times in O:1, O:2, O:6, O:9, O:10, O:11) to the last four weeks (thirty-one times in O:12, O:13, O:14, O:15, O:17, O:18, O:19, O:20, O:21, O:22, O:23) and P:4 mentioned that learners should learn to communicate with others when they are uncomfortable or get hurt (I/P:4). Learners holding hands or holding on to each other as a gesture of physical friendliness increased, as it occurred twice in the first four weeks (O:1, O:10) and ten times in the last four weeks (O:12, O:13, O:14, O:16, O:19, O:20, O:22, O:23). Friendly play as normal child's play engaged in with and without objects occurred thirty-eight times in the first four weeks (O:1, O:9, O:10, O:2, O:3, O:4, O:5, O:6, O:7, O:8, O:10, O:11) and twenty-one times in the last four weeks (O:18, O:19, O:22, O:12, O:13, O:15, O:16, O:17, O:21, O:23). Sportsmanship as a skill, mostly amongst the boys while playing ball or the girls cheering friends to perform their best remained constant from the first four weeks (three times in O:1, O:3, O:9) to the last four weeks (three times O:12, O:13, O:20). Sharing amongst the learners was observed once during the first four weeks (O:1) and twice during the last four weeks (O:12, O:21). Learners taking turns on the swings or during an activity was noticed seven times during the first four weeks (O:2, O:7, O:8, O:9, O:10) and ten times during the last four weeks (O:12, O:15, O:16, O:17, O:21, O:22). Positive behaviours only witnessed in the last four weeks were: Hugging each other (O:15, O:18, O:19); telling the teacher about feelings (O:15, O:22) or discussing anger (O:12); solving social problems correctly on their own (O:15); following school rules on their own (O:18); correcting wrong behaviour by themselves (O:13); being considerate towards others regarding space (O:23); and seeing the class as a "safe house" (O:21/L32). These last-named skills observed in the last four weeks can also be connected to a sense of developing independence as noted eight times over the last four weeks in the observations as well (O:16, O:17, O:19, O:20, O:22). It was interesting that P:4 also stated (in her interview, as mentioned above) that the learners seemed to act in a more grown-up way and a

feeling of responsibility was experienced amongst them (I/P:4). Such skills are related to independence.

The behaviour mentioned above could also contribute to a happier class. The learners were generally observed to express happy feelings often in the last four weeks.. This was observed in the form of laughter (twenty seven times in O:12, O:13, O:16, O:17, O:18, O:20, O:21, O:22) and smiling (twenty-one times in O:16, O:17, O:19, O:20, O:21, O:22, O:23). The learners laughed and smiled often on every day of PAA (O:3, O:5, O:8, O:11, O:14, O:17, O:20, O:23).

In conclusion, it was clear that PAA had an influence on general positive behaviour, although less friendly play and respect for own property was not observed as being influenced positively. A positive influence from PAA was observed with regard to sharing, taking turns, physical affection, discussions amongst learners, friendly rough play, responding correctly to aggressive or negative situations, including others, pushing each other on the swing, playing games like chasing, helping and comforting each other and preventing possible problems by telling the teacher. No influence from PAA was shown with regarding helping the teacher, seeking guidance from the teacher and sportsmanship amongst the learners.

4.8 TEACHERS' OPINIONS, EXPERIENCES AND OBSERVATIONS REGARDING THE INFLUENCE OF PAA ON THE LEARNERS' AGGRESSIVE BEHAVIOUR

The aim of the study was to explore the influence Of PAA on learners' aggressive actions. The aim was to investigate the possibility of assisting in the development of a programme for using pets in class or for further studies on the use PAA as a method for better management of aggression in the classroom. The teachers felt discouraged because, as discussed in section 4.3.1, aggressive behaviour places a strain on the process of educating learners. Although this was a qualitative study and the methodology and data analysis resonate with a qualitative approach, the figure below provides an informing visual presentation of the way in which the incidences of aggressive behaviour decreased over the eight-week period. Figure 4.1 presents the occurrence of aggressive behaviour over the eight-week PAA intervention and is elaborated on below.

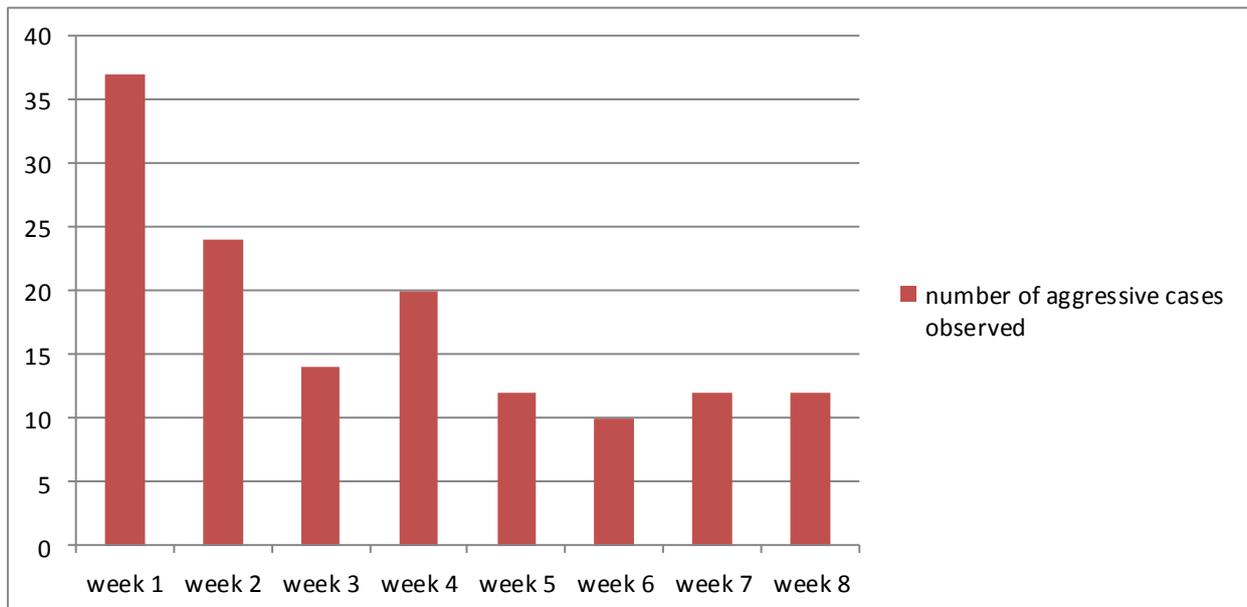


Figure 4.1: Influence of PAA on the occurrence of aggressive behaviour

P:1 and P:2 felt that PAA had the positive influence of reducing the class's aggression (I/P:1, I/P:1), as individual learners were influenced (I/P:1) and when a few learners were positively influenced, the whole class was affected positively (I/P:2). The principal agreed on the positive influence PAA had on the occurrence of aggressive actions in the class (I/P:4). She did, however, provide a different view since she is not in the class every day, like P:1 and P:2. She stated that her experience concerning the reduction in aggressive actions following the intervention suggested the possibility that the teacher felt positive about having less aggression to deal with on her own and did not feel a need to resort to the principal for assistance (I/P:4). This view reflects the positive experience the teachers may have had (I/P:4).

To elaborate on the positive influence, P:2 stated that the influence varied from individual to individual (I/P:2). A participant also stated that one boy who seldom participated in the activities with the dog, showed no change in his aggressive actions (I/P:1). P:1 mentioned that the class was like a “safe haven” for the learners as they liked the dog (I/P:1) and the researcher concludes that a feeling of safety could contribute to a lessening of aggressive actions. When referring to the specific time line of the dog visits, P:1 was of the opinion that she found that fewer aggressive actions occurred with the passing of time during the first four weeks, but that aggressive behaviour increased during the fourth week of intervention. After that it decreased again until the eighth week (last week) of the intervention (I/P:1). P:2 also stated that the learners did seem less interested in the middle of the intervention period (I/P:2). According to the observations during the fourth week, there was a decrease in aggressive behaviour, with 16 aggressive actions in 5.5 hours (O:9, O:10,

O:11) compared to the first week's 37 aggressive actions in 5.5 hours (O:1, O:2, O:3). This was reduced to eight aggressive actions in 5.5 hours in the last week (O:21, O:22, O:23).

Girls specifically were less verbally aggressive towards each other when comparing the female learners' behaviour before and after the intervention (I/P:1), as was also observed in comparing the verbal aggression occurring during the first four weeks (five times in O:1, O:4, O:5, O:7, O:10) with the last four weeks (three times in O:13, O:17). This influence was also seen to be transferred to other situations after class (I/P:2). Another influence on specific aggressive behaviour that was mentioned was reported as less biting (I/P:2). This was confirmed during observations, with two biting instances in the first four weeks (O:4, O:9) and none during the last four weeks. It was reported that the boys' aggressive actions were continuing as normal (I/P:2). Less pushing and calmer learners were experienced by the music teacher (I/P:3), which was confirmed by the observations. Twelve incidents of pushing were witnessed in the first four weeks (O:1, O:2, O:4, O:5, O:6, O:7, O:8, O:11) and six were witnessed in the last four weeks (O:14, O:18, O:19, O:21, O:22). The different types of aggressive behaviour observed were discussed in section 4.3. For a general indication of the influence on aggressive behaviour, the number of cases observed from starting in the first week of PAA and ending in the last week of PAA of the intervention; are reported as follows: week one: 37, week two: 24, week three (which had one less day due to a public holiday):14, week four: 20, week five: 12, week six: 10, week seven: 12, week eight: 12. Note that the observations were made over three days in one week, over a period of 5.5 hours. These positive influences on the occurrence of aggressive behaviour experienced by the teachers were confirmed by the observed aggressive actions.

Learners reacted differently to aggressive actions by others. Learners were specifically observed to stare silently at the aggressive learner (O:1, O:4, O:6, O:7, O:8, O:11, O:16). This reaction decreased as time went on during the intervention. Aggressive learners seldom responded in a discussion on their anger (O:1, O:2) in the first four weeks, and even responded less during that method less in the last four weeks (O:13). The possible reason for fewer 'silent stare reactions' may be the increase in situations where activities were continued after an aggressive action (O:3, O:6, O:7, O:8, O:12, O:13, O:14, O:19, O:20, O:21, O:22, O:23). Aggressive learners did not apologise on their own in the first four weeks, but they did in the last four weeks (O:14, O:17). It has come to the researcher's attention that the learners' reactions to others' aggression changed. However, this change was not as remarkable as the change due to the influence of PAA on the occurrence of aggressive actions.

During the first four weeks the learners did not always listen to the teachers' guidelines, did not always apologise when she asked them to, did not discuss their feelings of anger with the teachers, ignored the teacher, continued with aggressive behaviour even when the teacher had asked them to stop, 'back-chatted' the teacher and responded by hurting back (O:4, O:5, O:6, O:9, O:10). Although during the first four weeks an aggressive situation was handled correctly twice (O:1, O:10) and a learner on the receiving end responded to an aggressive child by confronting him/her verbally (O:2, O:3), they seldom communicated the problem to the teacher (O:2), stopped the aggressive action on their own (O:2, O:6, O:9) and rarely responded to teachers' guidelines (O:2, O:3, O:5).

Compared to the above conclusion from the first four weeks, the learners performed as follows in the last four weeks: They once responded to teachers' guidelines, apologised more frequently on the teacher's request, explained and discussed anger with the teacher and walked away from the aggressive action more often (O:15, O:13, O:14, O:15, O:16, O:18, O:19, O:21). Although it was observed three times that aggressive actions did not stop immediately after confrontation in the last four weeks (O:12, O:13, O:18), that learners did not apologise immediately, although to a lesser degree than in the first four weeks (O:12, O:13), that learners did not respond to the teacher (although still less frequently than during the first four weeks) (O:18), or respond to another's request to stop (O:13), their reactions, in conclusion, indicated better responsiveness to the teacher in the last four weeks than in the first four weeks.

When asked for their opinion specifically of the PAA days, P:1 responded that there was no difference in aggressive behaviour compared to other days. She experienced the an influence in totality and thus could not distinguish between the days (I/P:1). P:2 stated that the influence in aggressive behaviour was not necessarily observable on the visiting days, but the learners were easier to manage during the visiting days (I/P:2). The principal's opinion was that there was less aggressive behaviour specifically on the PAA days (I/P:4) and the children were seen as more "responsible" children ("verantwoordelike klein mensies") (I/P:4/L300-304).

Teachers (P:1, P:2 and P:3) were of the opinion that, given more time, PAA could have a more pronounced influence on the learners' aggression (I/P:1) especially in the case of those who seek attention (I/P:2). P:3 elaborated and stated that, even though there would have been an even more positive effect over a longer period of time, such an effect could also then be due to the children growing (I/P:3). P:4 had a different view and her opinion was that the positive influence PAA had over the eight weeks could possibly not have the same effect over a longer period of time because

the learners may get used to the visits and the dog and, for that reason, PAA may not have the same impact (I/P:4).

Due to the reduction of aggressive actions experienced, class management was made “easier” (“makliker”) for her as there were fewer “complaints” (“klagtes”) to deal with (I/P:1/L333-335, I/P:2/L323) and less time was spent on addressing aggressive behaviour (I/P:1). P:1 stated that the same effect would be seen in other classes as well and the discovered reduction in aggressiveness was not bound to this one class only (I/P:1). Teachers experienced having gained more courage for dealing with aggressive behaviour (I/P:4).

4.9 OTHER FACTORS WHICH COULD EXPLAIN BEHAVIOURAL CHANGE

The participant teachers were of the opinion that they do try to follow the same programme every day, but other factors, like less playtime, could also influence behaviour (I/P:1). Although P:2 and P:4 stated that they had no other explanation for the change in behaviour (I/P:2, I/P:4). P:3, the music teacher stated that she did teach the learners songs and movements with the class during the eight weeks’ intervention and she felt that the calm music that was used could possibly provide further explanation for the influence on the learners’ behaviour, however, she also stated that the positive change in behaviour could be a combination of the dog visiting the class, the music and water-like movements the learners were taught (I/P:3). P:1 also referred to the idea that the influence on aggressive behaviour may be due to other factors linked to children’s families that could possibly influence aggressive behaviour (I/P:1).

During the observations a factor that possibly contributed to the influence on behaviour could be related to when the teachers used a motivation strategy by bribing the learners to behave well on a day when the student teacher’s lecturer came to assess her (O:6), but this only occurred on one day. A new girl was enrolled in the class and the teacher was of opinion that she had not yet found her place on the first day (O:7). This could have also have contributed to different group interactions. The fire brigade once brought their fire truck to school and the learners were extremely excited. This happened on the same day as a PAA hour and thus could possibly have influenced the behaviour during PAA (O:11). Lastly, the learners had 90 minutes of continuous outdoor play due to a cake sale at the school and the teacher had to plan and alternate the daily programme to adapt to the sale (O:13). On these days, events could possibly have assisted the influence, but no remarkably different behaviour was observed.

4.10 DISCUSSION OF THE FINDINGS

In this case study, the influence of PAA over eight weeks was explored through the teachers' opinions and observations in support of the findings that the teachers recorded. A case study is described by Babbie (2010) as an in-depth study that engages the reporting of a complex social activity and aims to provide a rich description of a specific phenomenon. The phenomenon in this case was the influence of PAA on the occurrence of aggressive behaviour in the class as experienced by the teachers and the impact of such behaviour on their classroom management. The study was grounded on the necessity to address the growing concern over aggressive behaviour in schools as aggressive behaviour is disruptive behaviour, which influences learning and emotional wellbeing (Csibi & Csibi, 2011) of all the learners involved. Teachers have to deal with many different behaviours, and confront cognitive and physical abilities as part of inclusive education (Swart & Pettipher, 2007). The findings were that there are instances when children should rather be referred to smaller classes at other schools as teachers felt that this may have a positive impact on learners' behaviour (I/P:4).

4.10.1 Discussion of the Influence of PAA on General Social Behaviour

The researcher concludes that PAA does adhere to the teachers' specifications for dealing with aggressive strategies (see section 4.4) and had a positive influence on the frequency of aggressive behaviour. Programmes which could possibly influence aggressive behaviour should also be easier to implement and the teachers and learners should react positively. Thus the learners' and teachers' reactions are of importance as it is an indication of whether the aim of the study (to make a contribution to developing a programme for implementation) could be reached. During interviews three of the participating teachers stated that they experienced the visits as positive (I/P:1, I/P:2, I/P:4) and the other teacher stated that she had not been in contact with the visits and therefore could not report a reaction (I/P:3). P:1, P:2 and P:3 elaborated and said that their positive experience was related to the learners being "easier" to manage (I/P:2, I/P:4) and these visits could have had positive value for class management (I/P:2). The reasons for easier classroom management may have resulted from the positive effect of PAA on individual learners. P:1 and P:2 stated that PAA influenced individual learners. This is strongly connected to the ecosystemic systems theory from which this research study's theoretical framework was taken. The influence of PAA on individual learners affected those individual learners, but since those individual learners were part of other systems and influenced other systems, the conjoined influence on the whole class cannot be ignored (I/P:1, I/P:2).

An example of the influence on an individual learner was reported by P:1, who stated that a girl who usually was too scared to take part did participate during the days when her parents were overseas (I/P:1). Hart (1995) supports this as she holds that animals also appear to be beneficial as a buffering factor under stressful life circumstances and that positive development in a person's psyche is due to the idea that dogs 'give' and 'accept' love, nurture people, and provide emotional security to people. P:1 and P:2 mentioned that the learners who look for attention and love used this opportunity (I/P:1, I/P:2) and were influenced positively.

The influence PAA had on positive behaviour other than the reduction of aggressive actions was discussed in section 4.7. A few of these findings could be connected to the literature. In the case study class, the learners were noted, as seen in observations, to be attentive and eager to interact with the dog. Katcher and Wilkens (2000) and Chandler (2005) also found in their studies that a pet in the classroom had a significant impact on gaining learners' attention. Children's improved attentiveness was also noticed when a dog was present in the class (Kotrschal & Ortbauer, 2003; Hergovich *et al.*, 2002), which supports the positive reaction the teachers mentioned. In the researcher's opinion, learners paying attention (without bribery) is a sign of learners being interested.

According to De Witt (2009), learners of this age tend to become self-centred, rebellious and aggressive (see section 2.4) and this was seen during the observations in the 'back-chatting' that occurred when teachers addressed an aggressive child, in not listening to the teacher or not following her guidelines, as at the beginning of the observation period. De Witt (2009) further states that, under the right circumstances, children could be loving, friendly, enthusiastic and cooperative, which, in summary, was observed during the last four weeks of intervention, as the teachers recalled that the children were "easier". All the participating teachers stated that the learners showed a general positive reaction to the dog and observations found that the children were happy, specifically on the visiting days, but also on general days during the last four weeks. Melson (2007) reported that children in a group exposed to activities with a dog developed general positive spirits. Friedmann *et al.* (2010) support this positivity with the explanation of children being happy. They observed that when dogs visited hospitalised children, the children were happier than before the dog visits (see section 2.6). The learners laughed and smiled often every day during the visits PAA (O:3, O:5, O:8, O:11, O:14, O:17, O:20, O:23).

A finding that the learners were calmer on the days when the dog was present in the classroom was reported. Hart (1995) describes the reason for this phenomenon. Hart (1995) noted that petting a

dog fostered two major needs i.e. the need for affiliation and self-esteem and a feeling of calmness. A feeling of calmness was noticed in the class when the dog was present, and in those children who were specifically taking part in the activity on the carpet with the dog (O14, O:17, O:20, O:23). This could also be supported by Odendaal en Meintjies's (2003) study on 18 human adults. They found the effects of stroking a pet being an increase in beta-endorphins, oxytocin, prolactin, phenylacetic acid and dopamine, which lowers blood pressure in humans. Beta-endorphins are involved in learning, memory and blood pressure, while dopamine provides a 'pleasurable sensation' (Brown cited in Odendaal & Meintjies 2003) (see section 2.5.3). Friedman *et al.* (2010) refer to Kaminski's study in 2002 on the effects of an AAA group and a child-life therapy group, which found that concentration increased and stress decreased amongst the human participants (see section 2.5.3). In the present study it was found that the learners were more relaxed during this eight-week intervention, specifically on the visiting days. A relaxed nature is a general indication of reduced stress. When the dog was present in the class, the learners were more attentive. It, however, is not known whether this attentiveness and concentration were maintained after PAA, but the class in general was easier to manage.

Pets can be used to improve our affiliation with others and stimulate a conversation, which will improve social interaction and help to reduce stress (Beck, 2002a). Spontaneous informal discussion (O:3, O:5, O:8, O:11, O:14, O:17, O:20, O:23) occurred many times while the learners were taking part in the PAA. This was one of the indicators for relaxed learners which P:2 experienced. Evidence that activities with pets can reduce stress in small groups was studied by Nagengast *et al.* (1997). They found that the blood pressure and heart rates of 2 year to 6 year old children was lowered when interacting with a friendly dog, as opposed to those who did not have the benefit of such interaction. The learners' comfort level around the dog grew with the dog's successive visits to the class and it was documented that the learners were focused on the dog. This supports Friedmann's (1995) findings that dogs provide an external, pleasant focus of attention and this, in turn, decreases anxiety and provides a feeling of safety and a source of contact and comfort. The learners in the class did refer to the class as the 'safe place' during free play. Jalongo *et al.* (2004) found that, where animals and their handlers go to schools to assist in reading lessons, children who struggle with reading show more confidence and less anxiety when reading to the animal. This confirms the growing confidence under the participating learners.

Chandler (2005) found that students had fewer behaviour problems and paid better attention to lessons when the teacher's dog was present (see section 2.7). With a dog being present in the classroom, children's attentiveness, social cohesion, self-confidence and social competence showed

greater development compared to a control group of children who did not have a dog present in the class (Kotrschal & Ortbauer, 2003; Hergovich *et al.*, 2002). De Witt (2009) also holds that children at the age of five years can make small decisions and are able to look after themselves in the caretaker's absence. She states that they are more stable regarding emotions and self-confidence than in the previous years. This influence on attention and greater confidence was an extraordinary observation made when the dog visited the class (O:20). There was a lack of confidence in this class before the intervention (as learners did not express their emotions regularly and some were observed to be too scared to take part when the dog visited) but, as time passed, observations recorded a clear improvement as the learner's confidence in taking part in the visits and discussing feelings and others intentions increased.

In Chandler's (2005) study on juveniles' rehabilitation with the help of dogs, the social skills that were influenced were self-esteem, compassion, gentleness, good and clear verbal and non-verbal communication, sense of self-worth, teamwork, reduced general anxiety, concentration, motivation and self-efficacy. In this research study, it was found that learners' verbal communication amongst themselves improved as the intervention continued and this was more apparent on visiting days. Furthermore, the learners were gentle with the dog and more gentle with others than on the days before the visits (O:8, O:14, O:20). It was also clear that the learners were being considerate of each other and in giving each other turns (O:3, O:5, O:8). Comforting or helping one another also showed an increase, which is an indicator of growing compassion. The learners physically made sure that others had a turn during the dog visits, but also on general days. Lind (2009) describes, in her book, how she, during her years of working with mentally handicapped children, found that performing animal therapy visits made the children respond well to the concept of 'taking turns', i.e. sharing and showing consideration (see section 2.6).

Melson (2007) found that young children, when they played with a dog, were introduced to an experience that provided them with opportunities to develop emotional 'self-regulation' (see section 2.6). It was found that learners were more in control of their actions and this could be an explanation for P:4's finding that they were more "aware of others" ("baie meer bewus van ander se sosiale vaardighede") (ISSI/P:4/L288-296). As mentioned above, it was also observed that the learners were considerate of others. According to Flavell *et al.* (2002) it is between the ages of 2 years and 3 years that children begin to develop 'theory of mind'. Theory of mind has to do with the understanding that other people also have their own emotions, thoughts, beliefs, desires, intentions and perceptions. It was noted that the learners illustrated awareness of others' emotions as they were more considerate towards each other. Consideration for others can also be connected to empathy

amongst learners. Even though the learners could have developed empathy before the intervention, they seldom showed it; their aggressive reactions caused concern. Their empathy could have increased, or they had become more capable of showing it to others. Strayer and Roberts (2004) came to the conclusion that empathy in children (at the age of 5 years) is positively associated with prosocial/good behaviour, but negatively associated with aggression. The positive attribute of comforting and helping others increased the more the learners came in contact with the dog.

It was observed that the learners were proud of themselves when performing an activity like walking the dog on the lead (O:14, O:23). Botha *et al.* (1998) state that pride develops at this age. During the last four weeks (of the eight weeks of PAA) it was observed that the learners solved problems on their own in a positive manner (O:15); followed school rules without reinforcement by the teacher (O:18); corrected wrong behaviour by themselves (O:13); and as mentioned above, were more considerate of each other, specifically in allowing each other space to take part in the interactions (O:23). Roehm (2010) supports these findings in that it is noted that the use of a therapeutic animal can be useful in children's development in the sense that it provides opportunities to learn appropriate peer interaction and problem-solving skills. Daly and Morton (2006) found that children who are in contact with animals appear to exhibit an increase in the development of empathy, but it is not clear *how* it impacts on social skills or interaction with others. It was noticeable that the learners started to comfort and help each other more during the last four weeks (seven times in O:21, O:13, O:14, O:15, O:17, O:20, O:22) compared to the first four weeks (once in O:10). Sharing (O:1, O:12, O:21) and being considerate regarding space (O:23) also occurred more frequently.

According to De Witt (2009), the development of manners, independence and responsibility takes place in learners between the ages of 5 and 9 years. Connecting this fact to PAA, Fine (in Fine, 2010) holds that the interaction with a dog could assist in the development of a sense of responsibility and sharing of emotions. P:4 found that learners revealed a better sense of responsibility than before the visits and acted maturely specifically on the days of the dog visits. The learners also prevented possible aggressive situations by more frequently informing the teacher about their emotions or the intentions of others as the visits progressed (O:10, O:12, O:15). From 7 years to 9 years, children seem to gain more independent from their parents and are able to do projects with others, even though they still need arbitration by adults (De Witt, 2009). An increase in independence was observed, for example with regard to taking care of property and regulating their own clothing as the weather changed. Since this is characteristic of learners before 7 to 9 years

of age, it could explain the maturity (“klein volwassenes”) that P:4 experienced during the PAA days and as PAA continued.

In conclusion: regarding the influence that PAA had on pro-social general behaviour, it is important to remember that better pro-social behaviour could be an indication of diminished aggression. The influence on general behaviour discussed above can be linked to Katcher and Wilkens (2002). Their study showed positive results from AAA for general behaviour that included capturing the attention of the children (attentiveness); decreasing the anxiety levels (relaxed); a more positive attitude towards others; more nurturing and affectionate play (the comforting and considerateness amongst the learners) (even in children who are typically aggressive); and an increase in children's self-esteem.

4.10.2 Discussion of the Influence of PAA on Aggressive Behaviour

The findings showed that teachers did experience aggressive behaviour in the class (Q:1, Q:2, Q:3, Q:4) and that they did not have set methods of dealing with the aggressive actions. They referred to different ways of dealing with aggression (ISSI/P:1, ISSI/P:2, ISSI/P:3, ISSI/P:4). Three types of aggression occurred, namely physical, verbal and relational aggression (Breet *et al.*, 2010). In the case study class, these types of aggressive behaviour were observed and given as examples in interviews. The girls in the case study class were more relationally and verbally aggressive whereas boys tended to be more overtly aggressive (physical); girls, however, regularly showed overt aggression and boys showed relational aggression. This is supported by Berk (2006) and Csibi and Csibi (2011) who found that girls are more likely to be relationally aggressive towards both genders and boys are more likely to be physically aggressive towards boys. One teacher was of the opinion that the girls in this class were more aggressive than the boys (ISSI/P:1). This is not what Schaffer *et al.* (2006) and Kim *et al.* (2010) found. They state that boys were typically more aggressive than girls, but girls did engage in aggressive actions, although less often. Fighting with others was a frequently observed phenomenon at the beginning of the eight-week intervention. This supports De Witt's (2009) finding that obsessiveness and fighting with others is seen in the 6th year of development (De Witt, 2009). Even though the observed behaviour correlates with the typical developmental behaviour as described by De Witt (2009), it still requires intervention or to be influenced as the severity of the occurrence creates a problem for teaching.

The participating teachers felt that there was a possibility of different reasons for the aggressive actions. P:4 mentioned the impact of television on aggressive behaviour. This supports Huesmann *et*

al.'s (2003) finding that television does have a negative impact on aggression amongst this age group. P:1 placed emphasis on the learners' context, which could be explained by the theoretical framework of this research study, ecological systems theory (see section 2.2.2), according to which the microsystems (in this case the parents and family) influence the individual. P:1 declared that many aggressive actions occurred because of the learners' conflicting personalities. Such personality conflicts could also be described as learners being unable to distinguish another person's intentions (Woolfolk, 2007) and thus failing to "read" one another correctly.

The impact of aggressive behaviour on education was clear and some teachers felt that it impacted extremely negatively on learners at the receiving end. Arseneault *et al.* (2010) recommend that interventions should start before entering the formal school setting as lifelong manifestations may occur in those exhibiting the aggressive behaviour, but also in those experiencing the aggressive behaviour, and that families should be included in the interventions that schools might undertake. The necessity of addressing aggressive behaviour does not pertain to those who practise the aggressive behaviour, but also to those who are the victims.

According to Farrington and Tfofi (2009), there are many prevention approaches to modify bullying (a type of aggressive action) behaviour, but the outcomes are disappointing. None of the teachers referred to any prevention strategies used, only to secondary intervention strategies for dealing with the behaviour as it arose. However, it was observed that the principal spoke to all the classes at the school about the negative impact of aggressive behaviour. Although this was a secondary prevention for the school, as the behaviour was witnessed in another class, it was also meant to prevent the aggressive behaviour from being used in the case study class, thus becoming a primary prevention for the primary class (O:13). An opinion that was voiced was that the methods currently in use were mostly aimed at dealing with situations in the short term (ISSI/P:1), thus aiming to influence the behaviour for a short term. Another participant was of the opinion that the methods they currently use could possibly have some influence on some individual learner's aggressive actions in the long term (ISSI/P:2). However, the primary teacher felt that strategies are needed to influence the behaviour in the long term (ISSI/P:1) and Walker (2010) agrees in that schools provide the best setting for long-term intervention. Vogel (2002) states that a long-term influence on aggressive behaviour is needed. Although there are many options to be used in dealing with aggressive behaviour, P:4 was of opinion that options involving specialists were expensive (ISSI/P:4), hence exploring the possible influence of PAA (a humane and cost-effective method) on the aggressive behaviour over eight weeks.

During the observations and interviews it was clear that the most frequent methods involved discussion of problems and using this to encourage children to think about their wrong behaviour. Although, this 'thinking' method was sometimes referred to as 'time out', it could be viewed as punishment. Vogel (2002) suggests that person-centred methods such as counselling or conflict resolution and social instruction, should be used rather punishment. However, the teachers did often make use of discussions on the problems (social instruction) around what behaviour was more appropriate. P:1 mentioned often using role-playing to teach the children about appropriate social skills and dealing with aggressive situations. This is mentioned in Woolfolk (2007) as a method to model the appropriate behaviour. It was clear, from the interviews, that the teachers seemed to regard some methods as time consuming, which indicated that time to deal with behaviour was an issue. Also found in Cunningham *et al.*'s (2009) findings was that educators preferred to implement programmes (to address bullying and aggressive behaviour) that require less training and time to implement. For example Fraser *et al.* (2005) list successive steps to modify learners' perceptions and cognitive understanding of social situations (see section 2.4.4). Although these steps could be used and could contribute to a great deal of positive behaviour amongst learners, the teachers were not eager to use methods which were perceived as time consuming.

In Bender and Emslie's (2010) study, it was found that teachers were of the opinion that they should make time to teach specific ways and methods with regard to respecting each other; that schools should provide supervision; that good communication between the microsystems is important and that secondary interventions could enhance the prevention of violent behaviour in schools. These suggestions could be explored in this research study. Teachers who participated in the current study felt that their verbal discussions were time consuming, thus specific education about respecting others would be as time consuming (I/P:4, O:1, O:1, O:4). The teachers used supervision as a primary measure of prevention (O:1, O:2, O:3, O:4, O:5, O:6, O:7, O:8, O:9, O:11, O:12, O:13, O:14, O:15, O:16, O:17, O:18, O:19, O:20, O:21, O:22), but one participant suggested that the teachers could find better management strategies if they shared their management options with one another (I/P:2). The other three participants, however, had used this method of sharing management options (I/P:1, I/P:2, I/P:3, O:2, O:4). Other microsystems (the parents and the principal) were contacted but this was specified as only used when the frequency of the aggressive behaviour increased (I/P:1, I/P:2, I/P:4, O:4).

As indicated in section 2.7, animals and pets that are brought into a class as class pets are referred to as a "companionable Zoo" (Melson, 2007). Melson (2007) describes how Dr Aaron Katcher developed the concept of the companionable Zoo: small animals were brought into a treatment

centre where boys were being treated for severe conduct disorders, emotional illness, poor impulse control and out of control aggression. After six months' exposure to the "companionable zoo", all the boys demonstrated significant improvement in their behaviour. The same influence was found in this class when the learners demonstrated even fewer aggressive actions as the intervention continued (see section 4.8), which could have been due to better control over anger.

The results of the research study by Tissen *et al.* (2007) on the effects of different training methods (with and without dogs) on social behaviour, empathy and aggression amongst children, indicated that the interventions had a significant positive impact on children's social behaviour and empathy (see section 2.6). Greater empathy was observed specifically in the children who had the dog in the classroom (Hergovich *et al.*, 2002). In the current study, having the dog in the classroom had a positive influence on the learners' aggressive reactions to one another and they were generally easier to manage. Daly and Morton (2009) regard it as no surprise to conclude that dogs have a positive effect on children's empathy skills, as research indicate greater social skills development in children who have a relationship with a dog(s). Vogel (2002) furthermore found that a lack of empathy resulted in aggressive behaviour, hence there is a possibility that AAT will be beneficial to these children. A reason for this, according to Jenkins (2009), is that animals can provide a less threatening environment and in turn increase the development of social skills.

Fine (2010) pointed out that research on activities with animals and groups of children, as in schools and classes, is limited and additional research should be undertaken, hence this research. This research aimed at providing information on the influence that PAA could have on a group's aggressive interactions and also potentially be of benefit for further studies or in developing programmes to assist teachers in the classrooms.

4.11 CONCLUSION

The conclusion derived in this chapter is that PAA had a positive influence on learners' aggressive interactions and thereby also made the management of the class easier for the teachers. The teachers stated that there were fewer aggressive cases to handle and that the general management of the class was easier.

In the next chapter conclusions from this study and recommendations for further studies are explained.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The chapter commences with a summary of Chapters 1 to 4 and then the aim is to answer the research questions through a discussion of the findings within the ecosystemic framework as discussed in section 2.2.2. This will be followed by a discussion of the limitations and strengths of the research, further research possibilities and recommendations, reflections by the researcher on the research process and a conclusion.

5.2 SUMMARY OF CHAPTERS 1, 2, 3 AND 4

There is a growing amount of literature on using animals and pets in animal assisted activities (AAA) and animal assisted therapy (AAT) in support of learners' cognitive, physical, social and emotional development (see section 2.5). In this specific case, the term Pet Assisted Activities was used (PAA). Violence in South African schools cannot be dismissed. This research study was aimed at exploring the possibility of using PAA in grade R to address aggressive behaviour amongst grade R learners, which also informed the primary research question. The aim in Chapter 1 was to inform the reader about the aims, research paradigm and methodology, ethical considerations and key words used in this research study. Chapter 2 served as the literature backdrop and the foundation to evaluate the findings of the current research study. The literature review provided relevant information on humans, the human-dog relationship and on AAA, PAA and AAT. The reason for choosing a qualitative case study within the interpretive paradigm is explained in Chapter 3. Chapter 3 also presents an explanation of the data-production techniques, which consisted of questionnaires, observations and semi-structured interviews. The process of data analysis is fully described and the relevant ethical considerations are discussed. Chapter 3 is followed by Chapter 4, which comprises a discussion of the findings derived by using the data production techniques to answer the research questions.

5.3 RESEARCH QUESTIONS

As explained in section 1.4 and section 3.3, the primary aim of this study was to explore the influence of pet assisted activities (PAA) on a grade R class that demonstrated aggressive behaviour

towards each other. More specifically, answers were sought to the following secondary questions:

- i. What are the teachers' perceptions with regard to aggressive behaviour amongst grade R learners and the effect on learning?
- ii. How do the teachers experience aggressive behaviour amongst the learners?
- iii. What methods/ways of dealing with aggressive behaviour do the teachers find to be effective?
- iv. What are the children's reactions to the P.A.T. dog?
- v. What are the teachers' experiences after the P.A.T. visits in terms of the aggressive behaviour amongst the learners and the effect on class management?

5.4 DISCUSSION OF FINDINGS AND CONCLUDING REMARKS

The Bill of Rights (Republic of South Africa, Constitution of South African Act No. 108, 1996) states that learning and education in schools in South Africa represent a fundamental human right. This suggests that all citizens have the right to education, no matter what their socio-economic status (SES), ethnicity, gender or religion are. Without placing emphasis on the reasons for aggressive behaviour or the SES of the school, all children have the right to be educated in a non-violent atmosphere. Wilson *et al.*(2003) found that aggressive behaviour in schools may inhibit learning and create problems amongst learners, and thereby place a damper on education. From personal experience and informal observation, it is evident that dealing with aggressive behaviour in schools is difficult for many reasons involving time and strategies. Aggressive behaviour is viewed as normal in human development (see section 2.3), but there is a need to address aggressive behaviour amongst learners in their early years to prevent aggressive tendencies in adolescence (De Witt, 2009; Vogel, 2002). Providing preventative interventions in schools, which are most children's primary source of education, is of utmost importance. The problem, however, is that the role of the educator is to provide sufficient and quality education to all, but, as the researcher found, the management of aggressive behaviour impinges on this provision. Due to the negative impact of increasing aggressive behaviour on schooling, schools have been giving more attention to addressing this growing concern over the past two decades (Merrell, Geuldner, Ross & Isava, 2008). However, as Vogel (2002) points out, not all schools have the facilities, services and finances to provide direct social intervention. PAA, as discussed in section 1.3, could be a possible prevention strategy to be used in schools and classrooms, as it is cost effective, humane, fun and does not involve harsh discipline. Furthermore, it does not focus on addressing wrong behaviour or individual children as the problem (which supports the medical model discussed in section 2.2.1), but rather provides a positive experience in children's contexts which, in turn, could influence

children's interaction with each other. This confirms the underpinning of the ecological systems theory adopted in this study and discussed in section 2.2.2).

It was important to explore whether any possible effect on young children's aggressive behaviour could be achieved through PAA and how teachers found PAA to influence their classroom management of aggressive behaviour. The study aimed to explore the phenomenon to, if possible, provide a method that would support teachers in addressing and/or preventing aggressive behaviour. A summarised discussion of the findings related to each research question of this study follows.

- Primary question: Exploring the influence of PAA on aggressive behaviour amongst grade R learners.

As stated in section 4.8, the participating teachers felt that PAA had some influence with regard to the learners' aggressive reactions to others. There was an indication that this influence, in their opinion, was facilitated by the positive influence of PAA on some individual learners and the decrease in girls' aggressive reactions. The observations supported these findings and mostly recorded a positive influence on most of the aggressive behaviours (see table 4.2). Although one participating teacher could not provide insight concerning the influence of PAA on the learners' aggressive behaviour on PAA days, two of the teachers stated that, in their opinion, the influence was not only experienced on the specific visiting PAA days, but rather throughout the week. The other participant stated that she experienced the learners to be less aggressive on the PAA days, compared to the other days.

- Secondary question: What are the teachers' perceptions with regard to aggressive behaviour amongst grade R learners and the effect on learning?

When probed for their opinions, the participating teachers mentioned relational, verbal and physical aggression as common types of aggressive behaviour amongst grade R learners (see section 4.3). This is supported by Breet *et al.* (2010), who refer to typical aggression in children as physical aggression, verbal aggression and indirect aggression. The teachers were of the opinion that aggressive behaviour has an influence on learners in schools as it affects some learners' motivation to come to school and learners at the receiving end of aggressive behaviour commonly experience aggressive actions as negative. Most significantly, all the teachers felt that aggressive reactions amongst learners erode instructional time and, in that way, influences learning negatively. Chan (2010) supports the teachers' opinion in that he holds that aggressive behaviour in the classroom has negative consequences for the learners and the teachers.

- Secondary question: What methods/ways of dealing with aggressive behaviour do the teachers find to be effective?

The participating teachers felt that involving the principal, asking the learners to 'think' about their actions, talking about their aggressive behaviour and involving the parents are ways to deal with the aggressive behaviour. During the observations, 'time out' was observed as a management method. The problem with this, however, according to Verlinden, Hersen and Thomas (2000), is that interventions should either be primary or secondary to be effective and the current methods that the participating teachers use are secondary methods only. The teachers' current ways of dealing with aggression in the class support the ecosystemic model discussed in section 2.2.2, as the teachers recognise the importance of involving other microsystems to provide a management strategy (which also involves the exosystems in highlighting the interactions amongst the systems). However, the teachers were of opinion that more guidance could be provided from exosystems such as the Department of Education, but this might be expensive. All the participants felt that the chronosystem (the influence of time) created a dilemma when teachers tried to address aggressive actions, with a reduction in the positive effect of their strategies over time. In this study, the participating teachers generally felt that they were unsure about ways to manage aggression and they voiced a need for methods which would rather have a long-term positive influence on the learners' aggressive behaviour. One participant felt that the current methods may have a long-term effect. In conclusion, the teachers felt that they could benefit from a method that is cost effective, less time consuming and easily accessible.

- Secondary question: What are the children's reactions to the P.A.T. dog?

As discussed in section 4.6, the terms mostly used to describe the children's reactions were "positive" and "excited." Although there were two occasions during which some learners seldom participated, it was noted that the learners were generally eager to take part in the PAA and they often laughed and smiled. It was interesting to note the positive influence reflected in other microsystems. One participant explained that learners also expressed their excitement at their homes (as stated by parents in an informal conversation) and during aftercare (as stated by P:2).

- Secondary question: What are the teachers' experiences after the P.A.T. visits in terms of the aggressive behaviour amongst the learners and the effect on class management?

As discussed in section 4.5, three teachers experienced the visits as positive and one teacher stated that she could not provide an opinion based on her own experience regarding the general classroom management. All the participating teachers stated that they felt that the learners were “easier” to manage, which can possibly be supported by Daly and Morton’s (2009) findings concerning greater empathy amongst learners exposed to pets. An important observation made by a participant was that this general feeling of an “easier” class could be the result of decreased aggressive action which, in turn, had a less negative impact on instruction.

PAA, provided by the P.A.T. organisation, was shown to have a positive influence with regard to this class's aggressive behaviour. The teachers expressed the opinion that PAA interventions could be used in a class as it can form part of the daily programme, is fun for the learners and teachers and could be given a specific time slot, like music and drama, although incorporating it more than once a week could be even more effective. In conclusion, this study revealed that PAA does affect learner aggression among one another in a positive way.

5.5 LIMITATIONS OF THE STUDY

Aspects of this research study could be regarded as limitations which should be addressed in further research. This research represents the influence PAA could possibly have on a small bounded 'system' and it thus limits the transferability of the findings to a larger scale. Even though transferability is subject to the researcher wanting to use the information of this current research, it could also have been enhanced by using more than one case study. This would have included a more diverse sample of teachers and learners. One participant suggested that, although a positive effect was evident only in this one class, the same findings would emerge from another class.

Information on the possible influence of PAA with regard to learners' aggressive interactions was explored. Data were gathered from the teachers and through observation, and the aim was to provide information, if possible, for further research or programme development. Even though the focus here was on classroom behaviour, additional information could have been gathered from the parents of the participating learners. This would have broadened the scope of the research and would have provided more comprehensive information. One participating teacher, for instance, works in the aftercare program as well and she was able to confirm that the positive influence on participating learners was transferred outside the classroom and to aftercare as well. More information on the transferability of the influence of PAA to other settings could have provided more in-depth information.

Even though the researcher was reflective and as objective as possible, another person involved in data gathering could have added to the trustworthiness and credibility of the research study.

Aggressive behaviour is a normal human function, but it may progress into violence in adolescents or adults if not addressed in young children. As seen in literature discussed in Chapter 2, aggressive behaviour occurs before the age of five (De Witt, 2009). This research study was focused on learners aged of five to six years and inclusion of an under age and older range (including younger and older children) could have produced more interesting findings.

Human behaviour is a complex topic to explore. However, the focus was on classroom management and possible support for teachers. This narrowed the influence to the behaviour seen at school during free play. The researcher is of the opinion that richer data could have been gathered if the research period could have been extended, because human behaviour can change over time.

5.5 STRENGTHS OF THE STUDY

There were many contributing strengths in the study. Firstly, all the teachers involved in the education of the class's education were asked to volunteer as participants and this provided in-depth information about opinions. Even though some were more involved in the class than others, they were able to provide conclusive opinions and different perspectives on the influence that PAA had on the children's interaction.

The aim of the study was to explore the possible influence of PAA on the aggressive behaviour that learners exhibited with regard to one another and subsequently to use this information to develop programmes or encourage further research to assist in alleviating the growing concern over aggressive behaviour in schools. Although aggressive behaviour also occurs before formal schooling, the researcher had the opportunity to explore the influence of PAA on the youngest age level of the formal school phase in this research study. Researchers such as Vogel (2002) state that aggressive behaviour in young children should be addressed as early as possible.

As the researcher was the only person gathering data for this research study, the researcher gained first-hand experience. This provided an opportunity to derive significant information and conclusions. The interviews furthermore provided an opportunity for the teachers to express their opinions and their understanding of possibilities for classroom management of aggressive behaviour. These opinions could be those true to themselves as identities were protected.

From a broader perspective, this research study could indicate a 'step' in the direction of easy, 'teacher friendly', fun, financially viable and humane methods of supporting learners without emphasising their troubling behaviour. In this sense, it supports the movement away from the medical model where the emphasis is on 'fixing' the problem within a learner, to provide supportive and innovative contacts for development to influence positive behaviour.

Even though the possibility of limited transferability exists, the findings of this research study can provide insight into the phenomenon with the aim of further research or programme development in using PAA. It is important to remember, as stated in section 3.5.5.3, that transferability is in the hands of the researcher wishing to use this research study. That researcher should determine whether the information provided by this research study is transferable.

5.6 FURTHER RESEARCH POSSIBILITIES AND RECOMMENDATIONS

This research study focused on the teachers' experiences of the possible influence PAA can have on the children in the case study's aggressive behaviour. These teachers commented that the children's aggressive behaviour was influenced for the better. Even though it was a case study involving a single, bounded system, the researcher is of the opinion that another case study exploring the same phenomenon with more than one class is a possibility for future research.

An aspect derived from the observations and interviews was the lack of time experienced by teachers towards providing suitable interventions for managing difficult class behaviour. A study exploring the availability of teaching time for providing interventions for difficult behaviour in the new CAPS (curriculum assessment policy statement) curriculum is recommended. Since there are no specific guidelines on how to address aggressive behaviour, not only for addressing it at the specific moment, but also for a lasting positive impact, other strategies could also be investigated, and an evaluation of the implementation of these strategies could be undertaken.

A research study focusing specifically on the learners' experience of two aspects could also be undertaken. The first aspect could be the effect of classroom management techniques on their motivation to learn and the second could be focused on their experiences and opinions on the implementation of PAA in the classroom.

Even though this research study did not focus on the transference of positive behaviour to the learners' family contexts, further research can include the parents' opinions on the influence of PAA

in the class on learners' behaviour outside school. A parent did inform the researcher in an informal approach about her child's fascination with the P.A.T. volunteer dog. The aim of this research was to support teachers, thus the aspect of using parents' opinions was not included, although it provides insight.

Finally, other ways of including animals and influences that are possible from the incorporation of animals in the classroom with regard to the teaching process and behaviour can be explored. As in the instance of the influence on general behaviour derived from PAA, many other positive attributes were witnessed and many possible influences could therefore be explored. A further study to establish the possibilities of the implementation of PAA and how it can influence other aspects may also be suggested.

5.7 REFLECTIONS

Before starting the research study, I found it difficult to imagine how all of the research aspects would fall into place. I was excited, but unsure of what the next steps should be and how to conquer the hurdles. Preparing a timeline was difficult as this was my first research study and I had no idea what to expect; it was unclear, for instance, how much time should be put aside for each chapter. Thankfully, there was support along the way to guide the steps and oversee my work.

Although planning the research was difficult, I found that good planning gives the researcher the results that are needed. Planning when and how to gain consent and to gather data was extremely important. I needed consent from all participating parents as the whole class had to be observed and interaction amongst the learners was influenced by one another. I did receive consent from all the parents in the allocated time. The assent forms were explained to the learners and I was relieved when they all showed great excitement to participate. I was not concerned about gaining consent from the teachers, because I had the feeling that they would take part in any study that could contribute to 'better' management of aggression in South African schools. My last hurdle was to get a volunteer and a dog from P.A.T. They took great care to send me a dog that would fit the profile of the learners. To my great relief, they assisted me with a volunteer who gave 100% cooperation every day. The above concerns influenced my perception of the research study as I felt positive and motivated because planning these important administrative elements contributed a great deal to the structure and success of the research study.

I learned a great deal about qualitative research during the research study. Literature did provide explanations and directions in qualitative research, but using it was another story. As the data gathered were peoples' perceptions and observations by myself, it became clear how qualitative research, specifically a qualitative case study, searches for in-depth information and findings.

During the process of planning the research study, I had to constantly remind myself that, although gathering quantitative data seemed easier, the focus was on teachers' true perceptions and the learners' actions in context. Although the observations were time consuming and difficult, I learned a great deal about learners' interactions and how truly difficult it is for teachers to provide supervision. These teachers are more than capable, but the limited time and the learners' behaviour in not listening at all times, doing things behind the teachers' backs or not informing the teachers about situations made their supervision difficult. I did ask myself numerous times if I was following the observations as a textbook would guide it, but I soon discovered that the context in which the observations took place played an enormous role. I did feel that I gathered enough rich data through the observations. I observed many interesting aspects and had to concentrate to keep to the research questions. These interesting aspects have been included to describe possibilities for further research. I experienced two problems with the observations. The class schedule changed from day to day as they were adjusted according to the activities planned for the day, thus the observation time had to be discussed with the teacher before the day started for me to make sure that I observed during the time as planned. There also was a public holiday on one of the proposed observation days. I was unsure what to make of this, but made a conscious effort not to do that observation on a different day, as it could then have contributed to a variable factor.

I found the interviews to be insightful. I consciously reminded myself that the teachers have not read the extensive literature on PAA that I have read and I found this to be a good thing. This made their opinions true to the specific class and their context. During the interviews and observations, I concentrated on remaining focused to avoid bias. Thinking before asking a question was very important.

In summary, I would like to reflect on the extraordinary reactions I witnessed. I found it extremely difficult to describe the teachers' and learners' reactions in PAA, without losing focus of the aim of the research. There was also so much to observe. Directly after the observations were completed, there was a report of shootings at a school in the Western Cape and later a boy from high school who stabbed another while walking home from school. Although neither the learners nor the teachers were involved, it posed a threat for the innocent learners. It made me realise the importance

to address violence in and outside schools and to explore ways to influence it. Although this study makes a minimal contribution, I sincerely hope that the information gathered could contribute to the possibility of addressing violence in SA schools and strategies for teachers.

5.8 CONCLUSION

It is appropriate to repeat a statement quoted in Chapter 2: “All therapeutic interventions involving animals rest on a powerful assumption: there is something about animals that powerfully attracts and motivates humans. This assumption seems particularly compelling when children are involved” (Melson & Fine, 2010). This research study allows a person to imagine a classroom in which fun, humane, friendly, cost-effective and influential methods are used to provide a contribution, even if small, to less aggressive learning situations.

Although the reason for the connection between children and animals and all the possibilities thereof are unknown, the excitement, focus, and positive influence on aggressive behaviour amongst the learners cannot be ignored.

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Addenda A

Ethical clearance

Addendum A: 1 Ethical clearance from Research Ethical Committee.



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Approval Notice New Application

02-May-2012
COETZEE, Jani

Protocol #: HS760/2011

Title: Aggressive behaviour of grade R learners: The role of animal assisted activities

Dear Miss Jani COETZEE,

The **New Application** received on **16-Jan-2012**, was reviewed by Research Ethics Committee: Human Research (Humanities) via Committee Review procedures on **02-Feb-2012** and has been approved.

Please note the following information about your approved research protocol:

Protocol Approval Period: **02-Feb-2012 -01-Feb-2013**

Present Committee Members:

De Villiers, Mare MRH
Hattingh, Johannes JP
Theron, Carl CC
Somhlaba, Noebazakhe NZ
Viviers, Suzette S
Bitzer, Elias EM
Engelbrecht, Sidney SF
Van Zyl, Gerhard Mkhonto
Fouche, Magdalena MG
Van Wyk, Berte B
Hansen, Leonard LD

Standard provisions

1. The researcher will remain within the procedures and protocols indicated in the proposal, particularly in terms of any undertakings made in terms of the confidentiality of the information gathered.
2. The research will again be submitted for ethical clearance if there is any substantial departure from the existing proposal.
3. The researcher will remain within the parameters of any applicable national legislation, institutional guidelines and scientific standards relevant to the specific field of research.
4. The researcher will consider and implement the foregoing suggestions to lower the ethical risk associated with the research.

You may commence with your research with strict adherence to the abovementioned provisions and stipulations.

Please remember to use your **protocol number (HS760/2011)** on any documents or correspondence with the REC concerning your research protocol.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

After Ethical Review:

Please note that a progress report should be submitted to the Committee before the approval period has expired if a continuation is required.

The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

National Health Research Ethics Committee (NHREC) number REC-050411-032.

This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

Provincial and City of Cape Town Approval

Please note that for research at a primary or secondary healthcare facility permission must be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Contact persons are Ms Claudette Abrahams at Western Cape Department of Health (healthres@pgwc.gov.za Tel: +27 21 483 9907) and Dr Helene Visser at City Health (Helene.Visser@capetown.gov.za Tel: +27 21 400 3981). Research that will be conducted at any tertiary academic institution requires approval from the relevant parties. For approvals from the Western Cape Education Department, contact

Dr AT Wyngaard (awyngaar@pgwc.gov.za, Tel: 0214769272, Fax: 0865902282, <http://weed.wcape.gov.za>).

Institutional permission from academic institutions for students, staff & alumni. This institutional permission should be obtained before submitting an application for ethics clearance to the REC.

Please note that informed consent from participants can only be obtained after ethics approval has been granted. It is your responsibility as researcher to keep signed informed consent forms for inspection for the duration of the research.

We wish you the best as you conduct your research.

If you have any questions or need further help, please contact the REC office at 0218089183.

Included Documents:

Letter of permission WCED

Questionnaire

Interview guide

Application form

Observation schedule

Letter of permission Welgemoed Pre-primary school

Consent form for teachers

Consent form for parents

Assent form

Research proposal

Sincerely,

Sidney Engelbrecht

REC Coordinator

Research Ethics Committee: Human Research (Humanities)

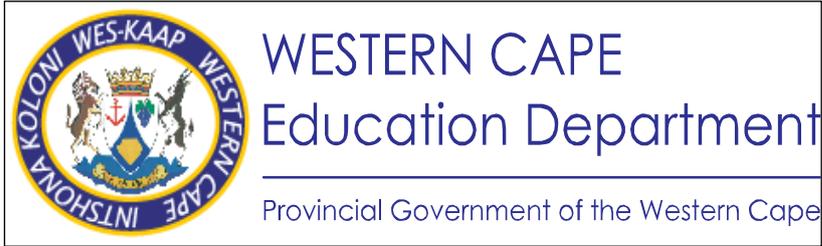
Investigator Responsibilities

Protection of Human Research Participants

Some of the responsibilities investigators have when conducting research involving human participants are listed below:

- 1. Conducting the Research.** You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.
- 2. Participant Enrollment.** You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use. If you need to recruit more participants than was noted in your REC approval letter, you must submit an amendment requesting an increase in the number of participants.
- 3. Informed Consent.** You are responsible for obtaining and documenting effective informed consent using **only** the REC-approved consent documents, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.
- 4. Continuing Review.** The REC must review and approve all REC-approved research protocols at intervals appropriate to the degree of risk but not less than once per year. There is **no grace period**. Prior to the date on which the REC approval of the research expires, **it is your responsibility to submit the continuing review report in a timely fashion to ensure a lapse in REC approval does not occur**. If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.
- 5. Amendments and Changes.** If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, number of participants, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the REC for review using the current Amendment Form. You **may not initiate** any amendments or changes to your research without first obtaining written REC review and approval. **The only exception** is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.
- 6. Adverse or Unanticipated Events.** Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouch within **five (5) days** of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the REC's requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch University Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.
- 7. Research Record Keeping.** You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the REC approved research protocol and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC.
- 8. Reports to Sponsor.** When you submit the required reports to your sponsor, you **must** provide a copy of that report to the REC. You may submit the report at the time of continuing REC review.
- 9. Provision of Counselling or emergency support.** When a dedicated counsellor or psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.
- 10. Final reports.** When you have completed (no further participant enrollment, interactions, interventions or data analysis) or stopped work on your research, you must submit a Final Report to the REC.
- 11. On-Site Evaluations, Inspections, or Audits.** If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.

Addendum A: 2 Clearance from the Western Cape Education Department



RESEARCH

Audrey.wyngaard2@pgwc.gov.za

tel: +27 021 476 9272

Fax: 0865902282

Private Bag x9114, Cape Town, 8000

wced.wcape.gov.za

REFERENCE: 20111118-0157

ENQUIRIES: Dr A T Wyngaard

Miss Jani Coetzee
Education Faculty
Educational Psychology
Stellenbosch University

Dear Ms Jani Coetzee

RESEARCH PROPOSAL: THE EFFECT OF ANIMAL ASSISTED ACTIVITIES ON AGGRESSIVE BEHAVIOUR OF GRADE R LEARNERS

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

- vi. Principals, educators and learners are under no obligation to assist you in your investigation.
- vii. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
- viii. You make all the arrangements concerning your investigation.
- ix. Educators' programmes are not to be interrupted.
- x. The Study is to be conducted from **17 April 2012 till 09 June 2012**
- xi. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
- xii. Should you wish to extend the period of your survey, please contact Dr A.T. Wyngaard at the contact numbers above quoting the reference number.
- xiii. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
- xiv. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
- xv. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
- xvi. The Department receives a copy of the completed report/dissertation/thesis addressed to:

The Director: Research Services

**Western Cape Education Department
Private Bag X9114
CAPE TOWN
8000**

We wish you success in your research.

Kind regards.

Signed: Audrey T. Wyngaard

for: **HEAD: EDUCATION**

DATE: 18 November 2011

MELD ASSEBLIEF VERWYSINGSNOMMERS IN ALLE KORRESPONDENSIE / PLEASE QUOTE REFERENCE NUMBERS IN ALL CORRESPONDENCE / NCEDA
UBHALE IINOMBOLO ZESALATHISO KUYO YONKE IMBALELWANO

GRAND CENTRAL TOWERS, LAER-PARLEMENTSTRAAT, PRIVAATSAK X9114, KAAPSTAD 8000
GRAND CENTRAL TOWERS, LOWER PARLIAMENT STREET, PRIVATE BAG X9114, CAPE TOWN 8000

WEB: <http://wced.wcape.gov.za>

INBELSENTRUM /CALL CENTRE

INDIENSNEMING- EN SALARISNAVRAE/EMPLOYMENT AND SALARY QUERIES ☎0861 92 33 22

VEILIGE SKOLE/SAFE SCHOOLS ☎ 0800 45 46 47

Addenda B

Consent and assent forms

Addendum B:1 Consent from teachers



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**STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH
Teachers**

Title: Exploring the influence of pet assisted activities on aggressive behaviour amongst learners in a grade R class.

Your class is asked to participate in a research study conducted by myself, Jani Coetzee (Hons BEd), from the Education Psychology Department at Stellenbosch University. The research will contribute to my Master's degree thesis. Please note that no individual assessment of learners will be done as the focus is on the class interaction.

● **PURPOSE OF THE STUDY**

The study is designed to assess whether the activities and free play with a dog has a positive influence on the aggressive behaviour amongst the learners of your grade R class. No individual assessment will be done. The purpose is to potentially develop a method or training programme (if the findings of this research yield positive results with regard to free play with a dog and classroom aggression in grade R). Firstly, we need to determine if AAA (including pet assisted activities) has a positive influence on the children's aggressive interactions (children of your class). Please note that no learner will be informed about the true nature of the research (the focus on aggressive behaviour will not be mentioned) as it is a risk that might bias their behaviour.

● **PROCEDURES**

If you volunteer to let your class participate in this study, we shall ask your class and you, as teacher, to do the following things:

The learners in your class will **not** be forced to play or take part in the activities with the trained Pets As Therapy (P.A.T.) dog (see section 3 for further information) during free play time, but the learners in your class have the option to play with the trained dog. The activities will be for 1 hour (appropriate time for intervention according to the P.A.T code of conduct) on a Thursday, starting the week of 16 April 2012 – 8 June 2012 (8 weeks). Children who will not be taking part in the research will continue with free play, without the dog, with the other grade R classes (all grade R classes have the same daily planning). Children who will not be taking part will also be asked to join the daily educational program of free play with another

class during observations. The activities will involve playing with a ball or any suitable activities, like giving commands or a treat, under strict supervision and P.A.T rules and regulations. Your class will be observed by their own teacher and the researcher. The behavioural reactions the learners show towards each other will be observed by you and willingly shared with me during an interview. I will also be observing the class in their normal routine 3 times a week. The field notes from the observations and the data from the interviews will be used to determine if the AAA had an influence on the class. Please note that the researcher will thus be present during the P.A.T. visits and the children will be observed as a class in general (but no observation of specific individual learners). Observations, by the researcher, are done 3 times a week and during P.A.T. visits.

The intervention (free play with the dog) will thus happen at school during school hours. It will not impinge on the instructional time, but will occur during free play time (which is part of the daily schedule).

Note: No individualizing will take place. The focus is on the class as a whole.

● **POTENTIAL RISKS AND DISCOMFORTS**

Some children may feel scared and unsure with a dog in the class, but dogs used in P.A.T. are trained dogs and provide therapy by visiting many institutions. They are chosen due to their relaxed, calm and gentle nature. Most children do feel comfortable and at ease at the end of an intervention. The dog visits the class to provide the option of taking part in the activities. Learners who feel uncomfortable will not be forced to play with the dog. I do not believe that there will be any risks as all activities are done under supervision of the handler as specified by the P.A.T rules and regulations. In case of any unlikely eventuality, like injury, the teacher will remove the child and the handler will remove the dog from the situation (and premises), the child will be assessed for any possible harm and the parents will be notified and their preferred action plan will be put in place. In such unlikely event, the researcher's supervisor will be asked to assist in deciding the future of the continuous of the research.

Please note that P.A.T. dogs are all tick and flea free, well groomed and show good and gentle manners towards all people. They are regularly assessed by a veterinarian and by the animal behaviourists.

● **POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

Potential benefits for your class is a calm atmosphere in class and developing skills to play with a trained dog. Studies have shown the following potential benefits: A study by Hergovich, Monshi, Semmler and Ziegler (2002) found that the presence of a dog in the classroom facilitated the development of greater self-confidence and social competence amongst children. The results of the study conducted by Tissen, Hergovich and Spiel (2007) revealed a demonstration of improved social skills (including less aggressiveness) in children between 7 and 10 exposed to dog therapy. Chandler (2005) found that students had fewer behaviour problems and paid greater attention to lessons when the teacher's dog was present.

More research on Animal Assisted Therapy (A.A.T) and Animal Assisted Activities (A.A.A.) could be another benefit. Schools and communities could use these methods as the costs are low and it is a humane, positive and friendly intervention. Furthermore, this research can provide more data on the impact of the human-animal bond. Dogs also benefit from the attention and love of people.

- **PAYMENT FOR PARTICIPATION**

No payment for participation.

- **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you or your learners will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of not using the school's name or any child's name in any data of the study. Data will be saved on my personal computer, with a pin code to access any data / findings or report.

My supervisor, Ms Charmaine Louw, will have access to data (with no names of children, parents, teachers or schools) as my supervisor helps with the development of the thesis. Information and findings will be released in the form of my Master's degree thesis, at the department of Educational Psychology of Stellenbosch University to provide feedback on the success rate of the research itself.

No videotapes will be used. Audio tapes will only be used during the interview with you to provide data. Only I, the researcher, will have the right to review these tapes and transform it into transcripts. You will be asked not to mention any names as the focus is on the class as a whole. When the final thesis has been handed in, the audio tapes will be kept in locked storage for 1 year, and then destroyed. Other documents/data will also be kept in locked storage for 1 year and will then be destroyed.

With the possibility of research findings being presented at a conference and/or in a scientific article, anonymity and pseudonymity will be used.

- **PARTICIPATION AND WITHDRAWAL**

You can choose whether your class is to be in this study or not. If you volunteer to let your class be in this study, you may withdraw your class at any time without consequences of any kind. The investigator may withdraw you from this research if circumstances arise which warrant doing so (which is unlikely). Please note that if one learner withdraws, or the teacher, the study is likely not to proceed.

When the research report has been submitted to the University of Stellenbosch, a presentation will be given (to those wanting to attend) regarding the findings and objectives of the research. A date, place and time will be sent out in written format via the school.

● **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact the Researcher: Jani Coetzee at 0827290488 (also the emergency number) or via e-mail coetzeejani@yahoo.com. The supervisor: Charmaine Louw via e-mail cll@sun.ac.za.

● **RIGHTS OF RESEARCH SUBJECTS**

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to..... by..... in Afrikaans/English/Xhosa/other and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily that my underage child may participate in the study. I have been given a copy of this form.

Name of Subject/Participant parent / guardian

Name of Legal Representative (if applicable)

Signature of Subject/Participant parent / guardian or Legal Representative

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ and/or his/her representative _____. He/she was encouraged and given ample time to ask me any questions. This conversation was conducted in Afrikaans/English/Xhosa/Other and no translator was used.

Signature of Investigator

Date

Addendum B:2 Consent from parents



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jou kennisvennoot • your knowledge partner

**STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH
Parents**

Title: Exploring the influence of pet assisted activities on aggressive behaviour amongst grade R learners.

Your child is asked to participate in a research study conducted by myself, Jani Coetzee (Hons BEd), from the Educational Psychology Department at Stellenbosch University. The research will contribute to my Master's degree thesis. Your child has been selected as a possible participant in this study because he/she is part of the selected grade R class to be used in the case study. Please note that no individual assessment will be done as the focus is on the class interaction.

● **PURPOSE OF THE STUDY**

The study is designed to assess whether the activities and free play with a dog has a positive influence on the aggressive behaviour amongst the learners of the grade R class your child is in. No individual assessment will be done. The purpose is to potentially develop a method or training program (if the findings of this research yields positive results with regard to free play with a dog and classroom aggression in grade R). Firstly we need to determine if AAA (including pet assisted activities) has a positive influence on the children's aggressive interactions. Please note that no learner will be informed about the true nature of the research (the focus on aggressive behaviour will not be mentioned) as it is a risk that might bias their behaviour.

● **PROCEDURES**

If you volunteer to let your child participate in this study, we shall ask your child to do the following things:

Your child will **not** be forced to play or take part in the activities with the trained Pets As Therapy (P.A.T.) dog (see section 3 for further information) during free play time at school, but your child has the option to play with the trained dog. The activities will be for 1 hour (appropriate time for intervention according to the P.A.T code of conduct) on a Thursday, starting the week of 16 April 2012 – 8 June 2012 (8 weeks). Children who will not be taking part in the research will continue with free play without the dog with the other grade

R classes (all grade R classes have the same daily planning). Children who will not be taking part will also be asked to join the daily educational program of free play with another class during observations. The activities will involve playing with a ball or any suitable activities, like giving commands or a treat, under strict supervision and P.A.T rules and regulations. Your child's class will be observed by their own teacher and the researcher. The behavioural reactions the learners show towards each other will be observed by the class teachers and shared with me during an interview. I will also be observing the class in their normal routine 3 times a week. The field notes from the observations and the data from the interviews will be used to determine if the AAA had an influence on the class. Please note, that the researcher will thus be present during the P.A.T. visits and the children will be observed as a class in general during and after the interventions (but no observation in specific individual learners). Observations, by the researcher, are done 3 times a week and during P.A.T. visits.

The intervention (free play with the dog) will thus happen at school during school hours. It will not impinge on the instructional time, but it will occur during free play time (which is part of the daily schedule).

Note: No individualizing will take place. The focus is on the class as a whole.

● **POTENTIAL RISKS AND DISCOMFORTS**

Some children may feel scared and unsure with a dog in the class, but dogs used in P.A.T. are trained dogs and provide therapy by visiting many institutions. They are chosen due to their relaxed, calm and gentle nature. Most learners do feel comfortable and at ease at the end of an intervention. The dog visits the class to provide the option of taking part in the activities. Learners who feel uncomfortable will not be forced to play with the dog. I do not believe that there will be any risks as all activities are done under supervision of the handler as specified by the P.A.T rules and regulations. In case of any unlikely eventuality, like injury, the teacher will remove the child and the dog from the situation, assess any possible harm and notify parents on the necessary steps to be taken. In such unlikely event, the researcher's supervisor will be asked to assist in deciding the future of the continuous of the research.

Please note that P.A.T. dogs are all tick and flea free, well groomed and show good and gentle manners towards all people. They are regularly assessed by a veterinarian and by the animal behaviourists.

● **POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

Potential benefits for your child is a calm atmosphere in class and to develop skills to play with a trained dog. Studies have shown the following potential benefits: A study by Hergovich, Monshi, Semmler and Ziegler (2002) found that the presence of a dog in the classroom facilitated the development of greater self-confidence and social competence amongst children. The results of the study conducted by Tissen, Hergovich and Spiel (2007) revealed a demonstration of improved social skills (including less aggressiveness) in children, between 7 and 10, exposed to dog therapy. Chandler (2005) found that students had fewer behaviour problems and paid greater attention to lessons when the teacher's dog was present.

More research on Animal Assisted Therapy (A.A.T) and Animal Assisted Activities (A.A.A.) could be another benefit. Schools and communities could use these methods as the costs are low and it is a humane, positive and friendly intervention. Furthermore, this research can provide more data on the impact of the human – animal bond. Dogs also benefit from the attention and love from people.

- **PAYMENT FOR PARTICIPATION**

No payment for participation.

- **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you or your child will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of not using the school's name, or any learner's name in any data of the study. Data will be saved on my personal computer, with a pin code to access any data / findings or report.

My supervisor, Ms Charmaine Louw, will have access to data (with no names of children, parents or schools) as my supervisor helps with the development of the thesis. Information and findings will be released in the form of my Master's degree thesis, at the department of Educational Psychology of Stellenbosch University to provide feedback on the success rate of the research itself.

No videotapes will be used. Audio tapes will only be used during the interview with the class teacher to provide data. Only I, the researcher will have the right to review these tapes and transform it into transcripts. Teachers will be asked not to mention any names as the focus is on the class as a whole. When the final thesis has been handed in, the audio tapes will be kept in locked storage for 1 year, and then destroyed. Other documents /data will also be kept in locked storage for 1 year and then be destroyed.

With the possibility of research findings being presented at a conference and / or in a scientific article, anonymity and pseudonymity will be used.

- **PARTICIPATION AND WITHDRAWAL**

You can choose whether your child is to be in this study or not. If you volunteer to let your child be in this study, you may withdraw your child at any time without consequences of any kind. The investigator may withdraw you from this research if circumstances arise which warrant doing so (which is unlikely). Please note that if one learner withdraws, or the teacher, the study is likely not to proceed.

When the research report has been submitted to the University of Stellenbosch, a presentation will be given (to those wanting to attend) regarding the findings and objectives of the research. Information about the date, place and time will be sent out in written format via the school.

● **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact the; Researcher: Jani Coetzee at 0827290488 (also the emergency number) or via e-mail coetzeejani@yahoo.com. The supervisor: Charmaine Louw via e-mail cll@sun.ac.za.

● **RIGHTS OF RESEARCH SUBJECTS**

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to..... by..... in Afrikaans/English/Xhosa/other and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily that my underage child may participate in the study. I have been given a copy of this form.

Name of Subject/Participant parent / guardian

Name of Legal Representative (if applicable)

Signature of Subject/Participant parent / guardian or Legal Representative

Date

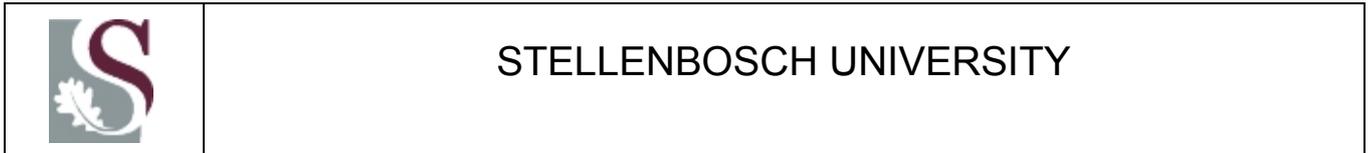
SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ and/or his/her representative _____. He/she was encouraged and given ample time to ask me any questions. This conversation was conducted in Afrikaans/English/Xhosa/Other and no translator was used.

Signature of Investigator

Date

Addendum B: 3 Child assent



PARTICIPANT INFORMATION LEAFLET AND ASSENT FORM



TITLE OF THE RESEARCH PROJECT: Aggressive behaviour of grade R learners: The role of Animal Assisted Activities.

RESEARCHERS NAME(S): Jani Coetzee

ADDRESS: 35 Woltemade Street, Strand

CONTACT NUMBER: 082 729 0488

What is RESEARCH?

Research is something we do to find out about the way things and people work. We use research projects or studies to help us find out more about disease, illness or behaviour. Research also helps us to find better ways of helping or treating children.

What is this research project all about?

In this research I want to see what happens to the class when the Pets As Therapy dog comes to visit. Your days will go on as normal, but the only change is that the Pets As Therapy dog will visit you every week for 1 hour.

Why have I been invited to take part in this research project?

I am asking you to take part in this research because you are in grade R and in the right school. I need a whole class of learners, and your class is perfect to do the research in.

Who is doing the research?

At least you know me. I am teacher Jani and I will be doing the research. I am doing the research to learn more and maybe help other schools. I am also a student at Stellenbosch University at the Educational Psychology department.

What will happen to me in this study?

In this research you can play with the Pets As Therapy dog if you want to (after educational play) or do some other activities like petting her or just talking to her. You do not have to if you do not want to, because the research is about the presence of the dog in your class. Presence means that the dog must be there and doesn't have to do anything. There will be ropes and balls to use to play with her. We then want to see what happens to your whole class and how you are with each other. All you need to do is to be yourself.

Can anything bad happen to me?

No, nothing bad can happen to you. The Pets As Therapy dogs are trained in helping children, disabled people and older people. They are all clean and healthy dogs. They know how to behave and are there to be your friend. But, if you don't feel good or feel scared, you must tell your teacher or your mommy or daddy.

Can anything good happen to me?

In this research you will get a chance to play with a dog and you can learn how to play with her. Other research has shown that good things have happened, like children becoming very calm and friendly after playing with a dog. They were also less shy. The dog is only visiting for 8 weeks, maybe you can make a good friend.

Will anyone know I am in the study?

Only mommy and / or daddy will know that you are in the study. Your teacher will also know.



Who can I talk to about the study?

You can talk to your mommy/ daddy / grandma / grandpa / any other family member. If you are at school you can talk to any of the teachers or even to me. If you have any questions, you can ask me, teacher Jani, 082 729 0488. You can also phone the ethical committee, Ms Fouche on 021 808 4622.

What if I do not want to do this?

This study will be a lot of fun, but if you do not want to do it, you can say NO!

It is your choice if you want to take part. You can stop taking part if you want to, but remember, you do not have to play with the dog if you do not want to, it is about the dog's presence in class.

Do you understand this research study and are you willing to take part in it?

YES

NO

Has the researcher answered all your questions?

YES

NO

Do you understand that you can pull out of the study at any time?

YES

NO

Signature of Child

Date

Addendum B:4 Consent from P.A.T. volunteer



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jou kennisvennoot • your knowledge partner

**STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH
Dog handler**

Title: Exploring the influence of pet assisted activities on aggressive behaviour amongst grade R learners.

You are asked to participate in a research study conducted by myself, Jani Coetzee (Hons BEd) , from the Educational Psychology Department at Stellenbosch University. The research will contribute to my Master's degree thesis. You have been selected as a possible participant in this study because you are a Pets As Therapy (P.A.T.) member and do Animal Assisted Activities at Children's homes. The intervention's (P.A.T visits) effect on aggressive behaviour will be observed by the researcher and established through interviews with teaching staff. Please note that no individual assessment of a learner will be done as the focus is on the class interaction.

● **PURPOSE OF THE STUDY**

The study is designed to assess whether the activities and free play with a dog has a positive influence on the aggressive behaviour amongst the learners of the grade R class. No individual assessment will be done. The purpose is to potentially develop a method or training program (if the findings of this research yields positive results with regard to free play with a dog and classroom aggression in grade R). Firstly we need to determine if AAA (including pet assisted activities) has a positive influence on the children's aggressive interactions. Please note that no learner will be informed about the true nature of the research (the focus on aggressive behaviour will not be mentioned) as it is a risk that might bias their behaviour.

● **PROCEDURES**

If you volunteer to participate in this study, we shall ask you to do the following things:

To visit the School, Pre-Primary, once a week as a P.A.T member and perform animal assisted activities with your P.A.T dog (which is also a P.A.T member). These visits will be with the same dog, on the same time and day every week from 16 April 2012 – 8 June 2012 (8 weeks). Activities to be performed during this hour is the normal prescribed animal assisted activities, like mentioned in P.A.T's code of conduct and will be done during school hours, but will not impinge on instructional time of children as it will happen during 'free play' time. P.A.T rules and regulations will also be followed accordingly. You and your dog are

thus asked to visit the school 8 times and perform the normal P.A.T activities. Please note, only P.A.T evaluated dogs are accepted for use.

Children who will not be taking part in the research will continue with free play without the dog with the other grade R classes (all grade R classes have the same daily planning). Your P.A.T visits will be observed by the class' own teacher and by the researcher. The behavioural reactions the learners show towards each other will be observed by the class teachers and shared with me during an interview. I will also be observing the class in their normal routine 3 times a week. The field notes from the observations and the data from the interviews will be used to determine if the pet assisted activities had an influence on the class. Please note, that the researcher will thus be present during the P.A.T. visits and the children will be observed as a class in general during and after the interventions (but no observation in specific individual learners).

Note: No individualizing will take place. The focus is on the class as a whole.

● **POTENTIAL RISKS AND DISCOMFORTS**

Some children may feel scared and unsure with a dog in the class, but with the help of the class teacher and the class assistant, learners will be kept calm and will automatically take part in this exciting intervention. As found that after a few interventions, most learners do feel comfortable and at ease at the end of an intervention. The dog visits the class to provide the option of taking part in the activities. Learners who feel uncomfortable will not be forced to play with the dog. I do not believe that there will be any risks as all activities are done under supervision of you, as the handler (as specified by the P.A.T rules and regulations) and the class teacher. In case of any unlikely eventuality, like injury, the teacher will remove the child and the handler will remove the dog from the situation, assess any possible harm and notify parents or parties concerned on the necessary steps to be taken. In such unlikely event, the researcher's supervisor will be asked to assist in deciding the future of the continuous of the research.

Please note that your dog should be tick and flea free, well groomed and show good and gentle manners (like assessed by P.A.T. animal behaviourists).

● **POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

Potential benefits include a calm atmosphere in a grade R class and giving children a chance to develop skills to play with a trained dog. Studies have shown the following potential benefits: A study by Hergovich, Monshi, Semmler and Ziegler (2002) found that the presence of a dog in the classroom facilitated the development of greater self-confidence and social competence amongst children. The results of the study conducted by Tissen, Hergovich and Spiel (2007) revealed a demonstration of improved social skills (including less aggressiveness) in children, between 7 and 10, exposed to dog therapy. Chandler (2005) found that students had fewer behaviour problems and paid greater attention to lessons when the teacher's dog was present.

More research on Animal Assisted Therapy (A.A.T), Animal Assisted Activities (A.A.A.) and pet assisted activities could be another benefit. Schools and communities could use these methods as the costs are low and it is a humane, positive and friendly intervention. Furthermore, this research can provide more data on the impact of the human – animal bond. Dogs also benefit from the attention and love from people and praised for good behaviour.

- **PAYMENT FOR PARTICIPATION**

No payment for participation, but as discussed, contribution to travelling fuel to travel to and from the school will be made by the researcher to the P.A.T. volunteer.

- **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you or your dog will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of not using the school's name, your name or your dog's name in any data of the study. Data will be saved on my personal computer, with a pin code to access any data / findings or report.

My supervisor, Ms Charmaine Louw, will have access to data (with no names of children, parents or schools) as my supervisor helps with the development of the thesis. Information and findings will be released in the form of my Master's degree thesis, at the department of Educational Psychology of Stellenbosch University to provide feedback on the success rate of the research itself.

No videotapes will be used. Audio tapes will only be used during the interview with the class teachers to provide data. Only I, the researcher will have the right to review these tapes and transform it into transcripts. Teachers will be asked not to mention any names as the focus is on the class as a whole. When the final thesis has been handed in, the audio tapes will be kept in locked storage for 1 year, and then destroyed. Other documents /data will also be kept in locked storage for 1 year and then be destroyed.

With the possibility of research findings being presented at a conference and / or in a scientific article, anonymity and pseudonymity will be used.

- **PARTICIPATION AND WITHDRAWAL**

You can choose whether you and your dog are to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. The investigator may withdraw you from this research if circumstances arise which warrant doing so (which is unlikely). Please note that if you withdraw, the study is likely not to proceed.

When the research report has been submitted to the University of Stellenbosch, a presentation will be given (to those wanting to attend) regarding the findings and objectives of the research. Information about the date, place and time will be sent out in written format via the school.

● **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact the; Researcher: Jani Coetzee at 0827290488 (also the emergency number) or via e-mail coetzeejani@yahoo.com. The supervisor: Charmaine Louw via e-mail cll@sun.ac.za.

● **RIGHTS OF RESEARCH SUBJECTS**

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to..... by..... in Afrikaans/English/Xhosa/other and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily that my underage child may participate in the study. I have been given a copy of this form.

Name of Subject/Participant parent / guardian

Name of Legal Representative (if applicable)

Signature of Subject/Participant parent /guardian or Legal Representative

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ and/or his/her representative _____. He/she was encouraged and given ample time to ask me any questions. This conversation was conducted in Afrikaans/English/Xhosa/Other and no translator was used.

Signature of Investigator

Date

Addendum B:5 Consent from Scribe



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jou kennisvenoot • your knowledge partner

STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH
Transcriber

Title: Exploring the influence of pet assisted activities on aggressive behaviour amongst learners in a grade R class.

You have been asked to transcribe the interviews for the research study conducted by myself, Jani Coetzee (Hons BEd), from the Education Psychology Department at Stellenbosch University. The research will contribute to my Master's degree thesis.

● **PURPOSE OF THE STUDY**

The study is designed to assess whether the activities and free play with a dog has a positive influence on the aggressive behaviour amongst the learners of your grade R class. No individual assessment will be done. The purpose is to potentially develop a method or training program (if the findings of this research yields positive results with regard to free play with a dog and classroom aggression in grade R). Firstly we need to determine if PAA has a positive influence on the children's aggressive interactions (children of your class). Please note that no learner will be informed about the true nature of the research (the focus on aggressive behaviour will not be mentioned) as it is a risk that might bias their behaviour.

● **PROCEDURES**

To gain information from the teachers regarding their perspectives of the influence PAA had on their class, individual interviews will be done. If you volunteer to participate in this study, I shall ask you to do the following:

- To type the recordings of the individual interviews with four teachers in the transcription format as verbally discussed, with payment from the researcher.
- To keep all information in the interviews strictly confidential and no information may be discussed with any person.
- To prohibit access to the document(s) on your computer by means of a password only known to you and myself, the researcher
- To delete the transcripts from your computer after it has been given to the researcher.
- To delete the transcripts from your computer in the Recycle Bin

- **POTENTIAL RISKS AND DISCOMFORTS**

There are no potential risks or discomforts.

- **POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

The study has potential benefits for the class, the teachers and the learners. Studies have shown the following potential benefits: A study by Hergovich, Monshi, Semmler and Ziegler (2002) found that the presence of a dog in the classroom facilitated the development of greater self-confidence and social competence amongst children. The results of the study conducted by Tissen, Hergovich and Spiel (2007) revealed a demonstration of improved social skills (including less aggressiveness) in children, between 7 and 10, exposed to dog therapy. Chandler (2005) found that students had fewer behaviour problems and paid greater attention to lessons when the teacher's dog was present.

More research on Animal Assisted Therapy (A.A.T) and Animal Assisted Activities (A.A.A.) could be another benefit. Schools and communities could use these methods as the costs are low and it is a humane, positive and friendly intervention. Furthermore, this research can provide more data on the impact of the human – animal bond. Dogs also benefit from the attention and love from people.

- **PAYMENT FOR PARTICIPATION**

Payment for participation done by myself as researcher once the transcripts are made available to me and fully deleted from your computer.

- **CONFIDENTIALITY**

Any information obtained in connection with this study and which can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of not using the school's name, or any teacher's or child's name in any data of the study. Data will be saved on my personal computer, with a pin code to access any data / findings or report.

My supervisor, Ms Charmaine Louw, will have access to data (with no names of children, parents, teachers or schools) as my supervisor helps with the development of the thesis. Information and findings will be released in the form of my Master's degree thesis, at the department of Educational Psychology of Stellenbosch University to provide feedback on the success rate of the research itself.

During the interviews I asked the teachers not to name any child's name, school name or other information that could identify them. If it does happen that a teacher mentions a name, you are asked not to type it in the transcripts. Should any name become known to you by accident, you are requested to keep treat the information as strictly confidential. I shall keep the transcripts and audio tapes in personal storage for 1 year and then it will be destroyed.

With the possibility of the research findings being presented at a conference and / or in a scientific article, anonymity and pseudonymity will be used for all participants.

● **PARTICIPATION AND WITHDRAWAL**

You have a choice to provide the service of transcribing the audio information. If you choose to not provide the service, no payment will be made.

● **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact the; Researcher: Jani Coetzee at 082 729 0488 (also the emergency number) or via e-mail coetzeejani@yahoo.com. The supervisor: Charmaine Louw via e-mail cll@sun.ac.za.

● **RIGHTS OF RESEARCH SUBJECTS**

You may withdraw your consent at any time and discontinue your involvement as scribe without penalty. You are not waiving any legal claims, rights or remedies because of your involvement in this research study. If you have questions regarding your rights as a person involved in this research study, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to..... by..... in Afrikaans/English/Xhosa/other and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby give my consent to become involved in this study as a scribe voluntarily and undertake to keep to the requests described in this document. I have been given a copy of this form.

Name of Scribe

Signature of the Scribe

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ She was encouraged and given ample time to ask me any questions. This conversation was conducted in Afrikaans/English/Xhosa/Other and no translator was used.

Signature of Investigator

Date

Addenda C

Data production techniques

Addendum C:1 Questionnaire

Teacher questionnaire

Date: _____

no: / 4

Aggressive behaviour of grade R learners: The role of Animal Assisted Activities.

Please confirm the following:

1. Your qualifications.

2. Your years of experience in educating.

3. Years educating grade R.

4. Years of experience in educating at this school and in this specific class.

- Do you experience aggressive behaviour, between learners in this specific class?

Yes	No
-----	----

If yes, please state examples / forms of aggressive behaviour you experience in this class.

and, how often do you experience this aggressive behaviour?

Hourly	Daily	Weekly	Monthly
--------	-------	--------	---------

Thank you for your participation.

Jani Coetzee

coetzeejani@yahoo.com

Addendum C:2 Observation schedule

Observation Schedule

Based on Cohen-Mansfield Agitation Inventory (CMAI) and Crick, Casas and Mosher's Preschool Behaviour Scale (TSBS-T).

Non participant (onlooker). Observer role is known by some, but not others. Partial explanation of purpose to participants. Long-term multiple observations.

Researcher: Jani Coetzee

Aggressive behaviour of grade R learners: The role of Animal Assisted Activities.

Date: _____ Observation number: _____ Time: _____ - _____

1. Setting.

Detailed description of physical environment (school and class setting). Only to be documented during first observation or if change in setting has occurred after first observation.

2. The human - social environment.

The groupings that the learners form, according to gender and race. Location of play of these formed groups. Discuss how often the groups change. Spoken language of participants.

3. (Applicable for days of P.A.T. visits) P.A.T. Activities and participant behaviours during P.A.T visits.

Start from introduction at the beginning of the visit to end as time passes. Who is present? Overview of activities that take place. What do the learners do during P.A.T. visits? Description of their reactions.

4. Informal Interactions, unplanned activities (free-play) and occurrence of aggressive behaviour.

Start from beginning of free-play towards the end. Observing as time passes. Description of activities / play and interaction. See aggression occurrence observation schedule. Mark the number of occurrences of aggressive behaviour. Name if it was reported to teacher. Alternatively to marking on the sheet, also provide description of non-verbal communication and aggression actions between participants. Conversations regarding the P.A.T. visits. What aggressive behaviour did not occur (mention the absence of aggressive behaviour)?

5. Any other important related observations or informal interviews.

6. Insights and interpretations

Addendum C:3 Semi-structured interview guide

Semi-structured interview guide

Teachers

Aggressive behaviour of grade R learners: The role of Animal Assisted Activities.

1. What is your perception of aggressive behaviour amongst 5 – 6 year-old children?
2. What are your experiences with regard to aggressive behaviour in this grade R class?
 - 2.1 Please give examples.
3. What impact do you think does aggressive behaviour amongst the learners have on their education and learning development.
4. There are various ways in which a teacher can deal with aggressive behaviour amongst the learners. Which methods do you find to be effective in this class?
 - 4.1 To what extent does it affect their aggressive behaviour in the long term?
5. During the intervention, how did the children react to the P.A.T dog?
 - 5.1 What positive and negative reactions did you witness amongst the learners?
6. As the teacher, how did you experience the visits from the P.A.T. dog?
 - 6.1 Mostly positive or negative experiences? Would you like the visits to continue and do you think this could be a positive long-term experience for teachers?
7. I would like to establish your opinion on the last eight weeks' intervention and if it had an effect on the learners' aggression towards each other. You, as class teacher, know your learners and the ways that they interact towards each other.
 - 7.1 When you revise on the frequency of aggressive behaviour, do you think that the learners' aggressive behaviour has changed compared to their behaviour before the intervention? Please elaborate.
8. Did any structure / event in your class change that could be the reason for change or no change in aggressive behaviour? Please elaborate.

9. How did the change or no change on aggressive behaviour amongst the learners affect your management of aggressive behaviour in the class?
10. Please share any comments with regard to the intervention.

Thank you for your participation

Kind regards

Jani Coetzee

[\(coetzeejani@yahoo.com\)](mailto:coetzeejani@yahoo.com)

Addendum D

Audit trail

Audit trail

The table below provides a summary of the steps taken during the research process.

Table: Audit trail of the various steps taken during the research process.

Date	Purpose	Venue	Individuals concerned	Results
October 2011	Negotiating access to the school	School premises	School principal	Permission granted
October 2011	Permission to conduct study	School premises	School principal	Permission granted and study scheduled
November 2011	Application to conduct research in Western Cape School	Per post	Dr A T Wyngaard	Permission granted
January 2012	Ethical application to conduct research	Per post and via e-mail	Stellenbosch Research Ethics Committee (Mr Sidney Engelbrecht)	Permission granted
21 March 2012	Consent from parents	School premises	Participating learner's parents	Consent from all granted
13 April 2012	Assent from learners	School premises	Participating learners	Learner's sign assent
17 April 2012	Teacher questionnaire	School premises	Participating teachers	Data gathered
17 April 2012	Teacher consent	School premises	Participating teachers	Consent from all teachers
17 April 2012	P.A.T. volunteer consent	School premises	P.A.T. volunteer	Consent form P.A.T. volunteer
17 April 2012 – 8 June 2012	Observations in participating class	School premises	Participating teacher and learners	Data gathered
11 June 2012 and 13 June 2012	Individual semi-structured interviews	Office on school premises	Participating teachers	Data gathered
13 June 2012	Consent from Scribe	Office of Scribe	Scribe and researcher	Consent from Scribe
14 June 2012	Transcriptions	Office of Scribe	Scribe and researcher	Interviews transcribed

Addenda E

Coding of data

Addendum E:1 Coding of interview transcription

Participant 4 / Deelnemer 4 (P:4)

13 Junie 2012

Navorser: Ek gaan begin deur vir jou te vra wat is jou persepsie van aggressiewe gedrag oor die algemeen en nie net in die spesifieke klas nie op kinders van die ouderdom 5 en 6 jaar, wat ondervind jy?

Deelnemer 4: Daar is groot en baie wye spektrum van kinders wat verskillende aggressies toon. Jy kan leerders hê wat geweldig aggressief is en wat mekaar sal slaan en sal byt of sal skop of sal aanval. Mens sal ook sover kan gaan dat die leerder tot die opvoeder sal aanval of slaan of aggressief raak teenoor die opvoeder. Slaan, skop, byt ensovoorts en dan kan ons ook sover gaan dat die opvoeder nie daarmee kan goed oor die weg kom nie, of cope mee nie en dan kan die opvoeder tot na die hoof toe gaan en 'n kind kan tot die hoof ook aanval en slaan, maar dan kry jy ook kinders wat minder aggressief is of die wat dit agteraf doen wat skelmpies 'n ander kind sal aanval en byt of slaan of so aan. Terg natuurlik en dan kry jy ook die aggressiewe gedrag dat hulle so kwaad raak vir iemand maar hulle is meer introverte en hulle wys dit miskien nie maar dan sal hulle dit verbaal miskien iets sê vir die kind, wat dan verbale aggressie is. So dis miskien die een wat die minste opgetel word, maar wat net so 'n groot probleem kan wees.

Comment [Valued Ac1]: Dealing with aggressive behaviour: Teacher seeks help from principal. (P:4/L17).

Comment [Valued Ac2]: Perception of aggressive behaviour: physical: kicking, pushing, hitting. Physical aggression towards teachers. And relational aggression (teasing) and verbal aggression (which is not picked up as easily). (P:4/L24)

Navorser: As ons nou verwys na die spesifieke klas wat gebruik is in die studie, kan jy vir my voorbeelde gee van aggressiewe gedrag wat jy al moes hanteer.

Deelnemer 4: Wat ek al gesien het? Ek weet van een spesifieke leerder, die juffrou het dit nou die dan onder my aandag gebring dat die kind geweldige aggressiewe gedrag toon teenoor die ander en hy is so frustreerd, dit is so 'n frustrasie en dan sit dit oor in aggressiewe gedrag maar dit mag dalk moontlik mag wees, ek weet nie of ek mag sê dat dit moontlik is dat hy ook al gesien het, want wat ons uit navrae oor gedoen het hoekom maak jy so dat hy pertinent gesê het hy het dit gesien by sy ouers.

Comment [Valued Ac3]: Leading to aggressive behaviour: what they see at their houses. (P:4/L39).

Comment [Valued Ac4]: Aggressive behaviour in the class: Physical aggression due to frustration (P:4/L39).

Navorsers: Jy mag maar verwys na sulke gevalle, want hulle identiteite is beskerm. Dan verwys jy na televisie moontlik of familie toestande of vriende of al drie?

Deelnemer 4: Ek dink al drie kan 'n rol speel maar hierdie spesifieke geval was dit familie verwant, ek dink wat hy dit gesien het by familie. Hy was aggressief en kwaad vir die maatjie en hy het hom dingetjies toegesnou verbaal maar ek dink hy het hom ook gestamp in die ry en hy was kwaad en hy was gefrustreerd en dan byt hy op sy tande van woede.

Comment [Valued Ac5]: Leading to aggressive behaviour: Could be due to TV, parents and friends. (P:3/L45-50).

Navorsers: En die juffrou het tydens haar onderhoud verwys na vroeër in die jaar waar hulle gesukkel het met dogtertjies. Was jy daarby ook betrokke?

Deelnemer 4: Ek was betrokke by die dogtertjies ook gewees ja. Ook maar nuwe vriendskappe wat gevorm het, want hulle kom uit ander klassies van verlede jaar en dan is daar reeds een of twee vriendskappe gevorm en dan word hulle in die nuwe situasie gesit waar hulle met ander kinders moet sosialiseer en die een wil nie toelaat dat die ander een daarmee moet sosialiseer of inpas nie en dan is hulle ook verbaal lelik en aggressief teenoor mekaar en dan snou hulle mekaar dinge toe en sê mekaar lelike dinge toe soos ek gaan jou nie na my partytjie toe uitnooi nie en jy's lelik en ek wil nie meer met jou speel nie en dan staan die een op en loop fisies weg van die ander af en sê ek gaan nie meer met jou speel nie. Dit is nou maar 'n katterige houding maar dit sit oor in aggressiewe

gedrag en dan reageer een kind dalk baie negatief in die hele situasie en dit is dan waar die bom bars of wat dit wel veroorsaak het.

Comment [Valued Ac6]: Aggressive behaviour in the class: Girls being verbally and relational aggressive. (Excluding others). (P:4/L56-70)

Navorsers: Jy het ook op die questionnaire wat ingevul is getoon oor die jare van ondervinding het jy in hierdie jare van ondervinding, wat is jou opinie oor die effek van die aggressiewe gedrag, of hulle onderrig tyd en of hulle vermoë byvoorbeeld om te leer. Watter algemene effek ondervind jy het dit.

Deelnemer 4: Ek ervaar natuurlik dat hulle op hierdie stadium vir my meer aggressiewe gedrag as in die vroeër jare wat ek skoolgehou het. Ek weet nie of dit is omdat die ouers miskien meer aggressief en of dit die televisie se invloed is en of die kinders net meer vryheid van spraak het. Kinders is baie meer uitgesproke as vroeër jare. Vroeër jare was die ouers baie meer gesteld daarop dat die kinders respek moet hê teenoor mekaar en teenoor die volwassenes en so aan. Dis asof hulle nie meer daai respek het nie en die vryheid van spraak het om te sê ek hou nie van jou klere wat jy aanhet nie, jy lyk vir my lelik en party ouers ervaar dit nie as negatief nie en ek voel natuurlik glad nie so nie, want dit maak dan daardie ander een se hartjie baie seer.

Comment [Valued Ac7]: Perception on aggressive behaviour: More aggressive than previous years. (P:4/L78-82).

Comment [Valued Ac8]: Perception on aggressive behaviour: Modern way that children are allowed to say and do what they wish and some misuses this. (P:4/L82-89).

Navorsers: Dis ook die manier hoe dit oorgedra word.

Deelnemer 4: En dit ontnem definitief die kinders van sekere tydperke wat hulle eerder met vryheid met mekaar te doen het, en meer kon geleer het uit 'n situasie uit spandeer hulle nou tyd om te probeer om 'n kwessie te ontloot. Die juffrou self in die klas spandeer baie meer tyd daarin om die kinders se aggressiewe gedrag en sosiale probleme te probeer oplos en omdat tot het waardevolle tyd wat verlore gaan wat hulle meer kon geleer het.

Comment [Valued Ac9]: Aggressive behaviour negative impact on education: Spending time to solve the problem. Feeling of time being wasted, thus teachers repeat themselves. (P:4/L93-100).

Navorser: Goed, so as ek 'n afleiding kan maak dan is dit die instruksie tyd wat beïnvloed word en dit is 'n impak. En emosionele effekte vir die aggressiewe gedrag, byvoorbeeld die ontvanger van die aggressiewe gedrag?

Deelnemer 4: O ek dink nie dis ooit vir enige kind lekker om aan die ontvangkant te wees van aggressiewe gedrag nie en dit hang weereens af van geval tot geval. Party kinders is emosioneel sterk genoeg om dit te kan hanteer waar ander se wêreld heeltemal in die stort as 'n kind met hom of haar lelik was en aggressief gepraat het of gedoen het. Party kinders, as iemand aan jou stoot dan stoot jy terug, of as iemand aan jou stoot dan sê jy moenie dit doen nie ek hou nie daarvan nie en dit is ook wat ek wil hê die juffrouens, die opvoeders moet aan die kinders oordra, om te leer om vir ander te sê moenie dit doen nie ek hou nie daarvan nie. Die verbale kommunikasie om te sê moenie dit doen nie ek hou nie daarvan nie. Party kinders kan dit doen maar dit is nog moeilik op hierdie ouderdomvlak. Party kinders draai eenvoudig om en stap weg en dit affekteer hulle nie, want hulle is emosioneel sterk genoeg maar dan kry jy wel die kind wie se wêreld absoluut in duie stort en hulle kan dit glad nie hanteer nie en dan huil hulle en dan word die juffrou se tyd daarmee ook opgeneem om eers agter die kap van die byl te kom, wat het gebeur en die juffrou moet die hele ou storie ontloot en dit vat waardevolle opvoedingstyd.

Comment [Valued Ac10]: Learners on the receiving end: negative. (P:4/L107-116).

Comment [Valued Ac11]: Learners on the receiving end: Children need to be taught to talk about feelings, some walk away and some are emotional strong enough to handle it. (P:4/L117-122).

Comment [Valued Ac12]: Dealing with aggressive behaviour: Verbal discussion, but it takes time. (P:4/L122-125).

Navorser: Alhoewel u meer betrokke is by die kantoor het u jare se ondervinding in die onderwys, hoe het u die aggressiewe gedrag aangespreek in die klaskamer oor die algemeen. Watter intervensies kon jy doen daar.

Deelnemer 4: Kyk die heel beste is om onmiddellik te praat, moet dit nie eers hou vir tien minute later nie dan het hulle klaar vergeet. Praat onmiddellik en dan sê jy vir die kind wat het dan nou gebeur, hoekom het jy dit gedoen, moenie dadelik aanval nie. Vra wat het gebeur, wat het jy gedoen, kry dadelik eers die kind en dan kry jy die ander kind ook en kry daardie kind se kant van

die saak, dit help nie mens kan net altyd een kant van die saak sien nie. Bring hulle by jou, praat met hulle, goeie kommunikasie. Wat het gebeur en dan sê jy met ander woorde altwee van julle was verkeerd, die een het geskop en die ander een het geklap en dan sê jy vir hulle maar ek dink wat gaan ons nou doen, ons moet nou vrede maak. En dan sê jy die een moet vir die ander een om verskoning vra en hand skud of troos of watookal. Ek dink mens moet dit onmiddellik aanspreek in die klas situasie. Indien jy voel dit is te ernstig jy kan dit nie hanteer nie of iemand het nou die ander een gebyt en daar is nou letterlik bloed merke dan moet jy die ouers ook betrek daarby of as dit 'n ding is wat elke dag gebeur of oor 'n lang tydperk 'n klomp keer gebeur het dan is dit tyd dat jy die ouers moet skakel of kontak en of vir hulle of telefonies of indien dit 'n ernstige geval is, dat die ouers persoonlik inkom en dan moet jy met die ouers self praat en dit daar en dan oplos.

Comment [Valued Ac13]: Dealing with aggressive behaviour: Verbal discussion. Ask them to apologise and make friends. (P:4/L132-145).

Comment [Valued Ac14]: Dealing with aggressive behaviour: Involving parents in serious cases and frequent cases. (P:4/L145-152).

Navorsers: En in hierdie klas, hoe het die gevalle wat na jou toe gekom het in die kantoor, hoe het jy dit daar hanteer.

Deelnemer 4: In die begin van die jaar die geval van die dogtertjies wat so verskriklik katterig was teenoor mekaar en aggressief teenoor mekaar opgetree het, was daar een dogtertjie se mamma wat op 'n gereelde basis kantoor toe gekom het en met my gepraat het ook en sy wou weet wat ons in die verlede gedoen het met hierdie gevalle en ek het nie net die een dogtertjie nie maar ek het toe ook die ander ouers se mammas gekontak wat die probleme was en ek het met meer as een, ek dink ek het met drie van die ouers gekontak en gesê dit is wel die geval, ek sal graag wil hê dat hulle by die huis ook moet praat met die kind en dit aanspraak want dit is nie sosiaal aanvaarbare gedrag nie en ek dink as dit van die huis en skool af saam kan kom, kan mens dit baie makliker in die kiem smoor en dit is presies wat toe gebeur het want ek op hierdie stadium gaan dit baie beter wat daardie geval betref.

Comment [Valued Ac15]: Dealing with aggressive behaviour: Principal gets involved and contacts parents. Regular contact with parents. (P:4/L157-171).

Navorsers: Deur die loop van die dag as die juffrou na jou toe kom met 'n probleem, wat doen hulle dan by jou, is dit gewoonlik half 'n positiewe ervaring of dink jy dit word soort van, weet hulle dan dat hulle dan 'n verkeerde stap geneem het.

Deelnemer 4: Ek dink as die juffrou na my toe kom, dan het die juffrou alreeds met die kinders al 'n paar keer, miskien nie net een keer nie, maar twee of drie keer aangespreek, so dan beseft die kind hierdie was dan verkeerd, so ek moet dit nie weer doen nie. Dan dikwels as die kinders by my kom in die kantoor dan partykeer is hulle houding baie casual houding daarvoor en lag partykeer selfs daarvoor want hulle dink dis snaaks. Partykeer kry jy kinders wat so beseft ek het verkeerd gedoen en dan bars hulle in tranes uit. Ek dink as jy sover kom dan is dit dikwels klaar genoeg straf, die impak op hulle en dan sal ek persoonlik ook met die kind praat oor die situasie en dan wat het dan verkeerd gegaan en weet jy wat jy gedoen het was nie reg nie en mens moet daarvoor praat en dan laat ons hulle dikwels vir so vyf minute in die time out sit in die kantoor dat hulle kan beseft wat ek nou gedoen het was verkeerd. Dan voordat hulle weer teruggaan in die klas situasie, ons hou hulle nooit lank daar nie, drie tot vyf minute, en as hulle dan teruggaan in die klas situasie dan herhaal ek dit gewoonlik weer. Onthou nou, verstaan jy hoekom jy hier gesit het, want jy mag nie weer iemand skop of slaan of byt nie. Dit is nie aanvaarbare gedrag en so nie.

Comment [Valued Ac16]:

Comment [Valued Ac17]: Children respond to dealing: Some with laughter and some with tears. (P:4/L183-184).

Comment [Valued Ac18]: Dealing with aggressive behaviour: Teacher takes children to office after numerous times talking to them about aggressive behaviour. (P:4/L178-184).

Comment [Valued Ac19]: Dealing with aggressive behaviour: sitting in the office is seen as punishment. Verbal discussion takes place there and time to "think" about behaviour. (P:4/L184-197).

Navorsers: Tot op watter mate is jy van mening affekteer dit hulle aggressiewe gedrag oor die langtermyn, hierdie intervensies waarvan jy nou gepraat het.

Deelnemer 4: Ek dink dit het 'n goeie effek op die kinders. Ek voel regtigwaar dat ons nie sulke ernstige gevalle het nie want dit wat ons al gehad het, het ons al redelik goed aangespreek. Ook met goeie samewerking met die ouers. Ek dink dit het 'n baie goeie effek as mens die ding dadelik aanspreek.

Comment [Valued Ac20]: Dealing with aggressive behaviour: Immediate. Parents involvement. (P:4/L203-207).

Navorsers: En dan ander strukture van buite af, watter hulp ontvang mens buiten die skool en buiten die ouers, ontvang jy soort van as riglyne hoe om dit te doen. Ontvang 'n mens riglyne, is dit beskikbaar vir juffrouens.

Deelnemer 4: Daar is definitief baie hulp daarbuite. Baie van die hulp wat eintlik vir my hartseer is, baie van die hulp is gekoppel aan hoë finansiële kostes en dikwels wil 'n mens graag iemand hê wat vir jou kan hulp gee wat nie so duur is nie, want die kinders wie se ouers dit nie altyd kan bekostig of wat nie wil erken dat daar so 'n groot probleem is wat juis die probleem is en dan gaan dit alles daarmee saam dat jy 'n terapeut moet inkry of so aan en dit is kostes. Ons het wonderlike spel terapeute en opvoedkundige sielkundiges saam met wie jy kan werk en wat jy die paadjie mee kan stap. Daar is ook 'n geval in die skool wat ons 'n leerder so pas verwys het na 'n ander instansie wat dit miskien 'n kleiner instansie is wat dan vir die spesifieke kind 'n beter opsie sou wees as in ons skool. Die sensoriese stimulasie wat die kind kry is hopeloos te veel, hy word heeltemal te veel stimuleer, dan raak die breintjie hiperaktief net soos wat sy aksies is en hy dink nie voordat hy doen nie, tree aggressief op, slaan, byt, skop, hy wil daai spesifieke scooter hê, die blou scooter en hy sal almal wat naby daai scooter kom klap, byt, slaan en dit is sensories net te veel en die hulp wat ons vir die spesifieke geval gekry het is om te verwys na 'n ander instansie waar 'n kleiner omgewing, minder kinders in die klas, meer individuele hulp kry ensovoorts.

Comment [Valued Ac21]: Dealing with aggressive behaviour: Involvement of professionals, but it could be expensive. (P:4/L214-226).

Comment [Valued Ac22]: Dealing with aggressive behaviour: Advise children to go to other school for less over stimulation and less learners. (P:4/L226-234).

Navorsers: Wat sou jy nog voorstel kan daar nog in Suid-Afrika aangebied word of in die Weskaap om moontlik onderwysers of skole te help in die hantering van aggressiewe gedrag.

Deelnemer 4: As 'n mens by die Onderwysdepartement of by die onderwys sentrum, kom spelterapeute of mense wat jou kon help met gedragsprobleme, want mens sien al hoe meer dat kinders wel gedragsprobleme het en as die onderwysers nie die hulp van die Onderwysdepartement af kon gekry het ook gedragsprobleme sou dit ongelooflike impak op skole kon gehad het, maar dit

is wat geld kos en die kinders wat dit nodig het se ouers wil nie altyd daai finansiële uitset nie. Dis dikwels kinders wie se ouers in elk geval altwee ouers voltyds werk en hulle is reeds in creche situasies vandat hulle vier maande oue babatjies was en dit is dikwels hulle wat geweldige probleme, chreche kindertjies, dan kry jy in die graad R klas wat geweldige probleme het en daardie ouers het nie altyd die finansiële uitset om in te sit in die kinders vir ekstra hulp nie. So as die Onderwysdepartement dit kan beskikbaar stel, sal dit fantasties wees.

Comment [Valued Ac23]: Dealing with aggressive behaviour: Department of education giving more free play therapy and specialists for those who do not have the sufficient funds. (P:240-254).

Navorser: Gedurende die laaste agt weke het ons die intervensie gehad van P.A.T. Hoe was jou reaksie gewees. Was dit vir jou 'n positiewe ervaring, negatief, of het dit nie eintlik vir jou soveel impak gehad nie.

Deelnemer 4: Dit was 'n ongelooflike positiewe ervaring. Ek dink die kinders in die skool, tot die opvoeders, die assistente, almal het ongelooflik goed gereageer daarop. Veral die kinders, ek kon met duidelike invloed op die kinders sien dat hulle so uitgesien het daarna as [dog's name] sou kom en hulle het dit baie positief ervaar en ek dink juis op daardie spesifieke dae was daar nie konflik of aggressiwiteit in die kinders of so aan nie. Hulle het geweet [dog's name] kom nou. Dit het 'n baie goeie impak gehad.

Comment [Valued Ac24]: Children's reactions towards the P.A.T. visits: Positive. (P:4/L262).

Comment [Valued Ac25]: Teacher's reactions towards P.A.T. visits: Enormous positive experience. (P:4/L261).

Comment [Valued Ac26]: Influence of P.A.T. on aggressive behaviour: Less aggressive on P.A.T. day. (P:263-267).

Navorser: So jy sou sê hulle het 'n redelike positiewe reaksies getoon en vir jou was dit ook 'n positiewe reaksie?

Deelnemer 4: Hulle het in die kantoor ingekom en kom groet.

Navorser: Sou jy, dis nou 'n gepaste vraag vir jou as skoolhoof, sal jy wou gehad het dat iets soos dit oor 'n langer termyn moet geskied in 'n skool.

Deelnemer 4: Definitief, 'n mens sou dit kon in al die klasse 'n weeklikse instelling vir die hele jaar kon doen. Ek dink al die klasse het dit geweldig positief ervaar. Wel, die ander klasse se kinders was half jaloers dat hulle nie kon deelneem aan die projek nie.

Comment [Valued Ac27]: P.A.T. visits could be introduced: As a part of the program in all the classes. (P:279-283).

Navorsers: Die langtermyn invloed vir die juffrouens. Dink jy dit sou 'n positiewe of 'n negatiewe of geen impak gehad het nie.

Deelnemer 4: Ek dink dis baie positief vir die juffrou. Die juffrou kon aangaan met haar normale dagprogram en sy het geweet dat die kinders terwyl hulle besig is met die skeppende aktiwiteite, is eintlik baie soeter vir daardie tydjie wat hulle hier was, want hulle is so bang hulle maak die hond bang. Hulle is baie meer bewus van ander sosiale vaardighede om soeter te wees en stiller te wees en meer rustig te wees, want as hulle onrustig gaan wees, gaan die hond bang raak. Hulle was baie positief.

Comment [Valued Ac28]: Influences in general: Were 'good' during visits, more aware of other, calmer. (P:4/L288-295).

Comment [Valued Ac29]: Influence in general: Positive teacher. (P:4/L295).

Navorsers: Anderste emosies en hulle moontlike impak wat hulle kan hê op ander het hulle in gedagte gehou.

Deelnemer 4: Hoe meer ek na daai dag dink, hulle het opgetree soos ouer kinders op daai spesifieke dae, want hulle het verantwoordelik gevoel vir die hond, dat die hond nie moet bang wees of die hond nie moet weghardloop nie, so hulle was sulke volwasse, verantwoordelike klein mensies spesifiek op daai dag.

Comment [Valued Ac30]: Influence in general: Days of visits-feeling of responsibility. They acted like older responsible children. (P:4/L300-304).

Navorsers: Gedurende die laaste agt weke, hoe het jy die invloed spesifiek op hulle aggressiewe gedrag ondervind. Ek verstaan dat u nie elke dag betrokke is by die klas nie, maar het u enige invloed ondervind.

Deelnemer 4: Ja definitief, die juffrouens was nie een keer in hierdie agt weke, wel ek is onseker van die een juffrou, maar sy het nie kinders na my toe gebring met herhaaldelike, aggressiwiteit of gedragsprobleme in daardie tydperk nie. Sy kon dit self hanteer indien daar gevalle was. Dit was baie positief, want sy kon dit self hanteer want dit was nie so verskriklik nie. Dit was nie so 'n swaar nie.

Comment [Valued Ac31]: Influence of P.A.T. on aggressive behaviour: Less aggressive actions reported for her to deal with. It could be due to the teacher who felt more motivated or capable to handle it. (P:4/L311-317).

Navorsers: In Engels kan mens dalk die woord discouraged gebruik. So as jy dink aan die gevalle vroeër in die jaar en die herhaaldelike gebeure van aggressiewe gedrag in die klas en die juffrou se gemoed, sou jy sê daar was 'n mate van 'n positiewe effek gewees.

Deelnemer 4: Definitief, want ek kon sien dat hulle dit positief ervaar.

Comment [Valued Ac32]: Influence of P.A.T. on aggressive behaviour: Teachers felt more courage. (P:4/L325-326).

Navorsers: U het reeds bevestig dat spesifiek op hierdie dae dat die hond kom kuier het was dit ook 'n moontlike positiewe atmosfeer gewees.

Deelnemer 4: Baie positief en ek dink dat die juffrou het dit geniet dat die kinders dan baie meer selfstandig en volwasse opgetree het omdat hulle die hond wil akkommodeer dan geniet sy dit wanneer die klas makliker is.

Comment [Valued Ac33]: Influence in general: Teacher's enjoy the class being easier to handle due to visits. (P:4/L332-335).

Navorsers: Wat dink jy sal gebeur spesifiek in hierdie klas as die besoeke langer aangehou het ten opsigte van hulle aggressiewe gedrag?

Deelnemer 4: Ek dink dit moontlik 'n langdurige positiewe effek op hulle hê dat hulle die ander dae ook so positief sal optree nie net daai spesifieke dae wanneer die hond kom nie. Kyk, die algemene klas dissipline het verbeter op daai dae want hulle wil nie hond ontstel nie. So as die hond elke dag daar was, sou die klas dissipline elke dag beter wees.

Comment [Valued Ac34]: P.A.T. could be introduced: Because it has 'n positive effect on aggressive behaviour because the dog is present. (P:4/L341-346).

Navorser: Dink jy jy sal dieselfde effek waargeneem het as dit in 'n ander klas was of dink jy net dit was spesifiek hierdie situasie?

Deelnemer 4: Definitief dit kan in al die klasse werk. As hulle nou elke dag dit sou gehad, sewe dae 'n week, die hele jaar deur, dan het dit moontlik nie so 'n effek op hulle gehad nie, maar omdat hulle uitgesien het daarna en reggemaak is daarvoor en dit geleidelik infaseer is een keer 'n week en so aan, het dit 'n beter effek op hulle gehad want ek dink die kwessie van gewoonte kan natuurlik dan weer sleg wees. Dan is hulle weer gewoond daaraan, so op so 'n basis het dit gewerk en indien dit langer kon gewees het. Dit was nie in die begin genoteer nie, so hulle het toe nou gewoond geraak daaraan, so as mens dit nou kon langer vat, sou dit 'n beter effek op hulle gehad het.

Comment [Valued Ac35]: P.A.T. could be transferred to other classes. (P:4/L352-357).

Comment [Valued Ac36]: Influence on aggressive behaviour. May not be as strong over a longer period of time as learners may get use to the dog. (P:4/L353-262).

Navorser: Weet u of daar enige strukture of gebeurtenisse of deelnemers in die klas verander het wat moontlik die rede kon gewees het vir die positiewe impak op die klas. Die rede hoekom ek dit vra is daar enige moontlike eksterne goed wat moontlik die rede kan wees dat daar 'n verligting was met die aggressiewe gedrag wat ek kan elimineer.

Deelnemer 4: Nee ek glo nie daar was nie.

Comment [Valued Ac37]: Other reasons for change in aggressive behaviour: none. (P:4/L370).

Navorser: Hoe dink jy word die verandering in hierdie klas kamer beheer en die interaksie en spesifiek die aggressiewe interaksie onder hulle, beïnvloed dit die juffrou se hantering van die klas en haar instruksietyd en haar totale klaskamer beheer vaardighede. Wat dink jy veroorsaak, as daar 'n afname is in iets soos aggressiewe gedrag.

Deelnemer 4: Dit maak dit vir haar baie makliker. Jy kan baie meer tyd spandeer aan jou kurrikulum self as dit makliker gaan met kinders wat minder aggressief is want jy het nodig om

hulle sosiale probleme op te los nie, so sy kan baie meer tyd spandeer aan die leerprogram self en aan die kurrikulum self wat die kinders moet leer. Dit maak dit vir haar makliker.

Comment [Valued Ac38]: Influence in general: Less aggressiveness helps the teacher to spend more time on the curriculum. (P:4/L279-384).

Navorser: Dankie

Addendum E:2 Coding of observation field note

1 17 / 23
 2 24 May
 3 Thursday
 4
 5 Amount of learners present: 27
 6 Girls: 12
 7 Boys: 15
 8 Afrikaans speaking
 9
 10 Observation time: 09:00 – 09:15
 11

12 1. Setting

13 No toys / scooters^o some structures^o
 14 Outside (No toys and scooters packed out. Structures the same.) It cold^o
 15 is very cold, but sunny. There are 3 other classes outside and sunny^o
 16 supervision by 2 teachers standing on the stoop. All learners are other classes^o
 17 wearing long sleeves and shoes. They are outside after eating supervision^o
 18 inside. long sleeves and shoes^o
 19 outside after eating^o

20 2. The human – social environment AND
 21 4. Informal interactions, unplanned activities (free-play) and the
 22 occurrence of aggressive behaviour
 23

24 There is a group of girls (3) sitting on the stoop having a same gender
 25 discussion on what they dreamt last night. A mixed gender group verbal discussion
 26 is on the monkey bars. They are also playing with learners in mixed gender
 27 another class. There is a solo boy standing around on the stoop other class dynamics
 28 playing with his top. A same gender group as previous days are Solo
 29 chasing each other and making gun sounds. They are playing a same group as
 30 fantasy game. 3 boys are walking around on the stoop. 2 boys are fantasy
 31 also playing their own fantasy game. One boy who usually is a same gender

32 part of the chasing group is playing alone with boys from another
 33 class. They are playing rough, but they are smiling and laughing.
 34 The teacher sees the aggressive rough play and stops it. The girls
 35 on the stoop moved now to the monkey bars. 2 girls only finished
 36 their food now and they are running to go play outside. The rough
 37 play group which the teacher stopped is continuing their rough
 38 play as the teacher went inside. A girl is playing with girls from
 39 another class on the big swing. The boys playing the fantasy
 40 game (3) are still continuing the game but they moved to the
 41 jungle gym now. A boy who was part of a group is now playing
 42 solo and hiding behind the jungle gym. 2 other classes go inside.
 43 The class's bell rings too. The boys run to stand in line, one
 44 accidently fall and the other helps him up. They stand in the line
 45 and teacher firstly calms them down and then they can go inside.

other class
 Rough friendly play
 smiling
 laughing
 Teacher stops rough play
 groups move
 same gender
 Not listening to teacher
 other class
 Groups move
 solo
 other classes go inside
 Routine and structure
 Comfort each other
 Calms learners down before inside

47 5. Related observations or informal interviews

49 The teacher came to me and told me she feels discouraged with
 50 the girls, they are extremely rude (**verbal aggression**) to each
 51 other. They say rude things to each other.

Discouraged teacher
 Verbal aggression
 Teacher knowledge about aggressive action.

53 6. Insights and interpretations

55 They enjoy the class structures and routines when everything is
 56 explained to them.

Respond good to structures

58 Observation time: 09:35 – 09:45

60 1. Setting

61

62 Cold and sunny outside. Supervision by 2 teachers and another
 63 class outside. Structures are the same as earlier. -
 64

Cold
 Sunny
 supervision
 other class
 structures the same

65 2. The human – social environment AND
 66 4. Informal interactions, unplanned activities (free-play) and the
 67 occurrence of aggressive behaviour

69 They come outside after English inside. There are 3 girls playing
 70 with boys from another class. The previously rough playing group
 71 started their game again on the grass. 2 girls run to the bottom of
 72 the play ground. 2 boys are sitting on the swing. The same girls
 73 as usual are in the monkey bars and two boys are with them now.
 74 A mixed group is sitting inside with a book and turning through the
 75 pages. On the stoop there are 2 girls playing a dinosaur game.
 76 The group on the monkey bars are becoming crowded and one
 77 girl gets off. The boys on the grass are continuing their rough play
 78 and the girls are also continuing their dinosaur game. The group
 79 inside come outside now with the book that they were paging
 80 through inside. They go and sit on the grass. They are 2 girls and
 81 3 boys. There are only one other class outside. The two girls who
 82 previously played at the bottom of the playground is now part of a
 83 mixed gender group. The bell rings and the children run to the
 84 line. They are not standing still. The teacher motivates them by
 85 telling them she wants to see who is standing very still and "waar
 86 is my slim soldate?" they walk inside for work time.

outside after inside
 same gender
 other class dynamics
 same gender as
 previous days
 Rough play
 same gender
 same gender
 mixed gender
 same group, activity, place
 Inside when suppose to
 be outside.
 fantasy play
 friendly play
 Crowded group
 Responds good to negativity
 same group, activity, place
 Groups move
 Already reported on.
 other class dynamics
 mixed gender
 Routine and structure
 control before coming
 inside.

88 5. Related observations or informal interviews

90 The teacher told me she has to ring the bell now because she had
 91 adjust the routine for the activities.

last minute adjustments

93 6. Insights and interpretations

94

95 None

96 Observation time: 11:00 – 12:05

97 P.A.T. visit

98

99 1.Setting

100

101 Inside. The tables are packed out with coloring activates. Neat Prepared I

102 lockers and tables. The doll house is neatly packed away. There Neat I

103 are still interesting themes on the wall and good lighting inside. Interesting I

104 The class smells like bread as the class next to them are baking. Good light I

105 Warm inside. Smells good I

106

107 Outside it is warm. There is a table packed out with sweets to be Warm I

108 sold. There is supervision and all the other classes are outside. Selling sweets O

109 There are scooters, balls and sand pit toys packed out. supervision O

110

111 2. The human – social environment AND

112 3. P.A.T visit and observed behaviour

113 4. Informal interactions, unplanned activities (free-play) and the

114 occurrence of aggressive behaviour

115

116 The girls run to the carpet. They are laughing and they want to eager laughing ●●

117 start. The teacher lets the boys come in to and they sit at a table. Control through bell ●

118 The teacher asks ring the bell and asks them to greet the dog and Greet volunteer ●

119 the volunteer. The red team is first. There is a girl who already Group-by-group ●

120 greeted the dog and was laughing and touching her, does not choice to take part ●

121 want to join today. After she saw that the group will be walking the Girl who did not want to partake, wants to partake later ●

122 dog on the lead she ran to the carpet and smiled at me. She smiling ●●

123 decided to join. They are busy while waiting for their turn. Turning Taking turns ●●

124 on the carpet and making moves. One girl request that she can
 125 walk alone with the dog. She calls the dog with kisses and her
 126 name. Confidence. Laughter. Others follow and stick their hands
 127 out as to touch the dog. They all get a turn. When it was the girls
 128 turn who did not want to take part in the beginning, she was
 129 smiling with red cheeks and looking at the dog. The volunteer
 130 praises the children with the word: "excellent". Volunteer lets the
 131 children give the dog a treat. Confident girl asks the dog to sit.
 132 They give the dog a treat and go back to the table. A girl tells me
 133 she wants to rather finish her coloring work, but wants to play with
 134 the dog next time. She is supposed to be in the next group. The
 135 green team runs to the carpet. They are throwing the ball to the
 136 dog. The dog's tail is wagging and a boy moves closer to get the
 137 ball. They are all laughing. A boy says that he wants to give the
 138 dog a sweetie. The volunteer shows them how the dog can jump
 139 for a ball. She asks them if they want to give the dog a treat and
 140 they say at the same time; "me, me, me". One boy is very jumpy
 141 and accidently kicks the volunteer in the face. They give the dog a
 142 treat and then wash their hands. The next team is the orange
 143 team. Everyone is present. The rest of the class is coloring in
 144 pictures. One girl walks to the volunteer and gives her a picture. A
 145 boy who has already took part is staring at the group and the dog
 146 on the carpet. Those on the carpet are sitting close to each other
 147 and they start with a discussion on how to give the dog a treat.
 148 Afterwards, the volunteer asks them who wants to try and ask the
 149 dog to sit and do other instructions. There is a girl who wants to
 150 hold on to the lead while they are doing the tricks. She says "no"
 151 to the dog when the dog pulls. They all get a chance to give the
 152 dog a treat and ask her to sit. Afterwards they go and sit down
 153 and the next team comes and it is the yellow team. They are all
 154 present, including a boy who does not always take part, he has

walking dog on lead
 Independence
 Confidence
 laughter
 want to touch
 Taking turns
 child who did not want to partake is having fun
 volunteer praises
 Treat dog
 Ask dog to do tricks

 choice to take part
 Rather wants to finish activity
 eager
 Throwing ball
 comfortable dog
 laughing
 treat dog

 eager
 too excited
 hygiene
 everyone in group is present
 like the volunteer
 Those busy with something else pays attention.
 spontaneous discussion

 confidence

 Taking turns
 Everyone in group present

155	only taken part once before. This group walks the dog on the lead	Boy who seldom takes part is taking part	•
156	and the others try to touch her as they are walking past. There are	walking dog on lead want to touch	•
157	many smiles and laughter. The boy who seldom takes part is	smiles laughter	•
158	eager to walk the dog and jumps up to take the lead. He is smiling	Boy who did not want to partake is having fun	•
159	as he is walking the dog. They all get a turn. They ask the dog to	Taking turns Treat dog	•
160	sit and they all get a turn to give the dog a treat. The volunteer is	volunteer guides	•
161	guiding them as to how to give the dog the treat. The boy who	choice to take part	•
162	seldom takes part does not want to and the volunteer says it is		
163	fine. They go back to their tables to draw and the next team	All present	•
164	comes to the carpet. It is the blue team. They are all present and		
165	move close to the volunteer and the dog. There is a group of boys	Taking turns	•
166	sitting next to me and turning through a dinosaur book. They are		
167	giving each other a turn. The group on the carpet is grooming the	Groom dog	•
168	dog. They put out a blanket. They discuss how to do it. The dog	Volunteer explains activity	•
169	lays down and they start to brush the dog. As they are talking they	stroking the dog	•
170	are stroking the dog. All the groups were quiet on the carpet, not	Group on carpet is quiet	•
171	the first group. This group is sitting very still. A girl from another	Those busy with something else want to see	•
172	group comes to the carpet to see what they are doing. They give	treat dog	•
173	the dog a treat. This group is very gentle and careful not to hurt	careful not to hurt dog	•
174	the dog. They are having a discussion on dogs. The volunteer	spontaneous discussion	•
175	packs up her bag. 3 children are still standing there and looking at		
176	the dog and one boy bends down and gives her a treat. The	Thanks children	•
177	volunteer thanks the group and they go back. The teacher rings	Thank volunteer and dog	•
178	the bell and they all thank the dog and the volunteer and go	Does not want dog to go	•
179	outside. 2 boys stay on the carpet with the dog. I follow the	outside after inside.	o
180	children outside. Outside there is a table packed out with sweets	Independance	•
181	and things the children can buy. A boy buys something. 3 other		
182	boys stare at the table. A girl is eating packed of chips. The same	same group, activity, place	•
183	group as usually is on the monkey bars. 3 boys are playing rough	Rough friendly play	•
184	and grabbing on each other. A solo boy joins the rough playing	Including	•
185	group. 2 boy are running towards the class and runs inside. A girl	Inside when suppose to be outside	o

186 is on the swing and holding onto another swing with her other
 187 hand holding it for a friend. The teacher walks to the rough
 188 playing group and asks them to stop. As he walks way they start
 189 again. She sees them again and then walks back there to stop
 190 them. A boy is on the jungle gym with a girl from another class. A
 191 group of 3 boys are on the jungle gym. 2 boys are walking around
 192 eating a packet of nick nacks. Two boys run to the teacher to get
 193 to her first. One is red in the face and says the other **spat** him in
 194 the face. The teacher asks if this is true and he says yes. The boy
 195 apologizes on his own and the teacher asks the one boy to clean
 196 is face and for the boy who spat to go sit on the carpet. She then
 197 goes back outside and sees a boy holding his face. I saw another
 198 boy **kicking** him in the face because he did not move when he
 199 asked him to. The teacher puts the kicking boy in time out and
 200 comforts the hurt child. She goes back outside. The sale is still on
 201 the way and the rough playing group is still busy. The one boy
 202 stops and calls the other "**stupid.**" Then the boy responded by
 203 **punching** him in the face. The teacher sees this and runs to
 204 them. She stops the behaviour and puts both children in "time out"
 205 after having a discussion on why they were wrong.

holding swing for another
 stops rough play
 Does not listen to teacher
 Repeats herself
 mixed gender
 other class
 same gender
 same gender
 Inform teacher
 spitting
 Apologises on own
 hygiene
 time out
 kicking
 Informs teacher
 Time out
 comforts hurt child
 same group, activity, spot
 verbal aggression
 Punching
 Sees aggressive action
 and stops it.
 verbal discussion
 time out.

207 5. Related observations or informal interviews

209 The teacher tells me that there is less kicking and hitting today,
 210 but the girls rudeness still upset her. She tells me that she is not
 211 sure why but they are very busy today.

Discouraged
 Describes learners
 as "busy"

213 6. Insights and interpretations

215 Time out is used regularly. Teacher is patient and never loses
 216 her temper with children with bad behaviour.

Addendum E:3 Master lists of interviews and observations

Week 1 – 4 Master List of observations

The group dynamics	Positive behaviour amongst learners	Teachers way of dealing with aggressive behaviour and class management	Teachers' and learners' reactions to the P.A.T visits	Aggressive actions of learners	Reactions on aggressive actions	Teachers' experience of aggressive actions amongst learners	Outside setting	Inside setting
(Purple)	(Pink)	(Yellow)	(Blue)	(Green circle)	(Green cross)	(Orange)	(Black O)	(Black I)
1/23/L27 1/23/L137 1/23/L202 3/23/L43 4/23/L22 4/23/L44 4/23/L77 5/23/L46 6/23/L20 10/23/L22 11/23/L25 11/23/L80 Own groupings and choice on what to play with. 1/23/L28 1/23/L65 1/23/L209 3/23/L 179 4/23/L23 4/23/L29 4/23/L157 5/23/L23 2/23/L61 5/23/L187 7/23/L63 7/23/L153 7/23/L156 7/23/L169 8/23/L28 8/23/L74 8/23/L86 9/23/L40	1/23/L20 6/23/L91 10/23/L22 11/23/L21 Children are eager to play outside. 1/23/L39 2/23/L218 6/23/L107 9/23/L85 9/23/L222 10/23/L30 10/23/L158 11/23/L34 Verbal discussion 1/23/L39 10/23/L29 Holding hands. 1/23/L64 1/23/L167 9/23/L68 9/23/L80 9/23/L84 9/23/L136 10/23/L211 Friendly play with objects. 1/23/L46 2/23/L245 2/23/L226 3/23/L178 3/23/L182 3/23/L20 3/23/L24	1/23/L17 1/23/L90 1/23/L208 2/23/L168 3/23/L177 3/23/L 185 4/23/L15 4/23/L71 5/23/L29 6/23/L13 6/23/L138 6/23/L170 7/23/L16 7/23/L99 7/23/L143 8/23/L16 8/23/L58 8/23/L75 8/23/L214 9/23/L71 9/23/L161 11/23/L74 Supervision provided by teachers. 1/23/L41 11/23/L113 Motivates listening by clapping hands and counting. 1/23/L46 Provide guidelines and possible solution to problems. 1/23/L60 2/23/L33	3/23/L27 3/23/L52 3/23/L78 3/23/L87 3/23/L104 5/23/L113 5/23/L127 5/23/L135 8/23/L25 8/23/L96 8/23/L134 8/23/L162 11/23/L141 11/23/L202 11/23/L212 Excitement amongst children. 3/23/L68 8/23/L111 More than 3 adults present. 3/23/L78 No expressions. 3/23/L79 Children attracted 3/23/L81 5/23/L106 5/23/L139 8/23/L144 8/23/L162 11/23/L194 11/23/L235	1/23/L30 1/23/L162 1/23/L218 2/23/L75 4/23/L151 5/23/L31 6/23/L54 6/23/L145 8/23/L210 11/23/L95 Pushed another. 1/23/L50 Rude body language and moving body to not allow other to get on swing. 1/23/L58 4/23/L164 5/23/L100 7/23/L47 10/23/L187 Verbal rudeness. 1/23/L75 Loud verbal fight with no origin and it escalades. 3/23/L81 5/23/L145 5/23/L140 Grins and grabs. 1/23/L149 Grabbing and anger facial	1/23/L31 1/23/L162 6/23/L55 10/23/L46 Non verbal reaction from others. 1/23/L33 5/23/L30 6/23/L50 7/23/L46 7/23/L60 7/23/L76 8/23/L85 9/23/L76 9/23/L92 9/23/L100 9/23/L227 10/23/L47 10/23/L48 10/23/L93 11/23/L103 No one informs teacher of aggressive behaviour. (See also: No teacher knowledge of aggressive action 1/23/L38 Group pauses and has not reaction, then play continues. 1/23/L47 10/23/L140 No response to teacher	1/23/L33 1/23/L54 1/23/L81 1/23/L146 2/23/L43 2/23/L87 2/23/L146 3/23/L46 3/23/L194 4/23/L97 5/23/L102 6/23/L56 6/23/L97 No teacher knowledge of aggressive action. (See also: No one informs teacher of aggressive behaviour). 1/23/L43 1/23/L59 4/23/L33 4/23/L107 4/23/L110 10/23/L177 Teacher knowledge of aggressive action (see also: Tells teacher about occurrence) 1/23/L49 Teacher seems tired of handling situations. 1/23/L88 Teacher experience	1/23/L13 1/23/L161 2/23/L37 5/23/L13 6/23/L13 6/23/L42 6/23/L79 6/23/L138 6/23/L169 7/23/L16 8/23/L67 8/23/L207 9/23/L14 9/23/L121 9/23/L180 11/23/L13 Outside play after inside. 1/23/L15 1/23/L203 2/23/L157 4/23/L14 4/23/L27 4/23/L98 4/23/L146 5/23/L13 6/23/L14 6/23/L77 6/23/L139 6/23/L170 7/23/L17 7/23/L97 7/23/L144 8/23/L17 8/23/L40	1/23/L109 2/23/L113 4/23/L63 11/23/L65 Inside working. 1/23/L111 4/23/L64 5/23/L81 6/23/L76 7/23/L13 8/23/L14 8/23/L113 9/23/L82 10/23/L162 11/23/L161 Tables prepared and orientated. 1/23/T115 4/23/L70 5/23/L84 Comfortable temperature. 1/23/T118 No child's work on the walls. Opinion: Sense of proudness? 1/23/T120 3/23/L14 4/23/L69 5/23/L84 7/23/L14

9/23/L79	3/23/L25	5/23/L34	Volunteer explains	expression.	guidelines.	difference in behaviour	8/23/L59	8/23/L111
9/23/L83	4/23/L26	5/23/L192	activities.			from day to day.	9/23/L22	11/23/L164
9/23/L148	4/23/L31	6/23/L160		1/23/L153	1/23/L54		9/23/L77	Good light.
9/23/L150	4/23/L90	7/23/L95	3/23/L83	7/23/L164 Pushing	5/23/L55	1/23/L178	10/23/L17	
9/23/L151	4/23/L93	7/23/L108	3/23/L101	for no reason.	Rest of the group has	5/23/L192	10/23/L64	1/23/L136
9/23/L157	4/23/L155	10/23/L169	3/23/L114		no knowledge of the	Time limited to	10/23/L129	11/23/L67
9/23/L193	4/23/L159	11/23/L137	5/23/L103	2/23/L41 Hitting self	behaviour.	addresses and continues	10/23/L129	Educational play
9/23/L194	5/23/L21	11/23/L228	5/23/L149	hard. Anger		with instructions.	10/23/L201	inside.
9/23/L206	6/23/L34	1/23/L163	8/23/L143	expression.	1/23/L 56		11/23/L13	
10/23/L61	7/23/L53	1/23/L173	8/23/L161		10/23/L76 Children	1/23/L220	11/23/L126	2/23/L14
10/23/L102	7/23/L70	4/23/L153	8/23/L179	2/23/L55	handled others	10/23/L178 Teacher	Other classes	3/23/L14
10/23/L220	7/23/L103	9/23/L129	11/23/L176	4/23/L160	aggressive reaction by	calms down the	outside.	3/23/L65
10/23/L225	8/23/L36	Teacher provides comfort.	Children have a	6/23/L99	themselves.	involved learners.		4/23/L68
10/23/L231	8/23/L72		choice to take part.	6/23/L154			1/23/L18	7/23/L13
10/23/L232	9/23/L38	1/23/L60		7/23/L57			2/23/L18	8/23/L14
11/23/L85	9/23/L103	Asks from children to say	3/23/L84	8/23/L79	1/23/L81	1/23/L222	3/23/L17	8/23/L112
11/23/L86	9/23/L105	"sorry."	3/23/L106	10/23/L43	1/23/L155	5/23/L141 Individually	4/23/L14	11/23/L68
11/23/L122	9/23/L144		5/23/L104	10/23/L175	2/23/L44	addressing behaviour	5/23/L14	11/23/L163
Solo girl /	9/23/L159	1/23/L69	5/23/L130 Some	11/23/L101	7/23/L60	through pin-pointing the	6/23/L14	Inside is
solo boy.	10/23/L26	1/23/L142	uncomfortable	Screaming at a other.	8/23/L85	behaviour.	7/23/L15	organized, neat
	10/23/L55	3/23/L206			9/23/L100		8/23/L17	and comfortable.
1/23/L93	10/23/L83	1/23/L171	3/23/L85	2/23/L64	No other child gets	1/23/L232 Opinion:	8/23/L60	3/23/L14
Opinion:	10/23/L151	1/23/L216	5/23/L145	1/23/L176	involved.	Teacher distinguishes	9/23/L14	4/23/L69 Quite.
Mixed	10/23/L155	2/23/L35	11/23/L187	Hits for personal gain		between 'good' and 'bad'	10/23/L15	
groupings not	11/23/L146	2/23/L74	11/23/L205		1/23/L144	days.	10/23/L131	
often.	Friendly play	2/23/L129	Activities involved	2/23/L84	1/23/L148		11/23/L74 No	4/23/L36
		3/23/L38	tricks.	Jumps queue and	2/23/L43	2/23/L33	toys packed out	8/23/L112
1/23/L95	1/23/L205	3/23/L47		grabs soap.	No verbal	5/23/L34	in morning.	8/23/L124
Opinion:	3/23/L204	4/23/L38	3/23/L89 Children		communication of	5/23/L192		11/23/L165
Groupings	9/23/L98	4/23/L40	do not respond to	2/23/L92 Opinion:	anger.	6/23/L160	1/23/L168	Inside after
change, but	Sportsmanship	4/23/L65	volunteer's	Rudeness-question		7/23/L95	7/23/L106 Noisy	playing outside
not as often.		4/23/L117	questions.	empathy.	1/23/L149	7/23/L108	outside.	
	1/23/L215 Sharing.	5/23/L36			2/23/L76	10/23/L169		7/23/L13 Dark
1/23/L170		6/23/L36	3/23/L91	2/23/L134	4/23/L94	11/23/L137	1/23/L186	
1/23/L204	2/23/L30 Musical	6/23/L57	A girl becomes	4/23/L32	6/23/L100	11/23/L228	2/23/L60 Too	8/23/L14 Cold
4/23/L28	dance.	6/23/L86	upset because of a	5/23/L191	7/23/L155	Teacher comforts hurt	many children	
4/23/L30		6/23/L111	friend bothering	Screaming at another	7/23/L58	child.	outside creates	8/23/L111
4/23/L44	2/23/L40 Smiling as	7/23/L24	her.	and pointing into	7/23/L74		tension.	Warmer than in
4/23/L89	going outside.	8/23/L40		face.	8/23/L82	2/23/L34		the morning.
4/23/L91		8/23/L73	3/23/L96 P.A.T		8/23/L138	10/23/L177	1/23/L192	
5/23/L21	2/23/L46	8/23/L92	EXCO happy with	2/23/L143	11/23/L98	10/23/L189	4/23/L13	11/23/L69
5/23/L24	2/23/L48	8/23/L215	interaction.	2/23/L51	Silent stare from	Sighs at the aggressive	4/23/L137	1/23/L117
5/23/L48	7/23/L65	9/23/L43		5/23/L165 6/23/L48	participants.	child/group.	6/23/L138	Interesting
5/23/L187	7/23/L155	9/23/L106	3/23/L98	8/23/L137			7/23/L143	themes.
6/23/L22	8/23/L169	9/23/L229	3/23/L105	9/23/L74	1/23/L154 Opinion: Do	2/23/L67	9/23/L15	
						6/23/L157 Teacher		

6/23/L24	9/23/L149	10/23/L102	8/23/L175	10/23/L104 Grabbing	not apologize on own.	responds with	9/23/L123
6/23/L34	10/23/L54 Taking	10/23/L173	3/23/L77	before discussing		distinction right from	9/23/L183
1/23/L29	turns.	11/23/L52	Verbal control over	things verbally.	2/23/L32	wrong to the hurt party.	10/23/L69
1/23/L64		11/23/L109	children.		Excluded child is		10/23/L129
4/23/L22	2/23/L72	Structures and routines.		2/23/L160	unsure.	2/23/L80	10/23/L199
6/23/L98	2/23/L212		3/23/L99 Listen	9/23/L89		Teacher responds that	Sunny outside.
6/23/L107	2/23/L219	1/23/L70	well to rules.	10/23/L45	2/23/L34	she will be putting both	
6/23/L149	3/23/L173	8/23/L87		Threatening other to	2/23/L56	parties in time out.	1/23/L193
6/23/L150	6/23/L35	11/23/L30	3/23/L103	lose friendship.	2/23/L147		2/23/L119
6/23/L152	7/23/L157	Classes follow own times.	5/23/L157 Children		2/23/L248	2/23/L94	3/23/L156
7/23/L44	7/23/L179		get individual turns	2/23/L164	5/23/L34	Music teacher	4/23/L138
7/23/L44	9/23/L23	1/23/L74	to touch the dog.	10/23/L88	7/23/L96	experience the hitting of	9/23/L182 Toys
7/23/L45	9/23/L31	Structure before an		1/23/L145	8/23/L82	self as "strange."	in the afternoon.
7/23/L52	9/23/L154	activity.	3/23/L108 children	2/23/L31	9/23/L75		
7/23/L61	9/23/L199		asked dog to give	6/23/L27 Excluded.	Normal activity	2/23/L136	1/23/L194
7/23/L105	10/23/L35	1/23/L110	high five.		proceeds after	3/23/L123	2/23/L18
7/23/L112	10/23/L68	8/23/L68 Schedule		2/23/L170	aggressive reaction.	4/23/44	2/23/L119
7/23/L114	10/23/L162	adjusted.	3/23/L108	4/23/L94		4/23/L111	2/23/L119
7/23/L151	11/23/L42		5/23/L113	5/23/L96	2/23/L52	7/23/L84	2/23/L201
7/23/L152	11/23/L113	1/23/L116	5/23/L146	6/23/L95	Child shows no sorry	9/23/L50	3/23/L17
7/23/L155	11/23/L122	2/23/L39	5/23/L154	7/23/L163	expressions.	Teacher responds	5/23/L14
7/23/L155	Friendly Physical /	2/23/L133	5/23/L158	7/23/L74		verbally and asks for a	6/23/L13
7/23/L156	rough play.	Children independent	5/23/L163	Kicks other.	2/23/L53	reason.	6/23/L139
7/23/L169		regarding clothing.	5/23/L177		3/23/L168		6/23/L170
7/23/L175	3/23/L32		8/23/L169	2/23/L213	2/23/L85	2/23/L139	7/23/L17
7/23/L176	5/23/L48	11/23/L69 1/23/L117	11/23/L184	4/23/L161	2/23/L69	The teacher gave the	7/23/L143
8/23/L30	7/23/L31	Visual and interesting	11/23/L192	3/23/L189 Disrupting	Child confronts wrong	angry child what he/she	8/23/L15
8/23/L32	9/23/L190 Calm	themes.	11/23/L200	others activities.	doing child verbally.	wanted.	8/23/L58
8/23/L68	learners in eating		11/23/L204				8/23/L75
8/23/L70	time.	1/23/L129	11/23/L225	2/23/L222	2/23/L57	2/23/L163	8/23/L214
8/23/L70		1/23/L196	11/23/L229 Happy	3/23/L192	10/23/L75	6/23/L158	9/23/L15
8/23/L71	3/23/L33	4/23/L81	(laugher and hands	7/23/L89	10/23/L146 Seeking	6/23/L164	9/23/L183
8/23/L77	5/23/L49	6/23/L85	clapping)	11/23/L135 Teasing	others to see that he is	7/23/L91	10/23/L130
8/23/L92	6/23/L40	11/23/L84			angry.	7/23/L187	10/23/L201
8/23/L208	7/23/L27 Healthy	11/23/L114	3/23/L109	2/23/L228 Hitting		8/23/L120	11/23/L15
8/23/L209	food in lunch boxes.	Teacher provides	5/23/L117 P.A.T	others with object.	2/23/L66	10/23/L141	11/23/L74
9/23/L23		individual attention for	regulations.		2/23/L78	Teacher responds to hurt	Supervision
9/23/L27	3/23/L147 Opinion:	cognitive support.		2/23/L234	2/23/L243	child with verbal	outside.
9/23/L28	children gave each		3/23/L111	3/23/L122	4/23/L33	guidelines.	
9/23/L39	other turns during	1/23/L130	11/23/L238	3/23/L165 3/23/L45	4/23/L152		1/23/L210
9/23/L40	P.A.T. visit.	1/23/L174	Children do have	4/23/L104	6/23/L31	2/23/L166 Responds to	2/23/L119
9/23/L67		5/23/L41	questions.	4/23/L112	6/23/L102	'hurt' child by letting	2/23/L201
9/23/L68	4/23/L56	6/23/L39		6/23/L116	6/23/L117	him/her sit with her.	4/23/L137
9/23/L69	9/23/L36 Calmer	6/23/L112	3/23/L112	7/23/L81	6/23/L156		9/23/L182 Hot
9/23/L70	and friendlier in	9/23/L97	5/23/L173	Hitting	6/23/L163	2/23/L225 Teacher	in the afternoon.

9/23/L71	morning.	9/23/L203	8/23/L195		7/23/L79	noticed aggressive	
9/23/L78		Gives children verbal	11/23/L234	2/23/L242	7/23/L90	behaviour and stops it.	2/23/L18
9/23/L86	5/23/L53 Responds	instructions: Repeat as	Activities like	Pulls others pants	7/23/L93		3/23/L17 windy.
9/23/L88	good to aggressive	learners are not listening.	brushing	down.	7/23/L163	2/23/L231 Teacher	
9/23/L104	child in another				8/23/L211	removes objects that	2/23/L158
9/23/L134	class.	1/23/L139	3/23/L115	2/23/L247	9/23/L211	were used to hurt.	2/23/L119
9/23/L135		1/23/L151	5/23/L119	9/23/L99	10/23/L56		2/23/L201
9/23/L137	5/23/L56	4/23/L83	5/23/L135	9/23/L224	11/23/L95	2/23/L236	9/23/L209
9/23/L139	7/23/L40 Respect	5/23/L40	8/23/L130	11/23/L102	11/23/L134	3/23/L188	Scooters make a
9/23/L153	for own property.	7/23/L37	8/23/L152	Throwing objects.		3/23/200	noise.
9/23/L158		8/23/L205	8/23/L174		Tells teacher about	5/23/L30	
9/23/L192	6/23/L87	11/23/L105	8/23/L188	3/23/L29	occurrence (see also	5/23/L98	2/23/L201
9/23/L193	Good class	11/23/L172	11/23/L181	Sticks tongue out at	teacher knowledge)	5/23/L167	3/23/L156
9/23/L197	behaviour.	11/23/L189	11/23/L199	other.		6/23/L103	6/23/L139
9/23/L205		11/23/L216	11/23/L230		2/23/L77	9/23/L213	Physical
9/23/L210	6/23/L109	11/23/L231	Children busy with	3/23/L184	5/23/L94	10/23/L170	educational
9/23/L210	8/23/L34	Handles noise through	something else still	Boy hits and waits	5/23/L96	11/23/L138	activities,
9/23/L215	8/23/L76	getting attention (bell and	gives attention.	for response.	6/23/L50	Deals with situation	equipment not
9/23/L216	10/23/L32	counts when children			11/23/L99 Responding	through discussion.	used to full
9/23/L217	10/23/L34	becomes loud)			with anger.		potential.
9/23/L219	10/23/L235		3/23/L117	3/23/L196 Group		2/23/L237	
9/23/L223	11/23/L91 Including	1/23/L141	3/23/L140 Teacher's	destroying others	2/23/L92 Opinion:	4/23/L113	4/23/L21
10/23/L25		2/23/L140	opinion that they	built object.	Responds with no	9/23/L214	Outside after
10/23/L27	7/23/L124	4/23/L84	like it.		remorse.	Sends to 'thinking chair'	movement.
10/23/L74	8/23/L33	11/23/L105		4/23/L49			
10/23/L86	9/23/L73	11/23/L107	3/23/L119	9/23/L48 Biting.	2/23/L137		
10/23/L138	9/23/L151	Verbally praise	5/23/L122		8/23/L212	2/23/L244	4/23/L43
10/23/L139	10/23/L98		5/23/L133	4/23/L147 Talking in	1/23/L165	3/23/L125	9/23/L60
10/23/L142	11/23/L25 Pushing	1/23/L156	5/23/L151	a loud disrespectful	Child gives reason for	5/23/L32	Eating outside.
10/23/L144	each other on the	Teacher does not address	5/23/L159	voice to teacher.	aggressive behaviour.	7/23/L86	
10/23/L146	swings.	aggressive child, but pays	5/23/L174			Teacher demands	4/23/L140
10/23/L149		attention to hurt child.	8/23/L152	5/23/L60 Tantrum.	2/23/L145 Learners	apology.	5/23/L84
10/23/L155	7/23/L170 Asking		11/23/L185		communicate on the		9/23/L123 No
10/23/L170	before taking.	1/23/L158	11/23/L188	7/23/L94 Strangling	problem.	3/23/L30	activities packed
10/23/L208		2/23/L83	11/23/L218			6/23/L117	out in the
10/23/L216	7/23/L171	3/23/L26	11/23/L237	8/23/L122	2/23/L216	11/23/L97 Teacher	afternoons by
10/23/L231	8/23/L89	3/23/L31	Spontaneous	8/23/L158 Threaten.	6/23/L55	responds with "oo no".	the teachers.
11/23/L24	10/23/L221	4/23/L41	discussions on		9/23/L227		
11/23/L28	Respond to	4/23/L86	animals.	9/23/L165 Opinion	Child stops behaviour	3/23/L93 Responds by	5/23/L13
11/23/L85	negativity with no	4/23/L88		one aggressive action	on his own.	giving 'hurt' child what	5/23/L84
11/23/L89	reaction.	5/23/L45	3/23/L121	or change effects		she/he wants.	6/23/L13
11/23/L90		5/23/L125	5/23/L150	whole class.	2/23/L226		6/23/L138
11/23/L120	8/23/L51 Opinion:	5/23/L185	8/23/L154	9/23/L212 Middle	5/23/L33 Aggressive	4/23/L49	7/23/L15
11/23/L123	gentle on days of	6/23/L37	Volunteer responds	finger to another.	child responded to	Refers to children as	7/23/L145
11/23/L123	P.A.T. visits.	7/23/L26	friendly.		teacher.	'busy'.	8/23/L214
							9/23/L15

11/23/L133 11/23/L140 11/23/L145 Groupings according to gender.	8/23/L167 Wash hands 8/23/L203 Working together as a group.	8/23/L126 11/23/L116 Control through groups and placement.	3/23/L122 hits during P.A.T visit 3/23/L127 Children playing related games.	10/23/L99 "Hates" another. 10/23/L112 Opinion: Angry child's anger becomes worse as day goes on.	2/23/L230 6/23/L29 Hurt child walks away. 2/23/L260 Opinion: child gets bored with wrong behaviour if no reaction from others.	4/23/L51 9/23/L49 Phoned Parents. 4/23/L108 Responds by addressing the wrong party.	10/23/L14 10/23/L130 11/23/L15 Cold
1/23/L213 4/23/L25 4/23/L79 5/23/L29 7/23/L173 10/23/L31 Groups change.	9/23/L130 Helping teacher 9/23/L146 Helping each other 9/23/L160 Careful not to hurt each other.	1/23/L102 1/23/L164 4/23/L166 Can not address behaviour: too busy – limited time.	3/23/L128 Boy does not want the volunteer and dog to go away.		3/23/L46 4/23/L158 4/23/L163 Activity change after occurrence of aggressive behaviour.	4/23/L116 Acts assertive.	5/23/L21 5/23/L27 7/23/L62 8/23/L27 10/23/L164 11/23/L132 Some inside when should be outside.
2/23/L47 2/23/L49 2/23/L156 2/23/L211 3/23/L40 3/23/L174 2/23/L132 4/23/L44 4/23/L153 4/23/L159 5/23/L22 5/23/L23 1/23/L51 3/23/L202 4/23/L24 3/23/L175 4/23/L45 4/23/91 5/23/L48 6/23/L21 6/23/L24 6/23/L33 6/23/L56 6/23/L174 6/23/L174 7/23/L63 7/23/L183 8/23/L37 8/23/L78	9/23/L170 Good behaviour in work time. 9/23/L190 celebrating birthday 9/23/L200 Energetic after party. 9/23/L233 Opinion: Girls verbal aggression decreased.	2/23/L59 9/23/L37 9/23/L77 9/23/L151 9/23/L215 9/23/L221 10/23/L73 Structure and routines in other classes.	11/23/L240 Dogs comfortable level kept in mind.		3/23/L126 Child follows teachers request and gives apology. 3/23/L126 2/23/L70 Group continue with what they were busy with.	5/23/L143 Threatens to put in "time out"	5/23/L26 6/23/L13 6/23/L138 7/23/L17 8/23/L61 9/23/L16 10/23/L16 11/23/L14 Long sleeves on outside.
	2/23/L80 Time out.	2/23/L96 Opinion: Making distinctions, but sometimes with the wrong parties.	3/23/L131 5/23/L179 8/23/L125 8/23/L206 11/23/L173 11/23/L241 Children greet and thank the volunteer.		3/23/L185 6/23/L32 7/23/L49 7/23/L49 8/23/L213 Normal play proceed after aggressive action.	5/23/L144 5/23/L170 Split up the group.	5/23/L84 wet
	10/23/L31 10/23/L143 10/23/L218 11/23/L126 Chasing each other. (aan- aan)	2/23/L114 3/23/L39 3/23/L34 4/23/L67 6/23/L85 11/23/L22 11/23/L51 Adjustment for individual learners.	3/23/L147 5/23/L116 5/23/L134 5/23/L155 5/23/L176 8/23/L169 Opinion: children gave each other turns during P.A.T. visit.		3/23/L193 10/23/L148 Walks away from aggressive confrontation.	6/23/L153 Verbal discussion leads to anger.	5/23/L187 9/23/L27 9/23/L152 9/23/L180 10/23/L64 10/23/L81 10/23/L173 Activities packed out.
	3/23/L187 10/23/L39 10/23/L168 10/23/L235 Seeks guidance how to	2/23/L139 11/23/L107	5/23/L112		4/23/L35 4/23/L149 Aggressive child still angry. 4/23/L105	7/23/L48 7/23/L166 7/23/L187 Asks them to be "nice." 9/23/L97 Asks the learner to stop. 10/23/L40 Accidents are dealt with as accidents.	5/23/L189 8/23/L18 8/23/L59 Rain.
						10/23/L193 Opinion: Teacher tired of addressing repeated aggressive behaviour.	7/23/L145 9/23/L60 9/23/L121 Undressing later

9/23/L22 9/23/L72 9/23/L101 9/23/L148 9/23/L149 9/23/L21010/ 23/L67 10/23/L83 10/23/L150 10/23/L210 10/23/L233 11/23/L23 11/23/L88 11/23/L120 11/23/L145 Mixed gender groups. 2/23/L63 7/23/L157 7/23/L151 9/23/L29 9/23/L67 10/23/L56 11/23/L26 11/23/L48 Crowded group. 2/23/L153 5/23/L34 6/23/L23 6/23/L172 7/23/L42 7/23/L61 8/23/L78 9/23/L25 9/23/L32 9/23/L81 10/23/L227 11/23/L38 Boy groups tend to play boy like games.	react from teacher. 10/23/L41 Scared to get into trouble. 10/23/L49 Comfort each other. 10/23/L57 Informs teacher of possible aggressive actions (prevention). 10/23/L159 Initiating game. 10/23/L171 10/23/L233 Concentrating while playing. 10/23/L174 Standing nicely in line, no pushing. 10/23/L210 10/23/L237 Tired later in the day. 10/23/L230 Hands folded over each other. 11/23/L36 Fantasy game 11/23/L42 Continue playing after got hurt. 11/23/L90 Interested in the objects on discussion table.	Asks the learners to freeze as way of control. 2/23/L152 Praising with stars. 2/23/L187 Opinion: prevention not always followed through 2/23/L189 4/23/L52 Opinion: Teacher distinguishes good from bad day. 2/23/L238 Thinking chair. Punishment. 2/23/L253 4/23/L156 Teachers talk to each other about situations. 3/23/L99 Listen well to rules in P.A.T visit. 3/23/L135 11/23/L199 Control by teacher in P.A.T 3/23/L181 7/23/L23 Cleanliness and first aid. 3/23/L211 Tertiary interventions. 3/23/L214 P.A.T visits was handled as a reward. 4/23/L39 Gets attention though	8/23/L132 11/23/L177 Ball throwing activity. 5/23/L130 5/23/L152 8/23/L145 8/23/L183 11/23/L193 11/23/L220 Activity: walking the dog on the lead. 5/23/L131 5/23/L153 11/23/L193 Focussed children 5/23/L134 8/23/L165 Rest are quite. 5/23/L140 5/23/L164 Grabs 5/23/L158 5/23/L183 8/23/L134 11/23/L178 Having fun. 5/23/L161 5/23/L174 8/23/L128 8/23/L147 8/23/L166 8/23/L197 11/23/L201 11/23/L239 Eager to interact with dog (include touching) 5/23/L175 11/23/L227 Careful not to hurt the dog.	Others respond by hurting back. 4/23/L114 'Back chatting' 4/23/L152 5/23/L166 Hurt child cries. 5/23/L63 5/23/L142 Aggressive behaviour continues even after teacher addressed it. 5/23/L168 6/23/L105 Ignores teacher. 6/23/L96 Hurt child tries the again even after other responded with aggression. 8/23/L140 Aggressive child leaves group. 9/23/L202 Does not listen to teacher. 10/23/L101 Does not turn to teacher with anger feelings.	in the day. 9/23/L24 Teacher is playing with the learners outside. 6/23/L61 9/23/L121 10/23/L71 10/23/L199 Warmer later in the day. 9/23/L114 Opinion: the more classes outside the more tension amongst learners. 9/23/L207 Outside activities packed away as learners are still busy. 10/23/L14 Outside after eating. 10/23/L14 Misty 10/23/L33 Less classes outside less noise. 10/23/L64 Not enough supervision. 10/23/L82 11/23/L31 Supervision increases.
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2/23/L168 6/23/L25 6/23/L33 6/23/L151 7/23/L99 7/23/L152 7/23/L160 8/23/L35 8/23/L69 9/23/L28 9/23/L35 9/23/L69 9/23/L131 9/23/L142 9/23/L156 9/23/L221 10/23/L37 10/23/L154 10/23/L224 11/23/L32 11/23/L125 Group dynamics change when other class is with as playing with other class.	2/23/L142 11/23/L110 Cleans up class. 11/23/L118 10/23/L214 Asks teacher for toys 11/23/L142 Excitement about fire department 11/23/L212 Listening well during P.A.T. visit.	asking learners to copy movement. 4/23/L51 Phone parents and discuss behaviour. 4/23/L82 4/23/L85 2/23/L131 11/23/L161 Gives learners independence in what to do. 4/23/L87 11/23/L115 Control through rhymes like "handjies in die mandjie." 4/23/L116 Puts the distinction between good and bad behaviour in the learners hands. 5/23/L35 6/23/L38 6/23/L90 6/23/L115 11/23/L56 11/23/L144 Structures and routines differ from normal. 5/23/L93 7/23/L78 Follows through with classroom rules. 5/23/L95 Assertive. 6/23/L22	5/23/L185 8/23/L126 11/23/L174 Group by group. 7/23/L190 8/23/L94 Awaiting dog to come. 8/23/L51 Opinion: gentle on days of P.A.T. visits. 8/23/L128 Educational play packed out for those not wanting to attend. 8/23/L133 8/23/L145 8/23/L165 11/23/L192 11/23/L211 11/23/L226 Attention on dog. 8/23/L134 No shyness amongst learners. 8/23/L136 8/23/L168 11/23/L214 Learners wash hands. 8/23/L139 Grabs 8/23/L139 Volunteer address aggressive action. 8/23/L140				10/23/L199 Not too excited to go outside. 10/23/L217 Children are not playing with the packed out activity. 11/23/L15 Cloudy 11/23/L15 Objects lying around. 11/23/L46 Quiet in the morning. 11/23/L72 11/23/L117 It became warmer outside and allowed them to go outside.
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7/23/L88 7/23/L167 10/23/L42 10/23/L61 10/23/L75 10/23/L90 11/23/L99 11/23/L104 11/23/L139 Group split after aggression.	Encourage learners to follow classroom rules.	Aggressive child stops PAA after being addressed.					
3/23/L172 9/23/L138 9/23/L217 10/23/L37 11/23/L121 Group stays constant like previous days.	6/23/L44 Bribe with stars for good behaviour. 9/23/L237 10/23/L184 Bribery with treats for good behaviour.	8/23/L141 8/23/L200 Previously scared child takes part. 8/23/L148 11/23/L198 Blush					
4/23/L30 4/23/L36 4/23/L99 7/23/L43 7/23/L69 10/23/L63 10/23/L78 10/23/L88 10/23/L95 10/23/L157 10/23/L165 11/23/L33 11/23/L35 Groups move around together.	7/23/L28 7/23/L33 7/23/L39 Teacher regulates clothing and eating: No independence. 7/23/L32 Verbally control loudness. 7/23/L100 9/23/L41 Supervision, but not really getting involved or being attentive.	8/23/L149 8/23/L189 11/23/L196 11/23/L210 11/23/L231 Give dog treats. 8/23/L156 Teacher takes aggressive child to the office. 8/23/L157 Threatening others during P.A.T. activities.					
4/23/L101 Participant in group copies others bad behaviour.	7/23/L145 7/23/L180 10/23/L166 10/23/L219 11/23/L45 11/23/L130 Does not follow through with classroom rules. 7/23/L158 7/23/L162 7/23/L177 Comforts alone child. 7/23/L159 Encourages positive play. 7/23/L174	8/23/L177 Principal tells the teacher that aggressive child wants to attend P.A.T. visit. 8/23/L181 11/23/L226 Calm while stroking the dog. 8/23/L184 8/23/L190 Confidence amongst learners. 8/23/L185					

<p>6/23/L25 6/23/L173 7/23/L181 8/23/L71 10/23/L25 11/23/L86 Girl playing girl like games</p> <p>4/23/L150 6/23/L35 6/23/L147 10/23/L76 10/23/L148 11/23/L100 Group is back together after they split up.</p> <p>5/23/L25 Solo girl sad.</p> <p>6/23/L46 7/23/L35 10/23/L223 Want to group with own class.</p> <p>7/23/L66 9/23/L136 11/23/L92 Bored solo child.</p> <p>7/23/L77 Formed a group because of aggressive action.</p> <p>7/23/L78 Group not having fun but</p>	<p>No supervision inside</p> <p>8/23/L24 Teacher explains daily routine.</p> <p>8/23/ L 156 Takes aggressive child to the office.</p> <p>8/23/L178 Sometimes communicate aggressive actions with principal.</p> <p>9/23/L30 Supervision increases as classes become more outside.</p> <p>9/23/L33 Teacher moves closer to possible problem group.</p> <p>9/23/L133 9/23/L200 11/23/L128 Stops bad behaviour before it starts.</p> <p>9/23/L164 9/23/L210 Supervision limited to supervisors vision.</p> <p>9/23/L204 Calmly and physically removes child from another.</p> <p>9/23/L207 Does not address hygiene under children.</p> <p>10/23/L72 Encourage learners to go outside.</p>	<p>Not all children familiar with a activities with a dog.</p> <p>8/23/L187 Children like the volunteer.</p> <p>8/23/L203 11/23/L203 Working together as a group.</p> <p>11/23/L175 11/23/L190 11/23/L209 Child does not want to join.</p> <p>11/23/L178 11/23/L183 11/23/L195 Smiling</p> <p>11/23/L180 11/23/L191 11/23/L213 Good interaction.</p> <p>11/23/L187 11/23/L196 11/23/L227 Stroke the dog gently.</p> <p>11/23/L208 11/23/L239 Boy who previously did not want to take part wants to take part now.</p> <p>11/23/L224 Girl who previously did not want to take part does want to take part now.</p>					
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<p>continuing the game.</p> <p>7/23/L110 8/23/L72 9/23/L37 Bored group</p> <p>9/23/L141 Solo tries to become apart of a group.</p> <p>9/23/L167 Opinion: Playing with other class increased.</p> <p>9/23/L217 Groups play the same games as previously.</p> <p>9/23/L219 10/23/L29 Playing near each other but not interacting.</p> <p>10/23/L48 10/23/L53 10/23/L85 10/23/L92 10/23/L94 10/23/L96 10/23/L151 10/23/L229 11/23/L129 Same group play in same place.</p>	<p>10/23/L207 Time management.</p> <p>10/23/L215 10/23/L237 Time limited for providing help.</p> <p>11/23/L27 Supervision not preventing possible problem behaviour.</p> <p>11/23/L41 Helps hurt child.</p> <p>11/23/L82 Lets them play inside when not enough supervision outside.</p> <p>11/23/L83 11/23/L154 Lets them play inside when too cold outside</p> <p>11/23/L104 Teacher motivates to take care of belongings.</p> <p>11/23/L119 Teacher follow through with children request.</p>	<p>11/23/L212 Listening well</p> <p>11/23/L221 Learning appropriate interaction with the dog.</p> <p>11/23/L222 Learners control over action.</p> <p>11/23/L233 Want to take part even when its not their group.</p> <p>11/23/L242 Lovable towards the dog.</p> <p>11/23/L250 Parents confirm that child is talking about dog outside of school.</p> <p>11.23.L248 Those who did not want to join on this visit, did not want to join as they were busy building something, not because they were scared.</p>					
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<p>10/23/L60 Boy does not want to be solo.</p> <p>10/23/L70 10/23/L80 Want to play with other class</p> <p>10/23/L84 10/23/L155 Group resting.</p> <p>10/23/L145 10/23/L156 11/23/L40 11/23/L93 Group grow</p> <p>10/23/L209 Did not want other class group to intrude</p> <p>11/23/L37 Want others to play along.</p> <p>11/23/L44 Group becomes smaller.</p> <p>11/23/L49 Constructively playing with objects in morning.</p> <p>11/23/L94 Individual</p>								
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play inside. 11/23/L111 Form a group and start to play when they are finished packing up.								
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Variants:

During 6/23. encouragements for good behaviour was done more repeatedly as the student teacher's lecturer was also in the class to do observe the student teacher's lesson: could lead to feeling of insecure and unsafe amongst learners (opinion: 6/23/L131).

New girl in the class during 7/23 observation. On the first day the teacher was of opinion that she has not yet found her place (7/23/L51).

The fire department brought their fire truck. The learners were extremely excited and it was on the same day as a P.A.T visit. (11/23/L57).

Week 5 – 8 Master List of observations

The group dynamics	Positive behaviour amongst learners	Teachers way of dealing with aggressive behaviour and class management	Teachers' and learners' reactions to the P.A.T visits	Aggressive actions of learners	Reactions on aggressive actions	Teachers' experience of aggressive actions amongst learners	Outside setting	Inside setting
(Purple)	(Pink)	(Yellow)	(Blue)	(Green circle)	(Green cross)	(Orange)	(Black O)	(Black I)
12/23/L23	12/23/L27	12/23/L13	14/23/L172	12/23/L57	12/23/L57	12/23/L93	12/23/L13	12/23/L130
12/23/L23	13/23/L87	12/23/L52	17/23/L118	12/23/L92	13/23/L29	15/23/L193	12/23/L82	Inside after work
12/23/L23	14/23/L25	12/23/L138	17/23/L178	13/23/L49	18/23/L125	18/23/L39	14/23/L13	
12/23/L30	16/23/L30	12/23/L191	20/23/L195	21/23/L132	Not stopping aggressive action	Asks aggressive child to give reason.	14/23/L173	12/23/L130
12/23/L45	19/23/L75	13/23/L16	23/23/L102	Throwing things			15/23/L14	14/23/L95
12/23/L89	20/23/L22	14/23/L54	Greet/thank dog and volunteer				15/23/L170	15/23/L114
12/23/L89	20/23/L88	14/23/L98		12/23/L68	12/23/L58	13/23/L72	16/23/L69	17/23/L101
12/23/L90	22/23/L114	15/23/L15		13/23/L158	13/23/L54	15/23/L202	16/23/L155	18/23/L69
12/23/L146	22/23/L175	15/23/L121	12/23/L43	16/23/L99	13/23/L158	16/23/L42	17/23/L17	18/23/L184
12/23/L146	23/23/L32 Holding onto each other.	16/23/L14	13/23/L112	19/23/L126	14/23/L33	17/23/L204	17/23/L62	19/23/L101
12/23/L146		16/23/L67	Transferring PAA aspects to house.	19/23/L145	15/23/L82	Verbal discussion on wrong behaviour	17/23/L180	20/23/L122
12/23/L170		16/23/L154		22/23/L202	19/23/L128		18/23/L16	23/23/L14
12/23/L178	12/23/L28	17/23/L16		Screaming at another	19/23/L165		19/23/L19	23/23/L93
12/23/L184	13/23/L91	17/23/L62	12/23/L43		21/23/L84	13/23/L75	19/23/L61	Tables prepared
12/23/L185	14/23/L71	17/23/L108	13/23/L106	12/23/L99	22/23/L121	15/23/L194	20/23/L197	
13/23/L31	14/23/L194	18/23/L14	Excitement about own new puppy	15/23/L201	22/23/L174	16/23/L99	21/23/L173	14/23/L85
13/23/L36	15/23/L31	18/23/L77		16/23/L91	22/23/L203	17/23/L51	Outside after inside.	15/23/L115
13/23/L38	15/23/L86	18/23/L127		16/23/L114	23/23/L144	17/23/L203		16/23/L60
13/23/L41	15/23/L206	18/23/L148	13/23/L110 Boy got a puppy like the P.A.T. dog	16/23/L168	Did not inform teacher	18/23/L38		17/23/L102
13/23/L44	15/23/L210	19/23/L15		22/23/L171		19/23/L85	12/23/L13	18/23/L70
13/23/L88	16/23/L105	19/23/L62		Excluding another	13/23/L60	Teacher sees aggressive action.	12/23/L52	19/23/L102
13/23/L133	16/23/L173	19/23/L105			13/23/L69		12/23/L82	20/23/L123
13/23/L133	17/23/L33	20/12/L14	14/23/L96	13/23/L27	15/23/L201		12/23/L138	Good light
13/23/L144	17/23/L71	20/23/L71	23/23/L134	18/23/L123	16/23/L41	13/23/L76	12/23/L191	
13/23/L154	17/23/L183	21/23/L15	Coloring picture represents the dog.	Disrupting others activities	17/23/L192	16/23/L99	13/23/L16	14/23/L96
14/23/L24	19/23/L178	21/23/L120			17/23/L198	18/23/L38	14/23/L15	15/23/L117
14/23/L26	20/23/L45	21/23/L176			18/23/L105	18/23/L105	14/23/L54	16/23/L60
14/23/L27	20/23/L95	22/23/L81	14/23/L108	13/23/L59	21/23/L95	Asks aggressive child to stop	14/23/L98	17/23/L101
14/23/L31	21/23/L60	22/23/L147 Supervision	17/23/L119	14/23/L31	21/23/L131 Informs teacher		15/23/L17	18/23/L71
14/23/L62	21/23/L141		20/23/L141	15/23/L79			15/23/L121	18/23/L186
14/23/L72	21/23/L191	15/34/L27	23/23/L102 Group by group	Grabbing		13/23/L80	16/23/L14	19/23/L101
14/23/L173	21/23/L213	15/23/L152			15/23/L65	15/23/L203	16/23/L67	23/23/L14
14/23/L173	22/23/L102	21/23/L88		13/23/L71	18/23/L124	16/23/L43	16/23/L154	23/23/L93
14/23/L173	22/23/L118	21/23/L128	14/23/L107	17/23/L50	Tries to inform teacher	16/23/L100	17/23/L16	Neat class
14/23/L180	23/23/L55 Rough but friendly play	21/23/L215	14/23/L116	17/23/L201 Verbal rudeness		18/23/L39	17/23/L62	
14/23/L185		23/23/L47 Supervision	14/23/L127		12/23/L59	19/23/L86	17/23/L108	15/23/L116

14/23L194		providing help	14/23/L137		12/23/L96	21/23/L96	18/23/L14	18/23/L71
14/23/L195	12/23/L29		17/23/L142	13/23/L78	13/23/L27	Asks children to	18/23/L77	18/23/L186
15/23/L26	12/23/L32	21/23/L23	17/23/L153	15/23/L 190	13/23/L59	apologize	18/23/L127	19/23/L102
15/23/L26	13/23/L65	22/23/L91 Supervision	17/23/L164	17/23/L203	Did not apologize		19/23/L15	23/23/L14
15/23/L29	15/23/L189	giving individual attention	20/23/L166	18/23/L103		15/23/L194 Thinking	19/23/L62	23/23/L93 Cold
15/23/L30	16/23/L36		20/23/L172	21/23/L94		chair	19/23/L105	
15/23/L63	17/23/L184	13/23/L116	23/23/L106	22/23/L119	13/23/L81		20/23/L14	15/23/L118
15/23/L70	18/23/L31	15/23/L152	23/23/L123	23/23/L142	15/23/L204		20/23/L71	Activities inside
15/23/L96	18/23/L200	16/23/L123	23/23/L139	Hit	16/23/L44	17/23/L196	21/23/L15	to play with
15/23/L96	19/23/L154	22/23/L113 Supervision	23/23/L153	Every	16/23/L102	17/23/L199	21/23/L120	
15/23/L99	19/23/L166	increase as classes increase	one in group present	13/23/L121	18/23/L40	17/23/L205	21/23/L176	16/23/L60
15/23/L131	19/23/L182			Destroying others	19/23/L86	Time out	21/23/L176	17/23/L105
15/23/L131	21/23/L37	12/23/L22	14/23/L108	build objects	21/23/L97 Apologies		22/23/L81	20/23/L122
15/23/L132	21/23/L46	12/23/L155	17/23/L123		on teachers request	21/23/L133 Provides	22/23/L147	Warm
15/23/L141	23/23/L48	12/23/L163	17/23/L156	14/23/L32		guidelines to hurt child	Supervision	
15/23/L141	Including others	14/23/L106	20/23/L159	18/23/L37	12/23/L60			12/23/L13
15/23/L144		16/23/L107	Walking the dog on	19/23/L84	Boy comforts hurt			16/23/L63
15/23/L146	12/23/L31 Playing	16/23/L107	the lead	19/23/L163	child		12/23/L13	18/23/L73
15/23/L146	correctly with	18/23/L22		21/23/L95			Laundry	19/23/L102
15/23/L154	objects.	18/23/L41	14/23/L118	22/23/L201	12/23/L94		hanging outside.	Interesting
15/23/L179		18/23/L148	17/23/L135 Playing	Push	18/23/L39		12/23/L15 Toys	themes
15/23/L179	12/23/L31	18/23/L153	with a ball		Does not answer		in sand pit in	
15/23/L182	15/23/L71	19/23/L140		14/23/L150 Boy who	teacher		morning	16/23/L64
15/23/L183	15/23/L183	20/23/L141	14/23/L145	did not take part				18/23/L168
15/23/L187	16/23/L78	22/23/L24	17/23/L131	stabs another	12/23/L95		12/23/L83	Children art on
15/23/L208	16/23/L132	23/23/L102	20/23/L149		15/23/L67		13/23/L13	the wall
16/23/L23	16/23/L174	Control through group	20/23/L178	15/23/L64	21/23/L85		14/23/L13	
16/23/L26	17/23/L123	placement.	23/23/L120	21/23/L84 Teasing	Stops aggressive		14/23/L53	17/23/L105
16/23/L104	17/23/L165		23/23/L129		activity.		15/23/L16	Smells good
16/23/L109	21/23/L73	12/23/L35	23/23/L150	15/23/L74 Initiate	12/23/L96 Careful not		16/23/L12	
16/23/L10	22/23/L194 Taking	22/23/L93	23/23/L170 Asks	teasing	to hurt others after		16/23/L68	17/23/L102
16/23/L113	turns	Provide guidelines to hurt	the dog to do tricks	15/23/L89 Tantrum	aggressive action.		17/23/L14	Interesting
16/23/L117		boy.					18/23/L14	posters
16/23/L129	12/23/L32		14/23/L140				18/23/L76	
16/23/L131	12/23/L181	12/23/L36	14/23/L160	16/23/L37 Tripped	12/23/L101 'hurt' child		19/23/L14	17/23/L172
16/23/L161	13/23/L25	13/23/L92	17/23/L167		shows no response		19/23/L61	Opinion: more
16/23/L165	13/23/L145	20/23/L41	Grooming	17/23/L198 kicking			20/23/L15	constructive play
16/23/L169	14/23/L23	21/23/L61			12/23/L102		21/23/L14	inside than
16/23/L173	14/23/L176	21/23/L187	14/23/L111	17/23/L193 Spitting	15/23/L196		22/23/L16	outside.
16/23/L176	14/23/L181	22/23/L118	17/23/L124		16/23/L40		22/23/L81 No	
16/23/L183	14/23/L183	22/23/L178	20/23/L149	19/23/L184	18/23/L107		scooters or toys	18/23/L185
16/23/L185	15/23/L97	23/23/L56	Opportunity for	Not giving each	19/23/L86		in morning.	Locker not neat
17/23/L24	15/23/L132	Supervision does not	independence	other turns	No other child gets			
16/23/L30	15/23/L185	prevent possible problem.			involved		12/23/L22	18/23/L235
17/23/L36	16/23/L33		14/23/L112				12/23/L89	Opinion: mostly
							13/23/L37	friendly play

17/23/L69	16/23/L113	12/23/L38	14/23/L130	13/23/L159	14/23/L53	inside
17/23/L71	16/23/L165	15/23/L207	14/23/L146	14/23/L34	16/23/L127	
17/23/L72	16/23/L167	17/23/L34	17/23/L130	14/23/L152	18/23/L75	20/23/L123
17/23/L190	16/23/L180	17/23/L187	17/23/L138	14/23/L192	18/23/L156	Quiet
17/23/L191	18/23/L31	Teacher prevents rough	17/23/L160	19/23/L87	19/23/L60	
18/23/L23	18/23/L32	play.	17/23/L173	19/23/L128	22/23/L81 Only	23/23/L14
18/23/L24	18/23/L155		20/23/L147	19/23/L166	class outside	23/23/L94 Dark
18/23/L29	19/23/L27	12/23/L39	20/23/L157	20/23/L87		
18/23/L31	19/23/L32	Verbal discussion on	20/23/L176	21/23/L217	12/23/L25	23/23/L15
18/23/L32	19/23/L75	possible problem with	20/23/L178	22/23/L174	12/23/L25	23/23/L95 Warm
18/23/L94	19/23/L82	learners.	20/23/L188	23/23/L143 Activities	12/23/L107	clothes
18/23/L113	19/23/L150		23/23/L114	continue as per normal	12/23/L112	
18/23/L151	19/23/L167	12/23/L46	23/23/L116		12/23/L140	23/23/L36
18/23/L196	20/23/L43	13/23/L42	23/23/L129	13/23/L55 Verbally	13/23/L15	Screaming inside
18/23/L210	20/23/L53	13/23/L94	23/23/L150	discusses anger	13/23/L95	
19/23/L27	20/23/L84	14/23/L26	23/23/L159		14/23/L14	
19/23/L29	20/23/L133	14/23/L180	23/23/L169 Giving	13/23/L229 Proceed	14/23/L99	
19/23/L30	21/23/L25	15/23/L145	the dog a treat	with aggressive action	15/23/L17	
19/23/L32	21/23/L28	16/23/L34		even after a child asked	15/23/L123	
19/23/L74	21/23/L27	16/23/L134	14/23/L113	him to stop.	15/23/L181	
19/23/L75	21/23/L43	16/23/L163	14/23/L115		16/23/L14	
19/23/L81	21/23/L48	18/23/L25	14/23/L131	14/23/L151	16/23/L69	
19/23/L76	21/23/L69	18/23/L152	14/23/L155	15/23/L194	16/23/L153	
19/23/L113	21/23/L71	19/23/L31	17/23/L122	18/23/L106 Explains	17/23/L15	
19/23/L115	21/23/L139	19/23/L81	17/23/L157	aggressive behaviour	17/23/L109	
19/23/L142	21/23/L144	19/23/L139	20/23/L155		18/23/L15	
19/23/L143	21/23/L198	19/23/L144	20/23/L161	14/23/L191	19/23/L15	
19/23/L149	22/23/L26	21/23/L37	20/23/L188	17/23/L194 Apologize	19/23/L106	
19/23/L156	22/23/L31	21/23/L92	23/23/L110	on their own	19/23/L157	
19/23/L172	22/23/L101	21/23/L127	23/23/L113		20/23/L14	
19/23/L178	22/23/L192 Chasing	21/23/L197	23/23/L151	15/23/L76	20/23/L71	
19/23/L180	each other.	22/23/L56	23/23/L160 Smile	Moves away from	20/23/L96	
20/23/L23		Class rules not followed		aggressive action	21/23/L15	
20/23/L24	12/23/L33	through.	14/23/L114		21/23/L35	
20/23/L25	12/23/L48		Nervous	15/23/L76 Responding	21/23/L120	
20/23/L26	15/23/L198	12/23/L60		to teacher's guidelines	21/23/L176	
20/23/L27	Preventing possible	17/23/L200	14/23/L115 Proud		22/23/L49	
20/23/L36	problems by telling	18/23/L208	body language	15/23/L91	22/23/L113	
20/23/L53	teacher	18/23/L212		Want others to see that	22/23/L147	
20/23/L78		19/23/L159	14/23/L116	he/she is angry	22/23/L163	
20/23/L78	12/23/L41	22/23/L34	Wanting others to		Another class	
20/23/L79	16/23/L82 Learner	22/23/L161	see	16/23/L38 Staring at	outside.	
20/23/L83	responds to request	Comforts hurt child.		each other		
20/23/L83	from other.		14/23/L116		12/23/L52	
20/23/L90		12/23/L64	14/23/L159	21/23/L97	19/23/L72	

20/23/L87	12/23/L47	12/23/L113	14/23/L171	Still angry		Preparing outside.
20/23/L130	15/23/L67	12/23/L150	17/23/L117			
21//23L24	16/23/L79	12/23/L203	23/23/L103 Control	21//23L188		12/23/L53
21//23/L24	16/23/L92	12/23/L208	through bell	No one in class gets involved		12/23/L83
21/23/L28	17/23/L77	13/23/L39				18/23/L128
21/23/L43	18/23/L109	14/23/L77	14/23/L117			19/23/L174
21/23/L54	21/23/L78	15/23/L38	17/23/L116			21//23L118
21/23/L55	21/23/L87	15/23/L101	17/23/L135			21/23/L195
21/23L59	21/23/L130	15/23/L133	17/23/L140			Providing with objects to play with.
21/23/L73	21/23/L128	15/23/L156	18/23/L231			
21/23/L75	21/23/L214	15/23/L211	20/23/L142			12/23/L82
21/23/L76	22/23/L37	16/23/L44	20/23/L173			12/23/L140
21/23/L93	22/23/L93	16/23/L137	20/23/L173			13/23/L14
21/23/L126	Responds correctly	17/23/L83	23/23/L11			14/23/L13
21/23/L129	to negativity	18/23/L140	23/23L105			15/23/L14
21/23/L142		18/23/L167	23/23/L152			15/23/L124
21/23/L183	12/23/L55	19/23/L45	23/23/L173 Eager			15/23/L173
21/23/L190	12/23/L181	20/23/L54				16/23/L154
21/23/L191	13/23/L25	20/23/L102	14/23/L121			17/23/L15
21/23/L19621	13/23L87	20/23/L140	20/23/L155			17/23/L62
/23/L20822/2	13/23/L108	21/23/L156	20/23/L182			20/23/L14
3/L25	16/23/L29	22/23/L65	23/23/L112			20/23/L69
22/23/L25	16/23/L35	22/23/L105	Excitement			Sunny
22/23/L27	16/23/L180	23/23/L77				
22/23/L30	17/23/L34	Structure and routine.	14/23L118			12/23/L111
22/23/L40	17/23/L117		14/23/L129			22/23/L17
22/23/L46	17/23/L126	15/23/L39	17/23/L168			Objects standing around outside
22/23/L56	18/23/L28	17/23/L84	20/23/L145			
22/23/L90	18/23/L99	17/23/L45	20/23/L157			12/23/L138
22/23/L95	18/23/L203	17/23/L85	Volunteer explains activities			13/23/L146
22/23L96	20/23/L29	Gets attention and calming before learners come inside				16/23/L109
22/23/L98	20/23/L46		14/23/L119			20/23/L118
22/23/L98	20/23/L150		20/23/L180			20/23/L198
22/23/L101	20/23/L169	12/23/L83	Nervous but takes part			Activities packed out in the afternoon
22/23/L102	20/23/L177	16/23/L124				
22/23/L110	20/23/L179	20/23/L39				12/23/L140
22/23/L111	20/23/L181	22/23/L148 Supervision but not interacting with children	14/23/L121			13/23/L13
22/23/L114	21/23/L90		14/23/L134			15/23/L122
22/23/L116	23/23/L119		20/23/L152			
22/23/L156	23/23/L146		20/23/L178 Those afraid still take part			
22/23/L158	23/23/L157	12/23/L108				
22/23/L158	23/23/L158	12/23/L188				
22/23/L164	Laughter	12/23/L200	14/23L124			
22/23/L165		13/23/L26	14/23/L170			

22/23/L170	12/23/L98	13/23/L131	20/23/L196			15/23/L173
22/23/L180	12/23/L180	14/23/L28	23/23/L177 Hug dog			17/23/L107
22/23/L188	13/23/L113	15/23/L99				20/23/L118
22/23/L191	14/23/L75	15/23/L 139				warm
22/23/L194	14/23/L184	16/23/L125	14/23/L125 Child from other class want to take part			12/23/L145
23/23/L22	15/23/L36	16/23/L183				13/23/L115
23/23/L26	15/23/L87	17/23/L42				15/23/L151
23/23/L26	15/23/L136	12/23/L34				20/23/L96
23/23/L33	17/23/L24	19/23/L33	14/23/L168			21/23/L35
23/23/L47	18/23/L32	19/23/L151	14/23/L128			22/23/L115
23/23/L49	18/23/L120	20/23/L32	17/23/L146			Loud outside
23/23/L61	18/23/L150	20/23/L51	17/23/L174			
Same gender group	18/23/L212	20/12/L85	20/23/L162			12/23/L167
	19/23/L185	21/23/L63	23/23/L111			16/23/L15
	20/23/L46	21/23/L69	23/23/L167			20/23/L71
12/23/L24	20/23/L81	22/23/L38	Spontaneous informal discussion			Eating outside.
12/23/L104	21/23/L54	22/23/L122				
12/23/L106	21/23/L71	22/23/L190				12/23/L213
12/23/L108	21/23/L70	Other class routine and structures.	14/23/L132			Opinion: calmer than usual in the afternoon
12/23/L171	21/23/L75		14/23/L135			
12/23/L190	21/23/L147		17/23/L117			
13/23/L24	21/23/L143	12/23/L118	17/23/L126			13/23/L14
13/23/L32	21/23/L206	13/23/L84	17/23/L137			21/23/L125
13/23/L46	22/23/L29	Positive frame of mind	20/23/L150			Outside after eating.
13/23/L47	22/23/L27		20/23/L169			
13/23/L63	22/23/L59	12/23/L141	20/23/L177			
13/23/L86	22/23/L91	15/23/L130	20/23/L179			
13/23/L95	22/23/L112	16/23/L142	20/23/L181			
14/23/L24	22/23/L117	18/23/L84	23/23/L119			13/23/L16
14/23/L29	22/23/L169	18/23/L131	23/23/L146			15/23/L15
14/23/L60	23/23/L35 Verbal discussion.	18/23/L192	23/23/L126			16/23/L155
14/23/L60		19/23/L116	23/23/L157			18/23/L16
14/23/L61		Routine adjusted for individuals.	23/23/L158			18/23/L76
14/23/L179	12/23/L105		Laughing			19/23/L16
15/23/L25	16/23/L118					19/3/L106
16/23/L27	19/23/L170	12/23/L142	14/23/L133			20/23/L15
16/23/L27	22/23/L179	14/23/L69	23/23/L174			20/23/L69
16/23/L75	Excluded child included later.	18/23/L161	Screaming of excitement			21/23/L15
16/23/L76		19/23/L158 Following class rules.				22/23/L14
16/23/L81						22/23/L150
16/23/L84	12/23/L150		14/23/L134			Long sleeves and shoes
16/23/L164	16/23/L106	12/23/L143	14/23/L149			
16/23/L172	18/23/L140	15/23/L142	14/23/L160			
16/23/L175	18/23/L220	18/23/L84	14/23/L167			13/23/L116
16/23/L179	18/23/L226	18/23/L131	17/23/L127			15/23/L152

17/23/L25	19/23/L135	18/23/L192	17/23/L157			16/23/L123
17/23/L73	19/23/L148 Clean class	19/23/L119 Individual attention to those still working.	17/23/L169			22/12/L113
17/23/L82			23/23/L118			Supervision increased as classes increase
17/23/L190	12/23/L162		23/23/L106			
18/23/L85	Celebrating birthday	12/23/L149	23/23/L110			
18/23/L88		14/23/L116	23/23/L154			13/23/L138
18/23/L111		14/23/L158	23/23/L128			14/23/L67
18/23/L129	12/23/L165	14/23/L171	23/23/L156			Quieter and calmer outside
18/23/L135	Responds good to bribery	15/23/L133	23/23/L			
18/23/L193		16/23/L105	Want to touch dog			
19/23/L26		16/23/L170				
19/23/L77	12/23/L176	17/23/L43	14/23/L137			13/23/L149
19/23/L82	21/23/L58 Sharing	17/23/L178	Calming the dog			14/23/L99
19/23/L182		18/23/L126				15/23/L77
20/23/L22		18/23/L138	14/23/L139			15/23/L143
20/23/L79	12/23/L182	18/23/L141	17/23/L145 Others busy with something else want to see			15/23/L171
20/23/L135	12/23/L193	18/23/L166				16/23/L69
21/23/L38	21/23/L210 Playing with objects packed out	18/23/L218				16/23/L153
21/23/L47		18/23/L226				20/23/L135
21/23/L53		19/23/L78				Scooters and toys out
21/23/L72	21//23L201 Not playing with objects packed out	19/23/L83	14/23/L141			
21/23/L71		192/3/L129	14/23/L148 happy dog			13/23/L152
21/23/L140		20/23/L166				15/23/L84
21/23/L144		20/23/L171				No one plays on the packed out activity.
21/23/L146		20/23/L165	14/23/L142			
21/23/L150	12/23/L186	20/23/L171	17/23/L180			
21/23/L195	13/23/L32	20/23/L182	20/23/L194			
21/23/L199	13/23/L44	22/23/L104	23/23/L179 Does not want visit to stop			
22/23/L29	13/23/L47	23/23/L36				14/23/L14
22/23/L90	14/23/L186	23/23/L60				14/23/L53
22/23/L123	15/23/L188	23/23/L74	14/23/L147			15/23/L14
22/23/L168	16/23/L166	23/23/L103	17/23/L161			16/23/L15
22/23/L174	19/23/L173	Control through use of bell	Volunteer guiding appropriate behaviour			16/23/L68
23/23/L27	20/23/L34	12/23/L152				16/23/L153
23/23/L35	22/23/L166 Pushing each other on the swing	14/23/L81				17/23/L14
23/23/L66		15/23/L44	14/23/L150 Boy who did not take part stabs another			17/23/L62
Mixed gender group.	12/23/L186	17/23/L90				18/23/L14
	13/23/L97	19/23/L42				18/23/L75
12/23/L109	15/23/L70	21/23/L102				19/23/L14
12/23/L110	15/23/L100	21//23L105	14/23/L155			19/23/L60
12/23/L148	15/23/L142	22/23/L135	14/23/L157 More conformable			19/23/L105
12/23/L171	15/23/L149	Last minute adjustments to routine				20/23/L14
12/23/L193	16/23/L28					20/23/L71
13/23/L35						21/23/L14
						21//23L118

13/23/L39	16/23/L111		14/23/L156 Blush			21/23/L173
13/23/L107	17/23/L30	12/23/L157				22/23/L14
13/23/L108	17/23/L75	19/23/L132	14/23/L159			22/23/L81
14/23/L30	18/23/L22	23/23/L26	17/23/L144			22/23/L147
14/23/L68	21/23/L200	Using counting to await	20/23/L164 Like			cold
15/23/L29	21/23/L208	behaviour.	the volunteer			
15/23/L33	22/23/L158					15/23/L14
15/23/L70	22/23/L181	12/23/L158	14/23/L161			Movement
15/23/L98	22/23/L181	18/23/L209	20/23/L168 Gentle			
15/23/L101	23/23/L28	Hug learner	and careful with			15/23/L18
15/23/L140	23/23/L65 Friendly		dog			15/23/L208
15/23/L197	play	12/23/L192				17/23/L74
16/23/L126		13/23/L98	14/23/L164			17/23/L185
16/23/L135	18/23/L211	18/23/L91	14/23/L169			18/23/L30
16/23/L176	19/23/L113	19/23/L70 Assessing	17/23/L172			21/23/L182
17/23/L27	22/23/L164	learners individually	20/23/L153			Some inside
17/23/L41	Friendly play with		20/23/L184			when suppose to
18/23/L89	objects	13/23/L83	23/23/L149			be outside
18/23/L98		19/23/L42	23/23/L155			
18/23/L119	12/23/L193	21/23/L151	23/23/L158 Even			15/23/L56
18/23/L165	20/23/L160	Discuss program with	though it is not their			21/23/L118
18/23/L197	23/23/L44	other teachers	group they want to			Setting does not
18/23/L198	Concentrating while		take part			change
19/23/L30	playing	13/23/L118				
19/23/L34		15/23/L187	14/23/L165			15/23/L123
19/23/L35	12/23/L195 Anger	Teacher playing with the	17/23/L170			15/23/L172
19/23/L41	is discussed	children	17/23/L173			19/23/L105
19/23/L113	verbally		20/23/L147			No activity
20/23/L136		13/23/L170 Principal talks	23/23/L162			packed out in
21/23/L29	12/23/L204	the class about bully	Quiet and calm			the afternoon
21/23/L33	13/23/L68	behaviour	while participating			
21/23/L41	20/23/L37					15/23/L172
21/23/L57	Sportsmanship	13/23/L160 Different	14/23/L166 Tired			18/23/L157
21/23/L138		routine as other days	dog			22/23/L51
21/23/L154	12/23/L206					Gardener
21/23/L212	16/23/L118	14/23/L76	14/23/L200			working
22/23/L45	16/23/L178 Tired	17/23/L36	Opinion: much			
22/23/L41	children later in the	18/23/L225	more comfortable			16/23/L69
22/23/L167	day	18/23/L220				Windy
22/23/L173		19/23/L79	14/23/L205 Loud			
22/23/L176	12/23/L213	19/23/L133	during P.A.T.			16/23/L168
22/23/L183	Opinion: calmer	Teacher instructs but	(excitement)			22/23/L115
22/23/L189	than usual in the	children do not listen.				Many children
22/23/L192	afternoon		17/23/L121			
23/23/L22		14/23/L87	17/23/L128			17/23/L108

23/23L39	13/23/L40 Taking care own properties	21/23/L202	17/23/L155			Selling sweets
23/23/L44		19/23/L54	23/23/L118			
23/23/L46		Opinion: limited time for teachers	23/23/L104			18/23/L14
Solo child	13/23/L88		23/23/L180 Child who did not want to partake is taking part and having fun			18/23/L75
	13/23/L104					22/23/L14
12/23/L26	14/23/L61	14/23/L178				22/23/L81
12/23/L185	14/23/L66	16/23/L21				22/23/L149 Wet
13/23/L24	16/23/L127	Teacher interacting with learners	17/23/L125			18/23/L34
13/23/L154	17/23/L76		17/23/L149			18/23/L75
14/23/L27	18/23/L117		20/23/L151			18/23/L200
14/23/L181	18/23/L195	15/23/L75	20/23/L158			22/23/L97
14/23/L193	19/23/L28	18/23/L143	20/23/L160			23/23/L15
15/23/L184	19/23/L120	20/23/L131	20/23/L174			23/23/L14 Rainy
15/23/L189	19/23/L171	22/23/L39	20/23/L186			
15/23/L209	21/23/L31	22/23/L53	20/23/L190			18/23/L154
16/23/L24	21/23/L56	22/23/L199 Supervision stops potential problem	23/23/L130			19/23/L77
16/23/L28	21/23/L54		Confidence			19/23/L83
16/23/L109	21/23/L206					22/23/L48
16/23/L120	22/23/L41	16/23/L22	17/23/L129			22/23/L127
16/23/L129	22/23/L169	Gives learners a sense of independence	20/23/L162			Screaming
16/23/L161	23/23/L29		Volunteer praises			
16/23/L179	23/23L22					19/23/L14
16/23/L184	23/23/L24					19/23/L104
17/23/L26	23/23/L53	16/23/L51	17/23/L132			21/23/L14
17/23/L32	23/23/L57	21/23/L134	23/23/L164 Rather wants to Finnish activity			21/23/L119
17/23/L38	23/23/L64 Fantasy play	Teacher dislikes children playing inside.				21/23/L173
17/23/L69						22/23/L148
17/23/L81						Cloudy
17/23/L190	13/23/L129	16/23/L86	17/23/L136			
18/23/L23	13/23/L151 Tired after longer play	18/23/L132	20/23/L169			19/23/L17 No laughter
18/23/L25		18/23/L139	20/23/L189			
18/23/L32		19/23/L134	23/23/L123			
19/23/L26	13/23/L102 Wrong behaviour corrected by themselves	23/23/L76	Comfortable dog			
19/23/L28		Praise children				19/23/L17 No smiling
19/23/L29			17/23/L141			
19/23/L32			23/23/L171			
19/23/L162	13/23/L108	16/23/L94 Accidents are treated as accidents	'Hygiene			19/23/L187
20/23/L24	16/23/L76					Music playing
202/3/L36	16/23/L85					
20/23/L44	16/23/L185	16/23/L171	17/23/L177			
29/23/L52	18/23/L99	16/23/L189 Integrating assessment in play	Volunteer thank children			
20/23/L134	18/23/L102					
21/23/L27	18/23/L112	16/23/L190	18/23/L204			
21/23/L34	18/23/L116	Tired teacher	23/23/L24 Playing dog			
21/23/L39	18/23/L119					

21/23/L40	18/23/L198	17/23/L49					
21/23/L50	19/23/L155	17/23/L209 Discouraged	20/23/L144 Does				
22/23/L32	22/23/L99	teacher	not want to take				
22/23/L33	22/23/L195		part				
22/23/L45	23/23/L48 Playing	17/23/L188					
22/23/L57	constructively	18/23/L324	20/23/L146				
22/23/L165		19/23/L80	20/23/L168				
22/23/L168	13/23/L157	Teacher needs to repeat	20/23/L191				
22/23/L170	14/23/L190	herself	23/23/L108				
Group	21/23/L193		23/23/L166 Photo's				
dynamics	Friendly rough play	17/23/L210					
change when	ends in someone	18/23/L44 Experience	20/23/L146 Hold				
other class,	getting hurt	children as busy	lead				
playing with							
other class	13/23/L157	18/23/L44	20/23/L161				
	14/23/L38	Experience children as	Concentrate				
	15/23/L92	difficult					
12/23/L37	17/23/L44		20/23/L170 Shy				
12/23/L97	20/23/L41	18/23/L26	boy takes control				
13/23/L63	22/23/L161	18/23/L146					
13/23/L94	Comfort each other	Rules adjusted for ill	20/23/L192				
12/23/L42		learners.	23/23/L175 Whole				
12/23/L190	13/23/L89		class partakes in				
13/23/L99	14/23/L73	18/23/L49	class activity				
13/23/L108	14/23/L142	21/23/L103					
14/23/L189	15/23/L147	22/23/L129	20/23/L203				
15/23/L73	15/23/L147	16/23/L49	Opinion:				
15/23/L145	16/23/L35	Routine changes on rainy	Confidence grew				
16/23/L32	18/23/L30	days.					
16/23/L121	18/23/L110		20/23/L204				
18/23/L32	23/23/L68	18/23/L100	Participation				
18/23/L33	Quiet play	18/23/L207	growing				
18/23/L206		18/23/L214					
19/23/L125	15/23/L93	19/23/L115	20/23L209 Most				
19/23/L182	22/23/L92 Tells	23/23/L43	children like and				
20/23/L35	teacher about	Asks learners to be quite:	enjoy the dog				
20/23/L89	feelings	use "inside voices."					
20/23/L94			23/23/L37				
21/23/L46	15/23/L95	18/23/L133	23/23/L186				
21/23/L48	18/23/L210 Play	Verbal motivation	Sad about last day				
21/23/L145	continues after						
21/23/L200	someone gets hurt	18/23/L139	23/23/L124				
21/23/L221		19/23/L130	23/23/L147				
22/23/L33	15/23L136 Solves	23/23/L60	Discuss photos				
22/23/L48	social problem on	23/23/L75					
22/23/L99							

22/23/L161	their own	Ask learners to freeze	23/23/L133 Happy teacher				
22/23/L166							
23/23/L34	15/23/L163	18/23/L142 Explains activities	23/23/L141 Happy participants				
23/23/L58	Opinion: tired after work time						
23/23/L65							
23/23/L69		18/23/L153					
Groups grow	15/23/L205	Phone parents when learners seem ill.	23/23/L145				
	18/23/L24		23/23/L168 Want to connect with dog				
12/23/L50	18/23/L28						
12/23/L63	19/23/L181	18/23/L160					
13/23/L33	Hugging	19/23/L133	23/23/L131 Quiet at tables				
13/23/L138		Uses "time out"					
14/23/L35							
14/23/L65	16/23/L96	18/23/L205	23/23/L142 Hits during participation				
16/23/L128	21/23/L86	Teacher cleans					
16/23/L177	21/23/L215						
17/23/L36	22/23/L92 Seeks guidance from teacher	18/23/L209	23/23/L157 Playing with the dog				
17/23/L39		Gives sweet to hurt learner					
17/23/L79							
18/23/L29		18/23/L226	23/23/L177 Like the poster and is proud				
18/23/L33	16/23/L120	19/23/L131					
18/23/L137	16/23/L181	22/23/L106					
19/23/L44	17/23/L34	23/23/L61 Punishment through taking away privilege to play somewhere	23/23/L190				
19/23/L176	17/23/L122		Opinion: teacher likes visits				
19/23/L179	18/23/L96						
19/23/L184	19/23/L30						
20/23/L46	19/23/L36						
21/23/L67	20/23/L155	19/23/L40 Independence with clothing					
21/23/L211	20/23/L161						
21/23/L221	20/23/L188						
22/23/L43	21/23/L33	19/23/L69					
22/23/L54	21/23/L148	Want learners to practice activity					
22/23/L197	21/23/L185						
23/23/L72	22/23/L30						
Group moves	22/23/L50	192/23/L73 Continuing activity in the rain					
	23/23/L50						
12/23/L56	23/23/L73						
13/23/L45	23/23/L110	19/23/L136					
14/23/L22	23/23/L113	Gives good behaviour learners stickers					
14/23/L30	23/23/L150						
14/23/L177	23/23/L161 Smiling						
16/23/L34		19/23/L152 Punishment stops					
16/23/L134	16/23/L186						
16/23/L162	19/23/L138						
17/23/L28	22/23/L95 Baking	19/23/L157					

17/23/L70		No supervision					
19/23/L121	17/23/L55 Respond						
19/23/L153	good to structures	19/23/L192					
20/23/L28		21/23/L162					
20/23/L133	17/23/L186 Holding	Teacher is positive about					
21/23/L67	a swing for each	behaviour					
21/23/L68	other						
21/23/L153		19/23/L193 Concerned					
21/23/L184	17/23/L195	about difficult behaviour					
22/23/L28	18/23/L164						
Same groups	23/23/L171	19/23/L192					
as previous	Hygiene	Communication with					
days		parents					
	18/23/L36						
12/23/L99	Following school	20/23/L26					
12/23/L179	rules on their own.	Calm					
13/23/L46							
14/23/L36	18/23/L85 Playing	21/23/L66 Laughing					
21/23/L25	inside						
21/23/L185		21/23/L227					
Boys playing	18/23/L86	Smiling					
boy like	18/23/L136						
games.	18/23/L165	21/23/L167 Opinion:					
	23/23/L26	hopeful teacher					
12/23/L176	23/23/L43						
Want to group	23/23/L46 Reading	22/23/L108 Regulates					
with other		clothing					
class	18/23/L87						
	21/23/L77	22/23/L141					
12/23/L194	21/23/L222	Dislikes letting children					
12/23/L201	rest	watch television.					
13/23/L64							
13/23/L67	18/23/L89	17/23/L51 Discouraged					
13/23/L99	20/23/L50	teacher					
13/23/L114	20/23/L137						
13/23/L135	21/23/L57	23/23/L132 Opinion:					
13/23/L144	22/23/L36	Happy teacher.					
14/23/L74	22/23/L43						
15/23/L85	22/23/L111						
16/23/L31	22/23/L176						
16/23/L182	22/23/L183						
17/23/L73	Observing others						
17/23/L78							
17/23/L182	18/23/L92						
18/23/L96	18/23/L197 Rough						

18/23/L130	play with objects						
18/23/L134							
18/23/L164	18/23/L96 Working quietly						
18/23/L202							
18/23/L216							
18/23/L220	18/23/L100 Stopped game on teacher's request						
19/23/L37							
19/23/L123							
19/23/L161							
19/23/L162	18/23/L172						
19/23/L33	Opinion: more constructive play inside						
20/23/L49							
20/23/L93							
21/23/L34							
21/23/L36	18/23/L215 Playing loud						
21/23/L57							
21/23/L149							
21/23L218	18/23/L235						
22/23/L50	Opinion: Mostly friendly play inside						
22/23/L52							
22/23/L124							
22/23/L186	16/23/L22						
23/23L34	17/23/L181						
23/23L40	19/23/L40						
23/23/L67	20/23/L82						
23/23/L72	20/23/L90						
23/23/L73	20/23/L119						
Same group, same place, same activity.	20/23/L149						
	22/23/L35						
	Independence						
12/23/L197	19/23/L71 Waiting quietly						
13/23/L54							
13/23/L73							
13/23/L82	19/23/L198						
14/23/L33	Opinion: less impulsive						
15/23/L196							
16/23/L39							
16/23/L103	20/23/L86 Waiting for friends						
16/23/L115							
19/23/L146							
22/23/L203	20/23/L107 Calm while eating						
Group breaks up because of aggressive	20/23/L151						

action.	20/23/L158 20/23/L160						
12/23/L199 Group together after they split	20/23/L174 20/23/L186 20/23/L190 Confident						
15/23/L72 Group stays together after aggressive confrontation	21/23/L23 helping teacher 21/23/L51 game stops and they start with another game						
13/23/L22 Accidental grouping while eating.	21/23/L32 “safe house” is the class during games.						
13/23/L43 14/23/L181 21/23/L25 21/23/L197 Girls playing girl like games	21/23/L70 22/23/L109 Want to be inside 21/23/L111 regulating own resting						
13/23/L123 Formed a group because of aggressive action	21/23/L126 Skipping 21/23/L161 Calm after eating						
14/23/L73 15/23/L197 18/23/L115 Bored solo child	21/23/L183 Helping each other 21/23/L227 Opinion: children more helpful						
15/23/L30 16/23/L25 16/23/L112 18/23/L114 22/23/L156 23/23/L45 Playing near	21/23/L232 Opinion: More learners moving away from negative situations						

each other but not interacting	22/23/L208 Opinion: restless when routine change							
15/23/L34 16/23/L88 Tries to become part of a group	23/23/L51 Happy							
16/23/L77 16/23/L185 16/23/L76	23/23/L70 Making sure everyone has a space							
18/23/L108 18/23/L194 19/23/L43	23/23/L81 Opinion: children quiet							
19/23/L151 22/23/L107 22/23/L162 22/23/L177 Crowded group	23/23/L86 Opinion: Considering each other							
18/23/L27 Eager to group with other class								
18/23/L102 19/23/L177 20/23/L30 20/23/L48 21/23/L52 22/23/L58 22/23/L182 22/23/L185 23/23/L52 Group breaks up not due to aggressive action								
19/23/L175								

21/23/L49 21/23/L62 22/23/L191Gr oups become smaller								
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Variants:

Different routine due to cake sale later in the day. Children played for a long period outside (13/23/L160)

Masters list for individual semi-structured interviews

P:1, P:2, P:3, P:4

Teachers perceptions in general on aggressive behaviour.	Aggressive behaviour experienced in the class.	Dealing with aggressive behaviour.	Influence of aggression on education.	Children's' reactions towards PAA.	Teachers' reactions towards PAA.	Influence of PAA in general on learners.	Influence of PAA on aggressive behaviour.	Other reasons for influence.	Other related information.
<p>P:1/L9-11 Pushing, kicking, hitting, verbal abuse and rough playing.</p> <p>P:2/L18 Mostly verbal.</p> <p>P:2/L22-24 Learners do not know how to deal with aggression and it thus ends up in fighting.</p> <p>P:2/L28-30 Lack of verbal communication leads to fighting.</p> <p>P:4/L24 Kicking, pushing, hitting, physical aggression towards teachers, relational aggression and verbal aggression (which not</p>	<p>P:1/L20 "Bully" behaviour amongst girls.</p> <p>P:1/L19-22 P:2/L43 P:4/L56-70 Girls tend to be relational aggressive.</p> <p>P:1/L23-24 Boys pushing, not too much.</p> <p>P:1/L24 Girls are more aggressive than boys.</p> <p>P:1/L31/L32/L33 Leading to aggression: background, working parents, personalities that collide.</p> <p>P:1/L229-234 Rough play amongst boys cause aggression.</p> <p>P:2/L41-45</p>	<p>P:1/L78 P:4/L17 P:4/L157-171 Involving principal.</p> <p>P:1/L79 Role playing aggressive behaviour.</p> <p>P:1/L73-81 P:4/L122-126 Discussion with learners.</p> <p>P:4/L122-126 Discussion is time consuming.</p> <p>P:1/L81-90 P:2/L83-87 Thinking chair to think about behaviour.</p> <p>P:1/L97-98 Current ways has short term effect.</p> <p>P:1/L108-111 Teachers should be consequent.</p>	<p>P:1/L39-42 Negative. Learners are not motivated to come to school.</p> <p>P:1/L42-44 School not fun for learners.</p> <p>P:1/L50-56 P:2/L56-60 P:3/L64-68 P:4/L93-100 Taking away instructional time. Time to address behaviour.</p> <p>P:4/L93-100 Teacher repeats herself.</p> <p>P:3/L73 One child's aggressive behaviour impacts the whole class.</p>	<p>P:1/L151-154 P:2/L186-189 P:3/L135-136 Excitement.</p> <p>P:1/L151-154 P:4/L262 Positive.</p> <p>P:2/L194-195 No negative reactions.</p> <p>P:1/L159 One girl not eager to take part.</p> <p>P:1/L161 Enthusiasm</p> <p>P:1/L161-165 Excited even when they do have a pet.</p> <p>P:1/L172-174 Those looking for love liked it.</p> <p>P:1/L174 "Shining faces."</p>	<p>P:1/L170-171 Fun</p> <p>P:1/L171-174 Positive because her learners were happy.</p> <p>P:2/L205-208 Positive.</p> <p>P:3/L135-136 No reaction.</p> <p>P:4/L261 Enormously positive experience.</p>	<p>P:1/L282-287 Girl who was scared to partake did partake when her parents were away.</p> <p>P:2/L218 P:3/L184-189 PAA could have positive long term influence.</p> <p>P:2/L273-275 Class management was easier on PAA days.</p> <p>P:2/L294-298 Those looking for attention could benefit with positive behaviour.</p> <p>P:2/L353 Better class management as the teachers had more time.</p> <p>P:3/L216 Better classroom management.</p> <p>P:4/L288-295 Good during PAA</p>	<p>P:1/L202 P:2/L138 Positive on individual learners.</p> <p>P:2/L231-233 Positive</p> <p>P:1/L206-207 Boy who did not often want to partake had no change in aggressive behaviour.</p> <p>P:1/L210-211 Class was a "safe haven" due to dog.</p> <p>P:1/L222-223 Aggression decreased, then increased and then decreased again.</p> <p>P:2/L232 Some learners were not as involved in the middle of the intervention.</p> <p>P:1/L224 Girls are less mean that before the PAA</p>	<p>P:1/L207-210 Changes at their houses.</p> <p>P:1/L307-309 Change in routine from day to day.</p> <p>P:1/L321-325 May be due to less play on certain days.</p> <p>P:2/L312 P:4/L370 No other reason for change.</p> <p>P:3/L10-171 P:3/L264-270 The music done in the music lesson was calming.</p> <p>P:3/L216 P:3/L264-270 The effect of the water-liked movements during the music lessons.</p>	<p>P:1/L62-67 Aggression increases as they grow older and it affects the ability to make friends.</p> <p>P:1/L102 P:1/L349 Long term influence on aggressive behaviour is needed.</p> <p>P:1/L180-183 P:2/L213 Wanting visits to continue as its part of routine.</p> <p>P:1/L260-262 PAA could be introduced like music and drama.</p> <p>P:1/L272 P:3/L147-152 PAA could be introduced as learners liked it part of routine.</p> <p>P:1/L282-282 P:2/L204 P:4/L352-357</p>

<p>always seen).</p> <p>P:4/L56-70 More aggressive than in previous years.</p> <p>P:4/L82-89 Modern way that learners are allowed to say and do what they wish and some misuse it.</p>	<p>P:4/L56-70 Girls verbally aggressive.</p> <p>P:2/L46-48 Boys through tantrums.</p> <p>P:3/L11-16 Grabbing</p> <p>P:3/L25-30 Screaming</p> <p>P:3/L39-44 Rough play ends in someone getting hurt.</p> <p>P:3/L53-55 Pushing</p> <p>P:4/L39 Leading to aggression: That which learners see at home.</p> <p>P:4/L39 Physical aggression due to frustration.</p> <p>P:4/L45-50 leading to aggression: Could be due to parents, TV and friends.</p>	<p>P:1/L114-116 Teachers should work together.</p> <p>P:1/L123-125 P:2/L166-177 P:2/L358-261 P:3/L253 P:4/L157-171 Talking to parents.</p> <p>P:4/L145-152 Involving parents in serious and frequent cases.</p> <p>P:4/L157-171 Regular contact with parents.</p> <p>P:1/L141 P:2/L115 Knowledge on ways to deal with aggression is through experience.</p> <p>P:2/L67-69 P:2/L314-342 Teachers sometimes unsure.</p> <p>P:2/L69-74 Difficult for teacher, brings them down, but they arise again.</p> <p>P:2/L93-94</p>				<p>visits, more aware of others and calmer.</p> <p>P:4/L295 Positive teacher.</p> <p>P:4/L300-304 On PAA days they acted like older, more responsible learners. A feeling of responsibility.</p> <p>P:4/L332-335 Teacher enjoyed the class being easier to handle due to visits.</p> <p>P:4/L279-384 Less aggression helps the teacher to spend more time on the curriculum.</p>	<p>visits.</p> <p>P:1/L248-250 P:2/L260 Influence was seen throughout the week not specifically on PAA days.</p> <p>P:1/L333-335 P:2/L327-328 Learners were easier to deal with as less aggression occurred.</p> <p>P:1/L314-342 Less time was spend on addressing aggression.</p> <p>P:2/L231-233 Less biting.</p> <p>P:2/L245-248 Positive effect on girls even outside the class</p> <p>P:2/L252 Boys still continuing with normal behaviour.</p> <p>P:2/L273-275 PAA could have a longer positive effect especially for learners looking for attention.</p> <p>P:2/L281 When a few children is influence positively, the</p>	<p>Influence of dog on aggressive behaviour will have the same effect in other classes.</p> <p>P:2/L288 PAA could be introduced more than once a week.</p> <p>P:3/L147-152 Advises PAA to work in groups.</p> <p>P:4/L107-116 Learners on the receiving end experiences aggression negatively.</p> <p>P:4/L117-122 Learners on the receiving end need to learn to talk about their feelings and some are emotionally strong to handle it.</p> <p>P:4/L183-184 Learners respond to dealing some with laughter and some with tears.</p> <p>P:4/L279-283 PAA could be introduced as part of the program in all the classes.</p>
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	<p>Thinking chair may not work in serious situations.</p> <p>P:2/L108-109 Methods may be used for long term effect.</p> <p>P:2/L103 Effect of dealing depends from individual to individual.</p> <p>P:2/L115-124 P:2/L358-361 P:3/L107-110 P:3/L252 Discussion amongst other teachers.</p> <p>P:2/L115-124 Courses.</p> <p>P:2/L129-132 Churches providing courses.</p> <p>P:2/L137 Other institutions providing help.</p> <p>P:2/L145-161 Teachers should discuss and use the same methods.</p> <p>P:2/L236 Department of Education could</p>				<p>whole class interaction in effected positively.</p> <p>P:3/L162-166 Lesser aggressive actions regarding pushing.</p> <p>P:3/L222-224 More time for educating as less time was spend on dealing with aggressive behaviour.</p> <p>P:4/L263-267 Less aggression on PAA days.</p> <p>P:4/L311-317 Less aggressive action reported to the principal on PAA days. Could be due to teacher who felt more motivated or capable to handle it.</p> <p>P:4/L325-326 Teachers felt more courage.</p> <p>P:4/L253-262 PAA may not be as effective over a long period of time as learners may get use to the dog.</p>	<p>P:4/L341-346 PAA could be introduced because of the influence on aggressive behaviour because the dog was present.</p>
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	<p>provide more specific courses.</p> <p>P:3/L73 Stopping activity</p> <p>P:3/L81 Taking away the privilege to play with something</p> <p>P:3/L85-90 Changing groups.</p> <p>P:3/L95-99 Tries not to stop activity as instruction time is short.</p> <p>P:3/L235-241 Does not like to place focus on individual learners.</p> <p>P:3/L259 Does not want to get involved in intervention as she feels she is not long enough involved.</p> <p>P:4/L145-152 Asks learners to apologise in verbal discussion.</p> <p>P:4/L178-184</p>						
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	<p>Teacher takes learners to office after numerous times of talking to them about actions.</p> <p>P:4/L184-197 Learners in the office. Seen as punishment. Discussion takes place and they have to think about behavior.</p> <p>P:4/L203-207 Immediate parent involvement.</p> <p>P:4/L214-226 Involvement of professionals, but it may be expensive.</p> <p>P:4/L226-234 Transferring to other school which could be more appropriate (less over stimulation and smaller classes).</p> <p>P:4/L240-254 Department of Education could provide more free play therapists. For</p>							
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	those who do not have sufficient funds.							
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