

1-1-2008

Teacher-student relationships in primary schools in Perth

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TEACHER-STUDENT RELATIONSHIPS
IN PRIMARY SCHOOLS IN PERTH

by
Natalie Leitão
Dip Teach (Prim), B.Ed (Hons)

This thesis is presented in partial fulfilment of the
requirements for the degree of Doctor of Philosophy

Faculty of Education and the Arts,
Edith Cowan University

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Date of submission: September 2007

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

ABSTRACT

This study investigated teacher-student relationships at Perth metropolitan schools in Western Australia. From the literature, three key social and emotional aspects that affect teacher-student relationships, namely, Connectedness, Availability and Communication, were identified as important to good, positive teacher-student relationships. Data were collected in four parts: (1) through a teacher questionnaire; (2) through a student questionnaire; (3) through teacher interviews; and (4) through student interviews. The three relationship aspects formed the structure of a teacher questionnaire in which ten stem-items were conceptualised from easy to hard - four stem-items for Connectedness, three for Availability, and three for Communication – and answered in three perspectives: (1) an idealistic attitude, this is what I would like to happen; (2) a self-perceived Capability, this is what I am capable of, and (3) Actual Behaviour, this is what actually happens, using three ordered response categories: not at all or some of the time (score 1), most of the time (score 2), and almost always (score 3). The same three aspects formed the structure of a student questionnaire in which ten stem-items were conceptualised from easy to hard and answered in two perspectives: (1) a realistic view, this is what does happen; and (2) an idealistic view, this is what I wish would happen. Questionnaire data were collected from 43 primary teachers concerning 139 teacher-student relationships and 139 primary school students. Interview data were collected from 25 primary teachers and 139 students gave either, or both, a brief written comment and some verbal answers to relationship questions.

The teacher questionnaire data were analysed with a Rasch measurement computer program (RUMM2020). Twenty-one out of 24 items fitted the measurement model with $p > 0.04$ and formed a satisfactory linear scale. The item-trait interaction chi-square = 71.37, $df=48$, $p=0.02$ and so it can be claimed that a dominant trait (called Teacher-Student Relationships) was measured. The Person Separation Index (reliability) was 0.93 showing that the measures were well-separated along the scale in comparison to the errors (which were mainly from 0.17 to 0.22 logits). The results showed that, for each of the stem-items, the ideal perspective was easier than the capability perspective which was, in turn, easier than the actual happening perspective (where the items fitted the model), as was conceptualised for the structure of the variable. That is, there was reasonably strong, but not total support, for the structure of the conceptualised variable. The easiest ideal item was 'I would like to like this child' (very easy), and the hardest ideal item was 'I would like to be available to this child' (but still very easy). The easiest capability item was 'this child and I are capable of getting along well together' (moderately easy) and the hardest capability item was 'If I am busy and this child needs help urgently, I am capable of stopping what I am doing and making myself available' (moderately hard). The easiest actual behaviour item was 'This child and I actually get along well together' (moderately hard) and the hardest actual behaviour item was 'I am actually interested to learn about this child's personal thoughts, feelings and experiences' (very hard indeed).

The student questionnaire data were analysed with a Rasch measurement computer program (RUMM2020). Nineteen out of twenty items fitted the measurement model with $p > 0.10$ and formed a satisfactory linear scale. The

item-trait interaction chi-square =45.0, df=40, p=0.27 and so it can be claimed that a unidimensional trait (called Teacher-Student Relationships) was measured. The Person Separation Index (reliability) was 0.90 showing that the measures were well-separated along the scale in comparison to the errors. The results showed that, for each of the stem-items, the ideal perspective was easier than the real perspective. There was reasonably strong, but not total support, for the structure of the conceptualised variable. The easiest ideal item was 'my teacher and I get along well together' (very easy), and the hardest ideal item was 'if my teacher is busy, I can still go and get help' (moderately hard). The easiest actual behaviour item was 'my teacher listens to me' (moderately hard) and the hardest actual behaviour item was 'if my teacher is busy, I can still go and get help' (very hard indeed).

The teacher interview data were analysed using the Miles and Huberman method and 31 themes about teacher-student relationships were identified from the data. The student data were analysed in the same way as the teacher data and 18 themes were identified. The 18 themes were then combined into five abstractions about teacher-student relationships. Two of the abstractions include 1) Students want to be able to connect with their teachers; students want to be liked by their teachers; students want their teachers to be kind and caring and to show a personal interest in them. However, these wants are not always satisfied and 2) Students believe it is important to have a teacher who will listen to them. Students want to be heard; students want to feel supported by their teachers. Students who have teachers who will not listen to them feel they are denied this source of support. The discussion data from teachers and students confirm the inclusion Connectedness, Availability and Communication as key aspects impacting on teacher-student relationships. Additional key aspects to emerge from the discussion data include Teachers' relationships with parents, Self-reflection, Equality and Teacher mood. The extended responses made by teachers and students were useful for verifying questionnaire responses, and provided an insight to their views. In particular, the responses from students confirm that young children are able to provide reliable information about their perceptions.

DECLARATION

I certify that this thesis does not, to the best of my knowledge and belief:

- (i) incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education.
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ACKNOWLEDGEMENTS

I am thankful to so many who have helped, supported and encouraged me over the many years it has taken to complete this thesis. I especially want to thank my God who has helped me to persevere. I wish to thank my family and friends for their ongoing encouragement. I especially thank my husband Rico, our children Jessica and Jayden, my parents Cher and Terry Harris, and my grandfather Ron Ward.

I wish to thank my 'Super' Supervisors, Dr Russell, who edits and returns draft chapters faster than the speed of light, and Dr Carmel, for sharing her valuable insights. I greatly appreciate the time and energy that Russell and Carmel have put into guiding me along this journey. I have particularly appreciated their input and feedback over the last couple of years during my chapter writing phase of the study. As I wrote and re-wrote each chapter, Carmel and Russell patiently read and re-read my work until the final draft took shape.

Finally, I wish to acknowledge and thank the many students and teachers who agreed to participate in the study. I am grateful for their generosity in sharing their precious time and knowledge so that we might better understand the relationships that teachers and students share.

Our job is as much about human relations as it is literacy, numeracy, science and so on and we, largely, set the tone.

Bill Rogers, 1990

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CHAPTER ONE

INTRODUCTION

Teaching is a people profession that demands a large proportion of time being devoted to personal interaction. Positive teacher-student relationships are believed to be necessary for effective teaching and learning to take place (Arthur, Gordon, & Butterfield, 2003; McInerney & McInerney, 2006; Szejnberg, den Brok, & Hurek, 2004). Effective teachers are those who, in addition to being skilled at teaching, are attuned to the human dimension of classroom life and can foster positive relationships with their students (Good & Brophy, 2000; Larrivee, 2005). But what is meant by positive teacher-student relationships? Why are teacher-student relationships important and how are they to be measured? This chapter begins with some discussion to these questions as a background to the present study.

Teacher-Student Relationships

Positive teacher-student relationships are characterised by mutual acceptance, understanding, warmth, closeness, trust, respect, care and cooperation (Good & Brophy, 2000; Krause, Bochner, & Duchesne, 2006; Larrivee, 2005; Noddings, 2005; Smeyers, 1999). The success of any interpersonal relationship is dependent to a large extent upon input from both parties (Noddings, 2005; Pianta, 1999). In the classroom setting, it is the teacher who has the opportunity, and indeed, the responsibility, to initiate positive interpersonal relationships (Barry & King, 1993; Krause, Bochner, & Duchesne, 2006; McInerney & McInerney, 2006; Smeyers, 1999). The teacher who is pro-active in demonstrating acceptance, understanding, warmth, closeness, trust, respect, care and cooperation towards his or her students not only works at initiating positive teacher-student relationships, but also increases the likelihood of building strong relationships that will endure over time (Barry & King, 1993).

Teacher-student relationships are important for many reasons. Teacher-student relationships greatly influence a student's ability to adjust to school, to do well at school, and to relate to peers (Entwisle & Hayduk, 1988; Howes,

Hamilton, & Matheson, 1994; Pianta, 1999; Sztejnberg, den Brok, & Hurek, 2004). The relationship between a teacher and a student impacts on classroom management, levels of academic engagement and students' progress (Collins, Harkin, & Nind, 2002; Klem & Connell, 2004; Sztejnberg, den Brok, & Hurek, 2004). Students who get on well with their teachers are more likely to develop prosocial skills and behaviours and are less likely to adopt deviant behaviours (Murray & Greenberg, 2000). Positive teacher-student relationships enhance students' mental and emotional well-being, including their self-esteem and their sense of belonging (Brazelton & Greenspan, 2000; Lynch & Cicchetti, 1992; Murray & Greenberg, 2000; Pianta, 1999; Weare, 2000, 2004). Stable teacher-student relationships have been found to promote resiliency in students, enabling them to cope in the face of adversity, even into their adult years (Novick, 1998; Rutter, 1979; Werner & Smith, 1992). Furthermore, the benefits of positive teacher-student relationships extend to teachers, contributing to an improved sense of job satisfaction (L. Goldstein & Lake, 2000; Weare, 2004). The importance of teacher-student relationships is further elaborated in the second chapter of this thesis.

Familial and Social Trends

Due to familial and societal changes in Australia teachers are increasingly challenged to support students socially and emotionally in ways that were not so common 10 or 20 years ago. For example, as marriage rates decrease and divorce rates increase the structure of the family in Australia has altered to encompass de factor living, divorce, remarriage, blended families and lone parenthood (Australian Bureau of Statistics, 2007a). With these changes children and young people are increasingly concerned about their family relationships and seek emotional support from people outside their families (Kids Help Line, 2006). Teachers who possess an awareness and sensitivity towards their students' home life may be able to offer social and emotional support in this area through the teacher-student relationships that are formed.

Other familial and societal trends in Australia that impact on children's social and emotional needs include the increased number of working mothers and the increased number of children who attend child care. In 2004 close to 50% of women with children under the age of five were in the labour force

(Australian Bureau of Statistics, 2004). In the ten year period from 1996 to 2006, there was an increase from 46% to 52% of the number of mothers aged 25 to 34 who were employed. For mothers aged 35 to 44 in this same time period, the rate of those employed rose from 64% to 68% (Australian Bureau of Statistics, 2007c). Alongside the increased rate of working mothers is an increased rate of children who require child care. Recent figures suggest one in five children under the age of five spend time in a formal child care setting in any given school week and 46% of children aged 12 and under receive some form of care, be it before and/or after school care, long day care or informal care by a relative (Australian Bureau of Statistics, 2005). Teachers who are aware of their students' care needs may be alert to the need for any additional social and emotional support.

Increased immigration has added to the diversity of the Australian classroom. Figures from 2005 - 2006 show a 72% increase in the number of migrants to Australia compared with the period 1996 - 1997 (Australian Bureau of Statistics, 2007a). Of the 180 000 permanent migrants who settled in Australia in 2005 - 2006, 17 000 entered through the Humanitarian Programme and mostly came from Sudan and Iraq (Australian Bureau of Statistics, 2007a). Increased numbers of students from overseas means teachers are presented with new challenges as they seek to build supportive teacher-student relationships. This is particularly the case for teachers of refugee students as these students may be trying to settle into a new culture, learn English, and cope with trauma associated with having experienced war in their home countries (Earnest, Housen, & Gillieatt, 2007).

Measurement

The measurement of teacher-student relationships is a relatively new area of research and, as such, there are few well-validated assessment techniques (Pianta, 1999). Existing measurement methods are found wanting in that they are based on True Score Theory. As explained in more detail in Chapter Four, there are many problems associated with using the True Score Theory measurement model. Hence, there is need to provide an alternative approach using modern rules of measurement. In this way raw scores could be used to produce linear measurement scales, so that valid inferences could be

drawn from these scales.

In addition to using linear measurement scales, there is a need to continue to probe deeper and gather data to describe and assess teacher-student relationships. A multi-method approach has been advocated by Pianta (1999) who suggests that no single assessment device can be used to adequately describe a relationship. In addition, Pianta (1999) recognises the importance of "listening to teachers describe their relationships in their own words, [and] listening to children describe [their] relationships with teachers" (p. 122). In Western Australia, there are relatively few studies where teachers and students have been given the opportunity to provide first hand accounts of their relationships, and no studies of linear measures of teacher-student relationships seem to have been published with Western Australian data. A combination of qualitative data from questionnaires and quantitative data from face-to-face discussions would seem to be needed to provide a study that has strength, depth and detail.

Past research on teacher-student interactions has mainly focussed on instructional aspects of the teacher-student relationship and failed to recognise relational aspects (Baker, 1999; Birch & Ladd, 1996; Pianta, 1999). Pianta (1999) suggests educators themselves "often do not recognize that all or most instruction involves social exchanges and emotional experiences" (p. 133). It would seem that there are at least three key relational aspects of the teacher-student relationship – namely Connectedness, Availability and Communication (defined later in this chapter). These three key aspects could be considered from different perspectives. Three main perspectives might be an ideal form (a relationship that teachers and students consider to be most desirable), a capability form (a relationship that teachers or students consider themselves to be capable of forming, given their personalities) and an actual form (the perceived actual relationships in the classroom). Before elaborating on this study further, there is a need to explain the educational system in Western Australia because this study is set within primary schools in Perth, and the education system in Western Australia is different to other parts of Australia.

The Education System in Western Australia

The education system in Western Australia consists of a government school sector and a non-government school sector, the latter being made up of independent schools and systemic schools. Systemic schools are those with a church or religious affiliation (Department of Education and Training, 2006). Schools in both sectors rely on three sources of funding, namely, state grants, federal grants and student fees (Association of Independent Schools of Western Australia, n.d.; Australian Government, n.d.).

Western Australia currently has more than 1 000 schools servicing around 370 000 students. The government school sector in Western Australia comprises 771 schools which, in 2006, had an enrolment in excess of 250 000 students (Department of Education and Training, n.d.-b). The non-government sector is made up of over 300 schools and in 2006, had an enrolment of over 119 000 students (Department of Education and Training, n.d.-c).

Schooling in Western Australian has three stages, namely precompulsory, compulsory and post compulsory. The precompulsory stage is comprised of kindergarten and pre-primary. The kindergarten programme runs for eleven hours each week, and may be made up of four half days, two full days or one full day and two half days. The pre-primary programme runs for five full days each week. Kindergarten and pre-primary programmes are usually offered on the primary school site. The compulsory stage of schooling in Western Australia spans seven years of primary school (years 1 to 7) and three years of secondary school (years 8 to 10). Students in the post compulsory years of secondary school, namely eleven and twelve, have the option of preparing for and sitting the Tertiary Entrance Examinations, or combining their education with work place training or may leave school to commence full time employment (Department of Education and Training, 2006).

Until recently, the school intake year coincided with the calendar year. For example, children who turned five from January to December inclusively, enrolled in pre-primary. Children who turned six from January to December inclusively, enrolled in year one. In 2002, however, a change was made to the school entry age. The revised cut-off date for determining class entry is the 30th

of June. The new change means children must enrol in year one if they turn six by the 30th of June. Children who turn six in the second half of the calendar year may enrol at pre-primary (Department of Education and Training, n.d.-a).

An Outcomes and Standards approach was formulated by the Western Australian Curriculum Council in the 1980s and formally adopted by the state schooling system in 1998. The resultant Curriculum Framework "sets out what all students should know, understand, value and be able to do as a result of the programs they undertake in schools in Western Australia" (Curriculum Council, 1998, p. 6). All schools in Western Australia are expected to use the WA Curriculum Framework. Although not yet fully implemented, the WA Curriculum Framework caters for students from Kindergarten to Year 12 (Curriculum Council, 1998). Some recent political decisions have delayed the implementation of the Outcomes Based courses for Years 11 and 12, but this has not affected the implementation of the Framework at the primary level.

The present study is focussed on teachers and students in the primary school from year three (age 7) through to year seven (age 13). The following section provides a background to teacher education in Western Australia and to teacher-student relationships in Western Australia primary schools.

Teacher Training in Western Australia

This section begins with a background to teacher education in Western Australia and traces the most significant changes as they have occurred in this state. The discussion then focuses on teacher-student relationships in Western Australia, looking at when teacher-student relationships have been recognised as being important, and the steps that have been taken to support their development.

For the greater part of the last century, the training of teachers in Western Australia (as in other Australian states) was the responsibility of the state's education department. From the early 1900s until the 1970s, the vast majority of teachers in Western Australia were trained in state run Teachers' Colleges at Claremont (established in 1902) and Graylands (established in 1955). Additional colleges were established at Mount Lawley in 1970 and at

Churchlands in 1972 (Edith Cowan University, n.d.). It is interesting to note that the huge influence of the government run Teachers' Colleges on the state of Western Australia was acknowledged as early as 1929 when Robert Cameron, Professor of Education and Principal of the College at the time, shared his thoughts about Claremont Teachers' College:

It is to be recognized that the Teachers' College is the most important single institution under the control of the Government ... It would be difficult to measure the College influence upon the State. What the State will be in the future will depend upon what the College is to-day. (Mossenson, 1955, p. 42)

The 1970s marked a period of change for teacher education, not only in Western Australia, but around the country. In 1973, all state education departments across Australia passed the control of teachers' colleges over to the advanced education sector (National Board of Employment, 1990). In Western Australia, the teachers' colleges either closed, or converted to become Colleges of Advanced Education. The change was further facilitated by the delivery of the Federal Schools Commission Report in 1975. Included in the report's recommendations was an injection of commonwealth funds into teacher education. The financial support was extended to autonomous teacher training facilities. This enabled independent colleges to become established and simultaneously brought about a closure of state run teachers' colleges and an end to the state government domination of teacher training (McKenzie & Keeves, 1982).

The 1980s and 1990s saw further changes to the operations of institutions involved in teacher training and the emergence of new universities in Western Australia. In the 1980s, additional campuses of the Western Australian College of Advanced Education were established, namely at Nedlands, Bunbury and Joondalup (Edith Cowan University, 2006). In 1991, the Colleges of Advanced Education were amalgamated and became part of the Edith Cowan University. In so doing, Edith Cowan University became the fourth university to be established in Western Australia, the first being the University of Western Australia which has been in existence since 1911, the second being Murdoch University which was established in 1973, and the third being Curtin University of Technology which attained university status in 1986, having formerly been a college of advanced education since 1966 (Curtin University of Technology,

n.d.; Murdoch University, 2007; University of Western Australia, n.d.). A fifth university, the University of Notre Dame, was founded in 1989 (The University of Notre Dame, n.d.).

Although the training of teachers in Western Australia for many years was the responsibility of the state education department, that responsibility has shifted from the state department to the individual universities that operate within Western Australia. Each university is responsible for its individual course content and, although aspects of the courses differ, their common goal is to train teachers who may be employed to work in government or non-government schools throughout Western Australia, Australia and overseas.

Teacher-Student Relationships in Western Australia

It is interesting to note that during the time of transition in the 1970s when the state education department's control over teacher training was lessened significantly, a Committee of Inquiry was established by the Western Australian Minister for Education to "review the preparation and continuing development of teachers in the light of existing and probable trends in the work of schools" (Vickery, 1980, p. 4). The Report of the Committee of Inquiry into Teacher Education in Western Australia, published in 1980, acknowledged the impact of societal change on schools. Specifically, higher rates of marriage, higher rates of divorce and higher rates of married women in the workforce were just three of a number of trends thought to be reducing the traditional influences of the family, the church and the local community, resulting in "an increased demand for pastoral and social education roles for the school" (Vickery, 1980, p. 5). In recognition of the widening role of schools, the Committee accepted that the primary function of schools was to provide for the intellectual development of children, but believed "schools must also establish a climate conducive to the healthy social, emotional and spiritual development of all children" (Vickery, 1980, p. 7). In addition the Committee reported on issues relating to pre-service education. Specifically, the Committee commented on the importance of selecting preservice teachers who were suited to the profession. Submissions received by the Committee claimed it was not enough for a teacher to be knowledgeable about certain subject matter and skilled in the processes of teaching and learning; personal qualities of the teacher mattered

as well. It was suggested preservice teachers needed to have "empathy for children, patience, vitality, flexibility, tolerance, sensitivity and communication skills" (Vickery, 1980, p. 23). While the Committee discussed this issue with all teacher education institutions, it was agreed that it would be difficult to accept prospective teachers to training courses based on their personal qualities. Nonetheless, the importance of a teacher's ability to relate positively to students in the classroom had been noted.

More recently, teacher competency documents have incorporated aspects of a teacher's ability to relate positively to students in the classroom. Planning for these documents began in the 1980s and 1990s when efforts were made to "understand and articulate what effective teachers do" (Ministerial Council on Education, 2003, p. 2). A competency based foundation was used to produce documents at both national and state levels. At an Australian level, the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) produced a National Framework for Professional Standards for Teaching in 2003. Here in Western Australia, the Department of Education and Training (DET) developed the Competency Framework for Teachers in 2004. The former was used to help shape the latter and, as a result, the two documents cover similar ground. With regard to teacher-student relationships, for example, both documents make reference to the importance of establishing positive teacher-student relationships. The National Framework for Professional Standards for Teaching refers to Professional Relationships that are "underpinned by trust, respect and confidence" (Ministerial Council on Education, 2003, p. 11). In a similar vein, the Competency Framework for Teachers identifies the importance of a teacher's ability to "build and maintain learning partnerships with students" (Department of Education and Training, 2004, p. 21). Specifically, effective practice in this area is thought to be evidenced when a teacher;

- respects students as individuals with different experiences, skills, talents and interests,
- responds to students' emotional needs by providing appropriate support,
- accepts and values students' diversity and treats students equitably,
- listens and responds to students' questions, comments, opinions, thoughts, ideas and silences,
- modifies communication styles to be inclusive of diverse students needs. (Department of Education and Training, 2004, p. 21)

While the National Framework for Professional Standards for Teaching and the Competency Framework for Teachers both advocate the establishment of positive teacher-student relationships, neither document is mandatory. This means that while teacher training and employment bodies in Western Australia agree that positive teacher-student relationships are desirable, it is up to individual schools to monitor and assess their progress towards achieving this goal.

Research Questions

The present study addresses six research questions. These are now presented.

1. Can a model involving three aspects (connectedness, availability and communication) be devised to determine teacher self-reported views in three perspectives (ideal, capability and actual) with regard to the teacher-student relationship?
2. Can a model involving three aspects (connectedness, availability and communication) be devised to determine student self-reported views in two perspectives (ideal and actual) with regard to the teacher-student relationship?
3. Can a linear scale of self-reported teacher-student relationships be created from the teacher's point of view in which items within the main aspects are ordered from easy to hard and calibrated on the same scale as the measures from low to high?
4. Can a linear scale of self-reported teacher-student relationships be created from the student's point of view in which items within the main aspects are ordered from easy to hard and calibrated on the same scale as the measures from low to high?
5. What are teachers' self-views about the aspects of Connectedness, Availability and Communication with respect to their ability to impact on relationships with students?

6. What are students' self-views about the aspects of Connectedness, Availability and Communication with respect to their teacher's impact on their shared relationships?

Relevance of this Study

It has been well established that positive teacher-student relationships are important for student's cognitive development and for their social and emotional well-being (Dowling, 2005; Weare, 2004). Teachers too stand to benefit from positive relationships with their students (L. Goldstein & Lake, 2000; Weare, 2004). On a broader, international level teacher-student relationships are being recognised as important contributors towards healthy societal development (Willms, 2001). As such, an investigation into teacher-student relationships has the potential to benefit students, teachers and the wider community.

Past research on teacher-student relationships has focused heavily on instructional aspects of the relationship, and largely ignored the social and emotional aspects of teacher-student relationships (Baker, 1999; Birch & Ladd, 1996; Pianta, 1999). As such, research into social and emotional aspects of teacher-student relationship is relatively new. This study, which takes place across Perth metropolitan schools in Western Australia, helps to address this gap in the research by identifying key social and emotional aspects of the teacher-student relationship from the literature and exploring these in more detail with data collected in Perth, Western Australia. Based on a review of the current literature, the three key social and emotional aspects of the teacher-student relationship that have been identified for inclusion in the present study are Connectedness, Availability and Communication. Each of these three aspects is explained in more detail in Chapter Three.

Given that research into the social and emotional aspects of teacher-student relationships is a relatively new area of study, it is understandable that there are few well-validated tools available. Calls have been made for the development of valid and reliable tools that can be used to better understand teacher-student relationships (Ang, 2005; Pianta, 1999). This study is unique in that it uses a mixed-methods approach and modern methods of measurement

to provide valid and reliable tools to investigate social and emotional aspects of the teacher-student relationship. By employing world's best practice in measurement in the human sciences (Rasch measurement), two linear scales have been developed, one from the point of view of the teacher and the other from the point of view of the student. This is a significant aspect to the study as linear measures of teacher-student relationships using a Rasch measurement model have not been created before. In addition, extensive discussion data has been collected from the participants and offers valuable insights from the points of view of both the teachers and the students. The quantitative data and the qualitative data have been used to describe teachers' relationships with students, and to determine the effectiveness of the newly designed questionnaires. This is a completely new approach to better understand relationships between teachers and students and the role these relationships play in the primary school classroom.

Of the research published on teacher-student relationships most of the studies have been conducted in the United States of America. My research provides information based on Western Australian teachers and students, resulting in greater local applicability than that of research conducted overseas. This study is important because it contributes new knowledge to the body of information about teachers' relationships with students in primary school classrooms in Perth, Western Australia. I have designed a new theoretical model of teachers' relationships with students and a new structural model. Both models contribute to the development of new ways to measure teachers' relationships with students, and represent a significant aspect of the study. In addition, this study contributes new knowledge concerning methods available for obtaining information about teachers' relationships with students.

It is anticipated that the information gained from this study may result in benefits to those involved in education. Information from this study may be used in teacher education to enhance the skills of training and practising teachers in order for them to more closely identify and meet students' social and emotional needs. The new scales may provide teachers with a tool for better understanding the dynamics of their own relationships with students and may be used by researchers for further work in this area.

Limitations

It is acknowledged that the present study has four main limitations and these are now explained.

The first limitation is that certain teacher participant variables have not been controlled. The gender, socio-economic status and cultural background of the teachers have not been controlled. Further, participating teachers' educational qualifications and their years of teaching experience have not been controlled.

A second limitation to the study is that the sample has been drawn from the Perth metropolitan area in Western Australia. This means the results will not necessarily be applicable to the wider population in Western Australia or Australia.

A third limitation to the study is that responses given to the questionnaires and during the face-to-face discussions may have been in accordance with how the participants felt they were expected to respond. However, assurances of confidentiality coupled with encouragement for participants to be accurate and true on responses is believed to have helped alleviate this possible limitation. Further, a conscious effort to employ appropriate interview techniques is believed to have encouraged true responses.

A fourth limitation to the study lies in the construction of the theoretical model itself. The model used for this study utilises three important aspects that contribute to teachers' relationships with students, but is by no means seen as a complete set of aspects. It is readily acknowledged that there are a multitude of aspects which contribute to teacher-student relationships, and for the purposes of this study, three key aspects were selected. Future studies would do well to further expand on the model by incorporating additional aspects which impact on teachers' relationships with students.

Definitions

The following definitions have been compiled to explain how the following

terms are used in the context of this study.

Relationship is used to mean the relational connection between two people. It covers aspects of bonding with others, belonging to others, feeling and showing love and acceptance towards others and is based on feelings of safety and trust. In this study the development of warm, personal relationships is recognised as being impacted by the three key aspects of connectedness, availability and communication.

Teacher-student relationship is the relationship that exists between a teacher and his or her students. The focus in this study is on what the teacher brings to the relationship in terms of their ability to connect with students, to be available to students and to communicate with students. This is reported on from two points of view: that of the teacher and that of the student. In this way the teacher's point of view is reported in terms of how the teacher believes he or she contributes to the relationship, and the student's point of view is reported in terms of how the student believes the teacher contributes to the relationship.

Resiliency refers to how well an individual copes with challenging circumstances. Resiliency is believed to be evidenced when an individual works through difficult experiences and can learn and grow from them.

Connectedness is used to mean how well teachers are able to connect with their students on a personal level. It is expected that teachers who show a genuine interest in students and who care about them as individuals are better able to make positive connections.

Availability encompasses how approachable and how accessible a teacher is, as perceived by themselves and by their students. It is expected that teachers who work at being approachable and accessible, and who are seen as such by their students, will have greater opportunities to establish positive relationships with their students.

Communication include various verbal and non-verbal skills that teachers use to communicate with students in meaningful ways. It is expected that good

communication skills enhance a teacher's ability to relate to students in positive and sensitive ways, thereby strengthening the teacher-student relationship.

(The following terms are relevant to the Rasch analysis)

True Score Theory is a theory of measuring social sciences variables which claims that the true score obtained by a person is given by the total score of the person on all the items of the test which is made up of a 'true score' and a random error score. The scale created by the True Score Theory does not contain equal units of measure and is therefore non-linear.

Rasch Measurement is a measurement model that calibrates item difficulties and person measures on the same scale and creates a linear scale of variables in the social sciences. To have the data fit the measurement model, the items are ordered from low to high on the same scale. Persons who have low ability can only answer the easy items but not the hard ones. Only persons who possess higher ability can answer both the easy and the hard items.

The Partial Credit Model is one of the main models within Rasch measurement. The Partial Credit Model makes it possible to use three or more response categories, or outcomes, to create a linear scale.

Unidimensional means only one attribute of an object is being measured in a test.

Item-trait Test-of-fit Statistic is a chi-square statistic with its corresponding probability of fit that examines whether a unidimensional scale is created under the specifications of a Rasch model. The statistic checks the consistency of the item parameters across the respondent measures for each item and then the data are combined across all items to give an overall test-of-fit (Andrich & van Schoubroeck, 1989, pp. pp. 479-480). The test shows the collective agreement for all items across persons of different measures along the scale and shows whether a unidimensional trait (inferred by a single measure for each person) can be used to describe each person's item response.

Person Separation Index is an index ranging from 0 to 1 that shows the proportion of observed variance considered to be true. A high value of the Index indicates that measures of the respondent's ability or preference are sufficiently well separated along the scale in relation to the errors of measurement. It is "constructed as the ratio of estimated true variance among persons and estimated observed variance among persons, using estimates of their locations (measures) and the standard errors of these locations (measures)" (Andrich & van Schoubroeck, 1989, p. p. 483). The Person Separation Index is interpreted like a Cronbach's alpha which measures the internal reliability of non-linear scales (Cronbach, 1951).

Item Thresholds show the location on a continuum whereby it is likely a person will obtain a particular score. More specifically, thresholds are points between adjacent response categories where the odds of answering in either category are 1:1. With three response categories there are two thresholds and with four response categories there are three thresholds. Thresholds should be ordered in line with the ordering of the response categories showing that the responses are answered consistently and logically.

Targeting shows whether an item's level of difficulty is matched to the participant measures. For example, targeting may show that hard items need to be added to the scale to better target those participants with high measures. *Category Response Curve* show whether items have been answered logically and consistently. The actual curve that is produced shows the relationship between the probability of answering each category in relation to the specific measure. For example, the ideal curve for an item with three response categories shows that when the measure is low, then the probability is high that the participant response is low (category one). As the measure increases, the probability of answering category one decreases and the probability of answering category two increases. As the measure increases further still, the probability of answering category two decreases and the probability of answering category three increases.

Item Characteristic Curve shows how well the items differentiate between persons with differing measures. A curve is produced for each item showing the

relationship between the expected response score and the particular measure.

Global Item-person and Person-item Test-of-fit examines both the response patterns for persons across items and for items across persons. The test-of-fit examines the residual between the expected estimate and the actual values for each person-item summed over all items for each person and summed over all persons for each item. The fit statistics approximates a distribution with a mean near zero and a standard deviation near one when the data fit the Rasch measurement model.

Structure of the Thesis

This thesis is presented in eleven chapters. Summaries of chapters two to eleven are given below.

Chapter Two is the literature review. The chapter provides a discussion on the development of relationships and why they are important for cognitive, social and emotional development. The relationship between an infant and primary care-giver is discussed in terms of the influence such a relationship has on an individual's overall development and on the development of their future relationships with others. The discussion then turns to the importance of examining an individual's social development within the wider social network. The wider social network is inclusive of teachers, and as such, the second half of the chapter provides a review of past research into teacher-student relationships. Key findings are discussed and gaps in the research are identified.

Chapter Three presents the theoretical framework for this study. A new theoretical model of teachers' relationships with students has been devised and is described. Built into the theoretical model are the three key aspects of Connectedness, Availability and Communication. The three key aspects are described in terms of how each is expected to impact on a teacher's ability to develop relationships with students in the classroom. The chapter also presents a newly constructed structural model. The structural model provides the theoretical basis for the construction of the questionnaires used in this study. The chapter concludes with an explanation of self-views as applicable to this

study.

Chapter Four describes theories of measurement and highlights problems that are encountered when using True Score Theory in social science research. The advantages of using Item Response Theory in preference to True Score Theory are explored and a summary of Rasch measurement is included. The chapter then goes on to describe the tools used to collect data for this study. The structure of the questionnaires and the discussion schedules is explained.

Chapter Five explains the methodology. The chapter begins with an explanation of the administration approvals that needed to be obtained and the ethical considerations that were made. A rationale is then provided for the method chosen for this study. The chapter includes details of the study design, the study sample and a summary is given of the pilot tests. Procedures used for data collection and data analysis are explained.

The Rasch analysis for the teachers' views on teacher-student relationships is presented in Chapter Six. Results of the initial Rasch analysis and the final analysis are included. Tables and graphs generated by the RUMM 2020 program are used to further explain the analysis results. The chapter concludes with a summary of the Rasch measurement analysis of the teachers' questionnaires.

Chapter Seven details the Rasch analysis for the students' views on teacher-student relationships. As in Chapter Six, Chapter Seven includes the initial Rasch analysis and the final analysis. Tables and graphs are again used to help explain the analysis results and the chapter concludes with a summary of the Rasch measurement analysis of the students' questionnaires.

Chapter Eight presents the data analysis from the face-to-face discussion with teachers and the responses teachers made to the open ended questions. The chapter begins with a description of the process used to analyse these data. The findings are then presented as themes within main categories. The main categories are Connectedness, Availability, Communication,

Teachers' Relationships with Parents and Self-Reflection for Teachers. In all, thirty-two themes are put forward in this chapter and are supported using material from the discussion transcripts.

Chapter Nine reports the students' discussion data and the responses students made to the open ended questions. The chapter presents the findings as eighteen themes within the main categories of Connectedness, Availability, Communication, Equality and Teacher Mood. The themes were then used to formulate five abstractions. The abstractions portray students' perceptions about their relationships with their teachers.

Chapter Ten begins with a summary of the study and goes on to answer each of the research questions. The key findings are presented along with a review of the themes and abstractions identified in the discussion data.

Chapter Eleven is the conclusion of the thesis. The results of the study are discussed in light of current literature. The chapter then concludes with implications for educational administrators, teachers, students, policy makers and future research.

CHAPTER TWO

LITERATURE REVIEW

Beginning in infancy and continuing throughout childhood and into adulthood, relationships are a key factor impacting on an individual's overall development (Tronick, 2005; Weare, 2004). Increasingly, relationships are recognised as being essential for an individual's cognitive development, social competence and psychological wellbeing (Dowling, 2005; Larrivee, 2005; Nadel & Muir, 2005; Noddings, 2005). Pianta (1999) identifies children's relationships with adults as being "a cornerstone of development" (p. 185) and contends the role of adult-child relationships is often underestimated due to a lack of understanding. An increased understanding of the role of adult-child relationships and specifically, teacher-student relationships can be made possible with further research. Research into teacher-student relationships in school settings is particularly valuable as the classroom situation provides a social context in which teachers interact with students (Weare, 2000). It is within the classroom setting that teachers have a unique opportunity to develop supportive relationships that serve to enhance a student's cognitive, social and emotional development (Good & Brophy, 2000; Pianta, 1999; Wentzel, 1998).

This chapter begins by providing a general overview of relationship development, and then specifically addresses teacher-student relationships and the development of research in the classroom. This chapter includes overviews of previous relevant studies. Gaps in the research are identified and, in so doing, a platform is laid for the present study. Literature specifically relating to the key aspects of Connectedness, Availability and Communication is presented in Chapter Three.

Relationship Development

People are social beings with both a capacity and an in-built need to interact with others (Tronick, 2005). As people interact with each other, interpersonal connections are made that provide the basis of shared personal relationships. The nature of shared personal relationships impact on an individual's overall health and well-being (Tronick, 2005; Weare, 2000). Such a

sense of "well-being" may be described as one's sense of being 'loved' and of 'belonging', and is recognised as a primary human need upon which other needs are established (Weare, 2000). This notion is supported by the psychologist Maslow (1968) who developed a hierarchical list of five basic human needs. Maslow listed the need for belongingness and love (affiliation, acceptance and affection) third, preceded only by safety needs (security and protection) and physiological needs (such as food and drink) (Krause, Bochner, & Duchesne, 2006). While critics may argue the sequential nature of Maslow's human needs model, few would argue the identification of belongingness and love as a basic human need.

To better understand relationship development, it is essential to appreciate the influence of interactions between a primary care-giver and an infant. Such interactions influence how an infant's early relationships are shaped and formed. An infant has "social and psychological significance for others and is responded to in an emotional way" (Broom & Selznick, 1975, p. 98). The responses received by the infant indicate acceptance or rejection, approval or disapproval, relaxation or tension. The responses received influence the physical care the infant receives and the construction of interpersonal boundaries for that particular relationship (Broom & Selznick, 1975; Sameroff, 1989).

A discussion of attachment theory, as proposed by Bowlby (1958) and Ainsworth (1963), is helpful in further examining the significance of interactions between a primary care-giver and an infant. Attachment is viewed as a process that begins in infancy, and continually evolves and adapts throughout an individual's lifetime (Cicchetti, Cummings, Greenberg, & Marvin, 1990; Dunn, 1993). Attachment theory suggests children develop secure or insecure attachment to their mothers or no attachment at all, depending on the frequency, reliability and appropriateness with which the children's needs are met (Takahashi, 2005). This has been demonstrated in recent studies on Romanian adoptees where duration of deprivation was shown to have a close link with the degree of attachment behaviour disorders (O'Connor & Rutter, 2000).

The quality of attachment and the individual's personality traits determine the child's future social development, with a direct connection existing from one set of social experiences to the next (Fox, 1993). In highlighting the importance of the parent-child relationship, Feiring and Lewis (1984), state:

The quality of the interaction, such as the parents' responsiveness and sensitivity to the child's needs, is predictive of a secure child-parent relationship. The security of a parent-child relationship may affect the child's social development inasmuch as secure children are more willing to interact with other persons. (p. 62)

Proponents of attachment theory see positive child-parent relationships as desirable for a number of reasons. Children who experience supportive, emotional attachments early on are more likely to feel secure and be willing to explore the world around them (Bretherton, 1992; Harrison, 2003). Children who have supportive emotional bonds with their parents are more likely to develop positive relationships with peers and teachers and are more likely to complete school (Marcus & Sanders-Reio, 2001; Pianta, Nimetz, & Bennet, 1997). Furthermore, secure attachment is considered to be a protective factor contributing to one's state of mental health (Eagle, 1995; Hart, Brinkman, & Blackmore, 2003).

While a focus on the relationship that develops between a primary caregiver and an infant is a necessary starting point, social theorists emphasise the importance of examining a child's total social experience rather than just an individual's involvement within an isolated relationship (Furman, 1989; Lewis, Feiring, & Kotsonis, 1984). This is borne out in the work of Bronfenbrenner (1979) through his conceptualisation of categories of networks, specifically, microsystem, mesosystem, exosystem and macrosystem. Lewis, Feiring and Kotsonis (1984) stress that in order to gain a fuller understanding of a child's social development, the focus on the child's interactions must go beyond that of the immediate family, extending into the wider social network of adults and peers, kin and nonkin.

A child's social development is impacted by those in the wider social network. The child as the 'seeker' of particular social needs relies on adults and peers in their social network as the 'suppliers' of those needs. This view is supported by the theories of Sullivan and Piaget (Youniss, 1980) whereby, at

the initial stage of socialisation, the child is seen as a recipient only. As the child matures and becomes able to perceive the needs of others, the second stage of cooperative socialisation is reached, when the child may be a contributor, as well as a recipient, through a collaborative, interactive process. Adults seek to nurture mature skills, and children, keen to engage in adult activities, impel their own development (Rogoff, 1986). This theory is consistent in part with Neo-Piagetian views of children "actively constructing their own development, through their interactions with the environment" (Davis, 1991, p. 16). This theory aligns with the Vygotskian notion that adults and experienced peers provide children with social guidance, assisting the internalisation of skills initially practised with support in order for the skills to be used by children independently (Rogoff, 1991).

The concept of learning through interaction with others is supported by the symbolic interactionist view which asserts that an individual's social behaviour will be modified in response to behaviours, attitudes and expectations of others present (Fine, 1981). The view that social learning occurs through interactions with others is widely supported in the literature and interactions between students and teachers are seen to contribute to students' social development, as well as to the development of the teacher-student relationships that they share.

Teacher-Student Relationships

Research has shown that positive relationships between teachers and students are essential for effective teaching and learning to take place (Corrie, 2002; McInerney & McInerney, 1994). However, the focus of much educational research in the past has been on teacher effectiveness and students' academic achievement in the absence of any relational context. While the outcomes of such previous studies have been of value, the resulting overall picture of the educational process has been incomplete (Fraser, 1986). This section reviews past research into teacher-student relationships, details recent trends that have contributed to knowledge in this area and outlines areas of research that still need to be carried out.

As far back as the late 1940s, research was being conducted into the area of classroom climate, also referred to as psychological atmosphere and social-emotional climate. John Withall (1949) was one of the early pioneers in this area of research. He proposed a technique for analysing teachers' verbal behaviours to ascertain the extent to which teachers create a climate conducive to student learning. Withall (1949) found that teacher behaviour exerted a large influence on the emotional tone of the classroom and claimed it was "the most important single factor in creating climate in the classroom" (Withall, 1949, p. 347). Although Withall did not explore teacher-student relationships as such, he did recognise the impact teachers have on the classroom learning environment. While there was some interest in this area of research, it would appear that the interest was not sustained. This may have been due to the greater attention given to research into student outcomes, particularly during the 1970s (Fraser, 1986).

According to Brophy and Good (1986), the bulk of educational research in the 1970s had a process-product emphasis that largely focussed on teacher effectiveness and curriculum effectiveness. Although studies at that time examined the interactions between teachers and students, the main focus was on instructional aspects, such as methods of instruction (Brophy & Good, 1986), teacher thought processes (Clark & Peterson, 1986), teacher behaviour (Shulman, 1986) and the proportion of teacher talk to student talk (Brophy & Good, 1986). Teacher effectiveness was gauged by student achievement. This meant that teachers were recognised as being effective when their students attained a higher-than-expected level of achievement on standardised tests. (Shavelson, Webb, & Burstein, 1986). In this way process-product studies linked teacher behaviour to student achievement but had little or no regard for the relational context of teacher-student interaction (Birch & Ladd, 1996; Brophy & Good, 1986).

While it has been suggested that most of the educational research conducted in the 1970s had a process-product focus, a notable exception is found in the work of Rudolf Moos (Fraser, 1986) who spent most of the decade exploring psychosocial environments. Moos conducted research in classroom environments along with various other social environments that included

"university residences, hospital wards, community-based treatment settings, juvenile and adult correctional facilities, military companies, families, social and therapeutic groups, and work milieus" (Fraser, 1986, p. 16). As a result of this work, Moos identified three dimensions believed to be necessary for inclusion in any instrument used to assess human environments. These dimensions are described by Fraser (1986) as follows;

Relationship Dimensions which identify the nature and intensity of personal relationships within the environment and assess the extent to which people are involved in the environment and support and help each other;

Personal Development Dimensions which assess the basic directions along which personal growth and self-enhancement tend to occur; and **System Maintenance and System Change Dimensions** which involve the extent to which the environment is orderly, clear in expectations, maintains control and is responsive to change. (p. 16)

The work of Moos and Trickett (1974) gave rise to the Classroom Environment Scale proposed as suitable for use in secondary school classrooms. The Classroom Environment Scale was designed to assess such aspects as student involvement in the class, the affiliation felt between students, competition that exists between students, and teacher support in terms of the help, concern and friendship directed by the teacher towards the students (Fraser, 1986). This particular scale provides evidence that during a "process-product" dominated era in educational research, some researchers were actively exploring the social and emotional climate of the classroom.

In the late 1970s, Rutter (1979), like Moos and Trickett (1974), was not caught up in the process-product wave of educational research. Instead he was focussed on finding out why some vulnerable children did not succumb to the stress in their lives, but somehow managed to cope. In so doing, Rutter (1979) identified "warm close personal relationships" as one factor that could provide protective benefits (p. 71). He highlighted the idea that a non-parental adult who develops a close bond to a child may have a positive psychological impact on that child's life and named schools as "social institutions that have an impact on children's behaviour and emotional development" (Rutter, 1979, p. 61).

In the late 1980s and continuing into the 1990s, an increasing number of classroom studies emerged with a focus on the relational context of interaction

between teachers and students. Psychosocial aspects of the classroom environment were acknowledged as being important and the topic of teacher-student relationship became a focus of attention. Teacher-student relationships were found to influence students' behavioural adjustment at school as well as their academic success (Entwisle & Hayduk, 1988). Furthermore, teacher-student relationships were found to enhance resiliency and provide protective factors for mental health and social and emotional well being (Pianta & Walsh, 1996).

In recent years schools have been identified as key agencies that can effect change in the community through the promotion of social and emotional learning in students (Weare, 2000; Weissberg, Caplan, & Harwood, 1991). Weissberg, Caplan and Harwood (1991) describe the education system as "the most efficient and systematic means available to promote the psychological, social, and physical health of school-age children and adolescents" (p 835). The authors encourage administrators and educators to consider how schools must cope with public pressure to raise achievement scores, and for schools to use their potential to enhance the mental and physical wellbeing of students in ways that improve the ability of students to perform academically to the best of their capability and to become "responsible citizens and productive workers" (p. 835). In a similar vein, Weare (2000) challenges school communities to promote social, mental, and emotional health in students, in order to contribute to improved social cohesion in the community at large.

Benefits for Students

Research into teacher-student relationships has highlighted a number of ways in which students may benefit from having positive relationships with their teachers. These are discussed as follows.

Adjustment to school

A student's adjustment to school is determined partly by how well a student has made the transition from his/her home or day-care setting to the school setting. This includes how well they adapt socially, how well they perform academically and how positively they feel towards being at school. Research on classroom relationships has found that a positive relationship between a

teacher and a student will assist a student's adjustment to school and enhance his/her school performance (Baker, 1999; Entwisle & Hayduk, 1988; Hamre & Pianta, 2005; Valeski & Stipek, 2001).

At a time when most research on educational attainment was focussed at the secondary level of schooling, Entwisle and Hayduk (1988) chose to explore "the social structural and interpersonal forces that impinge on children early in their school careers" (p. 147). Their study traced students at three Baltimore schools through their first three years of elementary school and beyond. Students along with their mothers, teachers and peers were questioned to determine the influence each had on how well the students would adjust to school. Results found that students in all three schools were influenced by their "significant others" (parents, teachers and peers) in the first three grades of school and the influence continued into the long-term. While it was found that some students were more greatly influenced by their parents and others were more greatly influenced by their teachers, Entwisle and Hayduk (1988) were able to conclude "children's development is embedded in their social life [and] to understand it, one must take account of the social system in which children function" (p. 158).

One way of examining the social system within which students function is to investigate students' perceived levels of support. Valeski and Stipek (2001) did this with 225 kindergarten students and 127 first graders in American schools. The measure Feelings About School (Valeski & Stipek, 2001) was completed by students and used to ascertain their perceived levels of support from teachers. Links were found between students' perceptions of teacher support and their attitudes to school. Students who felt their teachers cared about them also had positive attitudes towards school.

Links between students' perceptions of teacher support and their attitudes to school have also been found for adolescents. A study by Wentzel (1998) used subscales from the Classroom Life Measure (D. Johnson, Johnson, Buckman, & Richards, 1985) to investigate perceived levels of support from teachers for 167 adolescents. A total of eight items were used in the measure and students answered using five Likert response categories where 1 = *never*

and 5 = *always*. Sample items included "My teacher likes to help me learn" and "My teacher really cares about me". Additional scales were used to determine perceived support from peers, family cohesion, psychological distress, interest in school and in class and academic achievement. Overall results found a strong link between supportive interpersonal relationships and the motivation of young adolescents to do well at school.

School adjustment may also be identified by the level of satisfaction a student experiences. This concept was explored in an American study by Baker (1999) who used self-report questionnaires, observations and interviews with sixty-one students to determine their levels of satisfaction with school. The students, who were from grade 3 to grade 5, belonged to low-income, urban African-American families. Baker (1999) confirmed that students who like school had different social experiences with their teachers compared with students who dislike school. Those students who liked school cited greater support from their teachers than those who expressed less satisfaction with school. This indicates that teacher-student interaction is a contributing factor to school adjustment in the primary years.

Student learning

A child's ability to develop relationships with others is considered by some to be the most essential factor affecting a child's capacity to learn (Brazelton & Greenspan, 2000; Malaguzzi, 1993). Research on interpersonal relationships has found that a child's cognitive development is impacted to a large degree by the social and emotional qualities of the relationships they share with their parents and teachers (Pianta, 1999). As Greenhalgh (1994) states, "children need to develop a sense of emotional safety and trust in others for development and learning to proceed" (p. 25).

A number of studies have found links between cooperative, supportive school environments and a student's ability to do well at school and to attain higher levels of academic engagement and success (Entwisle & Hayduk, 1988; Gardner, 1993; Howes, Hamilton, & Matheson, 1994). A recent example is found in the work of Klem and Connell (2004) who analysed sets of longitudinal data collected during the period 1990 to 1995. The data included records and

surveys from teachers and students and measured teacher support and student achievement. Klem and Connell (2004) identified teacher support as being important to student engagement. Students who 'engaged' more at school were more likely to attend school and to achieve higher test results than those who were less 'engaged'. The results were consistent across the primary and the junior high school classes.

Another recent study that shows a link between positive teacher-student relationships and enhanced student learning was conducted by Burchinal, Peisner-Feinberg, Pianta and Howes (2002). These authors tracked 511 preschool children over a five year period. They found that while there are many factors that contribute to academic competence in students, a close relationship with the teacher is one such factor, and it is a factor that is particularly beneficial for students considered to be at risk for lower achievement.

Furthermore, it has been suggested that "strong, positive relationships with students can provide motivation [for teachers] to spend extra time and energy promoting children's success" (Hamre & Pianta, 2001, p. 626). This may produce a positive, on-going, cyclical effect whereby extra input from a teacher contributes to a student's success which prompts the teacher to have further input and so on.

Peer relationships

Links have been found between teacher-student relationships and how well students relate to their peers. Students who relate well to their teachers are better able to develop positive relationships with their peers (Howes, 1999; Howes, Hamilton, & Matheson, 1994; Peisner-Feinberg et al., 2001; Pianta, 1999). What remains to be determined is whether positive teacher-student relationships assist students in establishing positive peer relations or whether students experience success in both relationship domains by virtue of the social skills they already possess (Hughes, Cavell, & Willson, 2001).

In the United States of America, Howes (2000) used a longitudinal study to explore the links between teacher-student relationships and peer relationships between students. She tracked 307 students over a five year

period from a childcare setting to kindergarten and into elementary school. The study used the Peer Play Scale to determine peer social competence, the Classroom Behaviour Inventory to assess behaviour problems and the Student-Teacher Relationship Scale to measure the quality of relationships between the students and their teachers. The study found that students who developed positive relationships with their teachers were more likely to interact with peers in socially appropriate ways. Howes (2000) concluded "considerable individual variation in children's social competence with peers as second graders can be understood by examining both their individual experiences and behavioural characteristics as four-year-olds in child care and the social and emotional climate of their child care classrooms" (p. 202). The study emphasises the impact teacher-student relationships have on the social development of young children. Furthermore, the study highlights the need for an increased awareness of the importance of establishing and maintaining a positive social and emotional climate in the classroom.

Student behaviour

Supportive interpersonal relationships between teachers and students have been found to bring about positive behaviour in students. An American study followed 436 children from kindergarten to grade two in order to identify and compare relationship histories (Pianta, Steinberg, & Rollins, 1995). The study showed kindergarten students who shared a "warm, close, communicative" relationship with their teachers had more positive teacher-student relationships in second grade, displayed fewer incidences of problem behaviours and a greater incidence of competent behaviours compared with those kindergarten students who had "angry, dependent" relationships with their teachers (Pianta, Steinberg, & Rollins, 1995, p. 295). It is acknowledged that teacher-student relationships are neither the only contributing factor to student behaviour, nor the sole predictor of student behaviour. For example, students may come to school with problem behaviours such as aggression or defiance and teachers may find such behaviours challenging to deal with. In fact such challenging behaviours may make it more difficult for teachers to form a positive relationship with those students. Nonetheless, the study supports the notion that once a good student-teacher relationship is established, it has a positive effect on student behaviour (Pianta, Steinberg, & Rollins, 1995).

Research into childhood aggression suggests positive teacher-student relationships attenuate children's levels of aggression (Hughes, Cavell, & Jackson, 1999; Meehan, Hughes, & Cavell, 2003). Data on 140 American students in Years One and Two indicated that aggressive students who had a positive relationship with their teacher in Year One were more likely to have lower levels of aggression in Year Two. The influence of positive teacher-student relationships to lower levels of aggression was found to be even more pronounced for students of African American and Hispanic backgrounds compared with Caucasian students (Meehan, Hughes, & Cavell, 2003).

Positive teacher-student relationships have been found to reduce the likelihood of students dropping out of school (Marcus & Sanders-Reio, 2001; Rumberger, 1995). This is desirable given the link between school retention and the decreased incidence of social problems such as unemployment, teenage pregnancy, crime and addiction (Marcus & Sanders-Reio, 2001). The quality of teacher-student relationships has been identified as one of a number of factors to influence a student's decision to complete school. This is supported by findings in a study by Rumberger (1995) who found that students who believed they had supportive, caring teachers were less inclined to drop out of school. Students who do drop out of school "frequently express a sense of individual alienation from school personnel" (Carnahan, 1994, p. 117). By actively fostering positive relationships between teachers and students it may be possible to minimise the incidence of school dropout behaviour.

Resiliency

Resiliency refers to an individual's ability to cope with risk factors such as stress and disadvantage. A definition offered by Masten, Best and Garmezy (1990) suggests resiliency is the "process of, capacity for, or outcome of successful adaptation despite challenging circumstances" (p. 426). Positive teacher-student relationships are known to promote resiliency in children. Furthermore, positive teacher-student relationships are thought to assist in the development of protective factors, potentially effective into adulthood (Novick, 1998; Pianta & Walsh, 1996; Rutter, 1979).

Rutter (1979) was one of the first to conduct research into factors that

produce resiliency in students. His longitudinal study tracked the progress of a cohort of 10-year-olds in Britain. The study spanned seven years starting from the students' final year of primary school and continuing across their years at secondary school. Actual levels of delinquent behaviour were compared with expected levels as predicted using information about student behaviour prior to when they started secondary school. Distinct differences were found between schools. In accounting for the differences, Rutter was able to identify "the 'atmosphere' of the schools and their qualities as a social institution" (Rutter, 1979, p. 63). This led Rutter to conclude that schools can and do produce a significant protective effect in the lives of students at risk by impacting on students' behaviour and emotional development (Rutter, 1979).

A number of studies confirm the link between positive teacher-student relationships and resiliency. For example, a Hawaiian study by Werner and Smith (1992) found that infants who were able to overcome various risk factors and grow up to lead productive lives did so through the support of people who provided a secure relationship. Apart from members of one's own family, teachers were identified as being a major source of support. Another study to recognise the role of teacher-student relationships in promoting resiliency was that of Moskowitz (cited in Larrivee, 2005). In this particular study, some survivors of Nazi concentration camps "attributed their resilience to their connection with warm, caring and encouraging teachers" (Larrivee, 2005, p. 71).

Sense of self

One's sense of self, or self-esteem, is considered to be necessary for healthy mental, emotional and social development. An individual's developing sense of self is contributed to by "warm personal, trustworthy relationships" (Weare, 2000, p. 86). Positive teacher-student relationships have been recognised as making an important contribution in this area. Students with high levels of self-esteem have been found to have high levels of support from parents and teachers. In cases where low parental support has been identified, high teacher support has been found to have a compensatory effect on student self-esteem (Harter, 1996).

Emotional competence

Warm, caring relationships contribute to children's emotional competence (Kienbaum, 2001). Deiro (2005) suggests "strong, healthy connections with prosocial adults are essential to a child's healthy social and emotional development" and "without caring relationships with prosocial adults, the prospects of a healthy social and emotional development are markedly diminished" (p. 4).

Positive teacher-student relationships have the potential to strengthen emotional competence thereby enhancing mental health. This is of particular relevance in Western Australia, considering 17% of children aged 4 - 16 have been identified as experiencing mental health problems, and an estimated 5% of young children suffer depression (Australian Bureau of Statistics, 2007b; Child Health Promotion Research, 2007; Zubrick et al., 1995). Schools are seen to have the potential to help promote mental health in children through the strengthening of teacher-student relationships (Zubrick, Silburn, Burton & Blair, 2000; Pianta, 1999). In this way teachers are being challenged to view their relationships with students as a resource for intervention (Karen, 1998; Pianta, 1999). Karen (1998) strongly advocates teachers take on a more active role in the promotion of children's emotional well-being, and recommends they capitalise on opportunities to relate to students (particularly those at risk) in positive ways. He claims "the school years are a unique opportunity for troubled children to be redirected emotionally, but that opportunity has not been seized" (Karen, 1998, p. 424).

In an American study on emotions and school adjustment, Shields, Dickstein, Seifer, Giusti, Magee, and Spritz (2001) illustrate the importance of a teacher's influence on students' emotional competence. Contrary to their expectations, the authors found the input of teachers to children's emotional competence was just as important for older children as it was for preschoolers. They suggest teachers can and should coach students to display appropriate emotional responses in a range of everyday situations (Shields et al., 2001).

Hargreaves (2000) regards teaching as "an emotional practice" (p. 824). After interviewing 53 teachers from elementary and secondary schools in

Ontario, Canada, Hargreaves (2000) was able to stress the importance of emotional understanding and the dangers of emotional misunderstanding in the context of teacher-student relationships. He suggests maximum emotional engagement and understanding are achieved when teachers and students share strong continuous relationships. In addition, positive teacher-student relationships that contribute to emotional competence are believed to be necessary for high-quality teaching and learning to take place (Elias & Weissberg, 2000; Hargreaves, 2000).

Benefits for Teachers

Caring classroom relationships have been found to contribute to a teacher's sense of job satisfaction (Connell, 1985; L. Goldstein & Lake, 2000), resulting in what has been referred to by Lortie (cited in Hargreaves, 2000, p. 817) as the "psychic rewards" of teaching. One way teachers secure psychic rewards is "by establishing close emotional bonds or emotional understanding with their students as a foundation for teaching and learning" (Hargreaves, 2000, p. 817). Teachers who share positive relationships with students are more likely to contribute to a supportive school climate in which teachers (as well as students) enjoy the school experience (Deiro, 1996). Conversely, teachers who interact with students in a negative manner, for example, "yell, name call, threaten, or use sarcasm and social ridicule are using hostile means to control students that destroy trust relationships and increase stress for all" (Corrie, 2002, p. 13). Such behaviour results in dissatisfaction in the workplace. It is also possible that teachers who become overwhelmed by the commitment to care for students may suffer "emotional strain, anger and alienation" (L. Goldstein & Lake, 2000, p. 862), resulting in a loss of job satisfaction.

The idea that positive relationships support teaching and learning and exert a positive influence on teacher job satisfaction is supported by Pollard's (1985) model of a positive cycle of teaching and learning. The model suggests that teacher initiatives that lead students to experience a sense of their own dignity and value are the ones that best stimulate learning. This then leads to effective instruction and the maintenance of order which in turn enhances teacher self-esteem and job satisfaction (Pollard, 1985). Pollard (1985) also puts forward a parallel model of a negative cycle of teaching and learning. In the

second model teacher initiatives that threaten students' sense of dignity and value are seen as likely to damage the teacher-student relationship, to disrupt effective teaching and learning, thereby increasing teacher stress levels and reducing job satisfaction.

Developments Within the Area of Measurement

As research into teacher-student relationships has continued there have been notable developments within the area of measurement. There have been developments, for example, in the way teacher-student relationships are identified and described, in the measures used to assess teacher-student relationships, and in eliciting students' views. An examination of these areas will now follow.

The identification and description of teacher-student relationships

In order to assess relationships they must first be identified and described. Georg Simmel (1858-1918) is hailed as the founder of sociology and is recognised as one of the early pioneers in this field. He worked at identifying and documenting the reciprocal patterns of behaviour that constitute the interactive process between individuals. In so doing, Simmel suggested ways to classify and analyse social relationships. In particular, Simmel identified patterns of conflict, of cooperation, and of competition. The work of Simmel has had "a deep influence on American social science" and effectively silenced his critics who maintained "that no social science was possible" (Coser & Rosenberg, 1989, p. 44).

Pianta is one example of a researcher whose own investigation of relationship assessment has been influenced by Simmel's work. Pianta (1999) has modified Simmel's groupings and uses the terms conflict, closeness and dependency to describe relationships between teachers and students. These terms feature in the Student-Teacher Relationship Scale (STRS), a tool used extensively in the United States in nation wide and local studies (Pianta, 1996). According to Pianta (1999), a relationship that is identified as conflictual is one in which there is a display of anger, emotionally negative interactions, student misbehaviour and ineffective behaviour management on the part of the teacher. A relationship that is identified as close is one in which there is reciprocal

involvement and high levels of positive emotional interactions. A relationship that is identified as dependent is distinguished by a student who exhibits high levels of help seeking behaviour and of seeking physical proximity to the teacher. Such behaviour is interpreted as an over-dependence by the student on the teacher (Pianta, 1999). These groupings are not hierarchical in order but are thought to encompass the range of relationships that may exist.

In their investigation into teacher-student relationships, Birch and Ladd (1998) also use three categories to identify and describe relationships, namely, "moving against others", "moving towards others" and "moving away from others". Of these categories the first two match Pianta's categories and the third is quite distinct. Birch and Ladd identify a "moving against others" behavioural orientation that matches Pianta's conflictual relationship pattern. According to Birch and Ladd (1998), a relationship categorised as "moving against others" is characterised by aggression, defiance and hyperactivity. Such behaviour tends to result in discordant interactions and poor relationships with teachers. A second behavioural orientation identified by Birch and Ladd (1998) is "moving toward others". This is similar to Pianta's (1999) close relationship pattern and is characterised by helpful, cooperative and considerate student behaviour. The third behavioural orientation identified by Birch and Ladd (1998) is "moving away from others". Unlike any of the behavioural patterns identified by Pianta, "moving away from others" is typified by asocial children who withdraw themselves, minimise contact with teachers and reduce the opportunity to develop positive teacher-student relationships (Birch & Ladd, 1998).

Within attachment theory, developed by Ainsworth and Bowlby in the 1950s, three different attachment styles are identified. These are, avoidant, secure and anxious-ambivalent (Ainsworth, Blehar, Waters, & Wall, 1978). Whilst attachment theory was initially used in research on infant-caregiver relationships, much of the current work on teacher-student relationships is "nested within an attachment theory perspective" (Howes, 2000, p. 191). This perspective recognises the influence of teacher-student relationships on the development of other relationships. For example, students who have a warm or secure relationship with their teacher are thought to use their teachers as a secure base and a resource for the development of other social relationships

(Howes, 2000).

Relationship assessment procedures, by which data on relationships may be collected, typically include observations and interviews. Lynch and Cicchetti (1992) caution that no one assessment procedure on its own is adequate for assessing relationships. Pianta (1999) goes further to say the "description and assessment of relationships is ... best when informed by multiple perspectives [and] by multiple methods" (p. 89). In future studies, there is a need to find ways to best identify and describe relationships by considering multiple perspectives (teachers' views as well as those of students), and by using multiple methods (questionnaires as well as discussion schedules). In this way it is possible to obtain a more complete picture of the relationships teachers and students share.

The development of non-linear measures

As research into the area of teacher-student relationships has developed so too have various measures used to assess teacher-student relationships. To date researchers in this area have typically relied on traditional methods of measurement and have predominantly made use of rating scales like Likert scales. For example, a number of studies into student-teacher relationships have made use of the Relatedness Scale developed by Wellborn and Connell (1987). The Relatedness Scale consists of 17 items that are assessed on a 4-point scale. The first 7 items are "I" statements that describe the relationship from the student's point of view (such as "I wish my teacher could spend more time with me" and "I wish my teacher knew me better"). To each statement the student must select one of four possible responses: definitely not true, not very true, sort of true and very true. The final 10 items describe how the students feel when they are with their teacher (for example, "When I'm with my teacher I feel safe" and "When I'm with my teacher I feel bored"). To each of these statements the student must select one of four possible responses: almost never, not very often, some of the time and almost always. A significant weakness in the design of the Relatedness Scale is that the level of difficulty between items is not taken into consideration and neither is the level of difficulty of the responses. The resulting scale may be ordinal but it is not additive or linear (see Chapter Four on Measurement). Even so, calculations are made to determine which one of

five possible patterns of relatedness exists between the student and their teacher.

The Student-Teacher Relationship Scale is another example of a popular tool that produces an ordinal scale rather than a linear measurement scale but which, nevertheless, is treated as a linear measurement scale (Pianta, 1996). As already stated, the Student-Teacher Relationship Scale has been used extensively in recent American studies and has been promoted as "the only standardized and validated instrument available for assessing teacher's perceptions of student-teacher relationships" (Pianta, 1999, p. 94). However, within the instrument design, the item difficulties are not considered. For example, the first three items read "I share an affectionate, warm relationship with this child", "This child and I always seem to be struggling with each other" and "If upset, this child will seek comfort from me". An additional problem is that the 28 items are rated on a 5 point Likert-type format that includes a neutral response. The scale is then scored by summing groups of items and calculating a total score. This rating scale is treated erroneously as a linear scale. Problems with these scales are explained in Chapter Four on Measurement.

Calls have been made for the development of valid teacher-student relationships measures (Pianta, 1997, 1999). Recently Ang (2005) responded to the calls by producing a Teacher-Student Relationship Inventory. The Teacher-Student Relationship Inventory was reported to be a reliable and potentially valid instrument. Ang (2005) felt it was a necessary addition to the available tools given that the Student-Teacher Relationship Scale was mainly suited to students from preschool up to Year 3 and the Teacher-Student Relationship Inventory was suitable for use with students from Year 4 through to junior high school. The problem with the Teacher-Student Relationship Inventory is that, like the Student-Teacher Relationship Scale and the Relatedness Scale, it is treated as a measurement scale when it is in fact a rating scale.

There is a need to respond to the call for the development of valid teacher-student relationship measures by using modern methods to produce linear measures with Rasch (1980/1960) Computer programs. Measurement scales of this kind are superior to rating scales as explained further in Chapter

Four. This would be a particularly important aspect of any new study as linear measurement scales have not been used previously in any other research into teacher-student relationships. There is a need to develop scales for use with students across the primary years and secondary years.

Eliciting students' views

Adult-like communication skills have been thought to appear in children as young as 4 years of age (Black, Puckett, & Bell, 1992) and some studies have demonstrated that young children are able to articulate "their understandings of social roles and categories" in reasonable and reliable ways (Corrie & Leitão, 1999, p. 25). Even so, of the studies that have been conducted in the area of teacher-student relationships, the main focus of attention has been on teachers' views (Pianta, 1999; Saft & Pianta, 2001). This has resulted in a lack of information about students' views. This is of some concern considering students' perceptions are recognised as "the determinants of student behaviour ... [and] can be more important than observed behaviours" (Fraser, 1986, p. 3). Adding to the argument for eliciting students' views is the finding that adults' perceptions of students' views may not necessarily match that of the students (Dubow & Ullman, 1989).

Of the studies that have investigated teacher-student relationships from the students' perspective Lynch and Cicchetti (1992; , 1997), Toth and Cicchetti (1996) and Wentzel (cited in Pianta, 1999) found that students were in fact able to offer valuable information about the relationships they shared with teachers. For example, Lynch and Cicchetti (1992) found in their study that it was possible to use the information provided by the students to identify what kind of relationship they shared with his/her teacher. In all, 215 students between the ages of 7 and 13 participated in the study. Each student was able to be identified as having either an optimal, adequate, deprived, disengaged or confused relationship with their teachers. Furthermore, the relationships shared with their teachers correlated to the students' experiences with their parents. Results such as these provide support for the argument to include students' views when researching teacher-student relationships.

A more recent example of a study that successfully elicited young

students' views is that conducted by Mantzicopoulos (2005) in the United States. In this particular study, 103 economically disadvantaged students from 24 public school kindergarten classes were asked about conflictual aspects of their relationships with their teachers. The student participants were aged between 67 and 83 months of age. They were asked to agree or disagree with a set of nine items. The students did this by viewing a card that related to the item and "posting it" into either a letter box (if they agreed with the statement) or a rubbish bin (if they disagreed with the statement). Items included statements such as "My teacher gets angry with me", and "My teacher tells me I don't try hard enough". Results from this particular study seem to indicate that students as young as 5 years and 7 months of age are able to articulate their awareness of negative or conflictual interactions with their teacher. Furthermore, it was found that student responses correlated with teacher responses, which was seen to substantiate the reliability of the students' responses. Calls have been made to further examine teacher-student congruence of relational self-reports within specific teacher-student dyads (Mantzicopoulos, 2005). This is an area undertaken in my study.

It is important to note that while both of the studies just mentioned, that is, by Lynch and Cicchetti (1992) and by Mantzicopoulos (2005), did take students' views into consideration, they also both limited students to using standard response formats. The inherent danger with using standard response formats is that researchers may be imposing their own factors on the students and may be limiting the responses students make (Dubow & Ullman, 1989). This is because methods for assessing teacher-student relationships typical involve standard response formats such as true-false and multiple choice options. While these formats do yield useful information from the student's perspective what is lacking is the student's voices. It must be remembered that students may have more to say than just the limited responses on offer and provision should be made to hear their extended responses if they so wish to make them. In this way, open ended questions may be used to further ratify and amplify student's responses to the initial closed response questions. This gap in the research can be addressed in a future study by giving students the opportunity to respond to open ended questions and to make extended responses during discussions. Likewise teachers can be invited to record

written responses to open-ended questions and to give extended responses in discussions. This stance is supported by Seidman (1991) who maintains talking with participants is a “powerful way to gain insight” into the lives of individuals (p. 7).

Gaps in the Relationship Literature

Positive relationships are vital for an individual's ongoing overall development. Positive relationships between teachers and students are said to contribute to a student's cognitive, social and emotional development. Furthermore, teachers who experience positive relationships with their students are believed to benefit by way of increased job satisfaction. Such gains make research into teacher-student relationships a very necessary endeavour.

Previous research into teacher-student relationships has had a strong emphasis on instructional aspects but has failed to fully explore relational aspects. There is a need to investigate relational aspects of teacher-student relationships, such as the key aspects of connectedness, availability and communication. Further justification for exploring these particular three key aspects is provided in the following chapter.

There is a need for research into teacher-student relationships that uses modern methods of measurement. Research to date has relied heavily on traditional research methods that employ rating scales and, as a result, there is a lack of linear scales. Furthermore, there have been calls for the development of valid and reliable tools for use in teacher-student relationship research. Modern methods of measurement, such as Rasch measurement, have been used successfully in the human sciences to produce valid and reliable tools. In addition, modern methods of measurement, such as Rasch measurement, have the potential to contribute new information within the area of teacher-student relationship research.

Greater research needs to be done to determine students' views of teacher-student relationships. Most research to date has taken teachers' views into consideration but failed to consider students' perspectives. This has partly been due to a lack of regard for the value of students' views and partly due to a

lack of available tools with which to obtain students' views.

There is a lack of research in Perth, Western Australia, with respect to teacher-student relationships. Local research is needed to determine teachers' views and students' views in order to better understand the role these shared relationships play in Western Australian classrooms. In addition, this research is particularly needed, given the current concern for the mental well-being of Western Australian primary school students.

The next chapter explains the theoretical framework of the present study.

CHAPTER THREE

THEORETICAL FRAMEWORK

This chapter presents the theoretical framework for the study. A new theoretical model of teachers' relationships with students and a new structural model have been devised for this study. Both models are presented and explained along with supporting information from the literature. In addition, this chapter explores the importance of self-views in the context of the study.

Introduction

There are many aspects that influence the quality and nature of personal relationships and, specifically in this study, relationships between teachers and students in the primary school. A complete understanding of how these aspects influence teachers' relationships with students is likely to be very complex. To fully understand the interconnections between all possible aspects would be very involved, and is beyond the scope of this study. However, it is possible to simplify these connections by creating a theoretical model and building into it a selected number of aspects that are considered most important. The resulting theoretical model of teachers' relationships with students features in this study. This simplified model provides an understanding of the interconnections between the selected aspects, gives direction to the research in the collection of data, and provides guidelines for the analysis and interpretation of the data. In addition to the theoretical model, a structural model for the questionnaires has been constructed for use in the study. The structural model presents the theoretical basis for the construction of the questionnaires developed for this study. Both models will now be explained.

A Theoretical Model of Teachers' Relationships with Students

A review of the literature on relationship development reveals there are a number of vital aspects necessary for the development of strong, healthy relationships between teachers and students. The aspects identified as significant include emotional safety and trust (Greenhalgh, 1994), positive emotional involvement (Pianta, Nimetz, & Bennet, 1997), a sense of closeness (Brazelton & Greenspan, 2000), teacher availability (Pianta, 1999; Weissberg,

Caplan, & Harwood, 1991) and, open communication (Pianta, 1999). For the purpose of this study, these aspects from the literature have been grouped into three broad areas, namely Connectedness, Availability and Communication. Each of these broad areas is seen to be a key aspect likely to impact on a teacher's ability to develop relationships with the students in their classroom. These three key aspects have been built into the theoretical model for this study. The model is depicted pictorially in Figure 3.1. An explanation of the model and a description of each of the three key aspects follows.

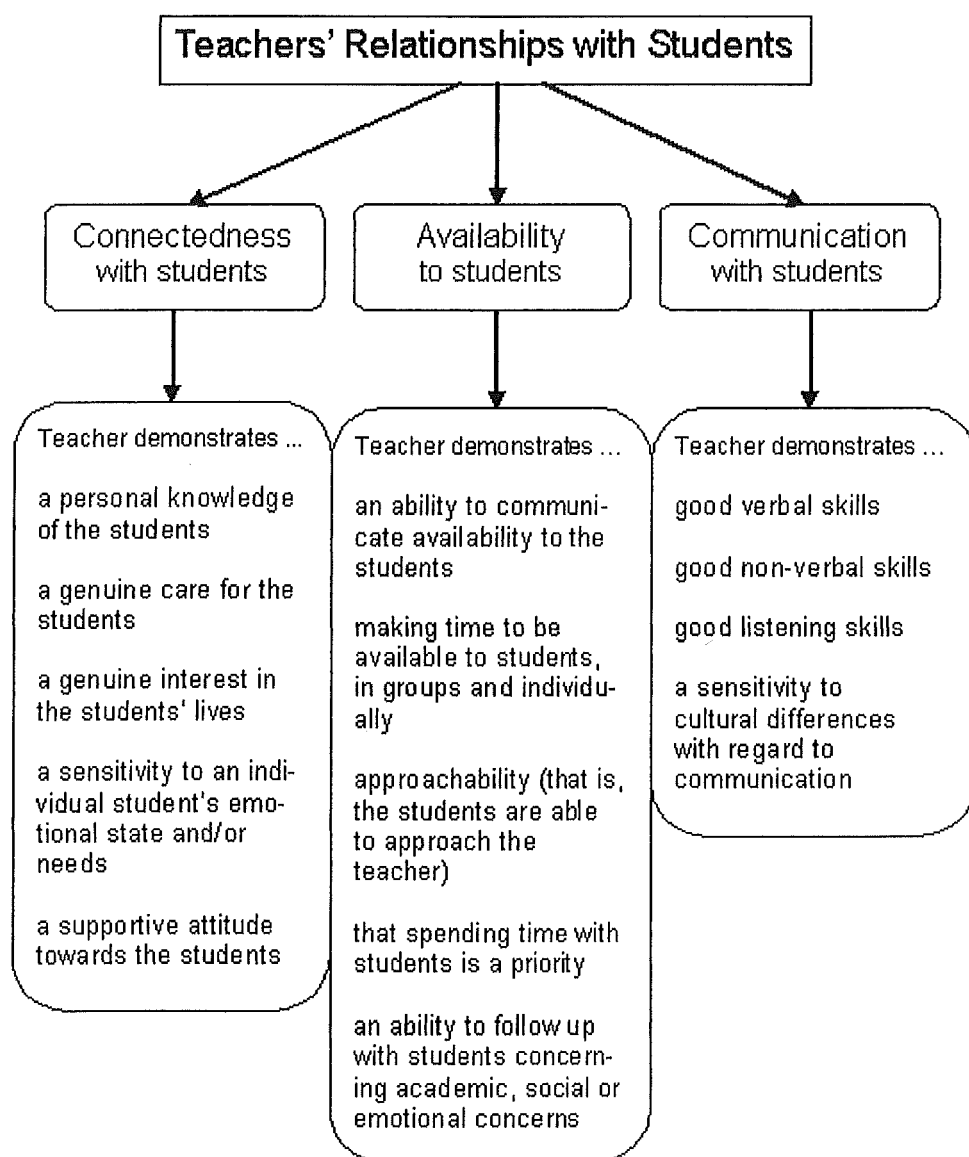


Figure 3.1. Theoretical Model: Teachers' Relationships with Students.

Source: Created from a literature review for this study by Natalie Leitão (2005)

The Theoretical Model is a multi-levelled model. Incorporated in the first level are the three key aspects most expected to impact on teachers' relationships with students: Connectedness, Availability and Communication. The second level of the model features the expected mechanisms by which the key aspects will be demonstrated by teachers as they relate with the students in their classes. Teachers who demonstrate the expected mechanisms will be seen to be working towards achieving the key aspects in their relationships with students. The three key aspects and the mechanisms are now explained.

Connectedness

Connectedness refers to the connection that exists between a teacher and a student and, as indicated in the literature, is expected to be an important aspect in the development of teachers' relationships with students in the classroom (Fox, 1993; Howes, 2000). Connectedness is expected to encompass how 'in-tune' a teacher may be with a student, and concerns the emotional tone of the relationship (Lynch & Cicchetti, 1992). A secure connection between a teacher and student is expected to contribute to an individual student's academic success, a student's ability to regulate his or her own behaviour, and a student's ongoing ability to develop social relationships with others (Entwisle & Hayduk, 1988; Shields et al., 2001; Thompson & Lamb, 1984; Valeski & Stipek, 2001). How well teachers connect with their students is considered to be a significant aspect to investigate when considering teachers' relationships with students in the primary school because positive connections enhance a student's sense of belonging and self value (Slater, 2004).

Connectedness mechanisms

The concept of connectedness is an abstract one, and is therefore difficult to observe directly. However, it is possible to identify observable mechanisms which teachers are expected to demonstrate in order to achieve connectedness with the students in their classroom. For example, teachers are expected to have a personal knowledge of their students, a caring attitude towards their students and a genuine interest in their students' lives (L. Goldstein & Lake, 2000; Good & Brophy, 2000). Teachers who connect with students are expected to be sensitive to individual students' emotional states and needs, and communicate a supportive attitude towards the students. In the

present study, teachers are asked to report on these mechanisms by responding to the 'Connectedness' items in the questionnaire. The degree to which these mechanisms are demonstrated will indicate the degree to which connectedness is being achieved.

Connectedness Constraints

Constraints are factors expected to impinge on teachers' ability to attain the level of connectedness they desire or may be capable of achieving. The following few paragraphs provide examples of these.

Personality type is an expected constraining factor. For instance, a student's temperament may not be compatible with that of the teacher and a personality clash may result. Such a clash would make it more difficult for the teacher and the student to trust each other and to get to know each other on a deeper, more personal level. Personality type may also present as a constraining factor in the instance of a timid or reserved student who may be disinclined to reveal personal information. Such reluctance to discuss personal detail would make it harder for a teacher to connect with the student on a personal level.

Time is expected to be a constraining factor. Teachers have many demands made of their time. How much time is devoted to connecting with students is impacted by how much time is made available to achieve that. Teachers who are burdened with administrative tasks and a demanding teaching load are less likely to have the flexibility of investing time into getting to know students on a personal level than teachers who have lesser administrative tasks and lower teaching loads.

Another constraint to be considered is that of attachment history. Teachers' inclination and ability to connect well with others is impacted by their own attachment history. Similarly, students' inclination and ability to connect well with others is impacted by their attachment history (Harrison, 2003). Prior ineffective attachment relationships have been found to inhibit the development of an individual's future relationships (Pianta, 1999). In addition, teachers have been found to alter their behaviour towards students depending on the student's

attachment history. For example, students with resistant attachment histories elicited a higher level of nurturance and tolerance from their teachers than did students with other types of attachment histories (Lynch & Cicchetti, 1992).

Availability

Availability is expected to be an important aspect influencing teachers' relationships with students as indicated in the literature (Good & Brophy, 2000; Pianta, 1999). In this study, availability means how available teachers are to their students. Put another way, it means how easily students are able to access their teacher. Availability is expected to include a teacher being available to fulfil a need for a student, be it an academic need (for example, to help with school work), or a social or emotional need (for example, to talk about being rejected by a friend). By being available and spending time with students, it is expected that teachers and students will get to know each other better (Good & Brophy, 2000; Pianta, 1999). In addition, ongoing contact with a caring adult, such as the classroom teacher, is expected to help develop in children a protective mechanism thereby reducing psychosocial risk factors (Weissberg, Caplan, & Harwood, 1991).

Availability mechanisms

While availability itself may be difficult to observe, there are a number of possible mechanisms related to availability which are observable. Teachers are expected to demonstrate these mechanisms in order for the key aspect of availability to be evidenced in their relationships with their students. For example, it is expected that teachers will explicitly communicate their availability to the students, by stating when and where they will be available. The teacher is expected to make time available to students, in groups and individually, and to follow up with individual students concerning academic, social or emotional concerns. The students need to view the teacher as being 'approachable'. In addition, the teacher needs to prioritise putting time aside to be with students. Participants in the study are asked to report on these mechanisms by responding to the 'Availability' items in the questionnaire.

Availability constraints

Teachers' perceived and actual availability is expected to be influenced

by various constraining factors, such as the personalities of both the teacher and the student. For example, teachers who demonstrate warmth and empathy may be regarded by their students as more approachable than teachers who do not exhibit those qualities. Furthermore, teachers may make themselves more available to students who present as the 'ideal', be it on account of their personality, physical attributes or their behaviour, compared with other students who are considered to be less 'ideal' (Fox, 1993). With respect to students' personality, they may or may not consider their teachers to be available depending on their own feelings of confidence. Shy children, for example, may not perceive their teachers to be approachable, even if those teachers are demonstrating availability mechanisms.

Another constraining factor expected to impact on teacher availability is the teacher's ability to perceive a situation and respond appropriately. According to attachment theorists, this is most likely influenced by the teacher's own attachment history. It is believed that teachers who have "a secure attachment history will be more likely to understand and value their role in this relationship with their students and will be better able to meet the [student's] attachment needs" (Kesner, 1994, p. 4).

Time is expected to be a constraining factor, as already mentioned in the discussion on connectedness. Increased administrative tasks and challenging teaching tasks take up the greater part of a teacher's time in the classroom each day, resulting in reduced time to be available to students.

Communication

Good communication is expected to be important to the ongoing development of relationships between teachers and students. Adler (1985) emphasises this point by stating "without communication, there can be no community. Human beings cannot form a community or share in a common life without communicating with one another" (p. 15). When done effectively, communication allows for the meeting of 'hearts and minds' (Adler, 1985). In the context of the classroom, ongoing communication is noted by Wynne (cited in Sroufe, 1989) as being a major process in the development of relationships.

Effective communication is based on a shared focus of attention that leads to shared meanings. Sroufe (1989) suggests "through repeated sharings of meaning, attachment deepens" (p. 119). By communicating effectively people are able to relate to each other in meaningful ways. Communication that takes on "a quality of caring, openness, and authenticity ... naturally engenders respect and love" (Campbell, 2005, p. xxix). Goldstein (1995) describes an effective teacher as being one who is able to communicate with their students "in positive, sensitive, and assertive ways" (p. 16). In the context of the classroom, communication of this kind is expected to strengthen a relationship of trust and respect between teacher and student (Good & Brophy, 2000).

Communication mechanisms

There are a number of mechanisms which are expected to indicate the degree to which a teacher is achieving communication with students in the classroom.

Within the teacher-student dyad, good oral communication is expected to require a teacher to be able to express information and ideas well. With regard to oral communication, this is expected to be dependent upon a number of factors, including a teacher's ability to select appropriate words, articulate words correctly, use pitch, volume and pauses effectively, and to use suitable rates of speech. Coupled with the oral delivery is the importance of non-verbal skills. These include appropriate use of eye contact, facial expressions and body language such as hand gestures. It must be acknowledged that much of this is culturally determined. What may be considered appropriate in one culture, may or may not be considered appropriate in another (Bormann & Bormann, 1981). The successful combination of these factors is expected to be essential for good communication to be achieved.

Active listening is expected to be an essential ingredient for good communication, and involves "an empathetic involvement with the other person" (Bormann & Bormann, 1981, p. 75). For example, when a teacher is talking to a student, the teacher should be alert to cues from the student to recognise whether or not the intended message is being received, and actively listen to what the student may have to say in return.

Participants in the study are asked to report on these mechanisms by responding to the 'Communication' items in the questionnaire. The degree to which these mechanisms are evidenced will indicate the degree to which communication is being achieved.

Communication constraints

Time is an example of a constraining factor expected to hinder teachers' attempts to communicate with their students as they would like or may be capable. As mentioned earlier, increased demands on teacher time in terms of teaching loads and administrative tasks are expected to limit the time available to communicate effectively with students in the classroom.

Students' inability or unwillingness to communicate with their teachers is expected to inhibit effective communication with their teachers. In Western Australia, a further contributing factor may be a student's limited knowledge of English, as may be the case with students who do not speak English as their first language.

Summary

The key aspects of Connectedness, Availability and Communication and their related mechanisms were used to devise a theoretical model of teachers' relationships with students in primary schools in Perth, Western Australia. While a focus on expected mechanisms assists in the identification of the key aspects that impact on teachers' relationships with students, the question arises as to how these aspects may be accurately measured. The theoretical model has been used to devise a structure of teacher-student relationships which can be tested through Rasch measurement. The structure provides a framework for the items relating to the key aspects and their related mechanisms to be created for a questionnaire that can be used to gather data on teachers' relationships with students in the primary classroom. The next section explains the structural model in detail.

Structural Model of Teachers' Relationships With Students

The structural model of teachers' relationships with students developed for this study is multi-hierarchical. It is based on an expectation that attitudes

will influence behaviour (Ajzen, 1989; Clark & Peterson, 1986). More specifically, the theory of reasoned action purports that beliefs influence attitudes, attitudes influence intentions, and intentions influence behaviour (Ajzen, 1989). For example, one might hold the belief that it is not good to litter. This belief is an ideal attitude that influences the individual's intentions and actions. If the person feels strongly that littering is wrong, it is highly unlikely that he or she will make a habit of littering. However, if the person happens to be holding some rubbish and can not find a bin, he or she may be tempted to just dispose of the rubbish by littering. Similarly, if the person is feeling lazy, or thinks no one is watching, he or she may still litter. Even so, this will be hard for them to do because their ideal is not to litter. In a similar way, a teacher may have an attitude that it is important to listen to students who want to share information about themselves. This attitude will influence the teacher's intention to listen to students when they express a desire to share. If the teacher felt strongly that it was important to listen to students, it is highly unlikely that the teacher would consistently ignore the students and not permit them to speak. The teacher who values listening may even put aside a set time each week to have an informal chat time with the students. However if the teacher experiences an interruption to the weekly timetable, such as swimming lessons, or a visiting speaker, and finds there is not enough time to fit in some core lessons, the decision may be made to forego the chat time in order to catch up on other work. This decision would not be made lightly because the teacher values the chat time, but due to constraining factors, he or she would justify the change. In these ways it may be seen that a person's attitude influences their intention which in turn influences their behaviour.

The structural model demonstrates the degrees of difficulty associated with each of these steps. For example, it is expected that attitudes will influence intentions and be easier than intentions, and intentions will influence behaviour and be easier than behaviour. In this way, a pattern of difficulty emerges in the structural model from left to right. In addition, a pattern of difficulty emerges in the structural model from top to bottom, because the items to be created within each key aspect will be presented in order of difficulty. Within each key aspect, the initial item is expected to be the easiest to answer, the following items are expected to be harder to answer and the final item is expected to be the hardest

of all to answer. Thus, what results is a structural model that maps out multi-directional expected levels of difficulty as shown in Table 3.1. Varying intensities of the colour blue have been used to represent the varying degrees of difficulty. The lightest shade of blue represents the easy to answer attitudes and the easy first items. The middle shade of blue represents the harder to answer intentions and the harder middle items. The darkest shade of blue represents the hardest to answer behaviour and the hardest to answer final items.

Table 3.1
Structural Model of Teachers’ Relationships With Students

		Easy	Harder	Hardest
		Attitudes	Intentions	Behaviour
Easy	First item			
Harder	Middle item/s			
Hardest	Final item			

Source: Created by Natalie Leitão (2006)

This structural model of teachers’ relationships with students provides a solid foundation for the design of the questionnaires used in this study. Responses to the questionnaire items are expected to follow the pattern of difficulty across the page and down the page as portrayed in Table 3.1. The notion of participants responding from two or more perspectives that follow a conceptual order of difficulty is one that has been demonstrated in a number of recent studies (Waugh, 2003b, 2003c, 2005; Waugh, Hii, & Islam, 2000).

The structural model interconnects closely with the Rasch measurement to be used in this study. Rasch measurement calculates item difficulties on the same scale as the measures and will be used to enable a true linear scale to be created with standard units. In this way, Rasch measurement provides a means for testing the structure of the questionnaire and, in turn, testing the structure of

the teachers' relationships with students model, relating to the stated key aspects that are expected to influence teachers' relationships with students. Rasch measurement is discussed in more detail in the following chapter.

The final section of this chapter will address the concept of self-views as applicable to this study.

Self-views

To better understand teachers' relationships with students, it is valuable to discover 'self-views'. Self-views are helpful in revealing the "perspective of an insider in a relationship" (Furman & Buhrmester, 1985, p. 1017). Much recent research on teacher-student relationships has gathered information from teachers regarding self-views, but has neglected to include input from students about their self-views (Birch & Ladd, 1998; Saft & Pianta, 2001). Both points of view are important. For example, it is acknowledged that teachers' beliefs underpin and frame their thinking and their temperament to behave in certain ways in their professional roles (Clark & Peterson, 1986; Hanrahan & Tate, 2001; Saft & Pianta, 2001). Pianta (1999) recognises the value of assisting teachers in describing their relationships with students, as individuals or in general. He identifies these descriptions as 'representations' of relationships, and notes the importance of identifying and understanding the connection between "beliefs, feelings, and behaviours" (Pianta, 1999, p. 135). Similarly, student views are important as they provide an insight into their beliefs, feelings and behaviours. Hamre and Pianta (2001) note that student views are "valuable indicators of relationship quality" and urge future researchers in the area of teacher-student relationships to find ways to explore students' self-views (p. 636). This is an area that is addressed in the current study as the questionnaires and the discussions schedules are designed to elicit self-views from both teachers and students.

In order to discover teachers' self-views and students' self-views, two separate questionnaires have been designed for this study. The focus of both questionnaires is the teacher's role in the relationship with the student. That is, teacher and student views are sought with regard to how they perceive the

teacher to be connecting with the student, being available to the student and communicating with the student.

In both questionnaires, the items to be answered are of varying degrees of difficulty as based on the structural model constructed for this study. As such, both questionnaires evidence a pattern of difficulty from easy to hard down the page within each of the three key aspects. That is to say, the items within the Connectedness section are ordered from easy to hard, the items within the Availability section are ordered from easy to hard, and the items within the Communication section are ordered from easy to hard. The pattern of difficulty from easy to hard is also expected across the page. In the questionnaire for teachers, the first response to be made for each item is the easy to answer attitude statement (Idealistic response: this is what I would like to happen), followed by the harder to answer intention statement (Capability response: this is what I am capable of), followed by the hardest to answer behaviour statement (Actual response: This is what actually happens). It is expected that respondents will find it easy to report their idealistic view, harder to report views about their capability, and harder still to report their views about their actual behaviour. In consideration of students' ongoing conceptual development, responses expected from them will be limited to the two perspectives of ideal and actual. Specifically, students are asked their views on easy to answer attitude items (What I wish would happen) and harder to answer behaviour items (This is what does happen). In this way both questionnaires have been constructed to mirror the pattern of difficulty present in the structural model of teachers' relationships with students.

Establishing the accuracy of people's self-reports is seen to be a central problem in research that is attempting to get 'inside one's head' to understand one's "knowledge, attitudes, beliefs and values" (Feiman-Nemser & Floden, 1986, p. 506). This problem will be addressed two ways. One way is through the use of Rasch measurement analysis which makes it possible to identify and overcome inaccurate response patterns. The second way is through the use of face-to-face discussions whereby participants have an opportunity to validate the responses they have made on the questionnaires. Such validations would be seen to contribute towards overall accuracy of the participants' self-reports.

The following chapter describes the questionnaires and discussion schedules in greater detail. The chapter also provides detail about theories of measurement.

CHAPTER FOUR

MEASUREMENT AND TOOLS FOR DATA COLLECTION

This chapter begins with theories of measurement as they relate to the study. True Score Theory and its associated problems are outlined, followed by an explanatory summary of Rasch measurement. The chapter then goes on to describe the tools used to collect data for this study and explains the structure of the questionnaires and the discussion schedules.

Measurement

The measurement of attitudes has been seen as an important area of social science research since the 1920s and 1930s. Up until about 1980, the measurement framework that has dominated the field of attitude scaling has been True Score Theory (Punch, 1998). There have been, however, inherent problems associated with the popular True Score Theory measurement model. The following section explains these problems in more detail, and considers the advantages of using Item Response Theory with specific reference to the Rasch measurement model, as used in the current study.

Problems with True Score Theory

Traditionally, True Score Theory, also referred to as Classical Test Theory, has provided the framework for social science research. True Score Theory uses rating scales, such as Likert scales (Likert, 1932), which are ordinal and therefore not necessarily additive (Wright, 1999; Zhu, 1996). Much of the research on teacher-student relationships to date makes extensive use of Likert Scales and other rating scales (Baker, 1999; Hamre & Pianta, 2001; Pianta, Steinberg, & Rollins, 1995; Valeski & Stipek, 2001). The danger with using total scores from ordinal rating scales is that the results may be misleading. When such scales are employed, the sum of item scores and the item difficulties are not calibrated on the same scale, thereby resulting in a ranking scale, as opposed to a measurement scale. Nonetheless, data from such scales have been interpreted as though the scales provided interval data. Herein lies the falsehood, albeit unintentional. Ranking scales are erroneously treated as measurement scales. Wright (1999) goes so far as to say it is not

only wrong, but “immoral” to misuse raw scores in this way (p. 99). The present study demonstrates how Rasch modelling may be used to overcome a number of problems associated with using True Score Theory. Five of these specific problem areas are identified below, highlighting why True Score Theory was rejected for use in the current study.

Scores are not linear

To create a true measurement scale, it is necessary to use measures that are linear. True Score Theory uses scores that are not linear. In the 1920s, Thurstone devised a technique called the ‘equal appearing interval scale’ which used ordinal raw scores to construct linear measures. He recognised the importance of discerning the value of a response to make a fair comparison between responses. Thurstone found a way to mathematically calculate the response values and was then able to record them along a unidimensional attitude continuum. Likewise, Guttman (1944; , 1950) recognised that different items contain a different value and he introduced the idea of cumulative scaling. This method combined the ordering of items by difficulty according to their content, with a two-part response format. In this way, respondents could be located along an attitude continuum. Some time later, Likert (1932) came up with a similar idea that used a simpler response format. Unlike the combined method of Thurstone and Guttman that aimed to produce a linear scale, Likert’s method produced a summated rating non-linear scale. It was thought that similar results were yielded from using any of these three methods and, due to the simplicity of the Likert method, the latter became the favoured option and has been used widely in educational psychology ever since (Punch, 1998).

One of the problems with using Likert’s method is that the data collected are predominantly misused. Raw scores on Likert Scales are commonly summed, then used as though they were interval data. Linear statistical methods used on non-linear raw scores potentially produce “distorted results” that are “inferentially ambiguous” (Wright, 1999, p. 71). For example, Likert response categories typically have a score assigned to each response as if on an interval scale. In this way ‘Strongly Agree’ may be valued at 5; ‘Agree’ at 4; ‘Neutral’ at 3; ‘Disagree’ at 2; ‘Strongly Disagree’ at 1. Although this kind of scoring system was originally supported by data presented by Likert (1932),

research from as far back as 1968 disputes the validity of Likert's assumptions (DuBois & Burns, 1975; Glastonbury & MacKean, 1991). It has been discovered that respondents may interpret 'Strongly Agree' as being 'Very Strongly Agree' and value it in their own minds as a score of 6 or 7 rather than 5, that is, more than just a single equal interval from 'Agree' (DuBois & Burns, 1975). A further problem exists with scoring 3 for a 'Neutral' response, as 'Neutral' is not more than 'Disagree' nor is it less than 'Agree'. As highlighted by Wright (1999), simply "counting events does not produce equal units" (p. 69), and researchers have been urged to consider more carefully the values that respondents may place on their responses (DuBois & Burns, 1975). Michell (1990) asserts that with True Score Theory one cannot even claim that, in all cases, a person with a higher score has a higher amount of the attitude (behaviour or achievement) than a person with a lower score, due to non-compliance with the 'cancellation condition'.

Items are not ordered.

To create a linear measurement scale, it is necessary to use items that are ordered in difficulty from easy to hard. Usually the items included in current teacher-student relationship measures follow the Likert tradition and are loosely related to one another conceptually, but are not ordered in difficulty. This is demonstrated in the case of the Student-Teacher Relationship Scale (STRS) developed by Pianta (1996), which is credited as being "the only standardised and validated instrument available for assessing teacher's [sic] perceptions of student-teacher relationships" (Pianta, 1999, p. 94). The 28 Likert-type items that make up the STRS are statements to which teachers respond in four categories ('Definitely not true', 'Not very true', 'Sort of true' and 'Very true'). As can be seen from reading the first six items, the items are not ordered according to level of difficulty.

1. I share an affectionate, warm relationship with this child.
2. This child and I always seem to be struggling with each other.
3. If upset, this child will seek comfort from me.
4. This child is uncomfortable with physical affection or touch from me.
5. This child values his relationship with me.
6. This child appears hurt or embarrassed when I correct him/her.

The responses are not ordered.

To create a linear measurement scale, it is necessary to use responses that are ordered in difficulty from easy to hard. A check can be made to ensure the responses have been answered in a consistent and logical way. Current teacher-student relationship measures predominantly utilise Likert response categories which, as Waugh (2003a) explains, "are not ordered from low to high theoretically: they have a discontinuity in the middle" (p. 78). 'Strongly Agree' is considered to be more than 'Agree', but 'Neutral' is not necessarily less than 'Agree' or more than 'Disagree'. The neutral category may cater for various responses such as 'I don't know', 'I don't want to answer', 'I don't care', 'I can't make up my mind', or be used for between 'I agree' and 'I disagree', or be simply neutral (DuBois & Burns, 1975; Waugh, 2003a). Such a discrepancy contributes to the ambiguity of raw scores. In spite of these weaknesses in the design, a total score on the Likert item responses is usually counted, erroneously, as though each response is an equal unit of measure.

Person measures are not calibrated on the same scale as item difficulties

To create a linear measurement scale, it is necessary that person measures be calibrated on the same scale as the item difficulties. That is to say, a linear scale of difficulty and a linear scale of the measure must be calculated together on the same scale. True Score Theory typically calculates a total score by simply summing the items. Consideration is not given to the difference in item difficulty alongside the person measures.

Scores are not scale-free and the items are not sample-free

To check that data are reliable, the difference between respondent measures and item difficulties need to be sample-free and fit a measurement model like Rasch (1980/1960). While this difference is not considered within traditional True Score theory, this is possible on a unidimensional measure such as one which fits the Rasch measurement model. To do this, standard units of measurement need to be assigned across the full range of the continuum being considered. In this way, checks may be made to ensure that respondents are consistent in making their responses. The Rasch measurement model makes use of logits as the standard unit of probability, which represent the "log odds of successfully answering the items" (Andrich, 1988; Waugh, 2006, p. 1)

Requirements for Measurement

In order to create a measurement tool that will produce a true measuring scale, certain measurement requirements must be met. These are summarised by Thurstone (cited in Wright, 1999) as follows:

1. Measures must be linear, so that arithmetic can be done with them.
2. Item calibrations must not depend on whose responses they were estimated from - must be sample-free.
3. Person measures must not depend on which items they were estimated from - must be test-free.
4. Missing data must not matter.
5. The method must be easy to apply (p. 100).

The Rasch measurement model satisfies these criteria and has been used in the present study to successfully create linear measurement scales. The following section discusses Rasch measurement in greater detail.

Rasch Measurement

Rasch modelling is a better alternative to True Score theory within the area of social science research. Rasch measurement models provide a way of using raw scores to produce linear measurement scales.

Rasch measurement takes its name from Georg Rasch, a Danish mathematician, who discovered a measuring function that could be applied to statistics to create a linear measurement model. Rasch measurement is situated within the framework of Item Response Theory, also referred to as Latent Trait Theory. Item Response Theory posits that unobservable phenomena may be measured by making inferences from what can be observed. In social-psychological measurement, Item Response Theory is most fitting as certain traits that may not be directly observable may be discerned by observing the interaction between the traits and the environment. This interaction produces 'items' which are the observable indicators that show the degree to which a trait is present. A measuring instrument is then needed to interpret the data and make reliable inferences (Punch, 1998). This takes us into the realm of what Wright (1999) terms "abstract quantification" (p. 67). Accurate measurement requires accurate units of measure. How does one accurately measure something abstract such as social and emotional aspects of

a relationship between teacher and student? Rasch measurement provides a way, by using a mathematical formula to create a linear scale with interval data. Interval data that is shown to fit the Rasch measurement model is verified as reliable and valid inferences can be made from it.

Within Rasch measurement, there are a number of models, each of which is designed to be used in a specific context. The following paragraphs outline two of the main models that may be used to create a linear scale. The first, the Simple Logistic Model was published in 1960 (Rasch, 1980/1960). The second, the Partial Credit Model of Rasch (Masters, 1982, 1988, 1997), can be described as an extension of the Simple Logistic Model.

Simple Logistic Model of Rasch

The Simple Logistic Model has two parameters: one represents the measure for each person on a variable, and the other one represents the level of difficulty for each item (Wright, 1999). The equations for the Simple Logistic Model of Rasch are as follows:

$$\begin{array}{l} \text{Probability of answering} \\ \text{positively (score 1)} \\ \text{for person } n \end{array} = \frac{e^{(B_n - D_i)}}{1 + e^{(B_n - D_i)}}$$

$$\begin{array}{l} \text{Probability of answering} \\ \text{negatively (score 0)} \\ \text{for person } n \end{array} = \frac{1}{1 + e^{(B_n - D_i)}}$$

Where

e = natural logarithm base ($e=2.7318$)

B_n = parameter representing the measure (ability, attitude, performance) for person n

D_i = parameter representing the difficulty for item i

Calculations involving these equations is time consuming and requires a very advanced level of mathematical ability. To save time and to assist those researchers who do not have the level of mathematics required, there are a number of computer programs available such as RUMM (Rasch Unidimensional Measurement Models), Winsteps, or ConQuest. The researcher is able to solve

these equations by entering data into the computer in a text format and using one of the afore-mentioned computer programs which will take logarithms and apply a conditional probability routine (Andrich, Sheridan, & Luo, 2005).

Partial Credit Model of Rasch

The Partial Credit Model builds on the Simple Logistic Model, in that it uses three or more response categories, or outcomes. This is the model that has been used for the current study. The equations for the Partial Credit Model of Rasch are as follows (Masters, 1997).

$$\text{Probability of person } n \text{ scoring in outcome category } x \text{ of item } i \text{ (for } x = 1, 2, 3, 4 \dots M_i) = \frac{e^{\sum_{j=1}^x (B_n - \delta_{ij})}}{1 + \sum_{k=1}^{M_i} e^{\sum_{j=1}^k (B_n - \delta_{ij})}}$$

$$\text{Probability of person } n \text{ scoring in outcome category } x \text{ of item } i \text{ (for } x = 0) = \frac{1}{1 + \sum_{k=1}^{M_i} e^{\sum_{j=1}^k (B_n - \delta_{ij})}}$$

Where

e = natural logarithm base ($e=2.7318$)

$\sum (B_n - \delta_{ij})$ is the sum of $B_n - \delta_{ij}$

B_n = a parameter representing the measure (ability, attitude, skill or performance) for person n
 $\delta_{i1}, \delta_{i2}, \delta_{i3}, \dots, \delta_{iM_i}$ = are a set of parameters for item i which jointly locate the model probability curves for item i . There are M_i item parameters for an item with $M_i + 1$ outcome categories.

As explained in the previous section on the Simple Logistic Model, the equation is solved by taking logarithms of the data and applying a conditional probability routine, all of which may be done using a computer program such as RUMM 2020 (Andrich, Sheridan, & Luo, 2005). This particular computer program will now be explained in more detail.

RUMM 2020 Computer Program

The RUMM 2020 computer program has been used in the current study to solve the mathematical equations involved. It has been chosen in preference to other available programs for two main reasons. First, it is able to perform a number of data analysis tests very quickly and efficiently, and second, it generates colourful, graphical maps related to the measurement.

The RUMM 2020 computer program assisted me in demonstrating the following data analysis tests for the current study:

- 1) Testing that the response categories were answered consistently and logically (the RUMM program achieves this by producing two outputs, one being a calculation of threshold values between response categories for each item, and the other being response category curves which demonstrate the graphical relationship between the linear measure and the probability of answering each response category);
- 2) Testing for dimensionality (an item-trait test-of-fit calculated as a chi-square with a corresponding probability of fit);
- 3) Testing for good global Item and global Person Fit Statistics (by examining the response patterns for items across persons, and for persons across items by using residuals);
- 4) Person Separation Index (to test whether the standard errors were much smaller than the differences between the person measures);
- 5) Testing for good individual item and person residuals (to confirm that items were being answered in a consistent way and to give an indication of the individual person and individual item fit to the measurement model);
- 6) Item Characteristic Curves (to check how well the items differentiate between persons with differing measures);
- 7) Person Measure/Item Difficulty Map (to show how the person measures and item difficulties are distributed along the same variable, demonstrating if the items were too easy or too hard for the persons being measured), and
- 8) Testing for construct validity (to confirm that the items were actually ordered from easy to hard, and that the perspectives were actually ordered by increasing difficulty in line with their conceptual order) (Waugh, 2006).

Measuring Teachers' Relationships with Students

In this study, a new structural model was devised to appraise teachers' relationships with students. This new structural model of teachers' relationships with students, described in detail in the previous chapter, was developed to overcome the problems of existing models. As the views of both teachers and students were required, two questionnaires for the study were compiled. The items on both questionnaires needed to be consistent with the structural model so that Rasch measurement could be used to calculate the items and produce linear scales with standard units (Waugh, 2006).

Tools for Data Collection

The tools used for data collection include questionnaires and discussion schedules. The questionnaires were used to obtain quantitative and qualitative data from teachers and students, and the discussion schedules were used to obtain further qualitative data from teachers and students who were willing to participate in a follow-up discussion. The following section will explain the tools in more detail, using the headings of quantitative tools and qualitative tools. A diagrammatic representation of the tools used for data collection is depicted in Figure 4.1.

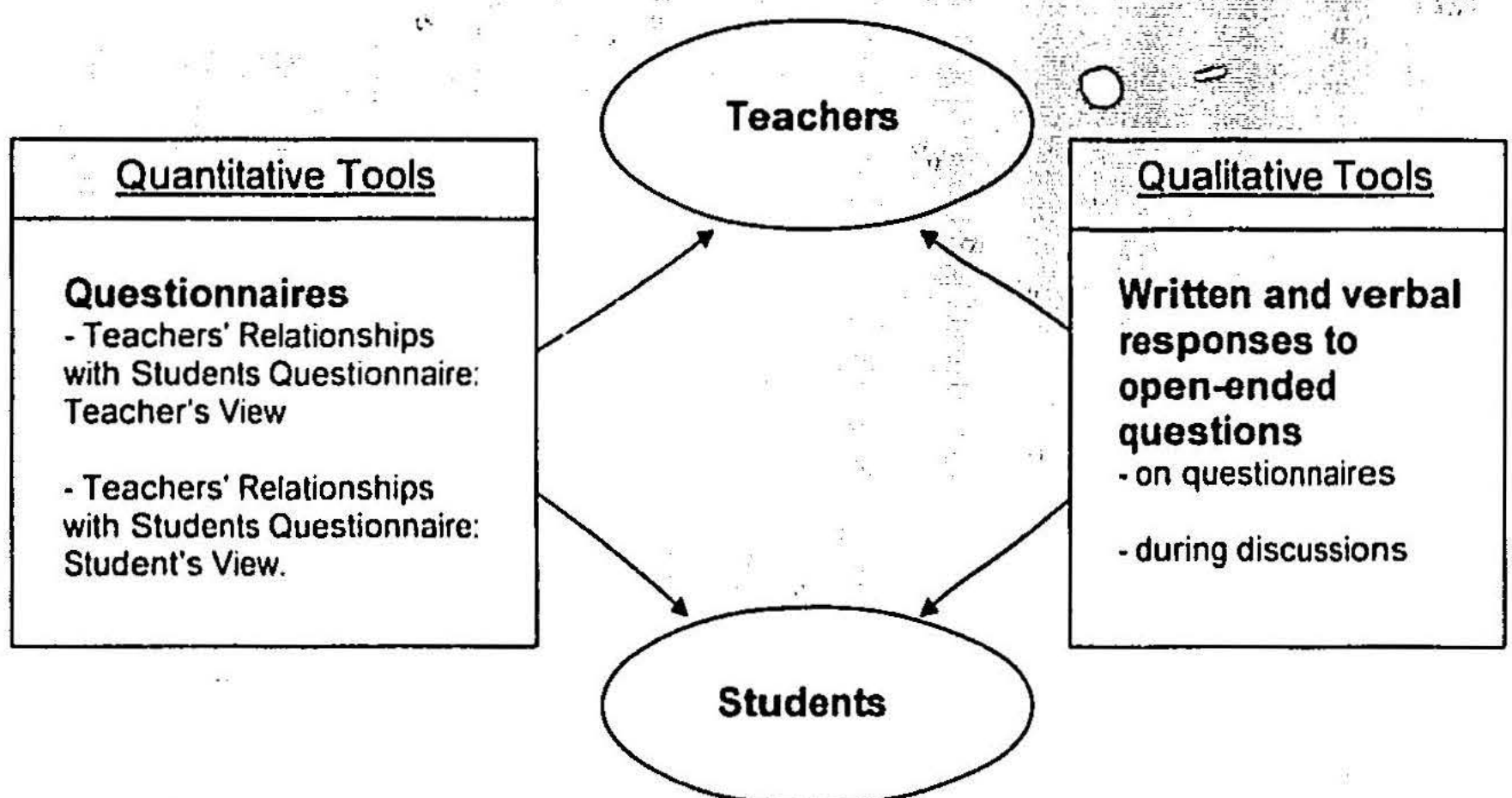


Figure 4.1. Tools used for Data Collection.

Source: Devised by Natalie Leitão for this study.

Quantitative Tools

As stated earlier, the quantitative data collection tools consist of two questionnaires, one each for teachers and students. The questionnaire for teachers is called the Teachers' Relationships with Students Questionnaire: Teacher's View and the questionnaire for students is called the Teachers' Relationships with Students Questionnaire: Student's View. The questionnaires have been constructed to mirror the Structural Model designed for this study, and the ordered difficulties are tested using Rasch measurement. What follows is a summary of the questionnaire structure.

The questionnaires incorporate three main aspects as identified in the Teachers' Relationships with Students theoretical model. The three aspects are Connectedness, Availability and Communication. The questionnaire items are constructed around these aspects. In the questionnaire for teachers, the questions are structured to gather information from teachers about their attitudes, intentions and behaviours in relation to their ability to connect with students, to be available to students and to communicate well with students. In the questionnaire for students, the students are asked about their expectations and experiences regarding their teacher's ability to connect with them, be available to them and communicate with them.

Teachers' Relationships with Students Questionnaire: Teacher's View.

The three aspects Connectedness, Availability and Communication have been structurally arranged with sets of items ordered from easy to hard in difficulty, giving a total of 30 items. Items include "This child and I get along well together", and "I listen to this child when he/she needs to talk and he/she feels better as a result." (See Appendix A). Each ordered item has been answered in three ways using the response categories to indicate the proportion of school time needed for each item to be achieved. Firstly, an Idealistic Self-view (expected to be easy on average), second, a Capability Self-view (expected to be harder on average), and lastly, an Actual Self-view of behaviour (expected to be harder still on average). This means that for each set of ordered items, teachers self-reported any particular response aspect (Idealistic Self-view or Capability Self-view or Actual Self-view) in a vertically ordered pattern from easy to hard. It also means that, for any one particular item, teachers self-

reported their responses (Idealistic Self-view, Capability Self-view and Actual Self-view) in an ordered pattern from easy to hard. The structural model for this study has been designed like this and the questionnaire has been designed to mirror this.

Teachers' Relationships with Students Questionnaire: Student's View.

As with the questionnaire for teachers, the corresponding questionnaire for students is based on the structural model designed for this study. The questionnaire for students features the three aspects of Connectedness, Availability and Communication structurally arranged with 18 items including "My teacher likes me" and "I can go to my teacher and tell him/her about my feelings and about things that happen to me." (see Appendix B) The response categories have been adapted, making it more suited to younger children's conceptual ability. Ordered items have been answered in two ways, namely, an Idealistic Self-view (expected to be easy on average), and an Actual Self-view (expected to be harder on average). Students used the response category to indicate the proportion of school time needed for each item to be achieved. A pictorial guide sheet was used with the students to assist them in differentiating between the different time periods.

Qualitative Tools

The qualitative tools used in the study are comprised of open-ended questions recorded at the end of the questionnaires and a discussion schedule that was used during one-on-one discussions. Some of the questions included in the discussion schedules emerged from the questions used in the questionnaires. The resulting data further describes participants' beliefs, attitudes and behaviours as they relate to their teacher-student relationships.

Written and verbal comments to open-ended questions

The questionnaires conclude with a section whereby participants are invited to write additional comments. Teachers were asked if there were any comments they would like to make about their relationships with their students. Students were asked if there were any comments they would like to make about themselves and their teacher. Many participants availed themselves of the opportunity to further communicate their thoughts and experiences resulting in

some rich descriptions of teacher-student relationships. Younger students who had difficulty with recording their own ideas were able to talk to me, and I recorded their ideas for them as they spoke.

Discussions are commonly regarded as an important source of information (Burns, 1994; Kvale, 1996). With regard to educational research, the act of conversing with and listening to teachers and students means "insights about teaching and classrooms can be secured" and information can be obtained about how people perceive a situation to be in order to gain an "understanding [of] what is going on" (Eisner, 1991, pp. 81-2). For this reason discussion schedules were used to further determine teachers' and students' beliefs, attitudes, behaviours and reasons for their behaviours, in keeping with the theoretical model (see Appendix C). The discussion schedules connect closely with the questionnaire structure, providing the participants with the opportunity to validate their questionnaire responses. During the discussions, teachers and students were asked their beliefs about social and emotional aspects of the Teacher-Student relationship. The direction of the discussion was flexible and allowed participants to contribute their own themes and ideas as they related to teacher-student relationships. The face-to-face discussions enabled the participants to provide further data about their own experiences, and yielded information on a deeper, more personal level.

The next chapter explains the methodology for the present study.

CHAPTER FIVE

METHODOLOGY

This chapter begins with an explanation of the administrative approvals obtained for the study and includes ethical considerations that have been made. Details of the method are then set out, and include the rationale for the method used, the research design, and details about the samples and the pilot testing. Next, an explanation is given about the procedures used for data collection. The chapter concludes with a description of the procedures used for data analysis.

Administrative Approvals

Study Approval

Prior to the commencement of the study, approval was sought at the university level and at the school level. Initial approval to conduct the study was given by the Edith Cowan University Ethics Committee. Subsequent approval was given by school principals, staff, students and the students' parents.

Ethics

Research projects must conform to a number of ethical considerations. In italics below are the ethical considerations applicable to the present study, followed by details of how these considerations have been met.

Participants need to provide informed consent. This has been achieved by informing a number of school principals in writing about the study and inviting their staff and students to take part. Those principals who responded positively gave their written consent to participate in the study. They were then sent letters to pass on to interested staff and parents. The letters detailed the study and what would be required of the participants. Staff members who were willing to be a part of the study then signed and returned the consent forms. Students who were willing to be a part of the study and had parental consent returned their forms with the necessary signatures. My telephone number was included on all correspondence and participants were invited to telephone if further information was required. A number of participants availed themselves of the opportunity and telephoned to tell me some of their concerns and to seek

further clarification regarding the study.

The confidentiality of participants has to be maintained. This has been achieved by not naming individual schools or participants in the writing of this thesis. When referring to individuals, pseudonyms have been used. In addition, I have pledged that no individual or school will be identified personally in any future reports resulting from this study.

The confidentiality of the data has to be maintained. The data has been stored securely for the duration of the study thereby preventing public access to it. At the conclusion of the study, the data will be securely stored for the required five years after which time it will be destroyed.

A summary of results needs to be made available to interested participants at the conclusion of the study. A number of principals and staff expressed their interest in knowing the results of the study and where possible, a follow up report will be sent to them. Copies will be made available to any other interested parties.

Participants have the freedom to withdraw from the study at any time. This was made known in writing to all participants when letters of invitation were sent out and consent forms were being signed. There were no withdrawals, however, had there been any, I had planned to thank the participants for their initial interest and respectfully acknowledged their decision to withdraw.

Method

Rationale

Methodology in educational research may take a variety of forms. Shulman (1988) recognizes that the area of education itself may be viewed as a field of study rather than as a discipline per se and, as such, the choice of methodology can be quite broad. He considers that various disciplines, each with their own peculiar brand of methodology, may be legitimately used to influence educational research. The choice of research method is typically governed by the questions being asked, the approach to be taken and the way in which the data are to be understood (R. B. Johnson & Onwuegbuzie, 2004).

Trends in educational research have changed over time. Prior to the 1960s, the scientific quantitative approach was traditionally used (Burns, 1994; Creswell, 2005). This approach involves the identification of set laws that can be used to explain particular observations. These laws or principles then provide a sound foundation upon which to formulate a hypothesis and make future predictions. Simply stated, this approach is one of 'cause and effect', the results of which are analysed using statistical techniques (Burns, 1994).

In recent decades there has been a shift towards using qualitative methods in educational research (Eisner, 1991). American anthropologist Clifford Geertz is just one of a number of people recognised as having contributed to the qualitative shift. In the 1970s, Geertz (cited in Eisner, 1991) introduced the concept of 'thick description' calling on researchers to dig deeper than the surface level so that meaning could be constructed from what was observed. In this way, more than discovering cause and effect relationships, researchers are challenged to make meaning of what they see to better understand the subjects within their context (Eisner, 1991).

In recent years qualitative methods have been widely accepted as wholly suitable for educational research, particularly given the social context of the educational setting. The subjective, naturalistic aspects of qualitative research have been used effectively alongside objective, quantitative methods (Eisner, 1991). This mixed methods approach, a combination of quantitative and qualitative methods, is now accepted as a distinct design within educational research (Creswell, 2005; Linn, 1986). Johnson and Onwuegbuzie (2004), agree that quantitative and qualitative methods need no longer be seen as methods in competition with each other; mixed methods research is a research paradigm in its own right. Shulman (1986) contends, however, for the mixed methods approach to work well, strategies must be thoughtfully selected and combined. He cautions against the 'goulash' or 'garbage can' approach, which he describes as "a form of eclecticism run wild, with little or no discipline to regulate the decisions" (Shulman, 1986, p. 33). The selection and combination of research methods must be done with thorough consideration as to what each method has to offer in terms of its purpose and perspective. When done well, this form of eclecticism "frequently results in superior research" when compared

to research which utilises a single method of inquiry (R. B. Johnson & Onwuegbuzie, 2004, p. 68).

The mixed methods approach has been selected for the present study to enable me to use the strengths of both quantitative and qualitative methods, and to minimise the weaknesses that may result from using either method on its own. The methods have been chosen in recognition of the superior features they have to offer. These are summarised in the following paragraphs.

A strength of quantitative research is the precision achieved by using reliable measurement techniques which permit statistical analysis (Burns, 1994). The present study makes use of this strength through the design of questionnaires that are created and analysed using a Rasch measurement model. The Rasch measurement model has been selected because it is "currently the only known method by which one can create linear, objective measures applicable to the human sciences" (Waugh, 2006, p. 1). As has already been argued in the previous chapter, linear, objective measures are seen to be superior to ordinal scales which are produced using traditional true score theory (Waugh & Chapman, 2005).

A limitation of using quantitative research methods alone is the possible denigration of human individuality and a disregard for individuals to interpret their personal experiences. In the present study, this limitation is addressed through the use of open-ended questions and face-to-face discussions, both of which are qualitative methods of inquiry. Open-ended questions allow the participants to make any comments they see as relevant to the topic. The research discussions have enabled me to dig a little deeper into areas covered by the questionnaire and the open-ended comments. Kvale (1996) refers to the research discussion as a "qualitative research interview" (p. 42) and likens it to a conversation which "is neither strictly structured ... nor entirely 'nondirective', but is focussed on certain themes" (p. 34). Face-to-face discussions are considered to be a valuable method as they give the researcher the opportunity to clarify participant's responses by asking further questions, and allow the researcher to pick up on non-verbal cues (Jaeger, 1988). The face-to-face discussions enabled me to glimpse an "insider's view" into context specific

relational areas, resulting in rich data that provides an in-depth picture of how people think and feel (Seidman, 1991). Through engaging participants in discussions, I was able to "aim beneath manifest behaviour to the meaning events have for those who experience them" (Eisner, 1991, p. 35), resulting in data which provides a 'thick description'.

Another limitation to using quantitative methods alone is the absence of 'voice in the text'. As Eisner (1991) points out, "why take the heart out of situations we are trying to help readers understand?" (p. 37). By incorporating expressive language in the present study, I have attempted to counter the neutralisation of voice and the detachment that is so often present in quantitative studies. For example, I am using "I" in preference to "the researcher". This study is an investigation into social and emotional aspects of teacher-student relationships, with an emphasis on gathering facts and the meaning behind the facts. As such, I believe empathy needs to be evident in the text, and this can not be achieved by an absence of the first person.

A further strength of using a mixed methods approach in the present study is the opportunity to convey information using numbers and graphs (traditionally belonging to the quantitative domain) plus words and commentary (which traditionally belong to the qualitative domain). In this way, data may be communicated more broadly and in a way which adds meaning overall (Eisenhardt, 2002; R. B. Johnson & Onwuegbuzie, 2004). This is especially helpful to a better understanding of an issue like teacher-student relationships, if the commentary flows directly from aspects of the measurement (as it does in this study).

An additional benefit of using a mixed methods approach is that the reliability and validity of the study may be checked through triangulation of the data. As stated by Johnson and Onwuegbuzie (2004), "If findings are corroborated across different approaches then greater confidence can be held in the singular conclusion" (p. 73). Conversely, if conflicting findings result, the researcher is able to draw on a broader base of methods to re-interpret the findings and make modifications to the interpretations and conclusions as needed.

The internal reliability of a measuring instrument is the degree to which the item difficulties and the person measures fit a Rasch measurement model. This may be checked using various methods, and with regard to the present study, the RUMM computer program has assisted in this area. Reliability of the questionnaires is related to the consistency of participants' responses. Inaccurate response patterns are easily identifiable using the Rasch analysis and may indicate the questionnaire item was not correctly understood, or was not answered accurately. Questionnaires containing unacceptable response patterns are eliminated thereby strengthening overall reliability (Zhu, 1996). Simply stated, The RUMM computer program is able to align items that fit the measurement model from easy to hard. Any item for which there is no agreement on its difficulty on the scale is rejected. By adopting a mixed methods approach for the current study, further support for the broad reliability of the measuring instrument data has been made possible by checking for consistency of the responses given to open-ended questions and during the face-to-face discussions with teachers and students.

Internal validity of the data refers to the check that is made to ensure relationships between the variables in the study have been interpreted correctly (Punch, 1998). If this is found to be so with more than one method in the one study, then the case for internal validity is strengthened. This has been demonstrated in the present study whereby aspects of the questionnaire data were further confirmed by information shared in the open-ended questions and during the discussions. In addition, the mixed methods approach has increased opportunities to gain insights and understandings that may have been missed, had only a single method been used (R. B. Johnson & Onwuegbuzie, 2004).

To conclude this section, the words of Linn (1986), are appropriate, "Quantitative analysis of primary research data and results of previous research is a vital part of research on teaching. But quantitative methods cannot stand alone" (p. 115). This notion is echoed by Johnson and Onwuegbuzie (2004), who challenge researchers to "collect multiple data using different strategies, approaches, and methods in such a way that the resulting mixture or combination is likely to result in complementary strengths and non-overlapping weaknesses" (p. 72). This challenge has been taken up in the present study. A

mixed methods approach has been adopted to create a study that is superior to mono-method studies and, as a whole, has greater depth and detail (R. B. Johnson & Onwuegbuzie, 2004; Patton, 1990).

Research Design

A diagrammatic representation of the research design is shown in Figure 5.1. To begin with, the research topic was identified. After an initial review of the literature, a theoretical model of teachers' relationships with students was designed (the model is described in detail in Chapter Three). Decisions were then made about how to collect the data and what tools would be needed. Questionnaires and discussion schedules were developed and a pilot sample was used to trial the tools. Improvements were made to the data collection tools as needed, and the revised tools were used with the study sample. The collected data was then analysed and final reports prepared.

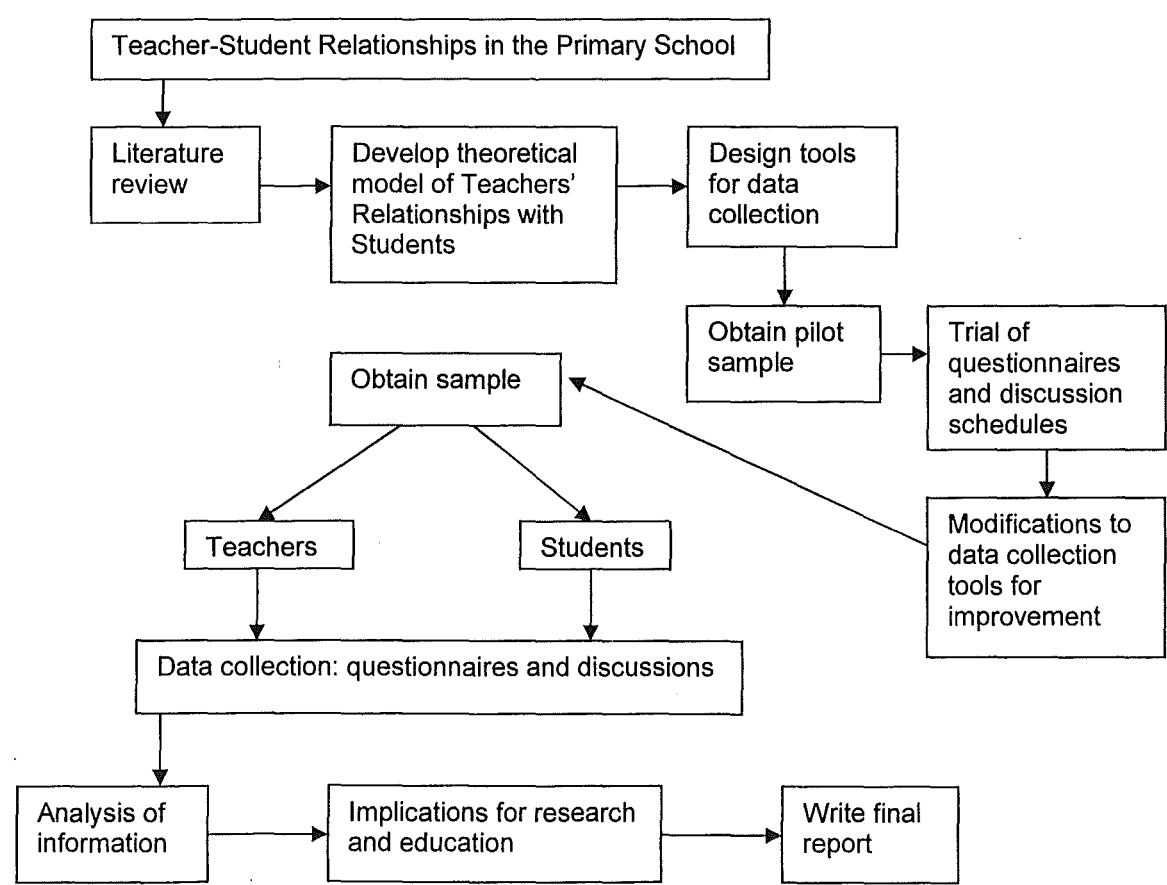


Figure 5.1. Research Design.

Samples

Convenience sampling was used to find the participants. The pilot sample of four teachers and fifteen students was taken from a school in the Perth Metropolitan area in late 2002. I knew the principal personally and was able to gain support for the study with little difficulty. This pilot sample tested the quantitative tools (questionnaires) and was later incorporated into the main sample. Table 5.1 below provides information about the participants, detailing gender, students' ages, and the class groupings represented.

Table 5.1

Details of the Participants in the Pilot Sample Used for Testing the Quantitative Tools.

Gender of staff participant	Class grouping	Age of students	Number of male students	Number of female students
female	3	8	2	2
female	4	9	2	2
female	5	10	2	2
female	7	12	1	2

The search for participants for the main sample began early in 2003 with the mailing of letters to one hundred principals of schools throughout the Perth metropolitan area. I experienced difficulty trying to elicit participants for the main sample. Most teachers cited existing work demands as the reason for their unavailability. Another commonly cited reason was the commitment already made by the school to other research projects. I followed up with the schools who indicated interest and availability to participate in the study. Additional contacts were needed so letters were then mailed to a further one hundred principals. Again, a small response was elicited and I followed up with those contacts.

In an effort to garner additional participants, a more personal approach was undertaken. I asked my university colleagues with school contacts to suggest name of principals and teachers who would be sympathetic to the study. I then telephoned those contacts directly and requested an interview to

discuss the research project. Two principals even consented to my attendance at staff meetings to meet staff face-to-face and ask for their support. This 'personal' approach for finding participants yielded the greatest response. Finally a total 43 teachers, 10 male and 33 female participated in the study.

Once principals and teachers had committed to being in the study, the next task was to find student participants. Teachers provided the names of students who they felt would be suitable and willing candidates, and whose parents would most likely agree to participate in the study. Letters of invitation were sent to these families via the school. Included in each letter was a consent form to be signed and returned to me using the pre-paid return addressed envelope provided. Most families accepted the invitation to partake in the study. A few parents telephoned me to clarify specifics, and expressed their consent verbally as well as in writing. Only a few families declined the invitation to participate. In total 139 students, 70 male and 69 female, participated in the study. The students ranged in age from 7 to 13 and came from a total of 26 schools, 13 of which were government schools, and 13 of which were independent schools. Table 5.2 below and Figure 5.2 on the following page show the break down of students by age and gender.

Table 5.2
Age and Gender of Student Participants.

Age Gender	7	8	9	10	11	12	13	Total
Male	1	15	17	13	13	11	0	70
Female	2	8	13	16	15	14	1	69
Total	3	23	30	29	28	25	1	139

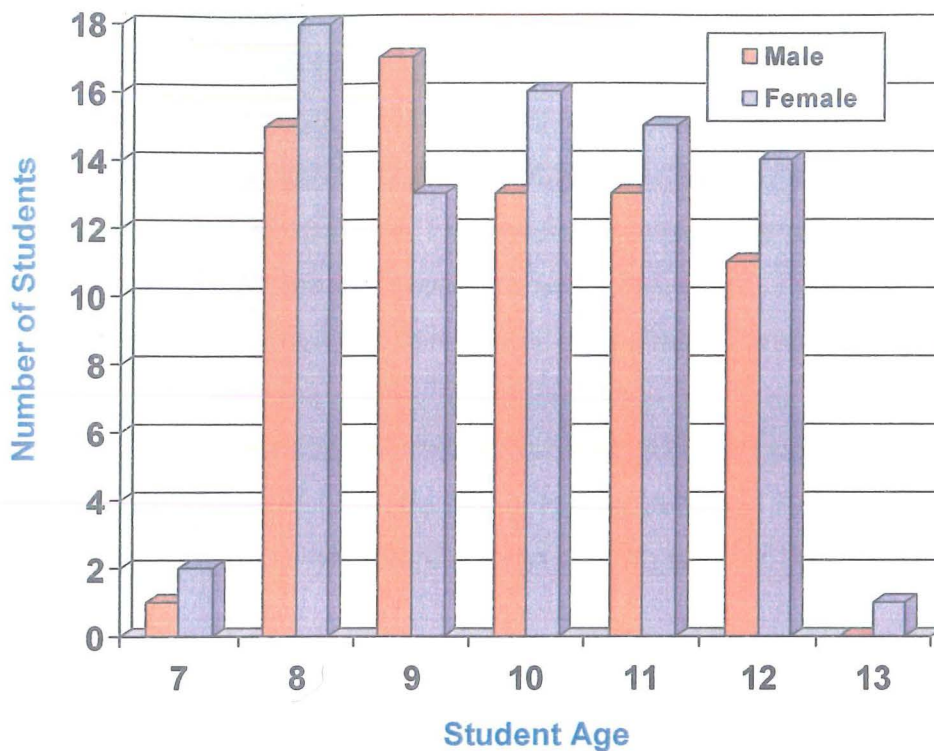


Figure 5.2 Age and Gender of Student Participants.

Pilot Testing

The pilot testing phase of a research project is an essential part of the overall study (Jaeger, 1988). The pilot test for the present study gave me the opportunity to become familiar with the tools and with the data collection procedures, and to be alerted to any modifications that were needed. Specifically, I anticipated that the pilot test would help me to identify any confusing or ambiguous language that may need to be eliminated (Wiersma, 2000). The pilot test was expected to help me to pinpoint any items which gained little or no information, for example, responses which attracted too many “I don’t know” or “I don’t understand” responses (DuBois & Burns, 1975; Glastonbury & MacKean, 1991). A further purpose of the pilot test was to confirm the appropriate length of the questionnaires and the discussion schedules, not so short that insufficient information would be gathered, and not too long so that the questionnaires were unworkable and/or caused the respondents to lose interest. Finally, the pilot testing phase gave me the opportunity to become familiar with the equipment that was to be used to make the audio recordings. The following sections provide more detail about the pilot testing phase of the study.

Quantitative Tools

The pilot testing of the quantitative tools was conducted in late 2002 in an independent primary school in the Perth metropolitan area. As already explained, the pilot sample comprised four female middle and upper primary school teachers and 15 students. I visited the school to formally trial the questionnaires. I found the questionnaire items to be well understood by both teachers and students, and the categories were sound. I was also satisfied with the length of the questionnaires. The teachers took between 5 and 10 minutes to complete their responses on a single questionnaire and reported that they did not find it too time consuming. The students took between 10 and 15 minutes to complete their responses and were able to stay on task for that length of time.

Early in the pilot testing phase, one minor modification needed to be made to the Teachers' Relationships with Students Questionnaire: Student's View. This modification involved re-ordering the response columns, resulting in a more logical flow of responses from the students' point of view. Specifically, the original format of the questionnaire required the students to first comment on their "ideal" response, then to comment on their "actual" response. For example, when looking at the first item "My teacher likes me", the students were asked to use the response format of Always, Most of the time, Some of the time and Never to say what they wish would happen, that is, to give their ideal response. The students were then asked to use the same response format to indicate what actually did happen, that is, to give their actual response. While working through the questionnaire with the first few participants it became evident that the students found it easier to conceptualise their responses by first stating what their actual situation was, and then to project what their ideal would be. As I continued to work through the pilot sample, I made the adjustment to the response columns and was satisfied that the students found it easier to complete the questionnaire with this modification. Consequently, the change was made to the Teachers' Relationships with Students Questionnaire: Student's View for use with the main sample.

No changes needed to be made to the Teachers' Relationships with Students Questionnaire: Teacher's View. All items were understood and the questionnaires were completed satisfactorily.

Qualitative Tools

As already explained, the students in the pilot sample were able to answer the open-ended questions at the conclusion of the questionnaire. Due to time constraints, however, the Student Discussion Schedule was not used. Neither was the Discussion Schedule used with the teachers, as the busy schedule at the end of the school year made it difficult to find a time to follow up with each teacher individually. To counter this dilemma, I contacted two personal friends, both of whom were teachers, and asked them to assist with the testing of the Teacher Discussion Schedule. Both friends agreed and in late 2003, they each signed a consent form. They were then each given a copy of the Teachers' Relationships with Students Questionnaire: Teacher's View to complete in readiness for the open-ended discussion. Separate times were arranged for each teacher to participate in the formal trial of the Teacher Discussion Schedule. Each session took approximately 30 minutes to complete. The sessions were audio taped with permission, enabling me to gain experience and confidence with using the recording equipment.

Data Collection

The collection of data was carried out in two phases. The first phase involved administering a questionnaire to teachers, a second questionnaire to students, and holding face-to-face discussions with students. The second phase involved holding face-to-face discussions with the teachers.

Phase One: Questionnaires and Student Discussions

Phase One required two samples, teachers in the first and students in the second. The first sample comprised 43 middle and upper primary teachers from the Perth metropolitan area and included the teachers in the pilot sample. The second sample was made up of the students from the classes of the teachers in the first sample. Between one and five students from each of the classes participated, giving a total of 139 students.

The first phase of the study was begun in early 2003. Letters of invitation were sent to primary school principals in the Perth metropolitan area requesting contact details of interested staff. Personal contact was then made by me with those teachers who were interested in participating in the study. The teachers

were asked to nominate four students in their classes who would be likely to participate in the study. Letters of invitation were then sent home with those nominated students and parental permission sought. Once permission was given for the students to participate, I arranged a suitable time to visit the classes and administer the questionnaires.

All 43 teachers in the first sample were given a Teachers' Relationships with Students Questionnaire: Teacher's View to complete for each of the students in their class who were participants in the study. The teachers completed the questionnaires in their own time and used the reply paid envelopes that I provided to return the completed questionnaires to me. All 139 questionnaires were successfully returned to me.

All teachers who completed the Teachers' Relationships with Students Questionnaire: Teacher's View were invited to participate in a follow-up discussion. Twenty-five teachers indicated their willingness to be involved in this way. Details of the face-to-face discussions are included in Phase Two below.

All 139 students in the second sample were given the Teachers' Relationships with Students Questionnaire: Student's View to complete. The questionnaires were completed during school time and in my presence. The students and I were able to talk privately as we were usually assigned a position outside their classroom or in a place nearby, for example, the classroom veranda, the wet area, an art room or the covered assembly area. In order to help the students to feel more at ease I would start by introducing myself as a mother and as a teacher. I would then briefly explain that the purpose of the visit was to find out more about what students thought so that teachers might be helped to do an even better job of teaching. I emphasised that there were no 'right' or 'wrong' answers, and gave assurances of the confidentiality of the students' responses. I would then show a copy of the Teachers' Relationships with Students Questionnaire: Student's View and explain the format whilst checking for understanding. Older students were able to complete the questionnaire unaided, while younger children generally needed my help to read the questionnaire items. The questionnaires generally took ten to fifteen minutes to complete. All the questionnaires were completed.

At the conclusion of the questionnaire, most students agreed to participate in an informal discussion with me. This was done to a lesser or greater degree depending on the student's interest levels, their ability to concentrate and the time constraints in place. For these reasons, parts of the Student Discussion Schedule were used, rather than using the schedule in its entirety. The discussions resembled a conversation, rather than a rigid interview format, in order to help the students to feel more at ease and be willing to share their thoughts and experiences. Student responses were documented in writing, either by me or jointly with the student.

Phase Two: Teacher Discussions

The second phase involved a sub-sample of teachers from the first phase. In total 25 teachers (6 male and 19 female) each accepted the invitation to participate in a follow-up discussion with me. These took place in late 2003. On average, the face-to-face discussions with teachers took half an hour. I usually met with each teacher at the school where they taught and conducted the discussion in their classroom or another convenient location such as the staff room or the library. Two teachers preferred the discussion to take place in their own home.

Each session began with me thanking the teacher for his or her participation. I purposefully tried to put the participant at ease by saying that no right or wrong answers were expected, just a sharing of insights from their point of view. I felt this was achieved as a number of teachers gave feedback at the end of the discussion saying that they had felt relaxed and at ease.

Each teacher consented to the discussion being tape recorded. I began the discussion by asking the teacher questions based on their responses as recorded on the Teacher-Student Questionnaires. As the discussion continued, I would draw on questions from the Teacher Discussion Schedule ensuring that the flow of the dialogue was maintained. The tape recorded discussions were later transcribed. Without exception, I found that all the teachers were willing to talk about their experiences.

Data Analysis

This section will outline the methods used for data analysis. The quantitative data that was collected using the questionnaires has been analysed using the Rasch Unidimensional Measurement Models computer program (RUMM) (Andrich, Sheridan, & Luo, 2005). The qualitative data that was collected during face-to-face discussions was analysed by looking for thematic connections (Punch, 1998; Seidman, 1991). A separate explanation is provided below to further explain these forms of data analysis. Further descriptions are provided in the appropriate data analysis chapters.

Rasch Analysis

Responses to the questionnaires have been calibrated using Rasch analysis. This is a relatively new method of analysis and is used in preference to the more widely adopted practice of using rating scales which are ordinal and therefore not necessarily additive (Wright, 1999; Zhu, 1996). The danger with using total scores from ordinal rating scales is that the results may be misleading. Rasch analysis provides a way of creating a linear measure, resulting in greater accuracy when analysing the data (Andrich, 1988; Waugh, 2002; Wright, 1999).

The RUMM computer program (Andrich, Sheridan, & Luo, 2005) has been used to analyse the data and create two scales of Teacher-Student Relationships, one from the teachers' view and the other from the students' view. Wright (1999) recommends the use of such computer programs, particularly as they may be a way of helping social scientists "to take the decisive step from unavoidably ambiguous, concrete raw observations to well-defined, abstract linear measures with realistic estimates of precision and explicit quality control" (p. 101).

Thematic Connections in the Qualitative Data

The framework for data analysis provided by Miles and Huberman (1994) has been used as a guide for analysing the qualitative data for this study. The authors suggest following an inter-related process involving the reduction of data, data display and drawing and verifying conclusions. Findings are presented in the form of themes.

During the analysis process, I used the three variables of Connectedness, Availability and Communication as my main categories. I looked within these categories for connections and patterns to then identify common themes. This is consistent with the view of Seidman (1991) who suggests organising excerpts from the transcripts into categories and searching for patterns and connections within the categories to identify themes. As the analysis process continued additional categories emerged, along with their additional themes. In this way, rather than forcing the discussion data into predetermined categories, I remained open to other categories as they arose (Seidman, 1991).

The following chapters explain the data analysis. Chapters Six and Seven explain the Rasch analysis of the quantitative data using the computer program RUMM 2020 (Andrich, Sheridan, & Luo, 2005). Chapters Eight and Nine explain the analysis of the qualitative data.

CHAPTER SIX

DATA ANALYSIS: PART 1 RASCH MEASUREMENT (TEACHERS' VIEWS)

This chapter presents the questionnaire data analysis for the Teachers' Relationships with Students model using the teachers' views. It begins with an explanation of the data analysis process using the Rasch Unidimensional Measurement Model (RUMM 2020) program (Andrich, Sheridan, & Luo, 2005). Following this, the results are presented through the use of tables, figures and text. The general meaning of the Teacher-Student Relationship Scale: Teacher's View is put forward and valid inferences are drawn from the scale.

Initial Rasch Analysis

The analysis started with ten items, each answered in three perspectives ('Idealistic', 'Capability' and 'Actual'), giving 10 x 3 (30) items. Data were analysed with the RUMM 2020 computer program (Andrich, Sheridan, & Luo, 2005). First, the data was checked to see whether the response categories were answered consistently and logically. The RUMM 2020 program assesses this with two outputs, namely, response category curves and thresholds. Response category curves show the probability of answering each response category by the Teacher-Student Relationship measure. These curves showed that teachers could not consistently discriminate between the two lowest categories, namely, 'Not at all' and 'Some of the time (less than 50% of the time)'. An example of this is shown in Figure 6.1.

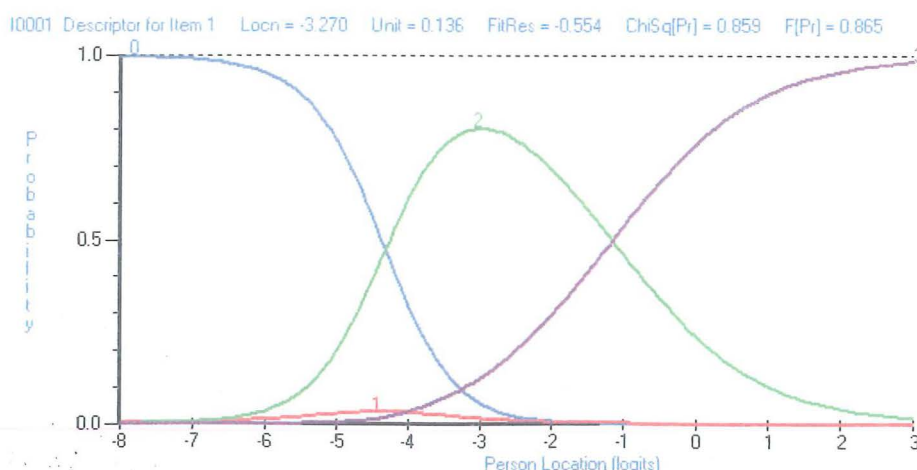


Figure 6.1 Response Category Curve for Item 1 Showing Poor Discrimination.

Thresholds are points between adjacent response categories where the odds are 1:1 of answering in either category. For good measurement, thresholds should be ordered in line with the ordering of the response categories. The thresholds, in this case, were not ordered in line with the ordering of the response categories, and this supported the evidence from the response category curves. Therefore, the two lowest response categories were combined giving score 1 for 'not at all or some of the time', score 2 for 'most of the time', and score 3 for 'almost always. Using these three response categories, the data were re-analysed with the RUMM 2020 program (note: the RUMM 2020 program converts the scores to 0, 1, 2).

Of the 30 original items that formed the Teacher-Student Relationship Scale, six items did not fit the measurement model. The non-performing items were deleted thus creating a linear scale with all items fitting the model. This re-analysis is now reported.

Final Analysis

The final analysis of the data for the Teacher-Student Relationship model: teachers' view used 24 items (6 x 3 perspectives; 2 x 2 perspectives and 2 x 1 perspective), and a total of 139 questionnaires completed by 43 teachers. The RUMM 2020 program produces outputs to assess fit to the measurement model, reliability and dimensionality. These are now explained.

Global Item and Person Fit

Table 6.1 shows the global item and global person fit. The fit residuals for both the item difficulties and the person measures are the differences between the actual values and the expected values, calculated according to the measurement model. When they are standardised, they have an approximately normal distribution (mean = 0, SD =1), if the data fit the measurement model. The fit residual data for the measure of Teacher-Student Relationships have a good fit to the measurement model (see Table 6.1).

Table 6.1

Global Item and Person Fit to the Measurement Model

ITEM-PERSON INTERACTION				
	ITEMS		PERSONS	
	Location	Fit Residual	Location	Fit Residual
Mean	0.00	-0.27	3.27	-0.37
SD	2.26	1.10	2.18	0.85

Notes on Table 6.1.

1. Item location is item difficulty in logits
2. Person location is person measure in logits
3. SD is standard deviation
4. The mean item difficulty is constrained to zero by the RUMM 2020 program
5. Fit residuals are the difference between the actual values and the expected values calculated according to the measurement model (standardised). They have a mean near zero and an SD near 1 when the data fit the measurement model. (A good fit for these data).
6. All values are given to two decimal places because the errors are to two decimal places.

Individual Item Fit

The RUMM 2020 program calculates individual item fits to the measurement model and these are given in Table 6.2. Twenty items out of 24 fit the measurement model with a probability greater than 0.05, indicating that there is an excellent fit to the measurement model. Set out on the following page is Table 6.2, accompanied by the explanatory notes relating to individual item fit to the measurement model. Deleting the not-so-good fitting items and re-analysing the data did not produce a better fit to the measurement model and so the 24 items were retained.

Consistency of Category Responses

The thresholds between category responses are given in Table 6.3. The thresholds are ordered in line with the conceptual ordering from low to high (not at all/some of the time, most of the time and almost always). This indicates that the teachers answered the three response categories consistently and logically.

The RUMM 2020 program produces category response curves for each item showing the relationship between the probability of answering each category in relation to the Teacher-Student measure. An example is given in Figure 6.2. This figure shows that when the measure is low, then the probability

is high that the teacher response is low (not at all/some of the time), that as the measure increases, the probability of answering in the lowest category decreases and the probability of answering in the next category increases, and that as the measure increases further still, the probability of answering category two (most of the time) decreases and the probability of answering category three (almost always) increases. This means that the teachers have answered the three response categories logically and consistently. The response category curves for all 24 items were good.

Table 6.2

Item Fit to the Measurement Model (Teacher Measure)

Item No.	Location	SE	Residual	df	Chi-square	Probability
Item 01	-4.19	0.82	-0.48	124.52	0.26	0.88
Item 04	-3.71	0.62	-0.43	124.52	0.30	0.86
Item 05	-0.27	0.22	-0.68	124.52	0.47	0.78
Item 06	1.58	0.18	-1.43	124.52	2.19	0.32
Item 07	-2.42	0.38	-0.72	125.46	1.15	0.55
Item 08	0.03	0.22	-0.23	124.52	1.70	0.41
Item 09	3.17	0.18	0.58	124.52	2.67	0.24
Item 10	-2.18	0.35	0.25	125.46	6.15	0.02
Item 11	0.37	0.21	-1.28	124.52	1.63	0.43
Item 12	2.46	0.17	-1.42	124.52	1.63	0.43
Item 13	-2.01	0.31	0.29	125.46	4.39	0.09
Item 14	0.97	0.21	-2.05	124.52	8.51	0.00
Item 15	3.06	0.18	0.26	124.52	3.59	0.14
Item 16	-2.66	0.36	-0.45	124.52	0.27	0.87
Item 17	0.86	0.20	-0.35	125.46	3.44	0.16
Item 18	2.20	0.18	1.76	124.52	3.20	0.18
Item 20	1.50	0.18	2.70	124.52	11.22	0.00
Item 23	0.74	0.20	1.44	125.46	3.39	0.16
Item 24	2.46	0.18	-1.22	124.52	0.41	0.81
Item 25	-2.82	0.50	-0.05	125.46	1.16	0.55
Item 26	0.44	0.21	-1.59	124.52	2.61	0.25
Item 28	-2.52	0.42	-0.88	125.46	1.01	0.59
Item 29	0.62	0.20	-0.63	124.52	4.53	0.08
Item 30	2.36	0.17	0.09	124.52	5.50	0.04

Notes on Table 6.2.

1. Location is item difficulty in logits.
2. SE is Standard Error.
3. Residual is the difference between actual value and expected value, calculated according to the measurement model.
4. df is degrees of freedom.
5. 20 out of 24 items fit the measurement model with a probability greater than 0.05.
6. All values are given to two decimal places because the errors are to two decimal places.

Table 6.3

Item Thresholds for Teacher Measure

	THRESHOLDS		
	Mean	1	2
Item 01	-4.19	-5.49	-2.88
Item 04	-3.71	-5.33	-2.09
Item 05	-0.27	-2.36	1.82
Item 06	1.58	0.29	2.87
Item 07	-2.43	-4.07	-0.78
Item 08	0.03	-3.02	3.08
Item 09	3.18	1.34	5.01
Item 10	-2.18	-3.91	-0.46
Item 11	0.37	-1.83	2.57
Item 12	2.46	1.18	3.74
Item 13	-2.01	-4.09	0.07
Item 14	0.97	-1.96	3.89
Item 15	3.06	1.06	5.07
Item 16	-2.66	-4.86	-0.47
Item 17	0.86	-1.48	3.19
Item 18	2.20	0.33	4.08
Item 20	1.50	-0.12	3.13
Item 23	0.74	-1.56	3.03
Item 24	2.46	0.80	4.11
Item 25	-2.82	-3.97	-1.68
Item 26	0.44	-2.06	2.94
Item 28	-2.52	-3.92	-1.12
Item 29	0.62	-1.48	2.71
Item 30	2.34	0.79	3.89

- Notes on Table 6.3.
1. Thresholds are points between adjacent response categories where the odds are 1:1 of answering the adjacent categories.
 2. Mean thresholds are the item difficulties in logits.
 3. All values are given to two decimal places because the errors are to two decimal places.
 4. The thresholds for each item are ordered in line with the ordering of the response categories.

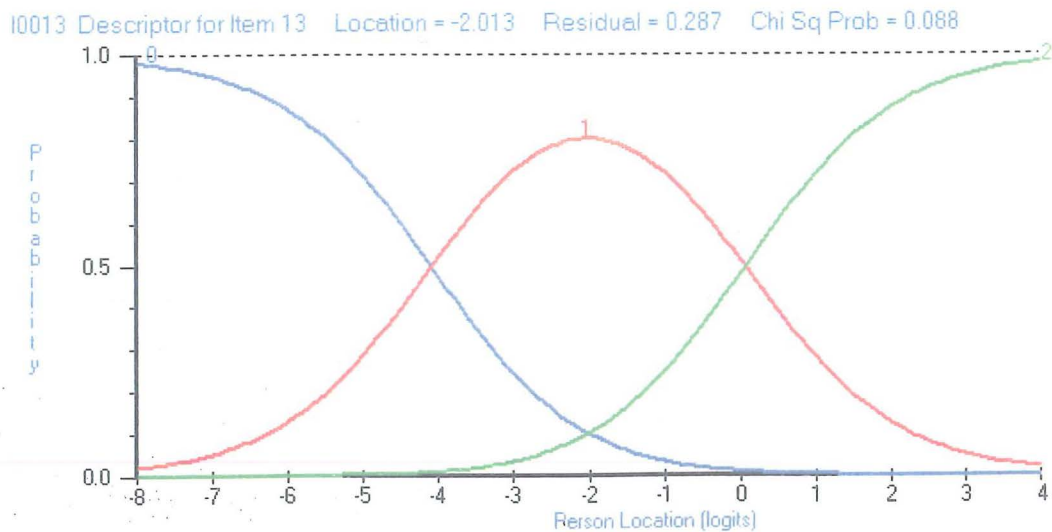


Figure 6.2 Response Category Curve for Item 13

Item Characteristic Curves

The RUMM 2020 program produces an item characteristic curve for each item showing the relationship between the expected response score and the Teacher-Student measure. An example is given in Figure 6.3 for item 30. It shows how the item discriminates for groups of persons near the item difficulty. In this case, the item is functioning as intended. The item characteristic curves for all 24 items showed that the items were functioning as intended.

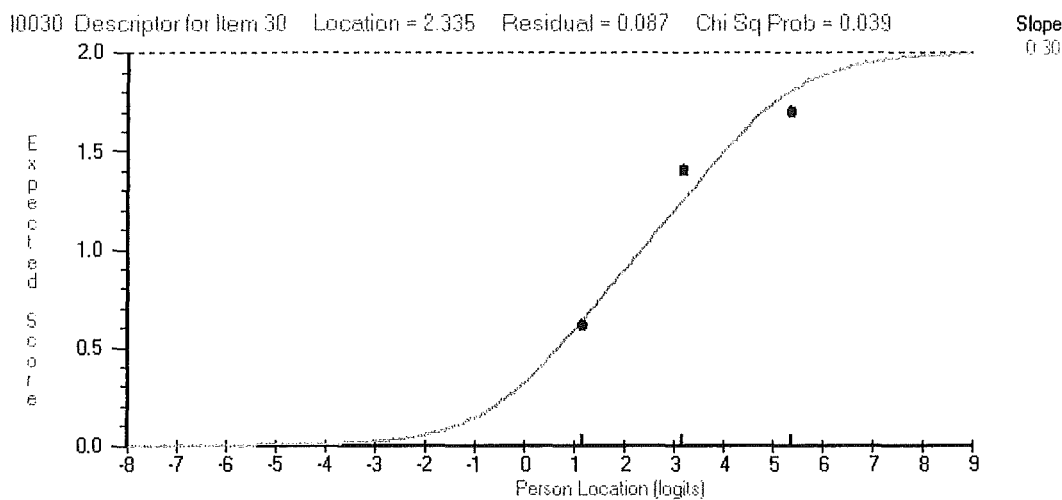


Figure 6.3 Characteristic Curve for Item 30

Dimensionality

The RUMM 2020 program calculates an item-trait interaction effect to determine whether a unidimensional trait has been measured. This examines the consistency with which teachers with measures all along the scale agree with the calculated difficulties of the items along the scale. That is, it provides a check that all the teachers agree that particular items are easy, of medium difficulty or hard. For the item-trait interaction, the total item chi-square was 71.37, and the probability was 0.02 (chi-square = 71, df = 48, p = 0.02). This indicates that there was no significant interaction of person measures with item difficulties along the scale and that, therefore, it can be concluded that a unidimensional trait was measured.

Person Separation Index

The Person Separation Index is 0.93 indicating that the measures are well separated along the scale in comparison to their errors of measurement.

This also implies that the power of the tests-of-fit are strong and the RUMM 2020 program says that the power for these data are excellent.

Targeting

The RUMM 2020 program produces a Person Measure/Item Difficulty graph. This graph (see Figure 6.4) shows the scale of item difficulties from easy (about -4.2 logits) to hard (about +3.2 logits) and the teacher measures calibrated on the same scale from low (about -4.6 logits) to high (about + 7.8 logits). This shows that some hard items need to be added to the scale to better target those teachers with high measures.

The RUMM 2020 program also produces a Person Measure/Item Threshold graph (see Figure 6.5) which shows the item thresholds instead of item difficulties. The thresholds range from easy (about -5.8 logits) to hard (about +5.1 logits) and thus better cover the range of teacher measures. Nevertheless, in any future use of the scale, some harder items need to be added to better measure those teachers with high teacher-student relationships.

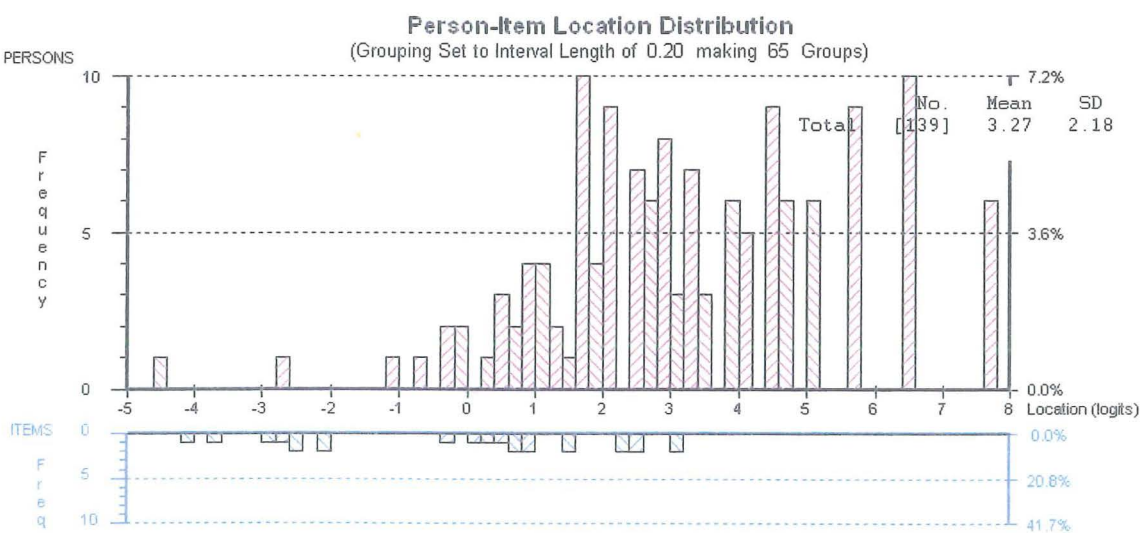


Figure 6.4 Person Measure/Item Difficulty Graph

Notes on Figure 6.4

1. Person measures are given on the upper side in logits.
2. Item difficulties are given on the lower side in logits.
3. Some harder items need to be added to the scale in future use to cover the higher measures.

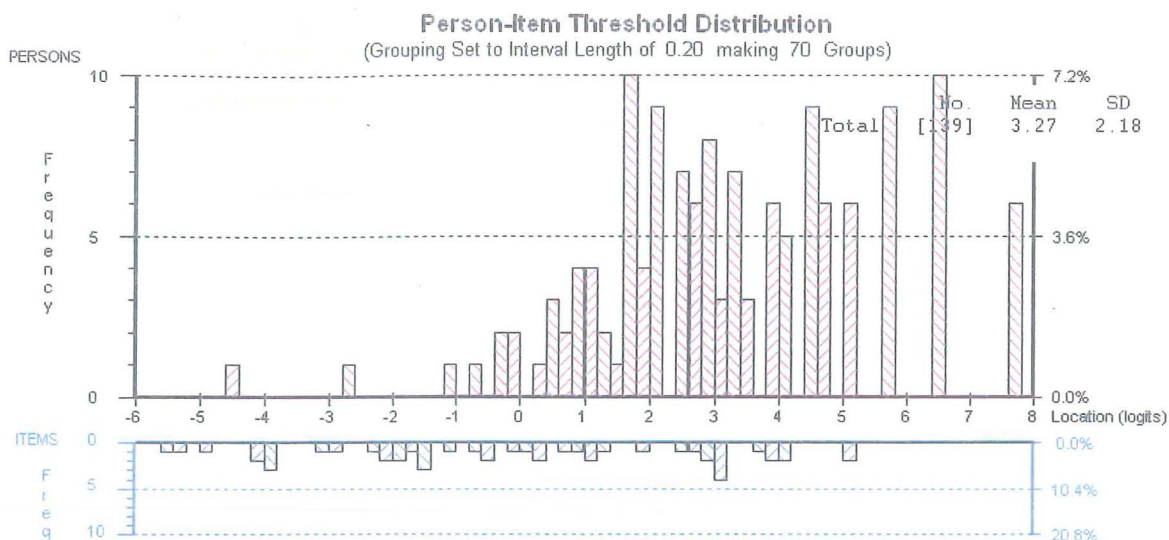


Figure 6.5 Person Measure/Item Threshold Graph

Notes on Figure 6.5

1. Person measures are given on the upper side in logits.
2. Item thresholds are given on the lower side in logits.

The Teacher-Student Relationship Scale: Teacher's View

The Rasch analysis has calibrated the teacher measures on the same scale as the item difficulties and produced a linear, unidimensional scale (see Table 6.4), for which the data have a good fit to the measurement model. Since it has now been shown that the scale data are reliable (there is good individual and global fit to the measurement model, the separation of measures is good in comparison to the errors and the teachers have answered the response categories consistently and logically), valid inferences can be made from the scale.

Items

For each item, teachers found that the idealistic perspective ('this is what I would like to happen') was easier to answer than the capability perspective ('this is what I am capable of') and the actual behaviour ('this is what actually happens') was the hardest to answer, as conceptualised at the beginning of the study.

The four easiest attitude items (what teachers would like to happen) are,

and these are very easy:

1. I like this child (item 1, difficulty -4.19 logits);
2. This child and I get along well together (item 2, difficulty -3.71 logits);
3. I listen to this child when he/she needs to talk about personal issues. (item 9, difficulty -2.82 logits);
4. I am available and will provide help when this child asks for it. (item 6, difficulty -2.66 logits).

Table 6.4

Item Wording and their Difficulties (Final Data Analysis)

Item no.	Item Wording	Response		
		Idealistic	Capability	Actual
Connectedness				
1	I like this child.	-4.19	NF	NF
2	This child and I get along well together.	-3.71	-0.27	+1.58
3	I am interested to learn about this child's personal thoughts, feelings and experiences.	-2.42	+0.03	+3.17
4	This child and I have a good, supportive relationship.	-2.18	+0.37	+2.46
Availability				
5	I am available for this child.	-2.01	+0.97	+3.06
6	I am available and will provide help when this child asks for it.	-2.66	+0.86	+2.20
7	If I am busy and this child needs help urgently, I will stop what I am doing and make myself available.	NF	+1.50	NF
Communication				
8	I communicate effectively with this child.	NF	+0.74	+2.46
9	I listen to this child when he/she needs to talk about personal issues.	-2.82	+0.44	NF
10	I communicate with this child in positive and sensitive ways.	-2.52	+0.61	+2.33

Note on Table 6.4

1. Item difficulties are in logits.
2. NF means did not fit.

The four hardest attitude items (what teachers would like to happen) are, although these are still quite easy:

1. I am available for this child (item 5, difficulty -2.01 logits);
2. This child and I have a good, supportive relationship (item 4, difficulty -2.18 logits);
3. I am interested to learn about this child's personal thoughts, feelings and experiences (item 3, difficulty -2.42 logits);
4. I communicate with this child in positive and sensitive ways (item 10, difficulty -2.52 logits).

The four easiest capability items (what teachers believed themselves to be capable of) are, although these are moderately hard:

1. This child and I get along well together (item 2, difficulty -0.27);
2. I am interested to learn about this child's personal thoughts, feelings and experiences (item 3, difficulty +0.03);
3. This child and I have a good, supportive relationship (item 4, difficulty +0.37);
4. I listen to this child when he/she needs to talk about personal issues (item 9, difficulty +0.44).

The four hardest capability items (what teachers believed themselves to be capable of) are, and these are moderately hard:

1. If I am busy and this child needs help urgently, I will stop what I am doing and make myself available (item 7, difficulty +1.50);
2. I am available for this child (item 5, difficulty +0.97);
3. I am available and will provide help when this child asks for it (item 6, difficulty +0.86);
4. I communicate effectively with this child (item 8, difficulty +0.74).

The three easiest behaviour items (what actually does happen) are, although these are still hard:

1. This child and I get along well together (item 2, difficulty +1.58 logits);
2. I am available and will provide help when this child asks for it (item 6, difficulty +2.20 logits);
3. I communicate with this child in positive and sensitive ways (item 10, difficulty +2.33 logits).

The four hardest behaviour items (what actually does happen) are, and these are very hard:

1. I am interested to learn about this child's personal thoughts, feelings and experiences (item 3, difficulty +3.17);
2. I am available for this child (item 5, difficulty +3.06);
3. This child and I have a good, supportive relationship (item 4, difficulty +2.46);
4. I communicate effectively with this child (item 8, also with a difficulty of +2.46).

Table 6.5

Teachers with Lowest Teacher-Student Relationship Measures (N=18)

ID	Raw Score	Teacher Measure	SE	Residual
123	2	-4.54	0.86	+1.92
069	11	-2.79	0.49	-0.98
113	19	-1.05	0.46	+0.39
066	21	-0.63	0.46	-1.79
070	23	-0.21	0.46	+0.17
108	23	-0.21	0.46	-0.83
107	24	-0.00	0.46	-0.06
122	24	-0.00	0.46	+2.02
080	25	+0.21	0.46	-2.58
088	26	+0.43	0.47	-0.97
104	26	+0.43	0.47	-0.27
076	26	+0.43	0.47	-2.49
084	27	+0.64	0.47	-2.26
106	27	+0.64	0.47	+0.18
090	28	+0.86	0.47	-0.91
102	28	+0.86	0.47	+3.05
018	28	+0.86	0.47	-0.09
079	28	+0.86	0.47	+0.53

Notes on Table 6.5

1. ID is teacher identification number.
2. Raw score is the total score on the 24 questionnaire items with three response categories 0, 1, 2 (minimum raw score is 0, maximum is 48).
3. Teacher measure is in logits (minimum linear measure is -4.54 logits, maximum is +7.74).
4. SE is standard error in logits.
5. Residual is the standardised difference between the actual score and the score estimated according to the measurement model.
6. All values are given to two decimal places because the errors are to two decimal places.
7. The teachers with the eight lowest measures (-4.54 logits to 0.00 logits) may need help in improving their relationships with the students.

Table 6.6

Teachers with Highest Teacher-Student Relationship Measures (N=25)

ID	Raw Score	Teacher Measure	SE	Residual
118	46	+5.67	0.78	-0.21
115	46	+5.67	0.78	-0.21
116	46	+5.67	0.78	-0.21
117	46	+5.67	0.78	-0.21
057	46	+5.67	0.78	-0.31
125	46	+5.67	0.78	+0.04
025	46	+5.67	0.78	-0.03
027	46	+5.67	0.78	+0.21
029	46	+5.67	0.78	-0.16
011	47	+6.48	1.06	-0.20
136	47	+6.48	1.06	-0.09
030	47	+6.48	1.06	-0.20
135	47	+6.48	1.06	-0.21
134	47	+6.48	1.06	-0.09
010	47	+6.48	1.06	-0.06
012	47	+3.06	1.06	-0.06
013	47	+6.48	1.06	+0.04
014	47	+6.48	1.06	+0.04
028	47	+6.48	1.06	-0.20
100	48	+7.74	-	-
126	48	+7.74	-	-
093	48	+7.74	-	-
094	48	+7.74	-	-
095	48	+7.74	-	-
138	48	+7.74	-	-

Notes on Table 6.6

1. ID is teacher identification number.
2. Raw score is the total score on the 24 questionnaire items with three response categories 0, 1, 2 (minimum raw score is 0, maximum is 48).
3. Teacher measure is in logits (minimum linear measure is -4.54 logits, maximum is +7.74).
4. SE is standard error in logits (RUMM does not estimate for maximum scores).
5. Residual is the standardised difference between the actual score and the score estimated according to the measurement model (RUMM does not estimate for maximum scores).
6. All values are given to two decimal places because the errors are to two decimal places.
7. The Rasch measures for the top six teachers' questionnaires are estimated because they obtained the highest raw score possible (48).

Persons

Each person's raw score has been converted to a teacher measure, expressed in logits. The teacher measures range from a lowest possible -4.54 logits to a maximum possible +7.74 logits. The lowest measures indicate a perception of a distant relationship while, conversely, the highest measures indicate a perception of a close relationship. The data on person measures is presented in Tables 6.5 and 6.6. Of the total 139 relationships reported on by the teacher participants, 18 teacher-student relationships were measured at the lower end of the scale, indicating those teachers perceived themselves to have a not-so-good relationship with their students. In particular, the eight lowest measures (the questionnaires numbered 123, 69, 113, 66, 70, 108, 107 and 122) indicate that these teachers need some help in improving their relationships with the particular students involved. Twenty-five teacher-student relationships were measured at the higher end of the scale which indicates those teachers perceived themselves to have a close relationship with their students.

Summary

A Rasch measurement analysis was conducted with ten items, conceptually ordered from easy to hard, and answered in three perspectives ('Idealistic', 'Capability' and 'Actual') giving an effective scale of 30 items. The RUMM 2020 computer program (Andrich, Sheridan, & Luo, 2005) was particularly helpful in conducting this analysis. It was found that six items did not fit the measurement model and were deleted from the scale. The remaining 24 items were analysed and it was concluded that a reliable linear, unidimensional scale of Teacher-Student Relationships was created using the teacher's view in which the measures were calibrated on the same scale as the item difficulties.

The reliability of the scale data was shown by:

1. Good global and person item fit to the measurement model;
2. Good individual fit to the measurement model;
3. The three category responses being answered in a consistent and logical way;
4. A good Person Separation Index indicating that the person measures were well separated in comparison to the errors;
5. A good item-trait interaction indicating the measurement of a unidimensional

trait;

6. Reasonable targeting of the items against the person measures, although some harder items need to be added for any future use of the scale.

Since the scale data were shown to be reliable, the following valid inferences were drawn from the scale.

1. All attitude relationships ('idealistic') were easier than the actual behaviour relationship, and capability was harder than idealistic, but easier than the actual behaviour.
2. Teachers found it very easy to give idealistic responses to like their students and to get along well with them.
3. Teachers found it moderately easy to say that idealistically, they would like to be available for the students.
4. Teachers found it moderately hard to say that they were capable of being interested in learning about their student's personal thoughts, feelings and experiences.
5. Teachers found it very hard to say that they could actually be interested in learning about their student's personal thoughts, feelings and experiences.

The distribution of Teacher-Student Relationship Measures makes it possible to describe a relationship as perceived by the teacher. The teachers with highest measures perceive that they have a highly satisfactory relationship with their students, and they do not need any help with their relationships with their students. Teachers with low measures perceive that they have a not-so-good relationship with their students. A closer look at the responses given by the teachers within the three aspects of Connectedness, Availability and Communication indicates which aspects specifically are sound and which may need attention in order for the relationship to be improved or enhanced.

The next chapter explains the Rasch analysis for the students' views on Teacher-Student relationships.

CHAPTER SEVEN

DATA ANALYSIS: PART 2

RASCH MEASUREMENT (STUDENTS' VIEWS)

This chapter presents the questionnaire data analysis for the Teachers' Relationships with Students model using the students' views. An explanation is provided of the data analysis process using the Rasch Unidimensional Measurement Model (RUMM 2020) program (Andrich, Sheridan, & Luo, 2005). The results are then presented through the use of tables, figures and text. The general meaning of the Teacher-Student Relationship Scale: Student's View is put forward and valid inferences are drawn from the scale.

Initial Rasch Analysis

The analysis started with ten items, each answered in two perspectives ('this is what does happen' and 'what I wish would happen'), giving 10 x 2 (20) items. Data were analysed with the RUMM 2020 computer program (Andrich, Sheridan, & Luo, 2005). It was first checked to see whether the response categories were answered consistently and logically. As stated in the previous chapter, the RUMM 2020 program assesses this with two outputs, namely, response category curves and thresholds. Response category curves show the probability of answering each response category by the Teacher-Student Relationship measure. These curves showed that students could not discriminate consistently between the two lowest categories ("never" and "some of the time"). An example of this is given in Figure 7.1.

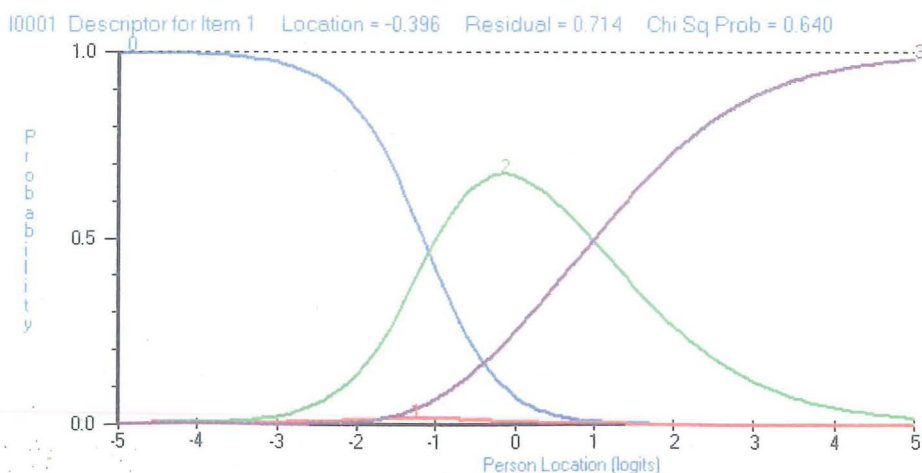


Figure 7.1 Response Category Curve for Item 1 Showing Poor Discrimination.

Thresholds are points between adjacent response categories where the odds are 1:1 of answering in either category. For good measurement, thresholds should be ordered in line with the ordering of the response categories. The thresholds, in this case, were not ordered in line with the ordering of the response categories, and this supported the evidence from the response category curves. Therefore, the two lowest response categories were combined giving score 1 for 'never or some of the time', score 2 for 'most of the time', and score 3 for 'always. Using these three response categories, the data were re-analysed with the RUMM 2020 program (note: the RUMM 2020 program converts the scores to 0, 1, 2). This re-analysis is now reported.

Final Analysis

The final analysis of the data for the Teacher-Student Relationship model: Student's View used 20 items (10 x 2 perspectives), three response categories and 139 students. The RUMM 2020 program produces outputs to assess fit to the measurement model, reliability and dimensionality. These are now explained.

Global Item and Person Fit

Table 7.1 shows the global item and person fit. Following the table are related notes, and an explanatory paragraph.

Table 7.1

Global Item and Person Fit to the Measurement Model

ITEM-PERSON INTERACTION

	ITEMS		PERSONS	
	Location	Fit Residual	Location	Fit Residual
Mean	0.00	-0.16	1.54	-0.13
SD	1.78	0.95	1.53	0.93

Notes on Table 7.1.

1. Item location is item difficulty in logits
2. Person location is person measure in logits
3. SD is standard deviation
4. The mean item difficulty is constrained to zero by the RUMM 2020 program
5. Fit residuals are the difference between the actual values and the expected values calculated according to the measurement model (standardised). They have a mean near zero and an SD near 1 when the data fit the measurement model. (A good fit for these data).
6. All values are given to two decimal places because the errors are to two decimal places.

The fit residuals for both the item difficulties and the person measures have a mean near zero and a standard deviation near one. The residuals are the differences between the actual values and the expected values, calculated according to the measurement model and, when they are standardised, they have an approximately normal distribution (mean = 0, SD = 1), if the data fit the measurement model. These fit residual data for the measure of Teacher-Student Relationships have a good fit to the measurement model (see Table 7.1).

Individual Item Fit

The RUMM 2020 program calculates individual item fits to the measurement model and these are given in Table 7.2. Nineteen items out of 20 fit the measurement model with a probability greater than 0.05, indicating that there is an excellent fit to the measurement model. Set out on the following page is Table 7.2, accompanied by the explanatory notes relating to individual item fit to the measurement model.

Consistency of Category Responses

The thresholds between category responses are given in Table 7.3. The thresholds are ordered in line with the conceptual ordering from low to high (never/some of the time, most of the time and all the time). This indicates that the students answered the three response categories consistently and logically.

The RUMM 2020 program produces category response curves for each item showing the relationship between the probability of answering each category in relation to the Teacher-Student measure. An example is given in Figure 7.2. This figure shows that when the measure is low, then the probability is high that the student response is low (never/some of the time), that as the measure increases, the probability of answering in the lowest category decreases and the probability of answering in the next category increases, and that as the measure increases further still, the probability of answering category two (most of the time) decreases and the probability of answering category three (all the time) increases. This means that the students have answered the three response categories logically and consistently. The response category curves for all 20 items were good.

Table 7.2

Item Fit to the Measurement Model (Student Measure)

Item No.	Location	SE	Residual	df	Chi-square	Probability
Item 1	-1.68	0.21	0.80	125.35	2.40	0.28
Item 2	0.84	0.16	-0.26	125.35	1.47	0.46
Item 3	-1.79	0.22	-0.27	125.35	0.03	0.98
Item 4	0.99	0.14	-0.77	125.35	1.01	0.59
Item 5	-0.74	0.18	-0.62	125.35	0.82	0.65
Item 6	1.15	0.13	0.67	125.35	0.32	0.85
Item 7	-0.19	0.16	-1.34	125.35	3.82	0.12
Item 8	0.87	0.14	-1.51	125.35	2.52	0.26
Item 9	-0.60	0.18	-0.63	125.35	0.71	0.69
Item 10	1.30	0.14	1.44	125.35	0.82	0.66
Item 11	-1.12	0.21	-0.93	125.35	2.02	0.35
Item 12	0.20	0.16	0.85	125.35	0.88	0.63
Item 13	0.43	0.15	1.90	124.41	14.01	0.00
Item 14	2.57	0.15	0.82	125.35	2.04	0.34
Item 15	-1.47	0.23	-0.32	125.35	1.50	0.46
Item 16	0.37	0.15	-0.83	125.35	2.01	0.35
Item 17	-0.36	0.17	-0.65	125.35	0.58	0.74
Item 18	0.55	0.14	0.28	125.35	1.55	0.45
Item 19	-1.71	0.23	-0.68	125.35	2.68	0.24
Item 20	0.41	0.15	-1.14	125.35	3.81	0.13

Notes on Table 7.2.

1. Location is item difficulty in logits.
2. SE is Standard Error.
3. Residual is the difference between actual value and expected value, calculated according to the measurement model.
4. df is degrees of freedom.
5. 19 out of 20 items fit the measurement model with a probability greater than 0.05.
6. All values are given to two decimal places because the errors are to two decimal places.

Table 7.3

Item Thresholds for Student Measure

	THRESHOLDS		
	Mean	1	2
Item 1	-1.68	-3.40	0.13
Item 2	0.84	-0.62	2.29
Item 3	-1.80	-3.39	-0.20
Item 4	0.99	0.36	1.63
Item 5	-0.74	-2.14	0.65
Item 6	1.15	0.77	1.52
Item 7	-0.19	-0.64	0.27
Item 8	0.87	0.47	1.27
Item 9	-0.60	-1.42	0.21
Item 10	1.30	0.80	1.80
Item 11	-1.12	-1.83	-0.40
Item 12	0.19	-1.13	1.51
Item 13	0.43	-0.12	0.97
Item 14	2.57	2.06	3.08
Item 15	-1.47	-2.32	-0.61
Item 16	0.37	-0.38	1.12
Item 17	-0.36	-0.79	0.06
Item 18	0.55	0.32	0.78
Item 19	-1.71	-3.11	-0.30
Item 20	0.41	-0.30	1.12

- Notes on Table 7.3.
1. Thresholds are points between adjacent response categories where the odds are 1:1 of answering the adjacent categories.
 2. Mean thresholds are the item difficulties in logits.
 3. All values are given to two decimal places because the errors are to two decimal places.
 4. The thresholds for each item are ordered in line with the ordering of the response categories.

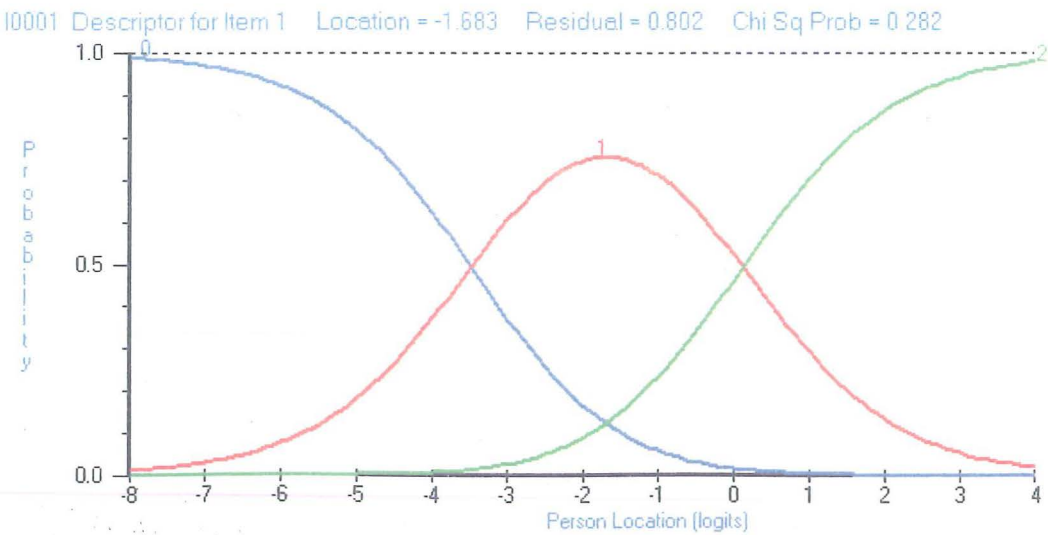


Figure 7.2 Response Category Curve for Item 1

Item Characteristic Curves

The RUMM 2020 program produces an item characteristic curve for each item showing the relationship between the expected response score and the Teacher-Student measure. An example is given in Figure 7.3 for item 8. It shows how the item discriminates for groups of persons near the item difficulty. In this case, the item is functioning as intended. The item characteristic curves for all 20 items showed that the items were functioning as intended.

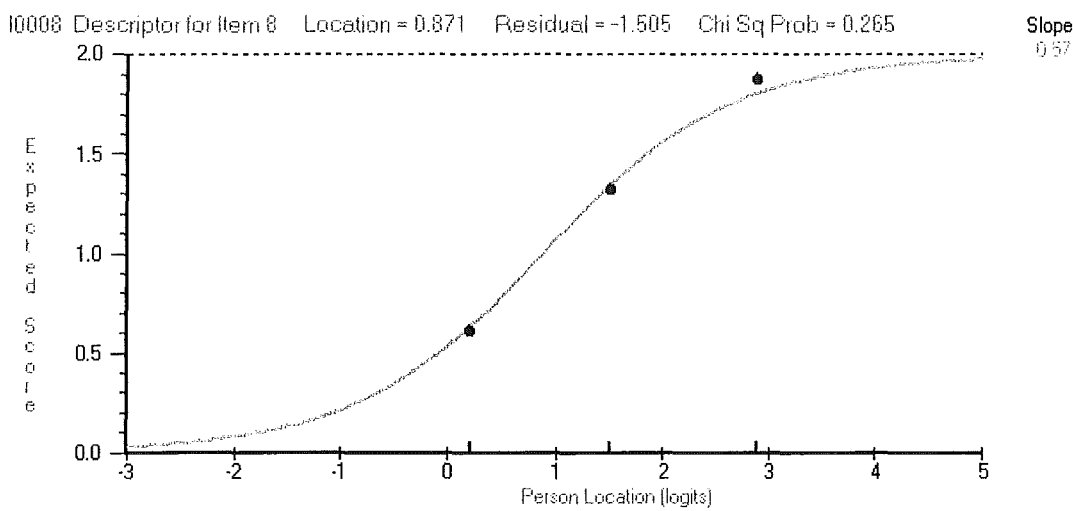


Figure 7.3 Characteristic Curve for Item 8

Dimensionality

The RUMM 2020 program calculates an item-trait interaction effect to determine whether a unidimensional trait has been measured. This examines the consistency with which students with measures all along the scale agree with the calculated difficulties of the items along the scale. That is, it provides a check that all the students agree that particular items are easy, of medium difficulty or hard. For the item-trait interaction, the total item chi-square was 45.00, and the probability was 0.27 (chi-square = 45, df = 40, p = 0.27). This indicates that there was no significant interaction of person measures with item difficulties along the scale and that, therefore, it can be concluded that a unidimensional trait was measured.

Person Separation Index

The Person Separation Index is 0.90 indicating that the measures are well separated along the scale in comparison to their errors of measurement.

This also implies that the power of the tests-of-fit are strong and the RUMM 2020 program says that the power for these data are excellent.

Targeting

The RUMM 2020 program produces a Person Measure/Item Difficulty graph. This graph (see Figure 7.4) shows the scale of item difficulties from easy (about -1.8 logits) to hard (about +2.6 logits) and the student measures calibrated on the same scale from low (about -6.2 logits) to high (about + 5.6 logits). This shows that some hard items need to be added to the scale to better target those students with high measures.

The RUMM 2020 program also produces a Person Measure/Item Threshold graph (see Figure 7.5) which shows the item thresholds instead of item difficulties. The thresholds range from easy (about -3.6 logits) to hard (about +3.1 logits) and thus better cover the range of student measures. Nevertheless, in any future use of the scale, some harder items need to be added to better measure those students with high teacher-student relationships.

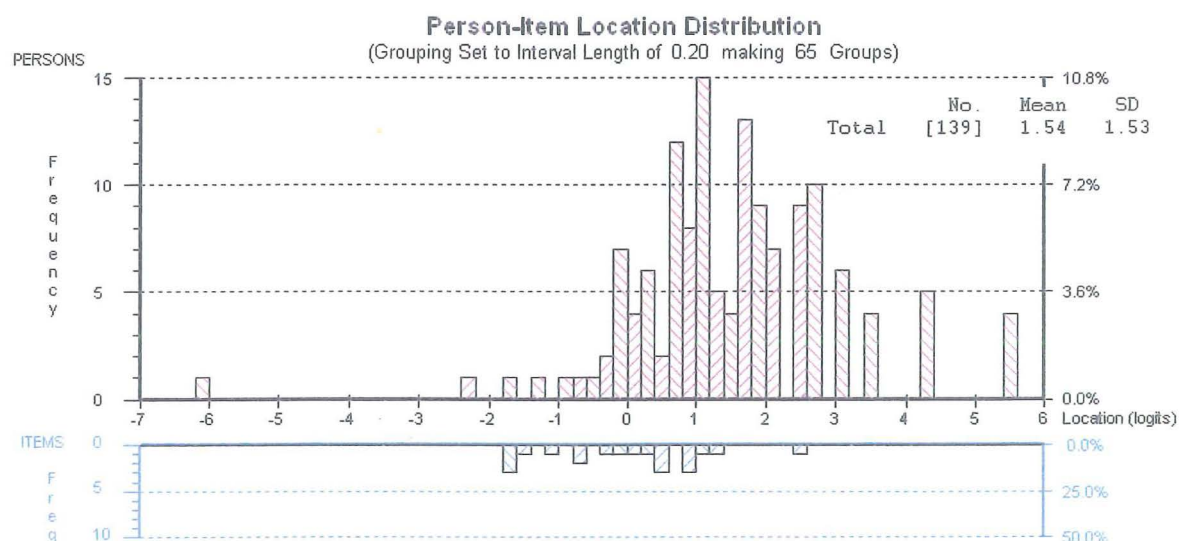


Figure 7.4 Person Measure/Item Difficulty Graph

Notes on Figure 7.4

1. Person measures are given on the upper side in logits.
2. Item difficulties are given on the lower side in logits.
3. Some harder items need to be added to the scale in future use to cover the higher measures.

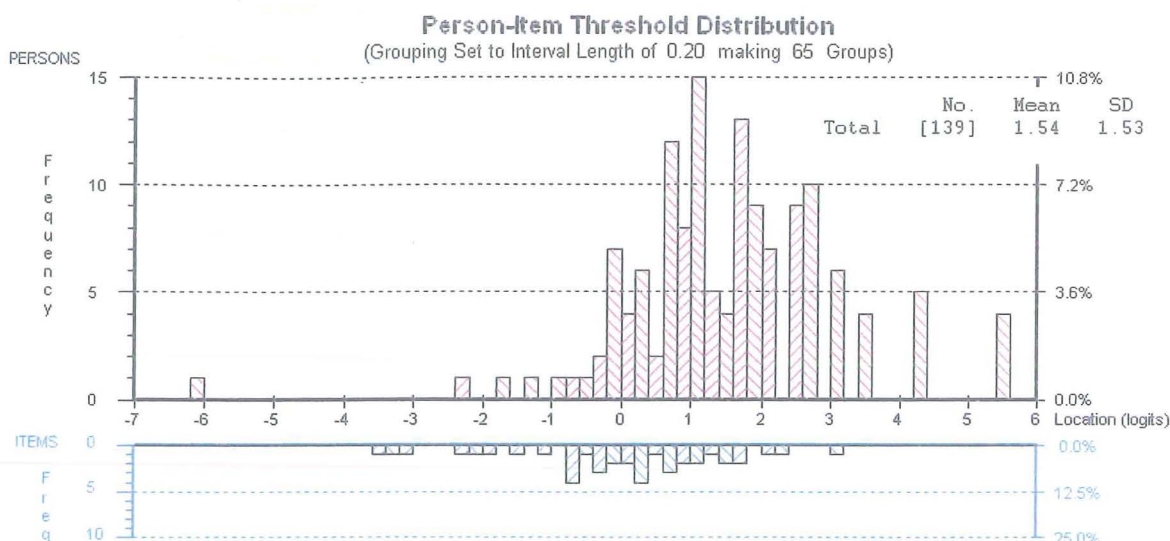


Figure 7.5 Person Measure/Item Threshold Graph

Notes on Figure 7.5

1. Person measures are given on the upper side in logits.
2. Item threshold are given on the lower side in logits.

The Teacher-Student Relationship Scale: Student's View

The Rasch analysis has calibrated the student measures on the same scale as the item difficulties and produced a linear, unidimensional scale (see Figure 7.4), for which the data have a good fit to the measurement model. Since it has now been shown that the scale data are reliable (there is good individual and global fit to the measurement model, the separation of measures is good in comparison to the errors and the students have answered the response categories consistently and logically), valid inferences can be made from the scale.

Items

For each item, the ideal perspective ('what I wish would happen') was easier than the actual behaviour ('what does happen'), as conceptualised at the beginning of the study.

The four easiest attitude items (what students wish to happen) are, and these are very easy:

1. My teacher and I get along well together (item 2, difficulty -1.79 logits);
2. My teacher listens to me and helps me to feel better (item 10, difficulty -1.71 logits);
3. My teacher likes me (item 1, difficulty -1.68 logits);
4. My teacher listens to me (item 8, difficulty -1.47 logits).

Table 7.4

Item Wording and their Difficulties (Final Data Analysis)

Item no.	Item Wording	Response	
		What I "wish" would happen	This is what does happen
Connectedness			
1	My teacher likes me.	-1.68	+0.83
2	My teacher and I get along well together.	-1.79	+0.99
3	My teacher is interested in what I think and feel, and in what I do.	-0.74	+1.15
4	My teacher and I care about each other.	-0.19	+0.87
Availability			
5	I can go up to my teacher any time.	-0.60	+1.30
6	I can ask my teacher for help.	-1.12	+0.92
7	If my teacher is busy, I can still go and get help.	+0.42	+2.57
Communication			
8	My teacher listens to me.	-1.47	+0.37
9	My teacher listens when I talk about personal/private things.	-0.36	+0.55
10	My teacher listens to me and helps me to feel better.	-1.71	+0.41

Note on Table 7.4

1. Item difficulties are in logits.

The four hardest attitude items (what students wish to happen) are, although these are still moderately easy, except for item 7 which is hard:

1. If my teacher is busy, I can still go and get help (item 7, difficulty +0.42 logits);
2. My teacher and I care about each other (item 4, difficulty -0.19 logits);
3. My teacher listens when I talk about personal/private things (item 9, difficulty -0.36 logits);
4. I can go up to my teacher any time (item 5, difficulty -0.60 logits).

The four easiest behaviour items (what actually does happen) are, although these are still hard:

1. My teacher listens to me (item 8, difficulty +0.37 logits);
2. My teacher listens to me and helps me to feel better (item 10, difficulty +0.41 logits);
3. My teacher listens when I talk about personal/private things (item 9, difficulty +0.55 logits);
4. My teacher likes me (item 1, difficulty +0.83 logits).

The four hardest behaviour items (what actually does happen) are, and these are very hard:

1. If my teacher is busy, I can still go and get help (item 7, difficulty +2.57 logits);
2. I can go up to my teacher any time (item 5, difficulty +1.30 logits);
3. My teacher is interested in what I think and feel, and in what I do (item 3, difficulty +1.15 logits);
4. My teacher and I get along well together (item 2, difficulty +0.99 logits).

Persons

Each person's raw score has been converted to a student measure, expressed in logits. The student measures range from a lowest possible -6.01 logits to a maximum possible +5.49 logits. The lowest measures indicate a perception of a distant relationship while, conversely, the highest measures indicate a perception of a close relationship. The data on person measures is presented on the following pages in Tables 7.5 and 7.6. Of the total 139 students who participated in the study, 20 students were measured at the lower end of the scale, indicating they perceived themselves to have a not-so-good relationship with their teacher. Twenty-nine students were measured at the higher end of the scale which indicates they perceived themselves to have a highly satisfactory relationship with their teacher.

Table 7.5

Students with Lowest Teacher-Student Relationship Measures (N=20)

ID	Raw Score	Student Measure	SE	Residual
051	0	-6.01	-	-
050	6	-2.28	0.53	-0.97
079	8	-1.78	0.47	+0.72
063	10	-1.37	0.43	-0.13
049	13	-0.86	0.40	+2.06
069	14	-0.71	0.39	-0.24
059	16	-0.43	0.37	+1.40
093	17	-0.29	0.37	-0.91
061	17	-0.29	0.37	-0.41
137	18	-0.15	0.36	+1.48
023	18	-0.15	0.36	-0.63
102	19	-0.02	0.36	-2.49
070	19	-0.02	0.36	+0.92
080	19	-0.02	0.36	+0.02
091	19	-0.02	0.36	+0.69
067	19	-0.02	0.36	+0.01
120	20	+0.10	0.36	-0.58
100	20	+0.10	0.36	-0.59
095	20	+0.10	0.36	+0.92
021	20	+0.10	0.36	-2.16

Notes on Table 7.5

1. ID is student identification number.
2. Raw score is the total score on the 20 questionnaire items with three response categories 0, 1, 2 (minimum raw score is 0, maximum is 40).
3. Student measure is in logits (minimum linear measure is -6.01 logits, maximum is +5.49).
4. SE is standard error in logits.
5. Residual is the standardised difference between the actual score and the score estimated according to the measurement model.
6. All values are given to two decimal places because the errors are to two decimal places.

Table 7.6

Students with Highest Teacher-Student Relationship Measures (N=29)

ID	Raw Score	Student Measure	SE	Residual
044	36	+2.72	0.56	-0.79
004	36	+2.72	0.56	-0.22
036	36	+2.72	0.56	-0.52
003	36	+2.72	0.56	+0.02
092	36	+2.72	0.56	-0.80
038	36	+2.72	0.56	-0.93
138	36	+2.72	0.56	-0.27
018	36	+2.72	0.56	-0.78
134	36	+2.72	0.56	+1.00
013	36	+2.72	0.56	-0.66
017	37	+3.06	0.63	-1.03
111	37	+3.06	0.63	-1.10
014	37	+3.06	0.63	-0.37
086	37	+3.06	0.63	-1.03
040	37	+3.06	0.63	-0.62
129	37	+3.06	0.63	+0.37
074	38	+3.53	0.75	-0.99
034	38	+3.53	0.75	-0.40
039	38	+3.53	0.75	-0.64
057	38	+3.53	0.75	-0.80
127	39	+4.28	1.02	-1.17
047	39	+4.28	1.02	-1.17
011	39	+4.28	1.02	-0.30
001	39	+4.28	1.02	-1.17
089	39	+4.28	1.02	-1.17
064	40	+5.49	-	-
041	40	+5.49	-	-
055	40	+5.49	-	-
077	40	+5.49	-	-

- Notes on Table 7.6
1. ID is student identification number.
 2. Raw score is the total score on the 20 questionnaire items with three response categories 0, 1, 2 (minimum raw score is 0, maximum is 40).
 3. Student measure is in logits (minimum linear measure is -6.01 logits, maximum is +5.49).
 4. SE is standard error in logits (RUMM does not estimate for maximum scores).
 5. Residual is the standardised difference between the actual score and the score estimated according to the measurement model (RUMM does not estimate for maximum scores).
 6. All values are given to two decimal places because the errors are to two decimal places.

Summary

A Rasch measurement analysis was conducted with ten items, conceptually ordered from easy to hard, and answered in two perspectives ('what I wish would happen' and 'what actually happens') giving an effective scale of 20 items. The RUMM 2020 computer program (Andrich, Sheridan, & Luo, 2005) was particularly helpful in conducting this analysis. It was concluded that a reliable linear, unidimensional scale of Teacher-Student Relationships was created using student views in which the measures were calibrated on the same scale as the item difficulties. The reliability of the scale data was shown by:

1. Good global and person item fit to the measurement model;
2. Good individual fit to the measurement model;
3. The three category responses being answered in a consistent and logical way;
4. A good Person Separation Index indicating that the person measures were well separated in comparison to the errors;
5. A good item-trait interaction indicating the measurement of a unidimensional trait;
6. Reasonable targeting of the items against the person measures, although some harder items need to be added for any future use of the scale.

Since the scale data were shown to be reliable, the following valid inferences were drawn from the scale.

1. All attitude relationships ('what I wish would happen') were easier than the actual behaviour relationship.
2. Students found it very easy to wish that they could get along well with their teacher.
3. Students found it moderately easy to wish that they and their teacher care about each other.
4. Students found it moderately hard to say that their teacher actually listens to them.
5. Students found it very hard to say that their teacher could be approached for help when the teacher was busy.

The distribution of Teacher-Student Relationship Measures makes it

possible to describe a relationship as perceived by the student. Students with low measures perceive that they have a not-so-good relationship with their teacher. Students with a high measure perceive that they have a close relationship with their teacher. A closer look at the responses given by the students within the three aspects of Connectedness, Availability and Communication may indicate which aspects specifically are sound and which may need attention in order for the relationship to be further enhanced.

The next chapter explains the discussion data analysis for the teachers' views on Teacher-Student relationships.

CHAPTER EIGHT

DATA ANALYSIS: PART 3

TEACHER DISCUSSIONS AND OPEN ENDED QUESTIONS

This chapter presents the data analysis and discussion from the teachers' view. This data comprises the oral responses that teachers made during the face-to-face discussions and the written responses that teachers gave to the open-ended question on the questionnaire. A description is provided of the process used to analyse these data as well as the data from students, described in the next chapter. The findings are then presented as themes. In this way, the fifth research question is answered, specifically, what are teachers' self-views about the aspects of Connectedness, Availability and Communication with respect to their ability to impact on relationships with students?

Process of Analysis

As stated in Chapter Five, the Miles and Huberman framework for data analysis (Miles & Huberman, 1994) has been used as a guide for analysing the qualitative data for this study. Miles and Huberman (1994) suggest following an inter-related process involving the reduction of data, data display and drawing and verifying conclusions. The process began by reading and re-reading the discussion transcripts and the open-ended responses made on the questionnaires. In this way I became familiar with the data, and could recognise the general themes as they began to emerge. I selected material that fitted within the three main categories of Connectedness, Availability and Communication. As I re-read the material within each main category, I looked for links and patterns to then identify common themes. This is consistent with the view of Seidman (1991) who suggests organising excerpts from the transcripts into categories and searching for patterns and connections within the categories to identify themes. As I worked through this process, the volume of data was reduced, enabling me to focus more fully on the main themes as they became more apparent.

During the process of data analysis, I jotted notes, or memos, to myself as certain ideas occurred to me. I recorded my thoughts as I identified common

concepts within the data and as I recognised links between certain ideas (Creswell, 2005). These notes have helped me to make sense of the data and to formulate what Punch (1998) refers to as propositions, and what I have termed themes. In presenting the themes in this chapter, I have provided an interpretation of each theme. The themes are then validated using supporting material from the transcripts.

As the process of data analysis continued, the number of categories actually increased. This happened as additional themes that did not fit within the main categories of Connectedness, Availability and Communication became evident. The additional themes warranted inclusion in this study as they raised further ideas about what impacts teacher-student relationships. As a result, additional categories to accommodate these themes have been developed. For example, in the discussion with some teachers, the topic branched off to include teachers' relationships with students' parents and the bearing that that is believed to have on teacher-student relationships. As such, a category has emerged to do with teacher-parent relationships. Another example is that I asked the teachers for feedback regarding the assessment tools that I used in this study. Even though this was not a specific research question, it was a question on the Discussion Schedule that brought about some insightful responses. As a result, I decided these responses warranted inclusion within the data analysis chapter.

In this study, 43 teachers completed a combined total of 139 questionnaires. At the conclusion of the questionnaire, participants were invited to record an answer to an open-ended question. The open-ended question simply asked "Are there any comments that you would like to make about your relationships with your students?" Fifty questionnaires had a written response recorded. These responses have been coded using the letter Q to denote questionnaire, and the number already assigned to the questionnaire (001 through to 139). For example, a response made by a teacher to the open-ended question on the 87th questionnaire is coded as Q087.

Twenty-five of the 43 teachers agreed to have a follow up face-to-face discussion. On average, the discussions took 30 minutes to complete. The

discussions were audio taped and later typed up into transcripts. The transcripts have been coded by letter (for participant), number (for page number of the transcript) and Roman numeral (for the paragraph). This means a comment made by the 2nd participant that appears on the sixth page and in the 2nd paragraph of the transcript has been identified as B.6.ii.

Categories and Themes

Category 1: Connectedness

The themes that have been identified within the category of Connectedness reflect teachers' self-views with regard to the personal connections they make with the students in their classes. In discussing this topic with teachers, we talked about whether or not it is important for teachers to have a good relationship with students. We also discussed the ways in which the teachers saw themselves being able to do this successfully. As was expected, all the teachers in this study consider it to be a high priority to connect with their students and to form positive relationships with them. This is articulated in the first theme.

Theme 1: Teachers believe that being able to establish positive relationships with their students is a necessary part of their work.

A positive relationship between teachers and students is necessary for teachers to do their job well. Teachers in this study recognise the importance of establishing positive relationships with their students. Of the 25 teachers who participated in the face-to-face discussions, all of them agree that positive teacher-student relationships are absolutely necessary. To describe how important they viewed their classroom relationships, the teachers used words like, "vital", "crucial", "critical" and "essential" as shown in the excerpts below:

I think it's vital. It's what we're all about as teachers before anything else. The content comes after, you can't teach a child unless you're starting to know them and love them a little bit and have a relationship with them. I think it's really the number one priority. (V.1.i)

Crucial, it's crucial for every aspect. (U.1.i)

It's critical. You can't work with the kids unless you have a good

relationship with them – just vital. (X.1.i)

That's essential. Without that ... It's hard work sometimes. (L.1.i)

I think it's probably *the* most important thing to have happen in a class. (F.1.i)

The teachers' choice of words demonstrates the importance they place upon being able to establish a positive relationship with their students. A positive teacher-student relationship is not viewed as an optional extra, but as an absolute necessity.

During the discussions it became evident that the teachers see a link between teacher-student relationships and student performance. This is articulated in the following theme.

Theme 2: Teachers consider positive relationships with students to be necessary for effective teaching and learning to take place.

When discussing the importance of connecting with their students, teachers' responses indicate that they recognise a link between having a personal connection with students and maximising learning opportunities. Connectedness between teachers and students is seen by the teachers in this study to be an essential first step in the teaching-learning process. The statements below are some examples that illustrate this point.

[connecting with students] underpins everything you do in a classroom ... (B.1.iii)

... once you can develop that rapport then teaching the students is much easier because you can teach to the student's heart and head. (C.1.i)

If they have a good relationship with the teacher then the children will perform at their best, and want to perform at their best. (U.1.i)

Conversely, teachers believe that if the relationship between themselves and their students is lacking, then the students' progress in the classroom may be impeded in some way. This thought is echoed in the following statements.

... if you can't interact positively with the children then you lost them straight away ... (B.1.i)

If you don't have a positive relationship with your children, and I don't just mean as in the collective form meaning the whole class, but with each individual child, then I don't believe that that child is able to learn at their true potential. I think most children will probably progress anyway, academically, but unless you build that relationship with them on their particular level, their special emotional level, then they will not be able to progress at the rate that they probably could have. (F.1.i)

I think very few have that strong relationship and the kids aren't going to produce the work and socialise within the classroom as well as what they're capable of. (A.1.i)

While all the teachers who were interviewed agreed that positive teacher-student relationships were the ideal, it was noted that such relationships did not just form by themselves. Teachers recognise they need to put an effort into building positive connections with their students. This notion is presented in the next theme.

Theme 3: Teachers believe it takes time and effort on their part to connect with students in order to establish positive teacher-student relationships.

Teachers know that relationships with students do not just occur by chance. Teachers need to put time and effort into getting to know their students and establishing a rapport with them. The statements below demonstrate that teachers believe relationships require deliberate effort to be developed. In particular, teachers acknowledge that some relationships require more work than others, and recognise it to be their own responsibility to work at improving relationships with particular students.

... it was hard work to kind of work through that, to get to a point where you had a relationship develop. You have to work at it, a lot. (L.1.i)

I had tried spending more time with that child in instances where they struggle with work, I put more effort into that child, give them more one-on-one, perhaps more than other children have. The reason being that I have to work harder to have a relationship. (G.2.ii)

Basically in the mornings I try and say hello to the children as they come into the door, just one-on-one, especially with the kids that I find harder

to relate to, or I notice they have difficulty relating to me as well. (J.1.ii)

... this little girl isn't a particularly delightful child and she'll be in my face all the time (sic) and so I find often I have to work a little bit harder to make sure that she doesn't go away from my classroom thinking that, "Mrs [U] really likes this child but she doesn't like me". I would like to think that each of the kids would think that "Mrs [U] likes us all evenly", so therefore I have to work a little harder sometimes. (U.2.i)

I'd say you usually get at least one child in the class that you have to work extra hard [with] because you're not going to like every child, you're not going to have the same relationship with every child so therefore you have to be aware of what you're doing with that child ... (X.11.v)

... there's always a queue in your class – and often they're the children that you wouldn't necessarily feel like you get along with as such or you're not sort of attached to that child as much and so you do feel like you have to work harder. Whether it's because you know you don't click together or because you know what they're like and you know that for them to do the right thing by you, you've got to connect with them and put that extra effort in. (J.8.iv)

A couple of children that I think I do need to work harder [with], their fathers work away and they're only home intermittently. So they're often a little bit lonely so to speak. Only child – would be another one, I mean I'm talking now after sixteen years' experience, they're the ones I tend to find that I do need to work a bit harder with. (B.6.i)

One student that I've had before, he was very, very hard to get to know and to like. So, I put a stamp on the back of my hand and whenever I looked at the stamp I had to praise him. Even if he was just sitting there and not hitting anyone at the time. (M.3.iv)

In discussing how positive teacher-student relationships could be established, teachers mentioned the various strategies they use, some purposefully, and some incidentally, in order to strengthen their connections with students. Some of the specific strategies that teachers have found to be successful are addressed in themes 4 to 8.

Theme 4: Teachers connect with students by showing a personal interest in them and by getting to know them as individuals.

When teachers show a personal interest in students, and make an effort to get to know them as individual beings, they are able to make connections on a personal level thereby potentially strengthening the teacher-student

relationship. When this happens, teachers have the opportunity to make a positive influence on the child's adjustment to school, to contribute to their sense of self and their emotional competence, and to the development of protective factors that enhance resiliency.

Teachers who show a personal interest in their students make an effort to discover personal information about their students. For example, teachers learn students' names, their family background, their likes and dislikes, and their hobbies and interests. Teachers also take time to greet students individually and to enquire about people and events as personally relevant to them.

[I] get to know them individually by name right from the start. To find out about their interests, not necessarily to delve into their personal lives, I don't mean that, because some children really don't like that so that would certainly come later if they wanted to talk about it. But just find out what they're into basically, whether they like music, whether they like sports. Just always put aside time to have a one to one talk with the child to find out what they like and go from there. But I think if you start off being focused in that area where you do show some interest in them, from the start they feel as though they're a little bit more secure, that you are interested in them as a person, they're not just a name on the roll. (E.1.ii)

I tend to know which sporting clubs the kids are involved in, whether or not they play sport on a weekend, or whether they do dancing, or whether they go to YMCA clubs or whatever. So you get to know what the home life is like of that child, whether or not they're still at home with mum and dad or whether there's a boyfriend or whether or not they've got older brothers and sisters and those type of things. I think I'm pretty knowledgeable about the kids – and that's only because you ask the kids and they feel comfortable enough to tell you certain things ... (A.2.ii)

I think the more you know about the child the better you can teach them because you can speak to them and touch them in a very personal way. Know their strengths, their weaknesses, their likes, their dislikes, their fears, and things they're proud of. (C.2.i)

When asked about the strategies teachers use to get to know their students as individuals, one teacher shared the following anecdote.

I get them usually to do a 'me' type thing where they tell us about their favourite things and draw a picture of themselves. And by drawing a picture of themselves you can get an insight into how they perceive

themselves. A kid with glasses might draw really dark or big glasses and you can see that's a feature that they recognise in themselves ...[one child] drew herself as a very womanly figure, and she thought of herself as very mature ... a lot of the times just talking – in the mornings they come and we talk about what they've been doing, end of the day and during the days and quiet times, and it's just really talking and listening. Diary entries sometimes, but most of the time they're private, the kids. They might share when they do some writing, "Who wants to share?" they can tell me all about it. (Q.2.i-ii)

One of the teachers who taught in a Christian school describes the daily prayer time as an important way of connecting with students and getting to know them individually. For this teacher, prayer time provides an opportunity for students to share their particular prayer needs with her and with each other.

In addition to getting to know students on a personal level, teachers who take time to support students in their individual interests or pursuits can further strengthen the teacher-student connection. For example, Teachers J and W capitalise on opportunities to see their students perform in activities outside of school and, in so doing, are able to build even stronger connections with those individual students.

... on the weekend [I] go and watch them play sport if they come and ask me to go and watch them, I generally go and do that sort of thing with them. (J.2.i)

... this one back here is very dramatic and she invited me to a local play she was in. So last Friday night a few of us went and watched her in this local amateur theatre company play – she was absolutely stoked but so was I, that I was asked. (W.11.i)

I've got a ballet dancer and then I say, "Look, if you've got something on that I can come to, if I can get there I'll be there". Why not? They're great kids. (W.12.ii)

Theme 5: Teachers connect with students by showing empathy towards them.

Teachers recognise the importance of showing empathy towards their students and, in so doing, being able to connect with their students more closely. When teachers empathise with their students, they try to understand the situation from the student's perspective in order to respond more sensitively

in ways that will enhance their relationship. Empathy is seen to be an essential skill for those involved in caring professions, such as teaching, as supported by the following comments:

I think empathy has a lot to do with it and I try and imagine that sometimes they have a bad morning and you have children that don't bring their pencils or they don't bring things to school. Rather than say, "Grow up and be more responsible", I try to think, what was it like for them that morning before they came to school? (F.1.iii)

[I] try very clearly to have a relationship with each particular child so rather than trying to do it with kids en masse I try and develop that one-on-one with children and sort of understand how they're feeling and where they're coming from. (F.2.i)

If I see kids who are distressed, like today there was this child that her mum yelled at her and she reckons for no reason but... all kids say that. I said, "Look, if you need to talk about it", I took her to the side quite early and said, "If you need to talk about it I can arrange for you to talk to me or to a female member of admin", so... if the kid's having a problem I try and get in there as soon as possible and say, "Look, I understand that you've got a problem, do you want to talk about it?" (N.3.iv - 4.i)

Theme 6: Teachers connect with students by being authentic in their relationships with them.

It is important for teachers to be authentic in the relationships they develop with students. To be authentic means to be real or genuine in one's interactions with others and to avoid pretence. Teachers in this study recognise the importance of being authentic in their relationships with their students. They acknowledge that at times, being authentic means sharing personal information about themselves. They believe that being 'real' in the stories they share and in the way they communicate enhances the genuineness of their interaction, as shown in the following statements:

I do share with them what's going on in my life and what my children are doing and how we solve things or do things or mistakes we've made. I know at times I have to be careful not to abuse my children's confidence in the stories I'm sharing, but I just find that they find it... they're fascinated because it makes me real and it often gives them a starting point for discussion. (O.15.ii)

... if you try and show them that you're a real person as well then they respect you more for that. So when I try and develop a relationship with them I try and be a real person, and based on friendship. I think that works. (R.1.ii)

I actually cringe when I hear teachers put on these voices of encouragement, I mean, some of them have a whole bag of voices that they use for different situations but they aren't real. And I think the children hear the artificiality so it doesn't necessarily have as much impact as the teachers hope or believe that it does ... So, keep it real, I think if you sum it up in one – you have to keep it real. (Y.3.ii)

For some teachers, being authentic extends beyond their communication to include their behaviour as well. This is illustrated by Teacher W who recalled a time when she joined in a chasing game with her students. As a result she was better able to connect with one particular student with whom previously there had been some conflict.

Our relationship has evolved more positively as the year has progressed. We clashed quite a bit early on but we have a much more positive relationship now. This is partly because I joined in with a game of chasey once. (Q087). [On this] particular day we had about 5 or 10 minutes left and they were playing chasey so I just joined in with them and it really did, it changed her outlook. I mean it probably made me look more human I suppose, more like one of them. (W.4.i)

Theme 7: Teachers who are experienced in teaching a particular year level believe they have insight into working with students of that particular year level in a way that contributes to their ability to connect with students.

When teachers have the opportunity to teach the same year level for a number of years, they get to know what students of that particular year level are like. They know what levels of development to expect and what students of that age may be capable of. They gain an understanding of what interests those students and what does not. They recognise strategies that will work for those students and strategies that won't. Such insight is thought to assist teachers in making positive connections with their students.

I think after 12, 13 years of teaching Year 7s I've got a pretty good idea of what they enjoy and what's relevant to them. (T.7.ii)

I'm talking now after sixteen years' experience, they're the ones I tend to find that I do need to work a bit harder with. (B.6.i)

I suppose 41 years' experience helps me ... (C.2.iii)

I think 15 years at this level, I've sort of got a little bit of basic understanding. (N.2.iii)

Theme 8: Teachers believe having the opportunity to work with the same class of students for a number of years can help strengthen their relationships with those students.

Teachers who teach the same students for more than one year cite having an advantage when it comes to connecting with those students in meaningful ways. Known as 'looping' in some education circles, working with a particular class of students for a number of consecutive years is thought to contribute to a teacher's ability to develop and maintain strong connections with their students (Noddings, 2005; Pianta, 1999). Looping is also thought to bring about improved instruction and higher levels of learning (Denault, 1999). In this study, teachers who have had a looping experience made the following comments:

Well in my workplace the idea was for a teacher to begin with a group of children in the first year and to stay with the same group right through primary school. In my case I've had the children for 3 years now ... I find it very rewarding because you build up, usually, warm, supportive relationships with the whole family and you get to know the children very well. You have the satisfaction but also hopefully the humility which needs to come with it in knowing that you're a major part of this child's life. (Y.4.2-4.3)

I've been in a small country school before where I've had the 4/5 class so... And that's all the 4s and all the 5s in the school so the 4s I had the next year anyway. And it is, it's a really good thing. At the beginning of the year you walk in and you know the kids and they know you so there's none of this having to get to know each other business. (W.9.iv)

I'm lucky that I know most of the kids in the school because I used to do Phys. Ed. with all the students 2 or 3 years so I have a bit of background on them anyway. (T.1.ii)

... because I've had them for 3 years, I think they feel really confident in their classroom to be able to say what they want out loud. (H.7.iii)

During the discussions it became evident that some teachers feel their efforts to connect with students are not always successful. When asked about the factors that may prevent them from establishing a close connection with their students, teachers cited two main reasons: personality issues and class size. These ideas are presented in themes 9 and 10.

Theme 9: Teachers may not be successful in connecting with a student if there are personality issues.

Teachers identified a number of personality issues that may prevent them from connecting with students in meaningful ways. For example, some teachers find shy students can be difficult to get to know on a personal level. The student's shyness or unwillingness to 'open up' is thought to act as a block to teachers' efforts to connect. The statements below illustrate this viewpoint.

... kids that are ultra-shy. They're in their little cave, they feel safe there, they really, really want to stay there. They'd stay there for many, many years and they're used to it. They really don't want ... to step outside that cave and somehow you've got to coax them into coming out. Dragging them doesn't do it. It just embarrasses them, they begin to resent you for it, they feel embarrassed, humiliated sometimes and it just builds up walls. (D.9.iii)

... he's quite sensitive and if I do sort of talk to him he often cries. So he doesn't like to open up very much, he's very closed. (M.3.i)

... sometimes they're afraid to open up and afraid to let you know who they are and what they are. (C.6.ii)

Another personality issue that is thought to create a barrier between a teacher and a student is that of a personality clash. A clash in personality may result in a teacher and a student not being able to get along together. This may be contributed to by the teacher's teaching style and expectations, and by personal attitudes, qualities and characteristics of the teacher and student concerned. When teachers find it hard to get along with a student, for whatever reason, it becomes a block to their efforts to connect on a personal level, as evidenced by the following comments:

[There are] personality clashes with some kids and [you] can't expect everyone to get on well with you and you're not going to get on with everyone else. (T.4.i)

To be honest, you can't connect with every child, you can only with some. And it's the same with adults, some adults just don't get on with other adults and [there are] abrasive personalities with children as there are with adults and that makes it difficult. (Q.2.iv)

I think it's my own block, which makes it harder to connect ... Because, he's a pain in the neck. I won't mention the child's name ... Things about the personality that make it difficult, I think he makes, through his actions, through his words, through his mannerisms... Kids don't like him, kids find it hard to get on with him, and I find it hard to get on with him. (K.3.iv - v)

I think there's personalities – that's what's good about having different teachers teaching different classes because if personalities don't meld in one class, the next teacher they go to they may find their personality does meld with on a better level. Sometimes you do have to be conscious that that child's personality grates, and so instead of automatically jumping you do have to pull yourself back a bit and think, "Well, okay that's the way that child is". (S.3.i)

A further personality issue that is thought to hinder a teacher's ability to connect with particular students relates to discipline problems. Teachers in this study believe it is harder to connect on a personal level with students who are identified as having discipline problems. This notion is borne out in the following statements:

James (pseudonym) and I have an inconsistent relationship. Some days, James is very disobedient, angry and distant and other days, he is affectionate and settled. (Q006)

I usually wait for this child to approach me. Sometimes he is not forthcoming. He has had many struggles and the breakdown in our relationship has more to do with behaviour issues. (Q015)

... the child who is a real discipline problem. They're often hard to reach because you're trying to find something positive to say about them but they don't give you that opportunity to and you feel like you're always being negative towards them ... (D.10.ii)

If I find them annoying other children, it's a bit harder [for me] to warm to them sometimes. (V.5.iii)

Theme 10: Teachers find the demands of the class size can make it difficult to successfully connect with all students in the class.

There is only so much time in each school day for teachers to capitalise on opportunities to connect with their students. The reality is, the bigger the class size, the harder it is for teachers to have that personal contact with all individual members of the class. At times, teachers feel they do not have enough time to develop and maintain strong connections with all their students.

I've got so many kids, 27 students, 28 students in the class (sic), it's really difficult to get, you've always got your certain characters who are outgoing and whatever, and you always connect with them better because they're the ones that come up and chat and say hello or whatever. And then you've got those quiet ones who maybe you don't quite get as much opportunity to speak to individually or to connect with quite as well, because you're so busy doing other things ... (T.3.iv)

Just certain times, I can't always give all my time to all students ... I think the main reason for me is just the number of students in the class, you can't physically get around and discuss with every single kid over the course of a week what did they get up to on the weekend. I mean obviously once you're marking your work and have a discussion whatever, but just to bring up personal information can be a bit difficult. (T.4.i)

I've got 27 kids but often have 30-32, 33. Time to connect – I find that really, really difficult ... sometimes it's just the constraints of, "I can't. I've got to achieve this and it's got to be achieved by this date" and so you just don't have the time and you think, "I know that child's struggling, I've got to find time to talk to them", and then it's the weekend and you think, "I never got there, I never made that time". So time, I think, is the teacher's biggest obstruction... (L.3.ii)

To summarise, within the category of Connectedness, all teachers who participated in the discussions consider it a priority to make positive connections with the students in their classes. Various strategies have been identified as being successfully used by these teachers to establish close bonds with students. In addition, a number of circumstances have been identified that make it difficult at times for these teachers to be able to connect with all students.

Category 2: Availability

When the teacher discussions turned to the topic of availability, teachers

described the importance of being available to students to provide help and support with aspects of school work as well as with personal issues as they arose. Teachers shared information about the ways in which they communicate their availability to their students and the ways in which students communicate their need to see the teacher. Teachers also spoke about how they endeavour to make themselves available to students as needed. These ideas are now explored within the following themes.

Theme 11: Teachers believe it is important to make time to be available to their students.

Teachers agree that making time to be available to their students contributes to building positive relationships in the classroom. To teachers in this study, making time to be available means foregoing some of their own time to spend it with students in need. In so doing, teachers demonstrate that students are a priority. The following comments support this:

... you've got to be available for them. If they want to talk to you then they've got to see that you're prepared to give up some of your time. I think that if they see that your cup of tea is more important than them telling you something, then they're going to get the wrong impression and see that maybe you're not as interested as what they would like you to be. (A.3.iii)

[Through being available] you can sense the rapport that you have with the children. You get rewarded twofold, tenfold, for that investment in time, trying to make that link with the kids that I do care about each and every one of them. (U.5.iii)

Teachers acknowledge that they communicate their availability to students in different ways. This is expressed in the next theme.

Theme 12: Teachers use various means to communicate their availability to their students.

A direct approach is one of the most common ways that teachers do communicate their availability to students. Teachers do this by issuing a direct invitation for students to come and talk with them. This invitation is given to

the whole class and to individuals, as confirmed by the following comments:

Most of the time [I'll] say, "If you've got a problem and you want to discuss it with me, you can come and speak to me about it" ... I always say [to] write at the bottom of their work if they're having difficulty, [I say] "Come and discuss it, ask me for some assistance" ... I go through that at the start of the year. (T.4.iii - 5.i)

Generally I say to the children right from the beginning, "If you do have an issue [come and] speak to me about it because I can't help you unless you speak", so that's a blanket statement. (S.3.iv)

I say to them if I sit at my desk that's quite often a good time ... I said DOTT time is always a good time, if I'm on duty same sort of deal, come and see me, that's a good time. And I say any time that you see that I'm not engaged in teaching a class and I'm not in the middle of hanging something up, sort of look at my body language and look who else is around me and sort of be a bit intuitive. And so I encourage the kids to sort of say that even though I know they have needs, it's going to be better for both of us if they can pick their times (F.9.ii)

If I see kids who are distressed, like today there was this child that her mum yelled at her and she reckons for no reason but... all kids say that. I said, "Look, if you need to talk about it", I took her to the side quite early and said, "If you need to talk about it I can arrange for you to talk to me or to a female member of admin", so ... I try and make sure I give them options but other than offering it and also showing you're caring, there's not much ... I show it through my body language and the way I say it. And also I try and, if the kid's having a problem I try and get in there as soon as possible and say, "Look, I understand that you've got a problem, do you want to talk about it?" (N.3.iv - 4.i)

At times, it is the teacher who will initiate the contact with students and sometimes it is the students. During the discussions, teachers talked about the importance of picking up on cues the students may give to indicate a need to see the teacher. The following comments explain how some teachers recognise when students need them to be available.

If I find a child is having difficulty or in tears or whatever, I try to get them alone and then talk to them calmly and quietly and mother them a little bit ... (S.3.iv)

Some kids outright ask, "Can I speak to you at recess time" or whatever. Some kids, it's just a difference in the way they are on a particular day. It might be, "Are you okay, would you like to come and talk to me?" Some

kids are quite capable of actually asking, some aren't. I suppose you've got to really look for it in their manner. (W.7.ii)

They know that if they ever need to speak to me alone, that they just need to whisper in my ear, "Can I have a word with you at lunchtime?" or whatever, and they know that I'll make myself available to them. They're allowed to write me notes – they're not allowed to write each other notes but they're allowed to write me notes – so if they've got a problem that they want to discuss they can just drop me a little note (P.3.i)

Teachers accept that finding time to be available to their students does not just happen on its own; a determined effort is required as explained in the next theme.

Theme 13: Teachers make efforts during class time to be available to their students on an individual basis.

When teachers interact with students on an individual basis, opportunities to connect with the student on a personal level are maximised. In addition, students' feelings of being valued and accepted are enhanced because the teacher has considered them important enough to spend individual time with them. Teachers in this study recognise the importance of having one on one time with students during the school day. The following excerpts describe the experiences of two teachers who try to be available to their students on an individual basis.

[I had] a situation where the children actually have to come up and one-on-one ... they have a rostered system [it] was these children come on Monday, Tuesday, Wednesday, Thursday, Friday and they had to show me different things – that was extremely valuable. They had things that they had to bring up ... So they had to bring something they'd done that they were proud of, something that they thought they could improve if they had a second chance, their homework, they needed to show me their homework ... Something that they enjoyed doing that week and ... where they were able to say to me "This incident I was self-motivated" or "I worked collaboratively" or cooperative or whatever. And they had to prepare all that before they came to me. (U.5.iii, 6.ii-7i)

I try to have every Thursday to do reading with them on an individual basis and to have that chat. Try, doesn't always work. And when I'm marking their work it's always on a one-to-one, sit down, have a chat. And I suppose at class meetings I try to get across that if they ever need to talk to me I am there. (H.6.v-7.i)

Theme 14: Teachers give up their own time to be more available to their students.

In making time to be available to their students, teachers accept that they need to give up their own time. This may be before or after school, and during break times. In the following quotes, teachers explain how they make time to be available to their students.

I'm always here early and my door is always unlocked so that if they need to come and speak to me they can. And it's open from 8.30 so they can come in at any time and if I see someone's having problems I stay back at recess and lunch and talk. I actually had one girl who's gone through a tough time and I spent a lot of time talking to her and built up a bit of a rapport trying to help her out. (M.4.v)

I'm there before school and after school. They have a website and [my] page on there and they're welcome to get ideas from there, homework assistance they can access, they can leave messages on my webpage and so, I can communicate with them at home ... (Q.4.i)

I give them my home phone number and my email, which they know they can use if they need to, and I've never ever had it abused ... (C.2.v)

There are times when teachers give up their allotted administration time during a school day to be available to students in need. The next quote explains how this works for one particular teacher during her Duties Other Than Teaching (DOTT) time.

[Students] come up and say, "Can you please speak to us?" And I say, "Well, I'm right in the middle of a lesson but I've got some DOTT time coming up after lunch, come and get me and I'll sit down". There was a couple of week ago I think I had two hours DOTT on a Thursday afternoon and both those weeks I spent I think an hour one time, an hour and a half another time just with a group of girls that were very unhappy, their relationship had got off track and they weren't speaking to each other and they were very unhappy, their parents were miserable too, their friends were sort of fighting around them and I ... spent an hour and a half of my two hours DOTT and although I didn't basically get anything done at the end of it after that, I at least came away knowing that I maybe had made a little bit of difference and I'd given them the opportunity to discuss things that they couldn't find time to discuss ... I find that sometimes I think ... I haven't achieved what I wanted to achieve for that week as far as my preparation, I think "Well that was just a waste", but at the end of the day if I know that my kids are happy

coming to school and I've made a bit of difference and I've helped to achieve that then it's not a waste of my time at all. (F.7.ii)

As teachers discussed how they structured their time to make themselves available to their students, a number of teachers mentioned they endeavour to make the most of any extra opportunities they have to interact with students outside the classroom. This idea is addressed in the next theme.

Theme 15: Teachers believe spending time with their students outside of the classroom can help strengthen their relationships.

Some teachers feel that spending extra time to interact with the students is helpful in establishing positive teacher-student relationships. One of the teachers talked about the impact of his involvement with school students during weekend sporting activities and on school camps. This is what he had to say:

I organise the Saturday morning netball ... so go down there for an hour or so on a Saturday morning with my daughter and watch some of the games ... There's the school camp which I organise, I spend a week on camp with the kids and that's a great time for me, when you're away obviously 24 hours a day you really get to see the kids out of a school environment, you get to see what they're really like. I do quite a lot of other activities, sporting-type activities being a Physical Education teacher, so I get to see the kids when they're in the classroom but also how they perform in out of school activities. I think all those, just that little bit of extra work that you do and having known them from previous years and known their brothers and sisters and you just sort of build up a relationship with the kids and hopefully they respect that relationship. (T.2.i)

Another teacher spoke of his plans for out of school hours visits to each of the student's homes. Such contact was seen to be beneficial to him, to the student and to the student's family.

I'm starting this new class and I'm making a point of going around and visiting the homes. We do home visits, that's part of our communication process, so that at least once in each child's time in the school the teacher actually goes to the home and visits that family there, which helps build a stronger connection and the child always enjoys having the teacher visit them at the home and showing the teacher their room and

things like this. It gives the teacher a better understanding of where the child's coming from. Normally this is spread out over some time but I'm making the effort with my new class that I'm beginning work with in February to do this during the holidays, so that I will know the children and the families when I begin ... (Y.6.i)

In discussing how teachers make themselves available to students, the issue of following up with students who had been to see them was highlighted as being important. This is explored in the next theme.

Theme 16: Teachers recognise the importance of being available to follow up with individuals or groups of students.

Quite often, teachers find that after making contact with individual students, they need to follow through soon after to ensure everything is as it should be. This may be because the student's concerns were not adequately addressed during the initial contact, for whatever reason, or because additional contact time is considered necessary to conclude a particular matter. By following through with students, teachers show they care about their students and consider students to be a priority. Examples are provided in the excerpts below:

I need to make time, and I need to make sure I get back to the kids. If somebody has come in and said, "I want to tell you about this" and I say, "Look, I can't talk now", but I need to make sure I go after that kid later, because whatever they want to say is important to that kid. (Q.5.iv)

I always set a time, "Right, we'll get together at 12 o'clock once everyone's gone out for lunch", or "How about - " if they've got to rush off after school - "We'll tell mum that I'll speak to you tomorrow afternoon or before school tomorrow", or whatever. (P.3.ii)

I hope they see that things are resolved. That if they make a complaint to me I will follow it up, even if it takes a lunchtime, even if it takes a week. Like sometimes I have said to them, "Look, I just can't do that today because I have to go to pre-primary or whatever, but I will see about it tomorrow" and I'll follow it up. And if they think something's being done it probably takes a little bit of weight off their shoulders. (E.6.ii)

The importance of following up is thought by teachers to be valued by parents too, as suggested in this quote:

I just have this feeling that parents like things to be followed up too. They don't want their child to go home and say, "Oh I told a teacher about it but the teacher ignored me." (E.7.i)

Idealistically, teachers want to be available to their students most of the time. In reality, teachers find there are numerous reasons why this does not always happen. Some of these reasons are explored in the following themes.

Theme 17: Teachers feel the increasing pressure of demands on their time and believe it can interfere with maintaining positive teacher-student relationships.

In discussing the constraints that impinge on fostering and maintaining positive relationships with their students, teachers cited 'time' as being a major factor. Teachers feel they don't have enough time to be with their students. This is partly due to the demands of the job, and partly due to an increase in work pressure, for example, increased administration duties. Some teachers deal with this dilemma by sacrificing time spent with their students, others respond by putting in additional work hours. Others still, make a conscious decision to leave some aspects of their work undone. Some teachers believe that the increased demands on their time contribute to increased stress levels. This is made evident in the following statements from teachers:

... it's not just the portfolios; it's all the paperwork, all the accountability paperwork that we have to do. You spend so much time collecting data, marking work, even collating it and putting it into the files and that sort of thing ... I find these last couple of weeks I've spent most of my time sitting at my desk so I'm not getting out and with the kids, I'm not working with the kids. (P.9.ii)

[I] find that you just get stretched so thinly these days that you have to prioritise, you have to say, "This is what's important and I'm sorry the rest either has to get done at a lesser level or just doesn't get done at all". (F.7.i)

... as a teacher I feel like I'm just forever having my head above water. The pressures are enormous. If you want to be a good teacher, and I'm not talking about one that gets here 5 minutes before the bell rings and leaves just after the bell rings, if you want to be a good teacher then the demands on time are just huge and there are huge stress levels that go with it. But at the end of the day, all I want to know is that I've made a difference to my children in my class and if I can do that then I know that I've done my job. (F.9.i)

Conversely, one particular teacher shared how she had extra time to be available to her students by virtue of having a small class.

When I was filling out this survey, that's one of the things in our situation with a class size of a limit of twenty, availability is... you know, we are always right there. It's so different to the norm of thirty or more children. You know I've come from schools with thirty, thirty-five children and I know how hard it is to get to every child and to be available. Situation of twenty, you'll notice a lot of my comments are, "Yeah, I'm available". I've got twenty children, I'm available. (B.3.iii)

To summarise, within the category of Availability, teachers consider it important to be available to students. Teachers have various ways in which they communicate their availability. This is usually communicated directly to the children in the form of an open invitation. That is, students are asked to approach the teacher as and when they decide they need to. In addition, teachers are on the look out for student cues that may indicate the student may benefit from additional time with the teacher. Teachers use various ways to actually make themselves available to students. Teachers are concerned with students' academic needs and social-emotional needs and are usually willing to put extra time aside, even their private time, to see students individually or in groups as needed. Understandably, teachers find time to be a limiting factor with regard to being as available to their students as they would desire.

Category 3: Communication

The themes that have been identified within the category of Communication provide information about the perceived importance of communication and the ways in which teachers see themselves using communication in the classroom to strengthen teacher-student relationships. The final theme in this category addresses the problems that teachers encounter when trying to achieve the level of communication they desire.

Theme 18: Teachers believe the ability to communicate effectively contributes to their ability to foster positive relationships with students.

Effective communication, both verbal and non-verbal, is necessary for people to be able to relate to one another. In the classroom, the way messages

are sent and received will impact on teachers and students, and in so doing, on the climate of the classroom. Effective communication can help create a caring, supportive atmosphere, conducive to the overall learning process. Teachers who effectively use non-verbal cues, such as facial expressions, tone of voice and gestures, are better able to engage in active listening and to convey positive messages to their students. When teachers' words are backed up by non-verbal language, students are more likely to gauge a sense of sincerity that has the potential to strengthen their shared relationship.

When one of the teachers in this study was asked about how she builds positive relationships with her students, she highlighted the importance of effective communication.

Non-verbal communication is possibly the most important - a smile, the eye contact. Explain to children how things work, guidelines, routines. It's definitely one of the most important ways that you can establish a positive relationship. The usual things like stickers and rewards and all that sort of thing, that wears off after a while so children need to know when you say something that you're genuine and that you mean it. (B.1.ii)

Another teacher indicated that being able to communicate was an essential requirement for teachers.

I think if you can't communicate with students then, I think you might be in the wrong profession. (A.6.iii)

I asked teachers about the strategies they use to communicate effectively. The strategies discussed include teachers being available to talk with students, teachers making sure communication is non-threatening, teachers being good listeners, teachers building trust, being authentic, and using humour appropriately. Teacher responses shaped the following themes as follows:

Theme 19: Teachers believe it is important to keep the lines of communication open so students feel free to discuss personal issues.

For many teachers, keeping the lines of communication open is important. Teachers believe it is not enough just to discuss school subject matter; teachers recognise the need to communicate on a personal level too. For this reason, teachers seek to be available to students before, during and after school, as shown by these responses:

Walking around with them and sitting down and just having a chat with them about their goals, I find that's a really good way to establish open communication. (H.9.iv)

I really try and deal with them personally at some stage, so it's on an individual basis, not as a whole because they don't feel quite as important. As I was walking around or they were writing stories or something I have a bit of chat to them about their life and what was important to them. So it's sort of on a one-on-one at times when I have a chance to talk to them by themselves or in small groups as well sometimes. (R.2.iii)

Before school in the morning they'll come and have a chat, that sort of thing just to keep the lines open. If I'm in at my desk they'll all just come up and say hello. (V.6.iii)

... so I think the best thing for my kids, they know that they can come and talk to me about anything. We've had some issues lately, especially a few years ago ... there was a vandalism incident by my kids, the boys who were involved came and admitted that they did it, which was huge. They know whatever happens we can deal with that, literally, that's important, so they come and talk to me about lots of things. We sit down, "I'm having a problem with a girlfriend", you know, two girls, friends not getting on "Right, we sit down and talk about it". (Q.4.i)

I find yard duty is fantastic as far as availability goes because it's that very, very informal air – you're not in a classroom, there are no other kids around and then one can come up and just say, "Hi, how was your weekend?" and I say, "Oh look, my weekend was pretty good thanks, I did a bit of gardening, I did a bit of this", so I'm volunteering stuff back to them not just a matter of "Good". That shuts doors. But then I say, "Oh my wife and I went shopping and we did this and we did that", that sort of thing so, "Oh, gee, he's a person. He does things just like all of us". And that helps break down barriers. (D.8.ii)

One particular teacher mentioned class meetings as a way that she provides a forum for the students in her class to share their ideas or concerns. When asked how the class meetings were conducted she described them as follows:

[A]t class meetings I try to get across that if they ever need to talk to me I am there. [We have a] community circle, [and] a ball, we usually start off with something positive, so they go around and say something positive about school, which I might, if I want to direct it towards playground I'll say something positive about playground, if I want to direct it towards class I'll say a positive thing about the classroom. When we go to the negative and they all have a chance to say something that they're not very happy with ... I write them down and I sort of categorise them according to needs that I think, and how many kids are saying that that's the same issue and then I'll bring up a question about, "Okay, how can we address this?" and we'll go and make a suggestion for that, how we can address it. I write on my piece of paper, what was the outcome, what we decided and then next class meeting we revisit to make sure that it's going okay. That sort of thing. And they love their class meetings. (H.7.i-ii)

Theme 20: Teachers work at ensuring their communication is non-threatening.

When communicating with students, teachers need to control those factors that may be perceived as threatening. For example, if the situation is emotionally charged, teachers may need to allow time for tempers to cool before the communication continues. At times, physical stance and proximity may be perceived as threatening, for example, if the teacher is towering over the student who is seated at their desk. The words that teachers use should be devoid of ridicule, sarcasm and derogatory terminology. Teachers would also need to be aware of others who may be listening to the conversation and decide whether or not that would have a negative impact on the student. If so, the conversation may need to take place at another location and/or at another time.

In talking about the need to communicate in non-threatening ways, the teachers in this study made the following comments:

[W]hen I speak to them I don't want them feeling threatened or intimidated or embarrassed, I make sure that when I deal with them it's the right sort of communication level that I'm speaking to them. (F.2.i)

I always try and make sure that I never embarrass a child; I never want to humiliate a child or intimidate them. I never want to make them feel vulnerable and I always want to make them feel safe so that when I deal with them if they know that I'm not going to put them in that vulnerable situation I feel that maybe I will get a better response or get a more honest response. If children feel unsafe or insecure when you talk to them then they're not going to be honest with you. (F.2.ii)

I think most of children feel safe enough to come and tell me what's on their mind if they're happy with me or unhappy, they're generally quite confident to let me know when that's occurring. I guess [I have] the ability to make them feel comfortable enough to chat. (G.3.ii)

Theme 21: Optimal communication between teachers and students requires teachers to be good listeners.

Most teachers mentioned the importance of being a good listener, of modelling good listening and giving the students the confidence to know they will be listened to. Being a good listener includes being an empathetic listener. The following comments are examples of what teachers had to say with regard to listening to their students:

... in the morning when they come in and want to tell you something, then you take the time to listen no matter what you've got to do. I think that's the most important thing, no matter what they've got to tell you, you listen and value what they've got to say and then usually the kids are more than willing to share and appreciate that, big time. (X.1.iii)

I think effective communication starts with your ability to listen first ... In being able to listen I think that shows that you are prepared to accept other people's points of views and that you're prepared to listen to other people ... I think a lot of teachers and a lot of adults prefer hear their own voice and are not prepared to hear what the children have got to say. So I think, "Hey listen", listening to the kids – that's the basis of good communication skills. (A.6.v)

I think I'm prepared to listen to them, especially when it's during what you call 'my time', recesses and lunchtimes and after school or before school – when there's time, of course. (W.11.i)

Theme 22: Teachers work at building a sense of confidentiality and trust into their relationships with students to enhance communication.

In teacher-student relationships, confidentiality and trust were cited as contributing factors for good communication to take place. Confidentiality in this sense refers to the safe-guarding of information that has been shared between teacher and student. The information may be something personal the teacher has chosen to share with the class or it may be a disclosure made by the student to the teacher. Trust, in this instance, refers to the reliance teachers and

students place on each other to keep confidential information just that; confidential. Trust is seen to be broken if the information is made public by one party without the consent of the other. The following comments by teachers show how they try to build confidentiality and trust into their relationships.

I told [the students], "Now, if we talk, what you say to me is between us. If I want to take it somewhere else I will ask your permission", and I do ... so they know that they can trust me ... I reckon that gives them the confidence to talk with me. (L.7.iii)

I pull children aside and I speak with them quietly by themselves without anyone else around. I quite often don't see the benefit of, when you're trying to speak to a child, giving them an instruction or telling them what you think with everyone else listening en masse. And I think you have to tailor-make your conversations and what you have to say just for that particular child for that occasion. I mean, it becomes really hard because you don't have a lot of time to do that so when other kids are off working if there's anything I need to say to a child I will draw them out and speak to them without anyone else being around. I'm very particular that no other child is around, that they can hear conversations that I have. (F.3.i)

... if a child is coming up to you with something a little bit personal and you've got other students around, you might ask the children to move and go away and what have you, so I think depending on what you're actually teaching, the actual physical environment and so on, needs to change, or you need to move around that particular environment that you're in and into a quieter area. (A.7.ii)

We do a lot of values education, talking about communication and trust and I try to make sure that I live that as well with the kids and they know they can trust me. (Q.4.i)

Theme 23: Communication between teachers and students needs to be natural.

Teachers want their communication with students to be natural. They aim to be natural themselves and encourage students to be natural in return. Such communication is more likely to enhance a relationship as this type of communication is perceived to be "real". When people pretend in their communication with each other they risk sending false messages and risk putting a barrier between themselves and others. The following comments by teachers describe how they aim to achieve natural communication with students:

I just try and be me and I try and talk to them at the level they're used to, as these kids would be talking to each other in certain respects. I try and talk to them as an equal. I mean I try and make sure that there's still a line, that I am still the teacher and I am still in control and I'm still the authority in this classroom, but I also try and make sure that's not, "I told you to do that, that's why you're going to do it blah, blah, blah". I try and let the kids know that I am on their level. (N.6.i)

I don't use 'teacherly' voices, I use my own voice all the time. And I insist that the children use their own voices. With certain children I've pointed out that they're using a cartoon voice, for instance, and that I won't listen to them if they're using a cartoon voice, they have to use their own voice. And with some children they get into this real habit, they speak all the time in this cartoon voice or some sort of ingratiating voice because they think that they have to. Very important – part of what I believe I'm teaching, to get people to be straightforward and to be straightforward myself. (Y.10.i)

Theme 24: Teachers believe sharing a sense of humour when they communicate with their students contributes to establishing positive teacher-student relationships.

Having a sense of humour means being able to appreciate a comical or amusing situation. A person who has a sense of humour is able to see a funny side to a particular situation and may also be able to share the joke with others. Humour is often culturally determined. This means, what may be considered funny within a particular cultural context may not be considered so within another cultural context. Humour may also be age determined. Something that appeals to the sense of humour of a 4-year-old may be lost on an adult and vice versa. Humour may be considered appropriate or inappropriate depending on the audience and the content of the joke.

Teachers who use humour appropriately may do so in such a way as to strengthen their relationships with students. Laughter can often diffuse a tense situation and help people to relax. A joke that is shared can bring about a sense of unity for those who share in it. When the teachers in this study were asked if humour helps to enhance their communication with students, many agreed that it does, as typified by the following response.

Yes it's very important (laughs). I think it helps you cope and it also helps the kids relax as well. They don't want to be in an army barracks. I think it's important, very important. (G.5.iii)

Teachers said that at times they will initiate the humour, and at other times they will recognise when it is being initiated by the students and will go along with it. The following comments from teachers provide examples of how they share humour with their students.

I try to as much as possible make activities which are quite interesting and when a joke happens you go along with it, you don't shush the kids, you go with the joke. You smile, you laugh, somebody does something silly, you laugh. (K.1.iv)

I'm that type of person where if something funny happens as long as it's not downgrading somebody, it's always good to have a bit of fun with it, kids can have a laugh and they can be relaxed. If you can have a laugh and you're relaxed then obviously the kids appreciate that, it's not all work, work, work, work, work all day. (T2.ii)

I think humour is extremely important, there's a right time and place for it, it can't be all the time but certain parts throughout the day ... it makes a relaxed atmosphere. But you can only have that relaxed atmosphere when you have the kids' respect ... and once you've got that then you can inject a bit of humour. (T.3.i)

During the discussion on communication, I asked the teachers if they encounter any blocks that prevent them from establishing the degree of communication they desire to have with their students. Teachers responded that there were some blocks. These perceived blocks shape themes 25 and 26.

Theme 25: Teachers believe demands on their time can limit their opportunities to communicate effectively with their students.

- Some teachers identified the constraints of time as working against them in their efforts to sustain good communication with their students, as shown by – the following comments.

... you just don't have the time and you think, "I know that child's struggling, I've got to find time to talk to them", and then it's the weekend

and you think, "I never got there, I never made that time". So time, I think, is the teacher's biggest obstruction. (L.3.ii)

It would be nice to be able to speak to them all the time but some of the things, depending – again a lot of that's got to do with environment, if other students are around it's not for their ears to be hearing, then obviously you going to say to that child, "this is not the time", and you have to try to catch them at another time. (A.8.ii)

One particular teacher recognised that time coupled with class size can limit her efforts to communicate effectively with the students in her class. When asked about the possible inhibitors that prevented her from attaining her idealistic level of communication with her students, she gave the following reply:

... I have to say, I think probably time ... and also maybe with that one, the number of children that you've got in the classroom, I think if you've got a smaller class you can spend more time communicating on an individual basis with the child whereas if you've a big class it's sometimes hard to get around to each child. (R.6.i)

Theme 26: Teachers' perceptions about restrictions to do with physical contact with students hamper their efforts to communicate effectively with their students.

In the discussions it became evident that limits to physical contact between teachers and students is seen by some teachers to prevent them from being able to offer the level of supportive communication they would otherwise like. Here in Australia we have a current climate of cautiousness regarding physical contact between teachers and students. This presents teachers with a dilemma; teachers want to use physical contact to enhance their communication (for example, give a student an encouraging pat on the back) but do not want to risk making physical contact that is misinterpreted as being inappropriate.

Schools are not sterile places but it is required that teachers be alert to cues from students indicating their responses to physical contact. Such cues may be verbal, for example the student says "Don't touch me" or non-verbal, for example, the student may have a non-responsive facial expression. If students indicate that a particular form of physical contact is unwanted, teachers refrain

from making that contact again. If teachers do not heed a student's signals, then that behaviour may be regarded as assault.

In the current climate where many teachers, particularly male teachers, are afraid to make any kind of physical contact with students, this lack of physical contact is believed to hamper their communication efforts. One particular teacher made this evident in the following remarks.

... for male teachers, you've got to be aware that society is looking at you and you can't just be friends. You can't just go up and put your arm around the kid and say, "It'll be alright." (N.7.i)

... even talking to kids. Putting your hand on them can be felt as a threatening issue and you're considered as, "You're abusing my child". It stops you from being the caring, sharing type person like a father figure type. because you think, "No, there's got to be a distance". So, yeah it does, it does make my job a little harder but then again there's obviously been people that have abused trust and therefore you've got to wear it. (N.8.ii)

As a consequence, this particular teacher feels he has to guard against any risk that may be incurred to his reputation when communicating with his students. He described how he does this in the following comments.

I try to make sure that if I have students in my classroom that there's more than one of them. Also I try to make sure that the door is open if... if there's a class then I close the door but if there's one or two students I make sure the door's open, I make sure that I'm in clear sight. There's all these little constraints and yes, you're always thinking, there's got to be distance. There are some times when I see kids upset and I... just put my arm around them – no you can't do that. My wife is also a teacher, she can, and she does, she actually puts her arms around kids and says, "Oh, there, there". It's different. Whereas me it's construed as, "Well he's being a dirty old man". (N.7.iii - 8.i)

Theme 27: Teachers believe a student's personality may block teacher efforts to communicate effectively.

Even though a teacher may be highly skilled at communicating with students, if a particular student has a shy disposition or a certain personality, teachers expect their efforts to communicate will be blocked. This is evidenced

in the following comments:

... [this] child could at times be unresponsive and just not very receptive to anything I would say, and sometimes I'd find myself being short-tempered or just being frustrated and not really knowing what to say. (G.3.iii)

... he perhaps wouldn't talk to me about anything, because he would rather keep it at home and he would consider it none of my business. So I wouldn't even ask him. He is different. (E.8.ii)

Some particular children do not bring their personal issues to the teacher, prefer not to and you would be imposing on them, you would be prying, you would be violating their personal sanctity by insisting on it. (Y.12.ii)

To summarise, within the category of Communication, teachers agree that open communication with students contributes towards positive teacher-student relationships. Teachers identify certain aspects of communication as being necessary, for example, being available to students, communicating in non-threatening ways, having good listening skills, building trust and authenticity into the relationship and using humour appropriately. Certain blocks are acknowledged that prevent teachers from engaging in the level of communication they would otherwise desire, and are recognised specifically as being limitations of time, limits to physical contact with students and particular personality attributes.

Category 4: Teachers' Relationships with Parents

This particular category emerged from the data as being quite significant. Themes 28 and 29, put forward within this category, highlight the importance teachers place on developing a positive relationship with students' parents.

Theme 28: Teachers recognise the importance of building a supportive relationship with parents and the benefit that brings to them in their role as teacher.

Teachers believe it is important to establish good relationships with the parents of the students in their classes. It is thought that positive teacher-parent relationships contribute to positive teacher-student relationships. Teachers who

develop a positive rapport with the parents of the students they teach create a link between school and home. Teachers in this study recognise the responsibility they have in establishing and maintaining contact with parents and spoke about the ways in which they go about doing it.

... getting to know their families as well, getting to know their parents and their siblings at school and then having that sort of a bond with them, saying, "I know that your dad works as this", and having a chat to their parents when they come in. I think that's really quite important, having that relationship, so it's more than just the child it's more of a family relationship. (W.10.iv)

But if you've got the parents onside as well as the child, you've got a happy kid and a happy family and a happy teacher. And you've got all those working in the same direction and well, what you've got – quality learning. (D.11.iv)

Always really important to have a good relationship with the parents and that starts when they start bringing – as soon as they open the door they're being welcomed (sic). (Q.5.ii)

You can't do it without their [parents'] help. We're a very important part of their life but you don't get by without the parents. It's a very important partnership. (Q.5.ii)

Contact and interacting with the parents, even if it's by phone call or by note and keeping them fully aware of what's going on, what's happening, even letting them have some say in what's going on in the classroom. Getting them in if there's any problems ... If you keep parents involved and aware of what's going on you don't have any problems. (P.7.ii)

Theme 29: Out of school contact with parents is believed to be valuable in establishing a positive teacher-student relationship.

During the discussions, one particular teacher mentioned he has opportunities to meet with parents outside of school hours. When asked if he feels this to be a valuable ingredient in building relationships with his students, he replied as follows:

I definitely do. Because then they feel comfortable coming to speak to you at any time and they know I'm always approachable. And also if you mix with parents and their kids in an out-of-school setting, it's a totally different atmosphere to what you get in the school setting... in school I'm a teacher, they're the student ... but out of [the] school setting I'm like

one of their parents' friends basically and it's a lot more relaxed atmosphere and you get to know the parents, you get to know their names and they feel comfortable coming to speak to you and they support you in the things that you do. I think it's really important. (T.8.iii - 9i)

Category 5: Self-Reflection for Teachers

This category describes teachers' views about the importance of self-reflection. It emerged when the topic of discussion turned to how user-friendly the teachers found the assessment tools to be.

Theme 30: Teachers find it valuable to reflect on their teacher-student relationships.

When I asked teachers how they had found the discussion session to be, most of them responded with enthusiasm and said they appreciated having the opportunity to participate because the session had been helpful to them.

... It's good, makes you think actually. Yeah, think about what you're doing ... you do things without thinking so it's good to think, "What do I do? What don't I do? What should I do?" (X.15.iii)

I think it's good. I think it also makes you think about the relationship with your students more, actually having time to reflect, because in busy classroom life sometimes you don't get time to think about how your relationships are going with the kids. (R.11.iv)

... you like to think you're doing a good job and I think for the most part I do, but it's really important to do reflection ... (Q.8.iii)

Thinking about what I think about and how else I can I improve on some of the areas, that's good. (M.10.ii)

You very rarely sit down and think, "How do I work with these kids as people?" ... So it's good, it's great to focus on it for a change. (L.11.v)

It's interesting because when you put it down on paper it's one thing but when you talk to someone you find that you're able to bring into play other things ... When it comes to something that you want to give a lot more in-depth information about you have to have a one-on-one discussion with someone so I find this really valuable. (F.13.iv)

Also, just thinking about each kid and thinking, like I said about levels you know, making you realise that there are some kids that you'll put more effort into ... (N.11.i)

During the discussions, teachers were asked how they found the assessment tools. Specifically, they were asked two questions; "how easy or difficult was the questionnaire to complete?" and "how easy or hard was the face-to-face discussion?" The teachers mainly responded positively, and acknowledged they found it useful to have some tools to guide them through the process of being able to reflect on their teacher-student relationships.

Theme 31: Teachers find it valuable to have tools available that assist them in reflecting on their teacher-student relationships.

The majority of teachers gave positive feedback regarding the structure of the questionnaire and its "user friendliness". Teachers acknowledged that the questionnaire required them to put some thought into their responses, but that it was not a time consuming or arduous task. These are some of the responses that were made with regard to the questionnaire:

The format's fine because I think that comes into what we're doing a lot these days. That seems to be a fairly systematic way ... And I think it gives you a range, a scale to accommodate all your thoughts.(C.7.iii)

... the questionnaire I didn't have any problems with it. It was brief, it was easy, it wasn't invasive of my time, it wasn't one of these things where you sort of think, "Oh I don't understand what this person's on about." And I found it took me about 5-6 minutes, light and I didn't mind it at all. I thought it was pretty much to the point, which is great. (D.11.v - 12.i)

Just having to think, 'idealistic', 'capable' and 'actual' and – it was quite good actually because it makes you think, makes you stop and think, "Yeah well I know that's what I really want to happen, but does it really happen?", it was quite good. (X.14.iii)

The next set of responses was made with regard to the discussion teachers had with me. As can be seen by the comments, the teachers felt the face-to-face discussions had been a very positive experience.

It's good, makes you think actually. Yeah, think about what you're doing. As you say, you do things without thinking so it's good to think, "What do I do? What don't I do? What should I do?" (X.15.iii)

I think it's good. I think it also makes you think about the relationship with your students more, actually having time to reflect, because in busy classroom life sometimes you don't get time to think about how your relationships are going with the kids. (R.11.iv)

It's really good to actually ... You very rarely sit down and think, "How do I work with these kids as people?" We talk about kids ... but you don't often sit down and think, "What do I do with these [students]?" And I know I work hard at it but ... it's good, it's great to focus on it for a change. (L.11.v)

... it's good to actually talk out what you've done because often you don't tend to do it with other teachers because they're busy ... I've certainly found it, I suppose affirming in a way that I have done things even though I haven't consciously done them. (I.15.vi - 16.i)

I think it's been helpful ... Thinking about what I think about and how else I can I improve on some of the areas, that's good. (M.10.ii)

Concluding Comments

The face-to-face discussions with teachers yielded a wealth of information regarding their views on the importance of building positive relationships with their students. Their comments backed up the information provided in the questionnaires. Teachers agree that connecting with students, being available to them and communicating well are all important aspects of establishing and maintaining positive relationships in the classroom. In particular, teachers commented on the value of connecting with students on a personal level and being able to learn information about home contexts and their personal likes and dislikes. Teachers shared ways that they make themselves available to students and engage in effective communication. Teachers also spoke about the importance of establishing positive relationships with the parents of the students they teach, and explained the impact this is believed to have on making positive connections with their students. Finally, teachers revealed the value they place on self-reflection and how they find it beneficial to take time to evaluate how they are progressing with building classroom relationships.

The next chapter presents the analysis of the student qualitative data.

CHAPTER NINE

DATA ANALYSIS: PART 4

STUDENT DISCUSSIONS AND OPEN ENDED QUESTIONS

This chapter presents the data analysis and discussion from the students' view. These data comprise the oral responses that students made during the face-to-face discussions and the written responses that students gave to the open-ended question on the questionnaire. The process used to analyse these data has been described in Chapter Eight. The findings are presented in this chapter as themes. The themes are then used to formulate abstractions. In this way, the sixth research question is answered, specifically, what are students' self-views about the aspects of Connectedness, Availability and Communication with respect to their teacher's impact on their shared relationships?

In this study, 139 students each completed a questionnaire. At the conclusion of the questionnaire, students were invited to make a general comment about their relationship with their teacher. All 139 students chose to make a response. Many of the students were happy to chat further about their relationship with their teacher. This gave me the opportunity to ask some of the questions from the discussion schedule. As students answered the questions, I recorded their responses on the questionnaire sheet. Student responses have been transcribed and coded. The coding uses the letter S to denote 'student', a number to match the one already assigned to the questionnaire, (001 through to 139) and a Roman numeral to indicate the line number. For example, a response made by a student on the 25th questionnaire that appears on the 3rd line of the transcript is coded as S.025.iii.

Categories and Themes

Category 1: Connectedness

The themes that have been identified within the category of Connectedness reflect students' self-views with regard to the personal connection they have with their teachers. These include students' views about how teachers and students get along with each other, and about certain teacher

behaviours that students believe indicate whether or not they are liked by their teachers. Overall, students agree it is important to have a positive relationship with their teachers. This is shown in the first theme.

Theme 1: Students believe they perform better at school when they have a positive relationship with their teachers.

When students were asked whether or not they thought it was important to have a positive relationship with their teachers, the response was overwhelmingly affirmative. When asked why a positive relationship was important, students said it helped them to perform better at school, and to enjoy school more, as shown by the following responses.

It makes you feel happier and you can get on with your work and feel like you enjoy school more. (S.074.vii-viii)

Yeah, because you get along well, and it makes the work easier. (S.127.ix)

If teachers and students don't get on, students feel left out and lonely, scared to ask questions. (S.076.vii-viii)

If your teacher doesn't like you it's harder to learn 'cause it's easier to learn with someone you feel comfortable with. (S.078.vi-viii)

Theme 2: Students like to connect with their teachers on a personal level.

In the discussion about what made a teacher-student relationship a good one, students mentioned personal connections as being important. Such personal connections help students to feel special and valued by the teacher. Personal connections can be in the form of shared interests, or shared experiences, as shown in the following comments.

We get along because we like the same colour, we both like the same activities and we both like to laugh. (S.126.i-ii)

We both have an interest in horses and we sometimes see each other out of school. (S.110.ii-iii)

We connect and we talk to each other regularly and it's sort of like instinct, there is kind of a space between you if you don't connect. (S.085.iii-iv)

One student related a personal anecdote about going on a school camp and really connecting with her teacher. The student recalled her teacher was out of 'teacher-mode' (S.080.vi) as they chatted and toasted marshmallows together. (S.080.vii-viii)

Students recognise that personal connections are made between themselves and their teachers when their teachers show an interest in students as individuals. In describing the personal connection Estella (pseudonym) has with her teacher, Estella related how her teacher knows about, and shows an interest in, various happenings in her life. For example, Estella's teacher has been to see Estella perform in a dance competition. Another example is that Estella's teacher knows that Estella's father works away from home and will enquire after him, as evidenced in this quote: "My Dad goes away and [my teacher] she wants to know when my Dad gets back." (S.001.v)

Theme 3: Students who have the same teacher for more than one year feel they are able to connect more closely with that teacher.

Students who have the same teacher for more than one year feel they have an especially close bond with their teacher. This is the case for one particular student who had the same teacher from Year 2 to Year 7. In this instance, having the same teacher for five years was seen to enhance their relationship, as shown in the following quote.

My teacher and me get on really well (sic). We never have arguments ... [I know she likes me] 'cause I've been with her all my life. (S.123.i, iii)

For another student, having the same teacher for more than one year means there is continuity in the relationship, as expressed in the following quote.

She was my teacher last year and she hasn't changed a bit. She is my favourite teacher in the world. (S.056.i-ii)

Students believe to be liked by a teacher, means being accepted and valued as an individual class member. When asked how a student could know whether or not a teacher liked them, responses centred on aspects of teacher behaviour and on teacher approval of student behaviour. These ideas are presented in the following three themes.

Theme 4: Students believe teachers use certain cues to indicate whether or not students are liked.

Students are alert to various cues that they believe indicate whether or not their teacher likes them. Some of the cues are verbal and others are non-verbal. Students gave the following examples of cues teachers give to show whether students are liked.

They laugh, be nice, smile, say "hello", use my name. (S.007.iv)

The look that she gives you and how she talks to you, her voice (sic). (S.031.iv)

It's just how their face (sic) ... they just sit there and listen to you. They always help you whenever you're stuck. (S.044.v-vi)

They are more talkative. (S.028.iii)

They treat you better. (S.030.iv)

They don't ignore you and they will treat you equally with the other kids. (S.077.v)

Theme 5: Students believe a teacher's display of compassion and empathy is evidence of the teacher liking a student.

Along with the verbal and non-verbal cues, students interpret a teacher's expression of compassion and empathy as evidence that the teacher likes them. This is made evident in the following comments:

When I got hurt they were kind to me. (S.073.vi)

When they're nice to you ... if you're having problems at home and you haven't had time to finish your homework and they give you extra time. (S.076.iv-v)

When they be nice to them and tell them things like if they are sad, to make them cheerful (sic). (S.092.v-vi)

She talks to everybody, she doesn't get mad, she really understands us and doesn't give us hard work. (S.033.iv-vii)

She cares about me. She knows about my sensitive feelings ... She understands why sometimes I forget my homework. (S.100.i-iii)

Interestingly, one student noted that teachers do not necessarily display behaviour to indicate whether or not a student is liked. As the student explains:

You can get a really mean teacher who still likes you but she doesn't show it. (S.079.vi)

Theme 6: Students interpret teacher approval of student behaviour as an indicator that the student is liked by the teacher.

It seems students interpret their teacher's approval of their behaviour to mean approval of them as individuals. This idea is evident in the following comments as they were all made in response to the question "How do you know when your teacher likes you?"

When she passes good comments like if I do something good she says "good boy" or something. (s.082.v-vi)

She says that we're being good. (S.083.iv)

When you say something and give the correct answer to something she congratulates you and everything. (S.088.iv-v)

When she like gives me points when I'm sitting up and being good and when I answer a question with lots of detail. (S.068.v-vi)

She will be pleased with your work, she'll be nice to you and reward you with things. (S.074.iv-v)

Theme 7: An element of reciprocity is present in teacher-student relationships.

When talking about teacher-students relationships, students described how both teacher and student contribute to the relationship in a mutual manner. Examples of the elements in their teacher-student relationships that students recognise to be reciprocated include listening to each other, sharing jokes, laughing together, caring for each other and helping each other. These elements are contained in the quotes that follow.

We always get on together. We both listen to each other. (S.041.iii)

One of the things that I like about us is that we joke around with each other. (S.085.i-ii)

We always have a laugh together because we like each other and we care for each other. (S.086.i-ii)

We laugh at each other's jokes and we like to help each other. (S.092.iii)

One particular student, however, described a situation that took place with her teacher in which expected reciprocity did not occur. This situation is explained by the student as follows:

Sometimes Miss Martin is nice to me like if I give her a nice card and stuff. And then it means nothing after, she might just forget about me. (S.007.i-ii)

Theme 8: Students regard their teacher as a friend.

Some teacher-student relationships deepen on a personal level to the point where the classroom relationship becomes a friendship. Two students in this study mentioned that they regard their teacher as a friend. This is what they had to say:

... a good thing about our relationship is I count him as a friend as well as a teacher. (S.022.ii-iii)

... he's really nice to all of us. He is kind of like a good friend to me as well. (S.108.iii-iv)

Category 2: Availability

Within the category of availability, students shared their beliefs about when and how often a teacher may be approached, and about how receptive they felt their teachers were when an approach was made. In addition, students commented on the degree of help they felt could be gained from their teachers, including help for classroom related work tasks (for example, when working on a new mathematical concept), and for issues of a personal nature (for example, when being bullied). The two main themes that emerged will now be presented and discussed.

Theme 9: Students perceive their teachers to be available and able to help.

Students perceive their teachers to be available most of the time. Students' responses to do with teacher availability were coupled with a comment about the help teachers give. This is seen in the comments by the following students, who see their teachers as being both available and able to help.

When I need help with work I can go to her, she's always there, she really helps you. (S.001.iii-iv)

I can go up to her and she helps me. (S.003.ii)

She is generally busy, but can almost always help, she is an excellent teacher. (S.026.i-ii)

Most of the time he just tells us to work and if I need help I put my hand up and all the time he comes to help those who have their hand up - not just some of the time but all the time. (S.032.ii-iv)

Theme 10: Students recognise teachers are busy people and accept that there may be a delay in getting help.

When discussing teacher availability, students observed that, at times, teachers may be busy and not immediately available. Some of the students' comments show the students have an understanding of the need to wait to have their query attended to.

There are times he can't be disturbed. (S.032.i)

My teacher is very good but sometimes she is very busy so you can't talk to her. (S.057.i)

If a teacher is busy it is rude to interrupt them. (S.094.ii)

Sometimes you have to wait because she's busy. (S.001.iv)

If he's busy I should wait until he's done what he's supposed to do. (S.118.ii-iii)

Category 3: Communication

The themes that have been identified within the category of Communication reflect students' self-views with regard to how communication between teachers and students impacts on the personal relationships they share. Students believe that for good communication to take place between students and teachers, it is necessary for teachers to be good at listening and for teachers to be able to safeguard student confidentiality.

Theme 11: Students value being listened to.

Students want to be heard. They want their teachers to take time to listen to what they have to say. On the questionnaire, nearly all the students indicated that they wished their teachers were able to listen to them all of the time.

Students not only value being listened to, they also value having teachers who are able to respond to what has been said. These views are evidenced in the following comments:

She listens to me. She makes me feel good about myself. (S.043.i)

She's nice to me and always listens to what I have to say. If I have a problem she listens and helps me sort it out. (S.047.i-ii)

Our teacher listens to everything we have to say and is willing to help everyone. (S.058.i)

I like my teacher but sometimes I wish my teacher would listen more. (S.065.i)

Students value having teachers who listen, particularly when there is no one else available to listen to them. This idea is shown in the following quotes.

Yes, because if your parents are away and you're being babysat you may not be able to talk to them about it. (S.137.v-vi)

Yes because if you have a problem that your friends can't help you with and it is at school you have no one else to talk to. (S.131.ix-x)

... sometimes you can't talk to your parents or your friends. (S.129.vii)

... if you have a bad parent or something and you can't talk to them you can talk to your teacher. (S.132.iii-iv)

Theme 12: Students appreciate being able to share personal information with a teacher.

Students like being able to talk to their teachers about anything, not just school related issues. This idea is evident in the comments to follow.

I can always talk about things that have happened to me or if something good has gone on in my family. (S.003.i-ii)

I think my teacher and I get on well because I can talk to him about what I did on the weekend or after school and he will still listen to me. (S.022.i-ii)

My teacher is a great help. I can talk to her most of the time even through private things. I feel that she cares for me and likes me very much. (S.013.i-ii)

I can speak my own opinion without feeling restricted and she always listens. (S.014.i-ii)

Theme 13: Students value confidentiality when personal information is shared.

When students share personal information with teachers, students appreciate knowing that the information they share will be kept private. This notion is supported by the following comments by students.

I like the way my teacher is always ready to listen to what I think and how I can trust her with personal things. (S.074.i-ii)

Me and my teacher get on well when I tell her private things she doesn't tell anybody else. (S.082.i-ii)

Anything I say to her is kept with her and she never will tell anyone about "private" stuff. She is a good teacher. (S.089.i-iii)

Mrs Harris (pseudonym) and I get on very well, because if I tell her something and I don't want her to tell anyone else she doesn't, which I think is very important. (S.129.i-ii)

Theme 14: Students find it beneficial to talk with their teachers about personal problems or concerns.

Not only do students appreciate having a teacher they can talk to about personal things, they also feel better as a result. Students who have shared personal problems or concerns with their teacher testify to feeling supported by their teacher and being able to resolve issues as a consequence.

... she is nice and she helps me feel better if I get into a fight with my friends. (S.109.i-ii)

She's kind and she helps when you need help. When you're angry you feel better when you talk to her. Had a fight with my friend once, she put us together and made us say "sorry" (S.111.i-iii)

... well sometimes if you have a problem you discuss it so you can get it out of you. (S.126.iv-v)

she can understand me in a way nobody else can. (S.019.i)

Theme 15: Students may choose not to share personal information about themselves with their teachers.

Item 9 on the questionnaire reads "My teacher listens when I talk about personal/private things." Two of the students indicated that their ideal for this particular item was "Never." In other words, they never want to discuss personal information with their teacher. One of the students, Jess (pseudonym), said she chooses not to share personal information with her teacher based on past experience (S.063.ii-iii). The other student said he has been advised not to disclose personal information to people outside the home, as shown in the following quote.

My Mum says anything that is said or done in the house stays in the house. (S.090.ii-iii)

Category 4: Equality

The topic of equality emerged from the discussion data as a separate category. Students talked about the importance of fairness in the classroom and said they desire equal treatment over preferential treatment. This idea is expressed in the following theme and is supported by comments from students.

Theme 16: Students want teachers to treat all students equally.

She does not have favourites, that's a good thing. (S.080.ii-iii)

She treats everyone the same. (S.064.iii)

I feel like everybody else, like all the same. I feel like we are all treated the same. (S.118.viii)

I think it is important that a teacher pays the same amount of attention to everyone - not just their favourite children. Because some teachers have favourites and they pay more attention to them and leave the others by themselves. (S.103.i-iv)

Interestingly, one student made a comment about a teacher who did show what was, at least in the eyes of this student, favouritism towards a couple of other students in the class.

He likes Terry (pseudonym), I can tell. He treats him a bit different. How he talks to him, and when he gets into trouble. He doesn't get into too much trouble. And Jayden (pseudonym) too. (S.032.v-vii)

Another student also noted that, on occasions, teachers do have favourites amongst the class.

... some teachers have favourites and they pay more attention to them and leave the others by themselves. (S.103.iii-iv)

Category 5: Teacher Mood

The final category to emerge from the discussion data is that of teacher mood. As students shared their beliefs and experiences, it became evident that many students feel they are somehow responsible for their teachers' moods. For example, students feel they are the ones to blame if their teachers become grumpy or angry, as presented in the next theme and evidenced in the comments that follow.

Theme 17: Students feel responsible for their teacher's mood.

By listening to what Mrs Tucker (pseudonym) says and doing it first time ... this helps us to get on better so she won't get angry and frustrated. (S.016.i-ii)

I will be good for her [my teacher] so she doesn't have to get angry. (S.018.i)

Sometimes I can get on with my teacher because the teacher will be in a good mood. But sometimes he is in a bad mood and makes me feel bad about it. (S.048.i-ii)

Sometimes other kids get him really mad and he gets into a bad mood. (S.033.i-ii)

When students discussed various aspects of their teacher-student relationship, many made reference to teachers who raise their voice in the class. These comments helped shape the final theme in this chapter.

Theme 18: Students do not like it when teachers raise their voice and shout at them.

Students said they like teachers who do not "shout" or "yell" in the class. Teachers who do not raise their voice are considered to be good teachers. These thoughts are expressed in the following quotes.

We get on well at school, like, (sic) she doesn't yell at me much. (S.083.i)

The teacher never yells at me and when I do something wrong he talks about it. (S.094.iii)

She doesn't yell anymore and she's nice to people. (S.084.i)

... when you are good she treats you better than when you were bad. When she's having a good day she doesn't like (sic) shout or anything. (S.072.iii-v)

[A good teacher] listens, doesn't yell for no reason. (S.116.vi)

Abstractions For Teacher-Student Relationships

A closer examination of the eighteen themes drawn from the student data reveals that several links can be made. Such linkages can be supported by student quotes and expressed as abstractions. The abstractions that have been identified in the following section relate to students' perceptions about their relationships with their teachers.

Abstraction 1 (taken from Themes 1, 2, 11 and 12)

Students want to be able to connect with their teachers; students want to be liked by their teachers; students want their teachers to be kind and caring and to show a personal interest in them. However, these wants are not always satisfied.

Ninety percent of the students in this study indicated that they desire to have positive relationships with their teachers. Nearly all of the students said they want their teachers to like them, to care for them and to be interested in them as individuals. Many students shared anecdotes about positive teacher-student experiences. Such anecdotes are typified by the following comments, the first of which has already featured in Theme 12:

My teacher is a great help. I can talk to her most of the time even through private things. I feel that she cares for me and likes me very much. (S.013.i-ii)

I think Mrs Glencross (pseudonym) is a caring person and she always talked to me about things and treated me very well. (S.075.i-ii)

We get on well all the time and she is very concerned about me. (S.077.i)

Even so, a number of students reported experiences that were very

negative. Students who identified these negative experiences did so in the context of explaining how a teacher-student relationship was less than what they desired it to be. For example, students recounted instances where they were disturbed by a teacher's negative physical or verbal behaviour, as explained in the following quotes.

She didn't like me, threw a whiteboard marker at me. (S.090.vi)

She likes no one in the class. She said so. "I don't like any of you in the class, I just have to teach you." (S.091.i-ii)

We sometimes get along but I hate it when he yells in the class or when something bad happens. (S.105.i-ii)

In these instances, students feel let down by their teachers. The students' expectations of having caring, kind teachers who like them have not been realised. These unfulfilled expectations contribute to students' negative feelings towards school and negative feelings about themselves.

Abstraction 2 (taken from Themes 4-7)

Students interpret certain teacher behaviours and the receipt of privileges as proof that they are liked by their teachers. Students who believe they are liked by their teachers say they like their teachers in return, even when certain teacher behaviours are negative or when privileges are withdrawn or when consequences for negative student behaviour are being experienced.

Students are able to identify certain teacher behaviours they believe indicate that their teacher likes them. Such behaviours are elaborated on in Themes 4, 5 and 6 and include a teacher smiling, saying "hello", being nice, being kind, showing compassion and empathy and giving praise. In addition, students believe that being given certain privileges and responsibilities is further proof that their teacher likes them. Examples of such privileges and responsibilities are provided in the quotes below:

How I can tell he likes me is that he has chosen three [students] to do stuff (sic) the rest of the class won't do, and I'm one of them. (S.036.i-iii)

[I know my teacher likes me] Because she always lets me out first and if we play a game she will let me be "it". (S.046.v)

[I know my teacher likes me because] Normally he lets me go and do the messages. (S.054.iv)

Students shared stories about being on the receiving end of negative teacher behaviour. Even when privileges may be withdrawn or punishments meted out, students said they still liked their teachers. This idea is evidenced in the comments below.

I like her very much but even though sometimes she can be a bit rough on me, she is really nice to me most of the time. (S.070.i-iii)

I like my teachers but sometimes I don't like when I have lines. (S.009.i)

It would seem that the students quoted above feel secure enough in their relationship with their teachers to remain positive about their relationship, even in the face of conflict or negative circumstances.

Abstraction 3 (taken from Themes 9 and 10)

Students value their teachers' availability. Some students understand that teachers will not always be immediately available to them and they understand the need to wait until a teacher has time to see to their request. Other students feel frustrated when they are unable to get their teacher's attention.

Nearly seventy percent of the students in this study said that they can go up to their teacher at any time and that they can ask their teacher for help. Nearly two thirds of the students, within this group of seventy percent, accept that even when their teacher is busy, they may still go and get help. This view is typified by the following comment, previously featured in Theme Nine:

She is generally busy, but can almost always help, she is an excellent teacher. (S.026.i-ii)

Students accept that teachers are busy people. In so doing, they seem to understand why there is sometimes a need to wait before their request for help

can be met. In some cases, the students express consideration for their teachers being so busy and a supportive attitude with regard to waiting. These ideas are evident in the students' quotes to follow.

If he's busy I should wait until he's done what he's supposed to do. (S.118.ii-iii)

You don't want to take her off what she's doing. (S.098.ii)

While students in this study expressed an understanding of the need to wait for their teachers to be available to them, some students expressed frustration at not having the access they ideally want. The following comments present this point of view.

I think we get on quite well although sometimes I get a bit annoyed when he says if something is going on he will help and then he just tells me to go and sit down or do something else. (S. 021.ii-iii)

He's with other kids when I ask him he won't always come. (S.033.i)

Abstraction 4 (taken from Thèmes 11-15)

Students believe it is important to have a teacher who will listen to them.

Students want to be heard; students want to feel supported by their teachers.

Students who have teachers who will not listen to them feel they are denied this source of support.

Students believe they may rely on their teachers as a source of support. They expect teachers to listen to them and to help them, both with academic work and when dealing with social or personal issues, as shown by the following comments:

... if you get into a situation and you need help she [the teacher] can help you deal with it. (S.128.iv-v)

The teacher should listen to other people's thoughts and they'll be happy because the teacher listened to them. (S.102.v-vi)

... if the teacher doesn't listen you'll never know what to do. (S.138.iv)

Students testify to having received support from their teachers. These supportive teachers are the ones who took the time to listen to what students had to say, as explained in the following words.

My teacher always listens to me when I have something to say and when I don't understand something, he always helps me. (S.116.i-ii)

When something goes wrong out in the playground at recess or lunch I can always tell her what happened and how it upset me and she will listen to me and have a little talk to the other person. (S.044.i-iii)

By way of contrast, there are students who have a very different testimony. Some students feel they do not receive the support they desire from their teachers, and some feel they do not receive a fair hearing. These opinions are evidenced in the following quotes.

Mr Santos (pseudonym) and I usually get on very well but he doesn't always listen to me if I say something [against what] he has already resolved to do. (S.052.i-ii)

... when I go to him sometimes he doesn't listen very much (S.108.i-ii)

She [my teacher] sometimes doesn't listen to me. (S.122.v)

In computer she only listens to the people good at computer. (S.080.ii)

Sometimes I feel Miss Ward (pseudonym) doesn't support me. (S.063.iv)

These students feel they are denied the opportunity to be heard and supported, as shown by the above comment by student 080 who feels that she does not get the necessary help during computer lessons. When students discern that their teachers do not listen to them and do not support them, students may be reluctant to approach their teachers for help. In such instances, students may resolve not to rely on their teachers as a source of support and, in so doing, forego opportunities that they may have had to seek help from the teachers.

Abstraction 5 (taken from Themes 12-15)

There are students who want to be able to share personal information with their teachers and have it kept confidential. Some of these students have benefited from being able to confide in a teacher they trust. There are also students who choose not to share personal information with their teachers for various reasons, and in so doing, elect not to rely on their teacher for this form of support.

Nearly three quarters of the students in this study indicated that they are content with the opportunities they have to talk with teachers about personal or private issues. A number of students reported their satisfaction as shown by these comments:

Mrs Ferguson (pseudonym) and I get on well because she listens to me and I could talk to her about anything. (S.110.i-ii)

Mrs Mouchemore (pseudonym) always listens to me when I've got a problem or something. (S.114.ii-iii)

It's good to have a chat with them because it is really good to talk to a grown-up. (S.038.iv)

[It is important to have a teacher you can talk to] because sometimes you can't talk to your parents or your friends. (S.129.vii)

A number of students in this study said they opt not to share personal information with their teachers. One of the reasons for not sharing personal information with their teacher is because students felt there was no need; they had nothing of a personal or private nature that they needed to share, as shown by this statement.

I don't really have any personal things to talk about with her. (S.025.i)

Other students choose not to disclose personal information to their teachers because they have access to other people with whom they choose to discuss personal issues. For example, students 079 and 133 indicated they prefer to talk to their mothers.

Students who have had poor prior experience also choose not to share personal information with their teachers. This was the case for Jess as mentioned earlier in Theme 15. Jess said she never wants to share personal information with her teacher. She referred to a previous incident where private information had been entrusted to her teacher, and that trust had been broken. Jess has now resolved never to trust her teacher again.

Another reason why students do not want to share personal information with their teacher is due to poor teacher-student relationships. For example, Ricardo (pseudonym) indicated he never wants to share personal information with his teacher. In discussing this further, Ricardo simply stated he does not like his teacher (S.051.i, vi). It is interesting to note that the total responses Ricardo gave to the Student-Teacher Relationship Questionnaire reveal he thinks he has a very poor relationship with his teacher.

The next chapter presents a summary of the study and the answers to the research questions.

CHAPTER TEN

SUMMARISING THE RESEARCH QUESTIONS

Summary

Previous research has established that positive teacher-student relationships enhance children's educational experiences at school. Research has also established that relationships between teachers and students contribute to students developing a sense of self and contribute to their ability to adjust to school (see the Literature Review chapter). Positive teacher-student relationships promote students' cognitive, social and emotional development, and teachers who experience positive relationships with their students are believed to benefit by way of psychic rewards and increased job satisfaction. The present study builds on this foundation by placing greater emphasis on the social and emotional aspects of teacher-student relationships.

Research into the social and emotional aspects of teacher-student relationships is a relatively new area of study and, as such, there have been calls for further research in this area. This study is in response to such calls. Three key social and emotional aspects were identified from the literature on teacher-student relationships (namely, Connectedness, Availability and Communication) and were used to form the theoretical framework of the study. My study recognises that no single assessment tool adequately describes relationships (Pianta, 1999). By using a mixed-methods approach, I have utilised questionnaires to collect quantitative data and face-to-face discussions to collect qualitative data about teacher-student relationships. My study also supports the view that information about a particular relationship needs to be obtained from different perspectives (Pianta, 1992). Consequently teachers' views and students' views have been sought.

As research into the social and emotional aspects of teacher-student relationships is a fairly new area of study, there are few well-validated tools available. This study responds to the calls for the development of valid and reliable tools that can be used to better understand teacher-student relationships (Ang, 2005; Pianta, 1999). For this reason, world's best practice in

measurement in the human sciences (Rasch measurement) has been employed to develop two linear scales; one from the point of view of the teacher, and one from the point of view of the student. In so doing this study offers a completely new approach to better understand teacher-student relationships and the role these relationships play in the primary school classroom.

This study is important because it contributes new knowledge to the body of information about teachers' relationships with students in primary school classrooms in Perth, Western Australia. To date, much of the research published on teacher-student relationships originates from the United States of America. My research provides information based on Western Australian teachers and students, resulting in greater local applicability than that of research conducted overseas.

This study addressed six research questions. These will now be answered.

Research Questions

Research Question 1

Can a model involving three aspects (Connectedness, Availability and Communication) be devised to determine teacher self-reported views in three perspectives (ideal, capability and actual) with regard to the teacher-student relationship?

This study demonstrates that a model involving three aspects (Connectedness, Availability and Communication) can be devised to determine teacher self-reported views in three perspectives (ideal, capability and actual) with regard to the teacher-student relationship. This has been shown by analysing teacher questionnaire data and finding a good fit to the measurement model. The model is hierarchical, as explained in Chapter Three, and is based on the expectation that beliefs influence attitudes, attitudes influence intentions, and intentions influence behaviour (Ajzen, 1989). This study shows that attitude items (those from the 'ideal' perspective) are easier to answer than intentions (the 'capability' items), and intentions are easier to answer than behaviour

('actual' items). In this way, a pattern of difficulty emerges within the model, as was anticipated at the beginning of the study.

The responses made by teachers on the questionnaire support the inclusion of the three key aspects that have been identified in the Theoretical Model devised for this study (as presented in Chapter Three), namely, Connectedness, Availability and Communication. This is made evident by the frequency with which the response "Almost always (over 80% of the time)" was used when answering items from an idealistic view within each of the three key aspects. The questionnaire responses show there is close to ninety-five percent agreement from teachers that the items featured in the idealistic perspective are most necessary for positive teacher-student relationships to take place.

Research Question 2

Can a model involving three aspects (Connectedness, Availability and Communication) be devised to determine student self-reported views in two perspectives (ideal and actual) with regard to the teacher-student relationship?

This study demonstrates that a model involving three aspects (Connectedness, Availability and Communication) can be devised to determine student self-reported views in two perspectives (ideal and actual) with regard to the teacher-student relationship. This has been shown by analysing student questionnaire data and finding a good fit to the measurement model. As with the model for teacher self-reported views, the model for student self-reported views is hierarchical and is based on the expectation that beliefs influence attitudes, attitudes influence intentions, and intentions influence behaviour (Ajzen, 1989). Given limits to young children's conceptual capabilities, the model was simplified to consider just two perspectives from students. In this way, this study shows that the attitude items for students (those from the 'ideal' perspective) are easier to answer than behaviour items (from the 'actual' perspective). In this way, a pattern of difficulty emerges within the model, as was anticipated at the beginning of the study.

The questionnaire responses made by students support the inclusion of the three key aspects that have been identified in the Theoretical Model devised

for this study, namely, Connectedness, Availability and Connectedness. As was the case with teachers in this study, students made frequent use of the response "Almost always (over 80% of the time)" when answering items from an idealistic view within each of the three key aspects. Students used this particular response seventy-three percent of the time, indicating that they view the way a teacher connects with students, is available to students and communicates with students as significant to the development of teacher-student relationships.

Research Question 3

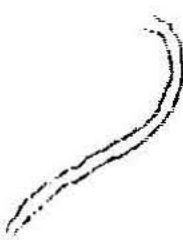
Can a linear scale of self-reported teacher-student relationships be created from the teacher's point of view in which items within the main aspects are ordered from easy to hard and calibrated on the same scale as the measures from low to high?

This study shows a linear scale of self-reported teacher-student relationships can be created from the teacher's point of view in which items within the main aspects are ordered from easy to hard and calibrated on the same scale as the measures from low to high. This has been shown using a Rasch measurement analysis with ten items, conceptually ordered from easy to hard, and answered in three perspectives ('Idealistic', 'Capability' and 'Actual'). Using the RUMM 2020 computer program (Andrich, Sheridan, & Luo, 2005) six items were found that did not fit the measurement model and were deleted from the scale. The remaining 24 items were analysed and a reliable linear, unidimensional scale of Teacher-Student Relationships was created. The scale uses the teacher's view and calibrates the measures on the same scale as the item difficulties.

A summary of the indicators of the scale data reliability showed that there was:

1. Good global and person item fit to the measurement model;
2. Good individual fit to the measurement model;
3. Consistent and logical answering of the response categories in line with their theoretical ordering;

4. A good Person Separation Index indicated that the person measures were well separated in comparison to the errors;
5. A good item-trait interaction indicated the measurement of a unidimensional trait;
6. Reasonable targeting of the items against the person measures were evident, although some harder items need to be added for any future use of the scale.



As anticipated, the items within each of the key aspects were found to be ordered from easy to hard. This order of difficulty fits the Structural Model presented in Chapter Three whereby attitudes influence intentions and are easier than intentions, and whereby intentions influence behaviour and are easier than behaviour. In this study, all attitude items (idealistic) were easier than the actual behaviour, and capability items were harder than the idealistic but easier than the actual behaviour. For example, in this study, teachers found it very easy to say that, idealistically, they would like to get along well with their students. Teachers found it moderately harder to say they were capable of getting along well with their students, and found it harder still to say they did actually get along well with their students. Since the teachers' responses fit the expected pattern of difficulty, valid inferences can now be made from the scale.

Research Question 4

Can a linear scale of self-reported teacher-student relationships be created from the student's point of view in which items within the main aspects are ordered from easy to hard and calibrated on the same scale as the measures from low to high?

This study shows a linear scale of self-reported teacher-student relationships can be created from the student's point of view in which items within the main aspects are ordered from easy to hard and calibrated on the same scale as the measures from low to high. This has been shown using a Rasch measurement analysis with ten items, conceptually ordered from easy to hard, and answered in two perspectives ('what I wish would happen' and 'what actually happens') giving an effective scale of 20 items. The RUMM 2020 computer program (Andrich, Sheridan, & Luo, 2005) was used to analyse the

data and produce a reliable linear, unidimensional scale of Teacher-Student Relationships using student views. In the scale the measures are calibrated on the same scale as the item difficulties.

A summary of the indicators of the scale data reliability showed that there was:

1. Good global and person item fit to the measurement model;
2. Good individual fit to the measurement model;
3. Consistent and logical answering of the response categories in line with their theoretical ordering.
4. A good Person Separation Index indicating that the person measures were well separated in comparison to the errors;
5. A good item-trait interaction indicating the measurement of a unidimensional trait;
6. Reasonable targeting of the items against the person measures, although some harder items need to be added for any future use of the scale.

As expected, the items within each of the key aspects were found to be ordered from easy to hard. This order of difficulty fits the Structural Model presented in Chapter Three. The simplified model for students uses two perspectives and predicts that attitudes influence behaviour and are easier than behaviour. In this study, all attitude items (idealistic) were easier than the actual behaviour. For example, students found it very easy to say that, idealistically, they would like their teachers to listen to them. Students found it harder to say their teachers actually did listen to them. Since the students' responses fit the expected pattern of difficulty, valid inferences can now be made from the scale.

Research Question 5

What are teachers' self-views about the aspects of Connectedness, Availability and Communication with respect to their ability to impact on relationships with students?

Teachers agree that the three aspects of connecting with students, being available to students and communicating with students all impact on the teacher-student relationship. During the face to-face discussions, teachers had

much to say about how these three key aspects impact on their relationships with students. Teachers discussed additional aspects that had an impact on their relationships with students, namely, teachers' relationships with students' parents and teachers' ability to self-reflect on their relationships with students. Teachers' self-views are made evident in the thirty-one themes that were created, based on analysis of the discussion data. The themes are summarised below within the five main categories that featured during the analysis. The themes reflect teachers' self-views regarding the factors that impact on their relationships with students.

Category 1: Connectedness (Themes 1-10)

This study demonstrates that teachers believe that being able to establish positive relationships with their students is an essential part of their work. Teachers consider positive relationships with students to be necessary for effective teaching and learning to take place. Teachers also believe it takes time and effort on their part to connect with students in order to establish positive teacher-student relationships. Teachers connect with students by showing a personal interest in them and by getting to know them as individuals. Showing empathy towards students and being authentic in their relationships with them are ways that teachers believe they are able to connect on a personal level with the students they teach.

Teachers indicate that there are other factors that contribute to the development of positive connections with students. For example, teachers who are experienced in teaching a particular year level believe they have insight into working with students of that particular year level in a way that contributes to their ability to connect with students. In addition, teachers believe having the opportunity to work with the same class of students for a number of years can help strengthen their relationships with those students.

Whilst all the teachers in this study consider it important to develop positive relationships with every student, teachers concede there may be various blocks that prevent this from happening. Two examples include personality issues that may arise and the demands of a large class; these situations can make it difficult for teachers to successfully connect with all

students.

Category 2: Availability (Themes 11-17)

Teachers in this study believe that by being available to their students they are able to strengthen teacher-student relationships. They recognise the importance of making time to be available to their students. Teachers said they use various means to communicate their availability to their students, including direct invitations to individuals and to the whole class. Teachers are also alert to various cues students may give to indicate that help is needed.

Teachers make efforts during and outside of class time to be available to their students. This sometimes involves time before school, during recess and lunch breaks, during DOTT time and even after school. Teachers recognise the importance of being available to follow up with individuals and with groups of students, and of capitalising on opportunities to spend time with their students apart from the school setting. To be available in these ways teachers accept they must prioritise their time, and be prepared to give up some of their own time. In so doing, teachers feel the increasing pressure of demands on their time. When there is insufficient time to spend with their students, teachers feel it is a struggle to maintain positive relationships with them.

Category 3: Communication (Themes 18-27)

Teachers believe that effective communication contributes to being able to foster positive relationships with students. Teachers believe it is important to keep the lines of communication open so students feel free to discuss anything at all, even personal issues. This is made possible by ensuring their communication is non-threatening, by being a good listener, and by building a sense of confidentiality and trust into their relationships with students. Additionally, teachers recognise the importance of being natural in their communication (being "real") and being able to share a sense of humour with their students.

Teachers attest to certain constraints that may limit their opportunities to communicate effectively with their students. These include demands made on teacher time, perceptions about restrictions to do with physical contact with

students, and even a student's personality; all of these circumstances are perceived to be possible blocks to teacher efforts to communicate effectively with students.

Category 4: Teachers Relationships with Parents (Themes 28-29)

Teachers recognise the importance of building a supportive relationship with parents and the benefit that brings to them in their role as teacher. Additionally, out of school contact with parents is believed to be valuable in establishing a positive teacher-student relationship.

Category 5: Self-Reflection for Teachers (Themes 30-31)

Teachers find it valuable to reflect on their teacher-student relationships. Such self-reflection helps to inform teachers of the areas of strength and need concerning the relationships they have with the students in their classes. For this to happen, teachers need to have tools to guide and assist them in the reflection process.

Research Question 6

What are students' self-views about the aspects of Connectedness, Availability and Communication with respect to their teacher's impact on their shared relationships?

Students agree that it is important to have a good relationship with their teachers. Students believe that when they have a positive teacher-student relationship they are able to perform better at school and they enjoy school more. Students agree that the way teachers connect with students, are available to students and communicate with students all affect teacher-student relationships. During the face-to-face discussions, students discussed the ways in which they felt these three key aspects impacted on their teacher-student relationships. Students' self-views are made evident by the eighteen themes that were created based on analysis of the discussion data. The themes will now be reviewed within the five main categories that featured during the analysis. The themes reflect students' self-views regarding the factors that impact on their relationships with teachers.

Category 1: Connectedness (Themes 1-8)

Students like to connect with their teachers on a personal level. Students who have the same teacher for more than one year feel that they are able to connect even more closely with that particular teacher.

Students believe teachers use certain cues to indicate whether or not students are liked. For example, when teachers display compassion and empathy, and when teachers communicate approval of student behaviour, students interpret these as indicators that the student is liked by the teacher.

Students are able to identify an element of reciprocity in their relationships with their teachers. By listening to each other, caring for each other, helping each other, sharing jokes and laughter, students see themselves being able to connect with their teachers in an equal fashion. In this way students believe the feelings between themselves and their teachers are mutual. Some students even regard their teacher as a friend.

Category 2: Availability (Themes 9-10)

Students perceive their teachers to be available to them and able to help. Students recognise that teachers are busy people and, as such, accept that there will be times when help is not immediate. In these situations, students understand the need to be patient and to wait.

Category 3: Communication (Themes 11-15)

Students value being listened to. They appreciate being able to share personal information with a teacher, and value confidentiality when personal information is shared. Even though students find it beneficial to talk with their teachers about personal problems or concerns, some students may choose not to share personal information about themselves with their teachers.

Category 4: Equality (Theme 16)

Students want teachers to treat all students equally. They do not want their teacher to show favouritism in the classroom.

Category 5: Teacher Mood (Theme 17-18)

Students feel responsible for their teacher's mood. This is particularly the case when a teacher may be angry or in a grumpy mood. When this happens, students feel somehow responsible for their teacher's emotional state.

Students do not like it when their teacher raises their voice in class. They prefer it when teachers refrain from yelling or shouting at them.

The next chapter presents the discussion and the implications of the study.

CHAPTER ELEVEN

DISCUSSION AND IMPLICATIONS

This chapter discusses the findings of this study in relation to previous research findings on teacher-student relationships as presented in the literature review. The chapter concludes with implications for educational administrators, teachers, students, policy makers and further research.

Discussion

The idea that teacher-student relationships are important to the whole school experience is consistent with that of McInerney and McInerney (1994) who describe positive teacher-student relationships as "both a function of effective teaching and learning and a significant contributing factor" (p. 579). When teachers' relationships with students are caring and supportive, teachers teach more effectively and student performance is enhanced. As teachers and students engage in positive ways in the classroom through effective teaching and learning experiences, their relationship is further enhanced.

Theoretical Model

This study shows that the relational aspects of Connectedness, Availability and Communication, as presented in the Theoretical Model (Chapter Three), are necessary contributors to positive teacher-student relationships. This is evidenced by the responses teachers and students made on the questionnaires and during the face-to-face discussions, and is discussed as follows.

Connectedness

In this study, responses from the participants indicate that a strong connection between a teacher and a student is absolutely necessary for establishing positive teacher-student relationships. The study shows connectedness is evident when a teacher likes a student, is able to get along well with them and shows a personal interest in the student's life. Connectedness is also evident when the teacher and the student care about each other. This kind of personal connection produces feelings of mutual

respect and regard. These findings confirm what the literature says about personal connections between teachers and students being important (Corrie, 2002; Good & Brophy, 2000; Noddings, 2005; Pollard, 1985).

Teachers in this study connect with students by being authentic in their relationships with them. This particular idea is supported by Rogers (1983) who identifies authenticity, or genuineness, as essential for developing caring relationships. Teachers who display authenticity in their relationships have a genuine concern for the well-being of individual students and a real desire to have a positive input into the lives of those they teach. Additionally, teachers in this study use empathy to connect with students. Empathy is documented in the literature as a fundamental interpersonal skill, whereby individuals recognise the emotions in others (Goleman, 1995). Empathetic teachers are better able to identify how a student may be feeling, and are more in tune with the subtle signals students may give to indicate what they want or need.

When relationships with students are strained or difficult, more work is required by the teacher to improve the situation. This is a notion supported by teachers in this study who recognise that when relationships are in trouble, teachers must pour in extra time and extra effort. For example, teachers may experience difficulty connecting with students when there are personality issues. A personality clash is often characterised by "discordant interactions and a lack of rapport between teacher and child" (Birch & Ladd, 1996). Another example is that of inappropriate student behaviours that may also make it difficult for a teacher to connect with a student. Such behaviours may include not following teacher's instructions or being slow to follow them; talking out of turn; inappropriate movement around the room; not having the necessary materials to complete learning tasks; not settling to work; not completing learning tasks; preventing others from engaging in learning tasks and display of physical aggression (Arthur, Gordon, & Butterfield, 2003; Corrie, 2002; W. Rogers, 1990). In these instances, teachers in this study acknowledged the need to work harder at making positive connections with their students in order to establish a positive teacher-student relationship.

Availability

Teachers recognise the need to put time and effort into being available to their students. As indicated in the literature, "time and repeated encounters" are necessary for teachers and students to come to know one another well (Pianta, 1999, p. 29). In many cases, teachers in this study opt to give up their private time in order to be more available to their students. Students, in return, value having a teacher who is available and approachable. However, teachers find it increasingly difficult to afford the necessary time and effort for building positive relationships with students while coping with the extra demands made of them professionally, particularly with regard to increased administrative tasks. At times, increased work obligations prevent teachers from being as available to their students as they desire.

One way teachers try to maintain their availability to students is by making time to talk with individual students before and after school and during break times. This is recognised by Good and Brophy (2000) as an important way to build close relationships, to earn the respect and affection of students, and to maximise student engagement in classroom activities.

Another way the teachers in this study try to be available to their students is by scheduling short, regular time slots with individuals. This is an idea advocated by Pianta (1999) who describes the strategy as "Banking Time". While this particular strategy is used for remediation with students who have relational difficulties, it is also useful as a preventative approach. In Banking Time, teachers commit to spending between 5 and 15 minutes with individual students on a regular basis. During this shared time, the teacher and student share an activity that has been selected by the student. The activity may be doing a puzzle together, reading a book, playing a game or just chatting. As the teacher and the student share in the activity, the teacher communicates that the student is valued and important and that the teacher is available, safe and consistent. These messages help the student to perceive the shared relationship in a positive light. As the teacher and student spend regular time together, they accumulate positive shared experiences. In this way, when there is tension or conflict, the teacher and the student can "draw on their accrued relationship capital and can 'withdraw' from the relationship resources ... [to]

enable them to interact effectively in times of stress" (Pianta, 1999, p. 140).

Communication

Teachers and students in this study agree on the importance of good communication for developing positive teacher-student relationships. Their views confirm what the literature has to say about the need for teachers to have good communication skills, and in particular, good listening skills (Brophy & Good, 1986). Good listening skills include being able to listen with empathy. Goleman (1995) describes being an empathetic listener as one who hears "the feelings *behind* what is being said" (p. 145). In this way, when students talk with teachers about school work or personal issues, teachers are able to really hear what students are saying and be in a better position to provide the necessary support.

Teachers' Relationships with Parents

This study found that shared relationships between teachers and their students' parents impact on teacher-student relationships. Teachers and students made reference to the added connection they felt towards each other on account of there being a positive teacher-parent relationship. This idea is supported in the relationship literature. When a teacher develops a positive relationship with students' parents, it provides a link that strengthens a child's sense of the teacher being a significant person in their life (Tietjen, 1989). Additionally, when teachers have a positive rapport with parents, student's performance at school is enhanced. When school and home work together students attain higher academic achievement, and have better behaviour at home and at school (Corrie, 2002; Padgett, 2006).

Self-Views

This study demonstrates the importance of obtaining reliable self-views to better understand teacher-student relationships. By giving teachers and students the opportunity to share their perspectives, it is possible to gauge their representations of teacher-student relationships. It is also possible to gain an insight into what aspects contribute to positive relationships. This is particularly important considering the lack of information currently available from the student's point of view. Increasingly, there is an understanding that students are

able to accurately assess and express how they perceive themselves and others within their social worlds (Mantzicopoulos, 2005; Murray & Greenberg, 2000; Sztejnberg, den Brok, & Hurek, 2004; Valeski & Stipek, 2001). Evidence is provided in this study to show that students as young as seven years of age do have an ability to discuss aspects of the relationship they have with their teacher, and that students are able to provide reliable self-reports. The self-views of both students and teachers in this study have been shown to be reliable because modern methods of measurement have been used to produce linear measures. This is a unique aspect to the study and one that makes a new contribution to this area of research.

Self-Reflection

It is important for teachers to reflect on their shared relationships with students. This need was voiced by a number of teachers. However, tools for self-reflection of teacher-student relationships are lacking (Pianta, 1999). The questionnaires and the discussion schedules developed in this study are tools that may be used by teachers for self-reflection. Such self-reflection may assist teachers to identify areas of particular relationships that are developing well and areas that need further attention.

Self-reflection for teachers extends to considering students' views. Teachers who support students in the process of self-reflection may gain a sense of how they as teachers are being perceived by the students. Such an insight may assist teachers to identify areas of the relationship that need adapting. As Pianta (1999) states, "Children's feelings about teachers ... contribute to an understanding of the relationship and should be acknowledged" (p. 86). This may be particularly helpful when the teacher's view of a particular relationship does not match that of the student. This notion is explored further in the following discussion on congruence of self-reports.

Teacher-Student Congruence of Self-Reports

There have been calls for further examination of teacher-student congruence of self-reports within specific teacher-student dyads (Mantzicopoulos, 2005). In other words, there is a need to be able to focus on a specific teacher and a specific student who share a dyadic relationship with

each other and compare the teacher's perspective of their relationship with that of the student to determine how closely the two different perspectives match. In this way, perceived gaps in the relationship may be identified and addressed. This study shows how this may be done.

The questionnaires constructed for this study ask teachers and students to report on ten teacher behaviours. Congruence of opinion regarding the behaviours can be determined by comparing the responses made by a particular student with those made by their teacher. This means making a comparison between the questionnaire responses made by the teacher in the column headed "Actual (This is what actually happens)" and the questionnaire responses made by the student in the column headed "This is what does happen". A match between the responses indicates congruence, a mismatch shows otherwise. For example, if a student reports that the teacher listens to him or her most of the time and the teacher makes a corresponding report, it is fair to say that the student and teacher share a congruent view. If the student reports that the teacher listens to him or her only some of the time, but the teacher reports otherwise, an incongruity is evident. The teacher would then need to determine if his or her own behaviour needed to be adapted (Sztejnberg, den Brok, & Hurek, 2004). In this case, the teacher may decide to work on improving his or her active listening skills and affording more time to listen to this particular student.

When determining congruence of self-reports and deciding whether or not teachers need to adapt their behaviour, it is necessary to take into consideration one's ideal view and their actual view of the relationship. Doing so provides a context upon which to base the teacher's and the student's expectations of the shared relationship. This is made possible by referring to the responses in the "What I 'wish' would happen" column on the student's view questionnaire, and the idealistic responses "This is what I would like to happen" made on the teacher's view questionnaire. To use the example given earlier, if a student reports that a teacher listens to him or her only some of the time, and reports that ideally he or she only wants the teacher to listen to them some of the time, the student has indicated satisfaction with this particular item. That is, the teacher's behaviour matches what the student desires and no change in

teacher behaviour would be expected. If, however, the student reports that ideally he or she wants the teacher to always listen and yet, in reality, the teacher only listens some of the time, a change in teacher behaviour could be warranted. Such a change would be especially anticipated if the teacher thinks likewise. That is to say, if the teacher has indicated on his or her questionnaire that their ideal behaviour is to always listen to the student. In this way, teachers may examine students' reports and compare them with their own to discern congruency. When particular aspects of the relationship are found to be lacking, specific support can be given to strengthen those areas of the relationship.

Examples of relationships in this study that warrant specific support were reported on by four students in the same class. An examination of the students' responses showed a pattern of dissatisfaction with their teacher's behaviour. In particular, three of the students used the responses "some of the time" and "never" when reporting on most of their teacher's behaviours. The corresponding responses from the teacher indicate that he felt the relationships were satisfactory. The lack of congruence indicates a mismatch between the teacher's perspective and that of the students. Upon closer inspection, the teacher's expectations of the relationships were mainly fulfilled, that is, his actual behaviour closely matched his idealistic view. This confirms that, from the teacher's perspective, the relationships with the four students were satisfactory. A closer look at the student's questionnaire responses shows a different story. Three of the four students indicated that they want more from their teacher in terms of his ability to connect with them, be available to them and communicate with them. The fourth student has indicated he wants little or nothing to do with his teacher. The fourth student concluded the questionnaire with the comment that he does not like his teacher. The mismatches indicate that there are gaps in the way this particular teacher is relating to his students. As a result of the analysis, this teacher needs guidance and support to strengthen his relationships.

Review of the Questionnaires

Participants in this study found the questionnaires easy to use. Even though the format of the questionnaire is different to the kind teachers and students are generally familiar with, the participants found the instructions were

adequate and the setting out of the items easy to follow. Furthermore, at roughly ten minutes each, the questionnaires did not take very long to complete.

With regard to the response categories on the questionnaire used to gauge the teachers' views, it was helpful to include both the wording and the time percentages as some teachers reported using the wording while others preferred to use the time percentages. The clock faces depicted in the response categories on the questionnaire used to gauge students' views were a useful tool, and helped students to visualise and choose between different time periods.

Review of the Discussions

In this study the face-to-face discussions provided a valuable opportunity to gain insight to the points of view of both teachers and students. Rather than limiting the responses from the participants according to set response formats, as has happened in past research, this study used the discussions to provide teachers and students with the opportunity to make extended responses. These extended responses were useful for verifying questionnaire responses and for learning about teachers' and students' experiences and the meaning they place on their experiences. In addition, teachers reported the benefit of taking time to think about their classroom relationships. One teacher said she had found the experience valuable and another said it had been affirming for her as she reflected on her own relationships. Another teacher said he had never been asked about his relationships with students and so had not considered the issue before.

Implications

Research into relational aspects of the teacher-student relationship is necessary to strengthen and enhance the influence of positive teacher-student relationships. This study has shown that such research is made possible using modern methods of measurement, and by considering the points of view of teachers and students. The results from this research produce implications for educational administrators, teachers, students, policy makers and for future research. These implications are explained as follows.

For Educational Administrators

There are benefits to be experienced from an administrative point of view when teachers are encouraged and supported in establishing and maintaining positive relationships with their students. For example, positive teacher-student relationships contribute to higher levels of job satisfaction and so impact on teacher morale (Hargreaves, 2000; Weare, 2000). Teachers who have positive relationships with their students want to go to school and look forward to spending time with their students. On the other hand, poor classroom relationships may contribute to teacher burn out and to depression and absenteeism (Weare, 2000). For these reasons alone it may be said that educational administrators have an obligation to actively work towards strengthening teacher-student relationships.

An administrative responsibility of schools is to regularly appraise staff. Given that the development of children's cognitive and socioemotional competence is enhanced by teachers who are able to interact with students in warm, affectionate ways, it then follows that staff appraisal should include an overview of teacher-student relationship development (Kienbaum, 2001; Peisner-Feinberg et al., 2001). Considering the limited tools available for assessing teacher-student relationships, the tools developed in this study would be useful in this regard. The questionnaires and the discussion schedules in this study may be used by educational administrators to help teachers to recognise teacher-student relationships that are working well and those that are in trouble. In so doing, administrators can provide specific support to teachers and students in need.

The results of this study suggest that teachers and students benefit from spending extended periods of time with each other. Decisions regarding the length of time teachers spend with students are made by school administrators. To make optimal use of teacher-student contact time, administrators must carefully consider two main areas; the timetabling of specialist staff and the option of looping.

While it is acknowledged that specialist staff play a valuable and necessary role within the primary school, it is vital that educational

administrators limit the number of teachers that students spend time with. For example, some schools employ specialist staff in the areas of sport, music, art and languages other than English. In addition, many schools have a specialist library teacher. While it may seem advantageous to expose students to a wide range of expertise within specialist areas, doing so at the expense of teacher continuity is not in the best interests of primary students' development. The greater the number of teachers engaged to work with individual students the less time each teacher is able to spend with them. This has the effect of splintering the timetable and making it more difficult for teachers and students to establish personal relationships. It is preferable for teachers and students to spend prolonged periods of time together and this is achieved by limiting the number of staff assigned to each student.

In considering ways to enable teachers and students to spend prolonged periods of time together, educational administrators need to consider the option of looping. As explained earlier, looping is the practice whereby teachers teach the same class of students for two or more consecutive years. Doing so has been found to enhance teacher-student relationships and to contribute to improved learning for students (Denault, 1999; Noddings, 2005; Pianta, 1999). In instances where a teacher and student have a strained relationship, looping may well not be a viable option. Even so, the potential benefits of looping make it an option worth exploring.

For Teachers

Teachers are being encouraged to take on a more active role in the promotion of children's emotional well-being, and to capitalise on opportunities to relate to students, particularly those at risk, in positive ways (Karen, 1998). Karen (1998) claims "the school years are a unique opportunity for troubled children to be redirected emotionally, but that opportunity has not been seized" (p. 424). It has been suggested that teacher-student relationships can be harnessed as a preventative intervention and that positive teacher-student relationships offer protective factors for students (Karen, 1998; Pianta, 1999). For these reasons it is necessary for teachers to be aware of the importance of developing and maintaining positive relationships with students, and to be better equipped to identify aspects of the teacher-student relationship that need to be

strengthened. This study contributes information in these areas by reporting on ways in which teachers successfully work at building positive relationships and providing tools that assist in the monitoring of relationship development.

For teachers to effectively monitor the development of their relationships with students, they need information about their relationships. Teachers are typically not encouraged or supported in this kind of self-reflection (Pianta, 1999). This study offers tools that will assist teachers in the self-reflection process by helping them to examine their own views and those of their students. The tools are easy to use, not time consuming, and help to pinpoint areas of strength and need within individual relationships. To make use of the discussion component, teachers would need to seek support from a mentor or school psychologist. In using the tools, teachers may choose to periodically assess their relationships with all their students, or to select and assess a sample of students. In selecting a sample of students, teachers may take a trouble shooting approach and decide to find out information about specific relationships that are conflictual or deemed to be in trouble.

For Students

This study demonstrates that students are able to comment on their perspectives with regard to their relationships. Students are able to provide teachers with valuable insight into what students expect from the relationship, and how students perceive things to be. Given that such insight can guide teachers in improving the way they relate to their students, an implication from this study is that teachers and educational administrators should engage students in the assessment process by giving them the opportunity and the means to provide information about their relationships with teachers.

In recent years there has been a growing awareness of mental health disorders in Australia, and surveys have been used to determine the scope of the problem (Minas & Sawyer, 2002). Extensive research conducted in 1998 found that, Australia-wide, over 17% of adults and 14% of children and adolescents had a mental health disorder or mental health problem - a prevalence rate considered comparable to rates in other developing nations (Sawyer et al., 2000). In Western Australia, a child health survey conducted

between 1993 and 1994 found that around 17% of 4 - 16 year old children and adolescents had significant mental health problems and as many as one in four children are currently considered to be at risk of developing mental health problems (Zubrick et al., 1995). Two of the eight mental health problems specified were "social problems", which referred to an individual's inability to get along with peers, adults and siblings, and "anxiety/depression", which referred to an individual feeling lonely, fearful, unloved and worthless (Zubrick et al., 1995). The increased awareness of mental health concerns in Australia highlights the need for strategies to be developed to address the problem. The development of positive teacher-student relationships is seen as important for promoting mental health in students (Denham, 2001; Nadel & Muir, 2005). This study contributes towards the development of strategies to promote the mental well being of students through the identification of social and emotional aspects of the teacher-student relationship that may be actively strengthened in order to enhance the relationships that teachers and students share.

For Policy Makers

Recent school reform in the United States has added pressure to school stakeholders and policy makers by legislating detailed expectations for student performance and consequences for students, teachers, and schools who fail to meet those expectations (Klem & Connell, 2004). Similar legislative changes have been mooted here in Australia. Recent debate has covered such topics as the development of a National Curriculum to specifically raise literacy and numeracy standards across the country, and the introduction of merit pay or performance based salary for teachers (Department for Education Science and Training, 2007a, 2007b). Any changes that our policy makers make must guard against student achievement becoming the sole focus of attention. An educational system that determines its success by demonstrable evidence may direct the spotlight onto standards of academic achievement and direct attention away from social and emotional areas of development. As Hargreaves (2000) pointedly states:

If we are serious about standards, we must become serious about emotions too and look again at the organizational conditions and professional expectations that can increase emotional understanding between teachers and their students as a basis for learning. By focussing only on cognitive standards themselves, and the rational processes to

achieve them, we may, ironically, be reinforcing structures and professional expectations that undermine the very emotional understanding that is foundational to achieving and sustaining those standards. (p. 825)

If a National Curriculum is to be introduced, our policy makers must avoid the pitfalls experienced in other parts of the world. For example, some now recognise that the National Curriculum implemented in the United Kingdom during 1988-1993 was done so in a "clearly unmanageable" way (Woods & Jeffrey, 1996, p. 116) and over the last twenty years has contributed to increased stress levels and a reduction of retention levels amongst teachers (Troman & Woods, 2001). In the push to raise teaching standards and levels of literacy and numeracy here in Australia, policy makers must not overlook the importance of the social and emotional involvement of teachers and students in the teaching and learning process. As Pianta (1999) suggests "No amount of focus on academics, no matter how strong or exclusive, will substantially change the fact that the substrate of classroom life is social and emotional" (p. 170). Goleman (1995) challenges schools to educate the whole child, "bringing together mind and heart in the classroom" (p. xiv). In helping to maintain a balanced approach to determining the success of our education system here in Australia it is vital that when policy makers debate National Curriculum, they must focus on strengthening academic learning alongside social and emotional development. The teacher-student relationship must be recognised as relevant to the success of instruction and seen as a powerful resource in the classroom. Not only must our policy makers be aware of the importance of teacher-student relationships with regard to student achievement and development, but they must also be committed to supporting teachers in harnessing this resource.

For Future Research

Two fully-refereed papers, based on this thesis, have been approved for presentation at the Australian Association for Research in Education Conference in November 2007 (Leitão & Waugh, 2007a, 2007b), and it should be possible to extend this research to country areas of Western Australia and inter-state. Whilst this study has shown it is possible to create a linear measure of teacher-student relationships to better understand teachers' views of their relationships with students, more needs to be done to extend the use of the two

questionnaires. Future studies could expand on the Questionnaires used in this study and build in additional stem items. Furthermore, future studies could incorporate additional aspects that impact on the shared relationship between teachers and students. Examples include class size, length of contact between class teacher and the class, the timetabling of specialised staff, and the use of humour in the classroom.

The results of the Rasch analysis for this study indicate that modifications need to be made to the questionnaires to improve them for future use. Two specific improvements are noted. Firstly, the response categories need to be revised. In this study, neither the teachers nor the students could consistently discriminate between the two lowest categories, namely, 'Not at all' and 'Some of the time (less than 50% of the time)'. This problem can be overcome by collapsing the two lowest response categories into one, namely, 'Not very often' (less than 50% of the time).

A second improvement to the questionnaires used in this study concerns replacing some of the items. The results of the Rasch analysis show that more difficult items need to be added to both the teacher and the student questionnaire to cover the higher measures. Also, in the questionnaire used to gauge teachers' views, it was found that six of the thirty items did not fit the measurement model. These six items need to be replaced by items that will fit the measurement model. I have revised the questionnaires to include these modifications and they are now ready for use in future studies. (See Tables 11.1 and 11.2).

Conclusion

To conclude, this study contributes new knowledge to the body of information about teachers' relationships with students in primary school classrooms in Perth, Western Australia. Further research in this area is needed to expand our understanding of how good teacher-student relationships can be recognised and promoted. To use the words of Pianta (1999), "Relationships with teachers are an essential part of the classroom experience for all children and a potential resource for improving developmental outcomes" (p. 21). The more that is known about how to identify and build positive teacher-student

relationships, the better use can be made of this resource in our schools and in our communities.

Table 11.1

Revised Questionnaire: Teacher's View

Teachers' Relationships with Students Questionnaire (Teacher's View)

The aim of this questionnaire is to find out your self-views regarding your relationship with a child in your class. Answer each question with one particular child in mind. One set of responses is labelled "idealistic", the next is "capability", and the third is "actual". These labels are to help you differentiate between what you would *idealistically* like to happen, what you are *capable* of making happen, and what *actually* does happen. Please rate the 30 questionnaire items using the following response format.

Almost always (over 80% of the time)	record 3
Most of the time (50% to 80% of the time)	record 2
Not very often (less than 50% of the time)	record 1

Example Item 1

I care about this child.

If you think that ideally you should care about child "A" almost always (over 80% of the time), record 3. If you think you are capable of caring about child "A" most of the time (50% to 80% of the time) record 2. If you think that actually it is not very often that you care about child "A" (less than 50% of the time) record 1. Your recorded responses would be as follows:

Item no.	Item wording	Idealistic (This is what I what would like to happen)	Capability (This is what I am capable of)	Actual (This is actually happens)
----------	--------------	--	--	--

Sub-group: Connectedness

1-3	I care about this child.	3	2	1
-----	--------------------------	---	---	---

Please indicate if you are willing to participate in a follow-up discussion.

YES ☐ NO ☐

If you responded "yes", please supply your name and contact number. All responses to the questionnaire will remain strictly confidential.

(print name)

(contact number)

(signature)

(date)

Table 11.1(Continued)

Teachers' Relationships with Students Questionnaire
(Teacher's View)

Item no.	Item wording	Idealistic (This is what I would like to happen)	Capability (This is what I am capable of)	Actual (This is what actually happens)
Sub-group: Connectedness				
1-3	I care about this child.			
4-6	This child and I get along well together			
7-9	I am interested to learn about this child's personal thoughts, feelings and experiences			
10-12	This child and I have a supportive, trusting relationship.			
Sub-group: Availability				
13-15	I am available for this child.			
16-18	I am available and will provide help when this child asks for it.			
19-21	When necessary, I put extra time and effort into helping this child.			
Sub-group: Communication				
22-24	I communicate with this child in positive and sensitive ways			
25-27	I communicate in ways that enable this child and me to understand each other			
28-30	I communicate in ways that help this child to resolve personal difficulties (academic or personal)			

Are there any comments that you would like to make about your relationship
with this particular student or about your relationships with students in general?

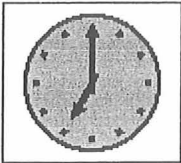
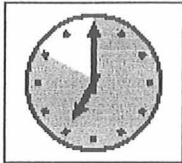
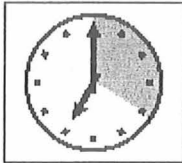
Table 11.2

Revised Questionnaire: Student's View

Teachers' Relationships with Students Questionnaire
(Student's View)

The child is asked to think about each statement in relation to their current classroom teacher, and to rate a response according to the format below.

Response Format

		
Almost always 3	Most of the time 2	Some of the time 1

Item no.	Item wording	Response	
		This is what does happen	What I "Wish" would happen
Sub-group: Connectedness			
2-1	My teacher cares about me.	_____	_____
4-3	My teacher and I get on well together.	_____	_____
6-5	My teacher is interested in me as a person (that is, in what I think and feel, and in what I do.	_____	_____
8-7	My teacher and I have a good, trusting relationship.	_____	_____
Sub-group: Availability			
10 -9	When I need help, I can ask my teacher	_____	_____
12-11	When I ask for help, my teacher gives it to me.	_____	_____
14-13	When I need extra help, I can rely on my teacher to give it to me.	_____	_____
Sub-group: Communication			
16-15	My teacher is easy to talk to.	_____	_____
18-17	When we talk, my teacher and I understand each other.	_____	_____
20-19	When we talk, my teacher helps me to feel better and to work through any problems.	_____	_____

Are there any comments you would like to make about the relationship you have with your teacher?

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Appendix A

ECU Human Research Ethics Committee Approval



CHURCHLANDS CAMPUS

Pearson Street, Churchlands
Western Australia 6018
Telephone (08) 9273 8333
Facsimile (08) 9273 8661

ABN 54 361 465 361

6th August 2002

Human Research Ethics Committee

Ms Natalie Leitao (Student # 0864 842)
15 Melaleuca Court
Morley 6062



Dear Ms Leitao

Code: 02-107

Project Title: *Teacher-Student Relationships in the Primary School*

This proposal has been reviewed by members of the Human Research Ethics Committee at its meeting on the 2nd August 2002.

I am pleased to advise that the proposal complies with the provisions contained in the University's policy for the conduct of ethical research, and your application for ethics clearance has been approved.

Period of approval: From 5th August 2002 To 31st December 2004

With best wishes for success in your work.

Yours sincerely

Marilyn Beresford
EXECUTIVE OFFICER
Phone 9273 8170
Fax: 9273 8661
Email: m.beresford@cowan.edu.au

Attachment: Conditions of Approval

cc. Dr R Waugh, Supervisor
Dr C Maloney, Supervisor
Ms C Wright, Executive Officer, Office Research Services
Ms J Knight, Manager, Graduate School
Ms S Kearn, Executive Officer, HDC

Appendix A (Continued)

HUMAN RESEARCH ETHICS COMMITTEE

For all queries, please contact:

Research Ethics Officer

Edith Cowan University

100 Joondalup Drive

JOONDALUP WA 6027

Phone: 6304 2170

Fax: 6304 2661

E-mail: research.ethics@ecu.edu.au



JOONDALUP CAMPUS

100 Joondalup Drive,
Joondalup
Western Australia 6027
Telephone 134 328
Facsimile (08) 9300 1257

ABN 54 361 695 361

CRICOS 915 112 73E

31 October 2006

Mrs Natalie Leita

15 Melaleuca Crt

Morley WA 6062

Dear Natalie

PROJECT CODE	02-107 LEITAO
PROJECT TITLE	Teacher-Student Relationships in the Primary School
CHIEF INVESTIGATOR	Mrs Natalie Leita
ETHICS APPROVAL DATES	FROM: 6 August 2002 To: 31 December 2004

Student Number: 0864842

Thank you for the Ethics Report Form and your recent request for an extension on the above application.

I am happy to inform you that an extension for the above project to the 31 December 2007 has been approved and noted by the Human Research Ethics Committee.

Please continue to keep us informed of any changes.

With best wishes for success in your work.

Yours sincerely

Kim Giffins

RESEARCH ETHICS OFFICER

Phone 6304 2170

Fax: 6304 2661

Email: research.ethics@ecu.edu.au

cc: Dr Russell Waugh, Education, ML
Dr Carmel Maloney, Education, ML
Karen Leckie, Grad School, ML
Sharon Snader, RHD, E&A, ML

Appendix B

Letter to Principals #1

15 Melaleuca Crt
Morley WA 6062
31 March 2003

Dear

As a doctorate student of Edith Cowan University, I am involved in conducting research into the area of teacher-student relationships with a particular focus on social and emotional aspects. This research is aimed at students in the 8 to 12 year old age bracket and their teachers. I am seeking your permission to involve two or more of your full time teaching staff and four students from each of their classes in the study. Participating staff will be asked to complete a short questionnaire for each of the four students, and participating students will be asked to complete one short questionnaire. With your permission, I plan to visit schools to supervise students' completion of the questionnaire. I will be available if needed to provide relief and so provide time for participating teachers to complete the questionnaires. (It is anticipated that teachers would need up to 2 hours to complete all the questionnaires). Copies of my credentials and current police clearance will be forwarded on request.

This is a new area of research and your school's involvement will contribute to our understanding of teacher-student relationships in the classroom and the role they play in education. All data will remain strictly confidential. Names of staff and students will not be used and the school will not be identified in any reports resulting from the study. Participants will be free to withdraw from the study at any time without penalty. Findings of the study will be made available to you at its conclusion.

I would be grateful to receive your agreement at your earliest convenience. Please complete the response form enclosed and mail it to me in the return envelope provided. I welcome the opportunity to talk with you and discuss this further if you wish. I may be contacted by phone on 9377 2692 or by mail at the address above. You may also contact ECU staff as detailed below.

If you have any concerns about the project or would like to talk to an independent person, you may contact Prof. Maxwell Angus (ph. 9370 6399).

Yours sincerely,

Natalie Leitão.
Ph.D student

Supervisors: Dr. Carmel Maloney ph. 9273 8463 Edith Cowan University
Dr. Russell Waugh ph. 9273 8360 Edith Cowan University

Appendix B (Continued)

PRINCIPAL'S RESPONSE FORM

I am / am not willing for staff and students at this school to be involved in the teacher-student relationship study.

Name _____

School _____

Signed _____ Date _____

If you are willing for your school to participate in the study, please complete the following details of potential staff participants so I may post to your school sufficient copies of letters of invitation and consent.

The names of staff at this school who may like to be involved are as follows:

Staff Member's name	Year Group
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-----	-----
-----	-----
-----	-----
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Appendix C

Letter to Principals #2

15 Melaleuca Crt
Morley WA 6062
9 April, 2003

Dear

I sincerely thank you for agreeing to be a part of the teacher-student relationships study. Please find enclosed copies of letters to be given to potential staff participants. I would be grateful if you could please ensure these letters are given to those nominated. I anticipate visiting the school in term 3 to administer the questionnaire, and will be in touch closer to that time to confirm the details.

I welcome the opportunity to talk with you and discuss this further if you wish. I may be contacted on 9377 2692. You may also contact ECU staff as detailed below.

If you have any concerns about the project or would like to talk to an independent person, you may contact Prof. Maxwell Angus (ph. 9370 6399).

Yours sincerely

Natalie Leitão.

Student ID: 0864842

Supervisors: Dr. Carmel Maloney ph. 9370 6438 Edith Cowan University
Dr. Russell Waugh ph. 9273 8360 Edith Cowan University

Appendix C (Continued)

15 Melaleuca Crt
Morley WA 6062
9 April, 2003

Dear

As a doctorate student of Edith Cowan University, I am involved in conducting research into the area of teacher-student relationships with a particular focus on social and emotional aspects. This research is aimed at students in the 8 to 12 year old age bracket and their teachers. The purpose of my study is to understand more about the self-views of teachers and students regarding their classroom relationships. I believe this will help us to better understand the role that teacher-student relationships play in education.

I am seeking your involvement in the following ways:

- Nominate four students in your class who are likely to be permitted by parents to be involved in the study. (If possible, nominate a mixture of students, some being those with whom you think you get along with easily, and others with whom it may sometimes be a bit of a struggle ... I will not need to know who is who.)
- Contact parents of potential student participants on my behalf (I will supply copies of letters and stamped return envelopes).
- In term 3 complete a short questionnaire for each of the four participating students.
- In term 3 permit me to spend 20 minutes with each of the four students to assist them in completing a questionnaire.

All data will remain strictly confidential. Names of staff and students will not be used and the school will not be identified in any reports resulting from the study. Participants will be free to withdraw from the study at any time without penalty. Findings of the study will be made available to you at its conclusion.

I would be grateful to receive your agreement at your earliest convenience. Please complete the response form enclosed and mail it to me in the return envelope provided. I welcome the opportunity to talk with you and discuss this further if you wish. I may be contacted on 9377 2692. You may also contact ECU staff as detailed below.

If you have any concerns about the project or would like to talk to an independent person, you may contact Prof. Maxwell Angus (ph. 9370 6399).

Yours sincerely

Natalie Leitão.

Student ID: 0864842

Supervisors: Dr. Carmel Maloney ph. 9370 6438 Edith Cowan University
Dr. Russell Waugh ph. 9273 8360 Edith Cowan University

Appendix C (Continued)

TEACHER'S RESPONSE FORM

I am / am not willing to participate in the teacher-student relationship study. I understand I may withdraw from the study at any time without penalty.

Name _____ Phone Contact _____

School _____

Year group _____ Signed _____ Date _____

(If you are willing to participate in the study, please complete the following details. I will send you letters to be given to these families.)

The details of four students from my class who are potential participants are as follows:

(Please include each student's name, age and their parent's name)

1.

2.

3.

4.

2nd Letter to Principals

WANTED

*100 full time teachers of students aged 8 to 13
to complete a short questionnaire*

and

*4 students from each of their classes
to complete a short questionnaire.*

REWARD OFFERED

Your involvement in this new area of research will contribute to our understanding of how to build teacher-student relationships in the classroom and how to strengthen these connections.

Conditions: Names of staff and students will not be used and the school will not be identified in any reports resulting from the study. Participants will be free to withdraw from the study at any time without penalty. Findings of the study will be made available to you at its conclusion.

Contact Details: Please complete the response form enclosed and mail it to me in the return envelope provided. I welcome the opportunity to talk with you and discuss this further if you wish. I may be contacted by phone on 9377 2692, by e-mail at jleitao@inet.net.au or by mail at 15 Melaleuca Crt, Morley, WA, 6062. You may also contact ECU staff as detailed below. If you have any concerns about the project or would like to talk to an independent person, you may contact Prof. Maxwell Angus (ph. 9370 6399).

Natalie Leitão.
Ph.D student

Supervisors:
Dr. Carmel Maloney ph. 9370 6438 Edith Cowan University
Dr. Russell Waugh ph. 9273 8360 Edith Cowan University

PRINCIPAL'S RESPONSE FORM

I am / am not willing for staff and students at this school to be involved in the teacher-student relationship study.

Name _____

School _____

Signed _____ Date _____

If you are willing for your school to participate in the study, please complete the following details of potential staff participants so I may post to your school sufficient copies of letters of invitation and consent.

The names of staff at this school who may like to be involved are as follows:

Staff Member's name	Year Group
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Appendix E

Letter to Parents

Dear

I am a doctorate student of Edith Cowan University, and I am conducting a study at your child's school. I am seeking your permission for _____ to be involved.

My study is about classroom relationships between teachers and students and I hope to find out more about how children develop socially and emotionally.

With your consent, I will visit the school to give your child a short questionnaire to complete. All data will remain strictly confidential. Your child's name will not be used and the school will not be identified in any reports resulting from the study. You will be free to withdraw your child from the study at any time without penalty.

I would be grateful if you and your child would read and sign the consent form and return it to me via the reply paid envelope at your earliest convenience. I welcome the opportunity to talk with you and discuss this further if you wish. I may be contacted on 9377 2692. You may also contact ECU staff as detailed below.

If you have any concerns about the project or would like to talk to an independent person, you may contact Prof. Maxwell Angus (ph. 9370 6399).

Yours sincerely
Natalie Leitão.

Supervisors: Dr. Carmel Maloney ph. 9273 8463 Edith Cowan University
Dr. Russell Waugh ph. 9273 8360 Edith Cowan University

Appendix E (Continued)

RESPONSE SLIP

PARENT CONSENT

(circle your response)

I give / do not give permission for _____ to participate in the teacher-student relationship study. I understand that all information will be treated with the strictest confidence, and that I may withdraw _____ from this study at any time.

Parent / Guardian name/s _____

Signature/s _____ Date _____

Phone contact (optional) _____

STUDENT CONSENT

I would like to help in a study to help other people learn more about how teachers and kids get along at school. I understand everything I say will be kept private, and that later on if I change my mind, I don't have to continue helping in the study.

Student's name _____

Signature _____ Date _____

Teachers' Relationships with Students Questionnaire (Teacher's View)

The aim of this questionnaire is to find out your self-views regarding your relationship with a child in your class. Answer each question with one particular child in mind. One set of responses is labelled "idealistic", the next is "capability", and the third is "actual". These labels are to help you differentiate between what you would *idealistically* like to happen, what you are *capable* of making happen, and what *actually* happens. Please rate the 30 questionnaire items using the following response format.

Almost always (over 80% of the time)	record 4
Most of the time (50% to 80% of the time)	record 3
Some of the time (less than 50% of the time)	record 2
Not at all	record 1

Example Item 1

This child and I get along well together.

If you would like to get along well with child "A" almost always (over 80% of the time), record 4. If you think you are capable of getting along well with child "A" most of the time (50% to 80% of the time) record 3. If you think you actually only get along well with child "A" some of the time (less than 50% of the time) record 2. Your recorded responses would be as follows:

Item no.	Item wording	Idealistic (This is what I would like to happen)	Capability (This is what I am capable of)	Actual (This is what actually happens)
----------	--------------	--	---	--

Sub-group: Connectedness

1-3 I like this child

4-6 This child and I get along well together

4

3

2

Please indicate if you are willing to participate in a follow-up discussion.

YES ☐

NO ☐

If you responded “yes”, please supply your name and contact number. All responses to the questionnaire will remain strictly confidential.

```
(print name)
```

(contact number)

(signature)

(date)

Thank you
Natalie Leitão
May 2002

Teachers' Relationships with Students Questionnaire
(Teacher's View)

The following questionnaire is anonymous. Please don't put your name or any identification on it. Please read the consent and cover page.

Item no.	Item wording	Idealistic (This is what I would like to happen)	Capability (This is what I am capable of)	Actual (This is what actually happens)
Sub-group: Connectedness				
1-3	I like this child.			
4-6	This child and I get along well together.			
7-9	I am interested to learn about this child's personal thoughts, feelings and experiences.			
10-13	This child and I have a good, supportive relationship.			
Sub-group: Availability				
13-15	I am available for this child.			
16-18	I am available and will provide help when this child asks for it.			
19-22	If I am busy and this child needs help urgently, where possible, I will stop what I am doing and make myself available.			
Sub-group: Communication				
22-24	I communicate effectively with this child.			
25-27	I listen to this child when he/she needs to talk about personal issues.			
28-30	I communicate with this child in positive and sensitive ways.			

Are there any comments that you would like to make about your relationships with your students?

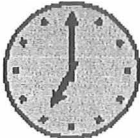
Thank you for taking the time to answer this questionnaire.
Natalie Leitão
May 2002

Teachers' Relationships with Students Questionnaire (Student's View)

The child is asked to think about each statement in relation to their current classroom teacher, and to rate a response according to the response format below. The child is told that all responses will remain confidential.

Response Format

Almost always 4



Most of the time 3



Some of the time 2



Not at all 1



Item no.	Item wording	Response	
		This is what does happen	What I "Wish" would happen
Sub-group: Connectedness			
1-2	My teacher likes me.	_____	_____
3-4	My teacher and I get along well together.	_____	_____
5-6	My teacher is interested in what I think and feel, and in what I do.	_____	_____
7-8	My teacher and I care about each other.	_____	_____
Sub-group: Availability			
9-10	I can go up to my teacher any time.	_____	_____
11-12	I can ask my teacher for help.	_____	_____
13-14	If my teacher is busy, I can still go and get help.	_____	_____
Sub-group: Communication			
15-16	My teacher listens to me.	_____	_____
17-18	My teacher listens when I talk about personal/private things.	_____	_____
19-20	My teacher listens to me and helps me to feel better.	_____	_____

Are there any comments you would like to make about you and your teacher?

Appendix H

Samples of Discussion Schedules

A. Teacher Discussion Schedule

Begin by discussing responses to the questionnaire. Note any differences between the “idealistic”, “capability”, and “actual” responses, and find out why the teacher responded the way he/she did.

Continue by asking the following questions:

1. How does the aspect of connectedness impact on teacher-student relationships?
2. How does the aspect of availability impact on teacher-student relationships?
3. How does the aspect of communication impact on teacher-student relationships?
4. What are the strengths that you bring to building relationships with the students in your class?
5. What difficulties do you experience in building relationships with the students in your class?

B. Student Discussion Schedule

Begin by discussing responses to the questionnaire. Note any differences between the “idealistic” and “actual” responses, and find out why the student responded the way he/she did.

Continue by asking the following questions:

1. Is it important for teachers and kids to like each other? Why/why not?
2. How does a teacher know when you like him/her?
3. How do you know when a teacher likes you?
4. How does a teacher show you that he/she cares for you?
5. How do you show a teacher that you care about him/her?
6. Is it important to have a teacher you can talk to? Why/why not?
7. How do you know when a teacher is the kind of person you can talk to?

C. Response to Assessment Tools

1. What aspects of the questionnaire were easy?
2. What aspects of the questionnaire were difficult?
3. During the discussion, how easy or difficult was it to discuss aspects of your teacher-student relationship? Elaborate.

Appendix I

Samples of Discussion Transcript

I just want to start by asking how important do you think it is for teachers to establish good relationships with kids in the class?

Probably the most important part of teaching. It's very important to, I think, gain their trust, with any of the students, gain their trust and have them consider you fair. And I think once you can develop that rapport then teaching the students is much easier because you can teach to the student's heart and head.

Well, you mentioned something about establishing a relaxed family attitude within the class. How does this help with the teaching and learning that goes on?

I think if the kids are relaxed, I think they're more in tune with what's happening, they'll cooperate a lot with each other, we work very hard on understanding each other, being fair to each other, being nice people in the classroom, we try to be a nice person in the classroom. And I think if there's a relaxed atmosphere it happens a lot easier. I think the learning happens a lot easier; the kids are much more trusting and not afraid to ask and I think that's very important.

In your view, how important is it for teachers to make connections with kids?

As I said to start with, once you've got that trust and once you've got that trust given to the student and the student trusting you, I think that is the crucial thing to be able to get through to the individual child to teach them. Especially the way we teach these days, to the individual, to their own developmental stage.

So how can a teacher work at building that trust?

Knowing more about the child. Knowing as much about the child as you possibly can. I think the more you know about the child the better you can teach them because you can speak to them and touch them in a very personal way. Know their strengths, their weaknesses, their likes, their dislikes, their fears, and things they're proud of.

Do you feel that you do this successfully with your students and connect with them in a positive way?

I think so. I think so.

Are there any factors that might prohibit you from doing that to the full extent you would like?

No, I probably tread on toes sometimes, and I suppose 41 years' experience helps me, but I think it's very important to not bulldoze through but to make sure to speak to the parents if you're unsure. I do have a survey which I give out at the beginning of the year asking parents to tell me about what they think of their child, how they perceive their child, and that also gives me a help.

Thinking about how available teachers make themselves to their students, do you feel that you do this successfully?

Yes, yes.

And how does a teacher do that, how does a teacher make themselves available?

Appendix I (Continued)

Be one of the children, understand where they're coming from. I give at the beginning of the year when they fill in their diary, I give them my home phone number and my email, which they know they can use if they need to, and I've never ever had it abused, and I think that's very important. Again, it's very much a trust... if I trust them then they will trust me.

And how do you think your being available impacts on the relationships with the students?

I think it gives them another point of support. They've got their parents and I think especially students of 11, 12 years of age, ready for high school, need somebody else who's just a step aside from their family perhaps, but someone they know understands them, someone they know loves them, I think that's very important for kids to know that you love them in a very special sort of a way, they're part of your life and you're part of their life for 12 months.

Love is a word that we're sometimes scared to use, because of the nature of the abuse that can be associated with it...

Definitely, definitely.

When you're talking about building positive classroom relationships and having a positive classroom environment, I agree that love is very...

There has to be love. Teaching is to me such an emotional thing. It's always been life; I didn't ever want to be anything else but a teacher. And you only do the best you can for the kids, you do the best you can for each one of them in

Appendix I (Continued)

the best way that you can. And so I think a lot of love has to go into them to help nurture them to become a nice adult.

Hopefully a loving adult.

Well that's right. Yes, loving of each other.

If you don't have a love for children and a love for *the* children there's not much else that would hold you to the job...

(Laughs) Teaching would be horrible. It would be absolutely ghastly.

Well I'm happy to hear you say...

But I think it goes with... I mean I love teaching, I love coming to school everyday. And the kids know that, they know that I come because I want to come.

In a way, that impacts upon the value that you take from them as well.

I think so; I know they know that value I place on being a teacher. And I say to them it's not just teaching you how to do your formal work, it's teaching you how to appreciate people and understand and be a nice person. And we all have faults, we talk about our faults. I know my faults, so I suppose...