Classroom Working Alliance:
Teacher-Student Relationship and Students’ School Outcomes

Jessica R. Toste
Department of Educational and Counselling Psychology
McGill University, Montreal
August 2007

A thesis submitted to the Faculty of Graduate Studies and Research of McGill University in partial fulfillment of the requirements of the degree of Master of Arts in Educational Psychology

© Jessica Toste 2007
Abstract

The articles presented in this thesis examined classroom working alliance and students’ school-related outcomes. In Article 1, the association between student performance and perceptions of working alliance was explored among 53 elementary school children (28 male, 25 female). Evidence was found to support the predictive validity of the Classroom Working Alliance Inventory (CWAI) for student performance. Further, results revealed a complex interaction between the alliance components: task, bond, and goal. Article 2 investigated the relationship between school satisfaction and working alliance among 50 elementary-aged students (33 male, 17 female). While students’ ratings of alliance were greatly predictive of their school satisfaction, teachers’ ratings made less of a contribution. The final discussion centers on the contribution of this research program to our understanding of the classroom working alliance and the unique interactions that define the teacher-student relationships. Implications for alliance-building and fostering student success will be presented.
Résumé


L’article 2 a investigué la relation entre la satisfaction scolaire et l’alliance de travail parmi 50 élèves d’école primaire (33 garçons, 17 filles). Tandis que les cotes d’alliance des élèves ont grandement prédit leur satisfaction scolaire, la contribution des cotes des professeurs a été moins importante. La discussion finale porte sur la contribution de ce programme de recherche à la compréhension de l’alliance de travail en salle de classe et les interactions uniques qui définissent les relations entre les professeurs et les élèves. Les implications pour la formation de l’alliance et la promotion du succès des élèves seront présentées.
Acknowledgements

I would like to first extend my sincere thanks to my research supervisor, Dr. Nancy Heath. It has been a privilege to work with Nancy and I am truly appreciative of her unwavering commitment to her students and their success. I thank Nancy not only for the professional support and guidance that she has provided to me over the years, but also her interest and encouragement in all of my endeavours.

There are several others that I would like to thank their various forms of support: Lana Zinck for her wonderful ability to put things in perspective and for her feedback on this thesis; Tatiana Nedecheva for kindly offering her time to translate my abstract; and to Shareen Holly, Kristin Shaub, and Elizabeth Roberts for their support, friendship, and willingness to split a pitcher of sangria at a moment’s notice! In addition, to all of the amazing children I have worked with over the years, thank you for reminding me of the powerful role that teacher’s play in creating classrooms and schools that promote success.

To my family, particularly my mother and grandmother, who have always believed in me (even when they were not quite sure what I was doing!). Also, to Jessica Lance, thank you for your fun-loving spirit, constant effort to learn and grow, and your willingness to put your complete trust in me.

Finally, I must express my heartfelt gratitude to Sharon Parry, who has offered me endless support. Thank you for believing in me and pushing me to continue when I felt deflated. You have been my constant source of strength.

This degree was completed through the support of research fellowships from the Social Sciences and Humanities Research Council of Canada (SSHRC) and Fonds québécois de la recherche sur la société et la culture (FQRSC).
Statement of Authorship

The studies reported in this thesis were co-authored by myself, serving as primary author on both articles, and Dr. Nancy Heath. In addition, the first article is also co-authored by Ms. Lynn Dallaire, who assisted with the development of the research instrument and data collection. Dr. Heath served in an advisory capacity during the development of the research instrument, during the formulation and conceptualization of the research questions, and during the writing of both manuscripts. The manuscripts have not been submitted to journals for publication. The data reported in the two articles was collected by me, collaboratively with members of Dr. Heath’s research team.
Table of Contents

Abstract................................................................................................. ii
Résumé.................................................................................................. iii
Acknowledgements............................................................................... iv
Statement of Authorship..................................................................... v
Table of Contents............................................................................... vi
List of Tables...................................................................................... viii
List of Appendices............................................................................ ix

CHAPTER 1
Introduction....................................................................................... 10

CHAPTER 2
Review of Literature
Resilient Classrooms........................................................................ 13
The Role of Teacher............................................................................ 15
Teacher-Student Relationships......................................................... 17
  Socioemotional and behavioural competence.............................. 17
  Academic functioning...................................................................... 19
  Overall school adjustment.............................................................. 22
Evaluating the Quality of Relationship............................................. 25
  Teachers or students as informants?.............................................. 25
  Independent measure of teacher-student relationship................ 26
  Definition of teacher-student relationship................................... 28
Working Alliance............................................................................... 29
Measurement of alliance................................................................... 30
Principal Aims of Research Program................................................. 31

CHAPTER 3
Article 1: Perceptions of Classroom Working Alliance and Student Performance
Abstract.............................................................................................. 34
Introduction......................................................................................... 35
Method................................................................................................ 45
Results.................................................................................................. 48
Discussion........................................................................................... 54
References............................................................................................ 61
CHAPTER 4

Article 2: Fostering Resilient Classrooms: Exploring the Relationship Between School Satisfaction and Teacher-Student Alliance

Abstract .................................................................................................................. 69
Introduction ............................................................................................................. 70
Method ..................................................................................................................... 77
Results .................................................................................................................... 83
Discussion ............................................................................................................. 90
References ............................................................................................................ 97

CHAPTER 5

Conclusion

Summary of the Research Program ................................................................. 103
Implications ........................................................................................................ 107
Concluding Comments ..................................................................................... 107

CHAPTER 6

Bibliography ........................................................................................................ 109
List of Tables

Article 1

Table 1: Correlations between Teachers’ and Students’ Ratings on the CWAI…… 52

Table 2: Summary of Regression Analysis for Teacher Alliance Variables
Predicting Teacher-Rated Student Performance…………………………… 52

Table 3: Summary of Regression Analysis for Student Alliance Variables
Predicting Teacher-Rated Student Performance…………………………… 52

Table 4: Summary of Regression Analysis for Teacher Alliance Variables
Predicting Students’ Self-Rated Performance…………………………… 54

Table 5: Summary of Regression Analysis for Student Alliance Variables
Predicting Students’ Self-Rated Performance…………………………… 54

Article 2

Table 1: School Adjustment Subscale Means, Standard Deviations, and
Correlations with SLQ……………………………………………………. 85

Table 2: Item Loadings for Rotated Component Matrix………………………… 86

Table 3: Summary of Regression Analysis for Student Alliance Variables
Predicting School Satisfaction…………………………………………… 88

Table 4: Summary of Regression Analysis for Student Alliance Variables
Predicting Social-Emotional Adjustment………………………………… 88

Table 5: Summary of Regression Analysis for Teacher Alliance Variables
Predicting School Satisfaction…………………………………………… 90

Table 6: Summary of Regression Analysis for Teacher Alliance Variables
Predicting Social-Emotional Adjustment………………………………… 90
List of Appendices

Appendix A: Classroom Working Alliance Inventory ........................................ 121
Appendix B: Student Performance Questionnaire ............................................ 126
Appendix C: Parent, Teacher, and Student Consent Forms (Study 1) ............... 129
Appendix D: Parent, Teacher, and Student Consent Forms (Study 2) .............. 135
Appendix E: Ethics Certificates ....................................................................... 143
CHAPTER 1

Introduction

As children make the transition from home to school, teachers become a primary source of guidance and support. Given that students spend a significant number of hours in school, it is not surprising that a positive relationship with the adult who plays a central role – the teacher – is important for their well-being and school functioning (Juvonen & Wentzel, 1996). Numerous studies, rooted in attachment theory, have demonstrated that children require warm, supportive relationships for healthy development (Ainsworth & Bowlby, 1991). Based on these theoretical assertions and related research, it has been posited that teacher-student relationships can enhance positive developmental outcomes (Birch & Ladd, 1997; Pianta, 1999).

Although empirical support for the importance of teacher-student relationships is not vast, the results of numerous studies have demonstrated that positive teacher-student relationships contribute to students’ school adjustment, including socioemotional, behavioural, and academic functioning (e.g., Baker, 1999; Birch & Ladd, 1997; Hamre & Pianta, 2001; 2005; Wentzel, 2002).

Currently, relatively little is known about the extent to which teachers and children agree on their reports of the quality of their relationship, and about how these different perspectives are associated with children’s school functioning. Further, there is no unique scale of teacher-student relationship that fully recognizes the complexities of the classroom environment and the interactions that take place within. Thus, the primary goal of this research program was to investigate the predictive validity of a measure of
teacher-student relationship that broadens our current conceptualization and considers variables unique to a classroom working relationship.

In applying a measure of relationship supported by theory and research in the counselling psychology literature, this research program sought to examine whether the construct of “working alliance” could be modified for use within a classroom setting and whether it would be related school-related outcomes. The primary focus of this program of research was the validation of working alliance as a measure of teacher-student relationship and the exploration of the differential role of teacher and student perceptions of alliance in predicting student performance, as presented in Article 1. The study presented in Article 2 extends this work by exploring the relationship between working alliance and another indicator of student adjustment, school satisfaction. This program of research has implications for classroom practices, teacher education, as well as future research exploring factors that contribute to resilient classrooms.

This thesis is written in accordance with the guidelines established by the Faculty of Graduate Studies and Research at McGill University and includes two articles that, together, comprise this program of research examining classroom working alliance and students’ school outcomes. Each manuscript is presented in its own chapter (Chapters 3 and 4 in this case), each containing its own introduction and literature review, as well as methods, results, and discussion sections. The thesis begins with a thorough review of the literature (Chapter 2) and ends with a discussion (Chapter 5) that summarizes and integrates the findings of the two manuscripts. The reader will find some, but relatively little, redundancy in the introductions and methods of the two otherwise independent
studies presented in this thesis, as each addresses the same general topics and investigates the same population, elementary students.
As children make the transition from home to school, teachers become a primary source of guidance and emotional support. As the intent of this program of research is to broaden the definition of teacher-student relationship, as well as examine this newly defined construct and its association with school-related student outcomes, this literature review will illustrate the larger context of resilient classrooms and teacher-student relationships. Specifically, this chapter presents literature on resilient functioning and protective factors, attachment theory, outcomes related to positive teacher-student relationship, considerations related to the measurement of quality of relationship, and alternative understandings of “working relationship.”

Resilient Classrooms

School and classroom environments play a central role in children’s development. Indeed, developmental psychologists have asserted that successful adaptation to school is a vital task in the developmental process (Cicchetti, 1990; Rutter, 1985). The identification of factors which enhance the positive psychological well-being of students is an important pursuit and undoubtedly, has implications for the development of educational programs and interventions.

Within the positive psychology framework, factors such as self-esteem, academic competence, and mastery experiences are believed to act as buffers against the development of psychological difficulties (Masten, 2001). Researchers seeking to conduct empirical investigations of individuals who are “resilient” or “invulnerable” have employed different operational definitions and criteria for understanding resilience.
(Luthar & Zigler, 1991). However, in general, an individual’s ability to use internal and external resources to achieve developmental expectations is a common theme that unites varying definitions (Luthar, Cicchetti, & Becker, 2000; Masten & Coatsworth, 1998; Sroufe & Rutter, 1984). Children who are well-adjusted have resources, competencies, and support from their social environment that contribute to their positive development, while also protecting them from stress and the negative effects associated with adverse situations (Luthar, Cicchetti, & Becker, 2000).

The contexts in which children participate have a significant impact on their adaptation and adjustment (Masten & Coatsworth, 1998). Thus, because children spend much of their time at school, it is important to consider how schools and classrooms can promote positive adjustment. The notion behind developing these “resilient classrooms” is that schools and classrooms can become communities that provide essential support and guidance so that all children can learn and be successful, despite their exposure to risk or other life stressors (Doll, Zucker, & Brehm, 2004). Resilient classrooms are environments where all children can be successful emotionally, academically, and socially through the supports and positive experiences provided. For instance, healthy learning environments provide support for the development of children’s competence, self-efficacy, positive relationships with peers and adults, as well as opportunities to practice self-regulation and engage in activities that are interesting and meaningful (Cowen et al., 1996).

Consequently, the complex interactions between children and the many features of their classroom environments can serve to maximize (or diminish) student success. This challenges the perception that learning or behavioural difficulties reside “within” the
child. Instead, the emergence of such difficulties reflects a mismatch between the children and one or more features within their social environments (e.g., Doll et al., 2004; Pianta, 2001). That is to say, rather than focusing primarily on providing individual intervention for children experiencing difficulties, we must seek to create resilient classroom environments, where children can have successful experiences while developing individual characteristics that promote positive school adjustment. Not surprisingly, exploring the effects of children’s relationships with the adults who actually participate in the classroom environment – their teachers – is a critical facet in this field of inquiry. Building on decades of research showing that teachers can influence student motivation through classroom reward structure (e.g., Ames & Ames, 1984), classroom organization (e.g., Rosenholtz & Wilson, 1980), and curriculum (e.g., Renninger, Hidi, & Krapp, 1992), recent work shifts attention to the quality of the teacher–student relationship.

The Role of Teacher

The majority of research regarding teacher-student relationships and children’s early school adjustment builds on attachment theory (e.g., Pianta, Nimetz, & Bennett, 1997; Pianta & Steinberg, 1992). According to attachment theory, all children require warm, supportive relationships with caring, helpful, and receptive adults for healthy development (Ainsworth & Bowlby, 1991). For children with a history of insecurity, relationships beyond the primary caregiver relationship are viewed as opportunities for the emergence of a secure alternative relationship (Pianta, 1992). Of particular importance to educators is the finding that having a positive relationship with a teacher further supports children’s development, beyond that accounted for by a secure
relationship with a primary caregiver (Howes, Matheson, & Hamilton, 1994; van Ijzendoorn, Sagi, & Lambermon, 1992). This alternative attachment relationship can serve a protective function; children with insecure parental attachments who develop secure attachments with other adults are more likely to show greater competence than those who have no such support in their lives (Masten, Best, & Garmezy, 1990). Based on this line of research, it has been posited that teacher-student relationships can enhance positive developmental outcomes (Birch & Ladd, 1997; Pianta, 1999).

In the early stages of life, young children begin to understand and try out social conventions when they are provided with a nurturing and responsive environment (Levitt et al., 1993). When children begin school and start to transition through childhood, they gradually begin to develop relationships with their teachers and peers whom also serve as valuable sources of support for children. Young children form relationships with their teachers that share similar qualities with those of their primary caregivers (Ainsworth & Bowlby, 1991). From an attachment perspective, children who have a close (or secure) relationship with teachers can rely on their teachers to be trustworthy, consistent, and supportive.

Presumably, children who have secure relationships with their teachers sense that their teachers care about them, support them, and believe in their ability to succeed. Past research has shown that achievement is enhanced by high expectations for students coupled with a classroom climate characterized by encouragement and support (Bernard, 1991; Stockard & Mayberry, 1992; Wang et al., 1994). There is an increasing recognition among educators that children’s overall adjustment and success at school requires a willingness, in addition to an ability, to meet both social and academic challenges.
Theoretically, secure teacher-student relationships provide children with a sense of security and belonging that supports them in pursuing other goals such as exploration, learning, and mastery (Ainsworth & Bowlby, 1991; Rey, Smith, Yoon, Somers, & Barnett, 2007). A number of researchers have investigated this notion through the study of teacher-student relationship and various student outcomes.

**Teacher-Student Relationships**

Although empirical support for the importance of positive teacher-student relationships is not vast, the results of numerous correlational and longitudinal investigations conducted with students at various developmental stages suggest that teacher-student relationship patterns are associated with children’s school-related adjustment and functioning (Baker, 1999; Hamre & Pianta, 2001; Ladd, Birch, & Buhs, 1999; Murray & Malmgren, 2005; Wentzel, 2002). Positive relationships have been defined as characterized by a teacher-student bond, connectedness, closeness, and a lack of conflict. Indeed, employing this definition, past research has demonstrated that the quality of the teacher-student relationship is associated with myriad positive outcomes for children and adolescents.

Positive teacher-student relationship has been characterized as a protective factor that clearly serves to support resilient functioning in diverse domains. To this end, the following sections will review findings related to students’ socioemotional and behavioural competence, academic functioning, and overall school adjustment. This review will be followed by a summative critique of the literature.

**Socioemotional and behavioural competence.** The majority of research on teacher-student relationships and school outcomes in the elementary years has focused on
children’s sociemotional and behavioural competence. Pianta (1994) assessed the predictive influence of children’s relationships with teachers in kindergarten on their adjustment in first grade (N = 436 children; 205 male, 231 female). Teachers’ ratings of relationship with their students on the STRS were examined, as well as teacher reports of children’s social and behavioural problems. Analyses revealed, first, that dysfunctional teacher-student relationships in kindergarten predicted conduct problems and poor peer social skills in first grade. Moreover, dysfunctional teacher-student relationships in kindergarten further predicted relatively low frustration tolerance, poor work habits, and learning difficulties in first grade. As Pianta’s scale initially focused on preschool or kindergarten children and it was thought that reliable reports of relationship from young children would be difficult to obtain, teachers served as the preferred informants on relationship scales. However, teachers and students undoubtedly have different perspectives on how they view the quality of their relationships.

In a study of 206 kindergarten children (108 male, 98 female), Birch and Ladd (1997) found, that teachers’ ratings of conflictual relationships on the Student-Teacher Relationship Scale (STRS; Pianta, 1992) correlated positively with students’ school avoidance and negatively with school liking, self-directedness, and cooperation in the classroom. It was also noted that relationships characterized by high conflict were associated with a decline in children’s prosocial behaviour and increases in peer-perceived aggression. However, this study did not account for students’ perceptions of relationships with their teachers. Given the reciprocity inherent in all relationships, it is critical to define relationship quality based on the perceptions’ of teachers and students. This is particularly important when examining behavioural functioning as an outcome as
it has been argued that children at-risk or experiencing difficulties often perceive their teachers’ intentions as hostile and report that their teachers behave as if they dislike them (Birch & Ladd, 1997; Wehlage & Rutter, 1986).

Further, in a study conducted by Hughes and colleagues (1999), the influence of teacher-student relationship on children’s subsequent levels of aggression was examined among a sample of 61 second and third-grade children (41 male, 20 female) who were nominated and rated by teachers as “aggressive.” Teachers’ and childrens’ reports of poor relationship quality, as defined by subscales from the Network of Relationships Inventory (Furman & Buhrmester, 1985) and the Social Support Appraisals Scale (Dubow, Tisak, Causey, Hryshko, & Reid, 1991), significantly predicted teacher-rated aggression one year later (Hughes, Cavell, & Jackson, 1999). These results clearly suggest the importance of considering multiple informants when measuring teacher-student relationship, as students’ ratings predicted aggression beyond that what was explained by teachers’ ratings. Another limitation of this study is that various instruments were used to assess teacher-student relationship; this creates a difficulty in terms of comparing the results to other studies in this area of research. Specifically, Hughes and colleagues employed two scales that assessed aspects of support, intimacy, and nurturance received from several social partners (e.g., family, teachers, peers) and as such, did not capture the unique variables associated with the classroom and relationships that are developed within this setting.

**Academic functioning.** Another critical school outcome is the degree to which students experience academic success, as research demonstrates that problems with school achievement may increase susceptibility to dropping out and future economic
disadvantages (Gregory, Shanahan, & Wahlberg, 1986). Achievement is enhanced by high expectations for students, coupled with a classroom climate that is encouraging and supportive (e.g., Bernard, 1991; Stockard & Mayberry, 1992; Wang et al., 1994). Presumably, when children’s teachers make them feel supported and capable, they behave in ways that support their cognitive development; they may feel confident in their academic abilities and be willing to actively engage in classroom activities. These assumptions are supported by research indicating that closeness or security between the teacher and student is associated with positive attitudes toward school as well as a willingness to actively participate in learning activities (e.g., Birch & Ladd, 1998; Pianta & Steinberg, 1992; Wentzel, 2002), both of which facilitate academic achievement.

Klem and Connell (2004) investigated the notion that positive teacher-student relationships influence student engagement in school, with data collected from 1846 elementary (941 male, 905 female) and 2430 secondary students (1190 male, 1240 female). Their findings indicated that students who experienced low levels of teacher support (as measured by student responses to 10 survey items) were significantly more likely to be perceived as disengaged by their teachers, and less likely to report a sense of engagement in the classroom. Similarly, in a study of 641 third- through sixth-grade students (321 male, 320 female), Furrer and Skinner (2003) found that children who reported higher quality relationships with their teachers (based on 4 self-report items) demonstrated greater levels of achievement than children who reported lower quality relationships. The combined results of the above studies suggest that students who report positive relationships with their teachers are more engaged and successful in the classroom. Nonetheless, due to the selected items employed and students’ as the sole
informants, it is difficult to assess whether teacher-student relationship is truly being assessed and whether teachers’ perceptions of the relationship might be further related to academic outcomes.

A longitudinal study by DiLalla, Marcus, and Wright-Phillips (2004) investigated the association between pre-school behavioural styles and early adolescent academic performance, as well as the mediating role of the teacher-student relationship. Specifically, they explored whether relationship, as rated by the teachers on the Student-Teacher Relationship Scale (STRS; Pianta, 2001), would predict student outcomes beyond that explained by child characteristics. Based on data from 42 children (23 male, 19 female) tested at the age of 5 years and again between ages of 11 to 13 years, the authors reported that children who had conflictual relationships with their teachers in pre-school had poorer academic achievement 6 to 8 years later (grades 5 through 8) as measured by teacher’s ratings of their school grades. Although these results represent an important contribution to the literature, the role that students’ perceptions of their relationship with teachers play in this dynamic remains unknown. As the teacher-student relationship has been identified as a long-term predictor of students’ academic outcomes, it would be of interest to examine whether there is agreement between teachers’ and students’ in how they are perceiving quality of relationship.

In another longitudinal study, Hamre and Pianta (2001) followed a sample of 179 children (91 male, 88 female) from kindergarten through the eighth grade to examine the extent to which kindergarten teachers’ perceptions of their relationships with students predicted a range of school outcomes. Data was collected from teachers’ ratings on the STRS. Results indicated that conflictual teacher-student relationship in kindergarten
predicted student grades, standardized tests scores, and work habits throughout elementary school. It is clear that early relationships with teachers serve as an important protective factor for children and thus, it is critical for researchers and educators to understand the development of such relationships. To define quality of relationship based on the absence of conflict seems too simplistic; rather, it would seem prudent to further explore the behaviours or unique characteristics that serve to promote positive relationships within classroom environments.

**Overall school adjustment.** Although much research has focused on academic achievement as a primary measure of positive school adjustment, students’ attitudes and beliefs about their classroom experiences may be more indicative of their adjustment within the school environment and as such, better predictors of school-related outcomes (Baker, Dilly, Aupperlee, & Patil, 2003).

In addition to the findings previously reported, Birch and Ladd (1997) reported that when the teacher-student relationship was characterized by closeness, children showed higher levels of overall school adjustment, as measured by ratings of school satisfaction and attitudes, as well as teachers’ ratings of students’ school avoidance, cooperative participation, and self-directedness. Despite the previously mentioned difficulties with this study, Birch and Ladd (1997) present important findings regarding the association between poor teacher-student relationships, negative school attitudes, and less positive engagement with the school environment.

A recent study by Popliger and Heath (2005) examined associations between students’ ratings of teacher support as measured by the Survey of Children’s Social Support (Dubow et al., 1991) and adjustment outcomes for elementary school-aged
children (N = 54; 43 male, 11 female). Results indicated that children’s perceptions of teacher support were positively associated with their personal emotional adjustment, global self-worth, and perceptions of physical appearance. Moreover, Murray and Greenberg (2001) found, among a sample of 289 fifth- and sixth-grade students (164 male, 125 female) in inclusive classrooms, that a supportive relationship was positively correlated with school-related adjustment. Specifically, positive teacher-student relationships, measured by children’s ratings on the People In My Life Scale (Cook, Greenberg, & Kusche, 1995), were positively associated with students’ bonds with school, as well as indicators of school-related adjustment (e.g., academic self-efficacy, frustration tolerance, assertive social skills, and task orientation). These studies provide support for the influence of social support on children’s positive adjustment; however, they further elucidate the difficulties in investigating teacher-student relationship as a unique construct. In addition to examining only students’ perceptions of relationship, the scales used in these studies did not focus on teacher support, but once again tapped measured perceived support from several social partners.

Among 452 sixth grade students, Wentzel (2002) examined positive relations with teachers through a compilation of short measures completed by students that examined dimensions of teaching (e.g., nurturance, negative feedback, fairness). The domains of teacher-student relationship explained a significant amount of variance in students’ ratings of their motivation, goals, interests, and teachers’ ratings of students’ prosocial classroom interactions.

relationship, as measured by the Things That Happen in School Scale (Grannis, 1992) and Psychological Safety Index (Hinman, 1993), were examined in regard to their contribution to school satisfaction. Results indicated that students’ who rated school as a more likeable and satisfying environment were found to have more caring and supportive relationships with teachers than their peers who expressed the least satisfaction with school (Baker, 1999). The scales used in this study as well as previous studies (i.e., Baker, 1999; Wentzel, 2002), make it difficult to determine decisively whether the items represented the full array of behaviours comprised in a positive teacher-student relationship, or if they were simply assessing behaviours perceived by students’ to be “caring.” There is a need for an instrument that measures other facets of the working relationship between teachers and students, and explores characteristics that may be unique to this relationship.

Rey and colleagues (2007) published the first study to examine both students’ and teachers’ perceptions of their relationship, and the association between these perceptions and children’s school-related adjustment variables, such as school attachment, interest, and involvement. Perceptions of African American children (N = 89; 42 male, 47 female) and classroom teachers (N = 5) were measured by ratings on the Survey of Children’s Social Support (Dubow et al., 1991) and Student-Teacher Relationship Scale (STRS; Pianta, 1992), respectively. Children’s perceptions of teacher-student relationship were found to be important correlates of school adjustment for several child-rated outcomes (i.e., school attachment, interest, and involvement in school-related activities). Moreover, the students’ perception of the relationship predicted numerous school outcome variables.
above and beyond teachers’ relationship perceptions. Clearly, this study suggests the importance of assessing both teacher and student perceptions.

**Evaluating the Quality of Relationship**

In reviewing the literature on teacher-student relationships, there appears to be inconsistencies related to issues of measurement that makes interpretation of these findings difficult. Perhaps the most overt differences between these studies include: (a) the informants they utilize to gather data (i.e. teacher versus child reports), (b) the particular items used to assess relationship, and (c) the definition of teacher-student relationship.

*Teachers or students as informants?* At this point, relatively little is known about the extent to which teachers and children agree on the quality of their relationship, and about how these different perspectives may be associated with children’s school adjustment. The majority of studies have measured teacher-student relationship from the perspective of the teacher (e.g., DiLalla et al., 2004; Hamre & Pianta, 2004; Pianta, 1994), although several studies of teacher-student relationships among older children have generally relied on students’ rather than teachers’ perceptions (e.g., Lynch & Cicchetti, 1997; Murray & Greenberg, 2001; Wentzel, 2002). Teachers are an invaluable source of information when it comes to their students, but likewise, students can provide valuable information on their teachers. It seems necessary to examine teacher-student relationships from both perspectives in order to gain a more complete picture of the relationship and its purported effects on school-related outcomes.

Only two studies have examined both teachers’ and students’ perceptions of relationship (e.g., Hughes et al., 1999; Rey et al., 2007). These studies reported
consistencies in teacher and student reports of their relationship, and found that both reports were associated with school-related outcomes. Thus, neglecting to take into consideration the children’s perceptions of the relationship is not advised, as children’s reports have been shown to be predictive of a large number of school-related functioning variables (Rey et al., 2007).

Independent measure of teacher-student relationship. The second issue that arose in the review of the literature is the number of ad hoc scales used to measure the quality of relationship in various studies. Teacher-student relationships have typically been measured either as a subdimension embedded in a larger scale of social support (e.g., Baker, 1999; Malecki & Demaray, 2002) or as a single dimension, but based on items extracted from other scales (e.g., Blankemeyer, Flannery, & Vazsonyi, 2002; Ryan & Patrick, 2001). The difficulty with this method of assessment is that the quality of relationship is then defined in specific terms related to the theories from which these measures were derived. At this time, only two validated scales exist which serve as independent measures of teacher-student relationship: the Student-Teacher Relationship Scale (STRS) and the Teacher-Student Relationship Inventory (TSRI).

The STRS (Pianta, 2001) has been validated for use with teachers rating their relationships with students between the ages of 4 and 9 years; it is a 28-item scale that uses a 5-point likert-type rating format. Results from explanatory factor analyses have suggested that the STRS is best represented by three factors measuring quality of relationship: Closeness (11 items), Conflict (12 items), and Dependency (5 items). Closeness items measure the degree to which a teacher expresses warmth and affection with a particular student, whereas Conflict items measure the degree to which a teacher
perceives his or her relationship with a student as negative and conflictual. Dependency items measure the degree to which a teacher perceives a particular student to be overly dependent. In general, the STRS scores have demonstrated evidence for concurrent and predictive validity (e.g., Hamre & Pianta, 2001; Pianta et al., 1995). In a study with 1535 students, Pianta (2001) reported Cronbach’s alphas of .86, .92, .64, and .89 for each of the subscales and total scores, respectively.

Until recently, no instrument had been validated for use with older elementary school children. As the teacher-student relationship at upper elementary through junior high levels was also hypothesized to be important predictor for children’s school adjustment (Davis, 2003), the Teacher-Student Relationship Inventory (TRSI) was developed and validated by Ang (2005). The TSRI is a 14-item self-report measure; it uses a 5-point likert scale to assess teachers’ perceptions of the quality of their relationship with students from grades 4 through 8. The items on the TSRI were generated from a review of existing measures of teacher-student relationship. Results from exploratory and confirmatory factor analyses indicated three factors measuring quality of relationship: Satisfaction (5 items), Instrumental Help (5 items), and Conflict (4 items). Satisfaction items measure the degree to which the teacher experiences a positive and satisfactory relationship with a student. The subscale of Instrumental Help includes items related to the teacher’s perceptions of the students’ willingness to seek out resources or to approach the teacher for advice, sympathy, or help. Finally, the Conflict items measure the degree to which the teacher views the relationship as negative, unpleasant, or conflictual. Although the TSRI has not been used in empirical
investigations to the extent of the STRS, it has shown high internal consistency and initial evidence of predictive validity (Ang, 2005).

Given the existence of validated instruments such as the STRS and TSRI, why is there a need for a new instrument? This question is addressed by the previous discussion regarding the need for multiple informants. The two independent measures of teacher-student relationship presented above rely solely on teachers’ perceptions. Thus, no study has yet examined, concurrently, both teachers’ and students’ perceptions of relationship on the same independent measure of teacher-student relationship.

**Definition of teacher-student relationship.** Teachers’ efforts to improve the quality of their relationships with their students are well spent. This can be a difficult task, as each individual child may relate to his or her teacher in different ways. According to attachment theory, children come to school with pre-existing expectations about how available and supportive adults are (Ainsworth & Bowlby, 1991; Anan & Barnett, 1999). These predispositions are thought to influence children’s perceptions and behaviours in ways that will confirm and maintain their prior expectations and relationship patterns. Following this view, it would seem that it may be near impossible for a teacher to develop a positive relationship with a student whose “expectations and relationship patterns” do not fit with their own. As a result, there may be a need to define teacher-student relationships more broadly in order to correspond with the complexity of classroom environments.

In past research, teacher-student relationships have been measured exclusively as the degree to which teachers or students feel that there is a liking, trust, connectedness, or a general absence of conflict. However, it is difficult to instruct a teacher on how to
develop a “liking” of his or her student. Further, regardless of whether these aspects of relationship are teachable, there will always be personalities or attitudes between teachers and students that do not connect well. Therefore, these characteristics should be understood as one aspect of a working relationship. In the counselling context, this relationship has been described as the “working alliance”.

**Working Alliance**

In counselling psychology, the construct of the working alliance has been extensively studied and validated (Horvath & Bedi, 2002). Researchers have demonstrated convincingly that the quality of the working alliance is deemed crucial regardless of theoretical orientation of the therapist. The working alliance is a conceptualization of relationship that taps three interrelated components: bond, task, and goal (Bordin, 1979). There is no one definition of alliance; a number of similar constructs have been described in the literature and various instruments developed to measure them. In a recent review of definitional issues, Horvath and Bedi (2002) proposed the following as representative of an emerging consensus in the field:

Alliance refers to the quality and strength of the collaborative relationship between client and therapist in therapy. This concept is inclusive of: the positive affective bonds between client and therapist, such as mutual trust, liking, respect, and caring. Alliance also encompasses the more cognitive aspects of the therapy relationship; consensus about, and active commitment to, the goals of therapy and to the means by which these goals can be reached. Alliance involves a sense of partnership in therapy between therapist and client, in which each participant is actively committed to their specific and appropriate responsibilities in therapy, and believes that the other is likewise engaged in the process (p. 41).

Findings have demonstrated that the quality of relationship, or the alliance, between client and counsellor is one of the best predictors of a variety of positive outcomes (e.g., Barber, Connolly, Crits-Cristoph, Gladis, & Siqueland, 2000; Horvath,
There is convincing evidence of the link between the alliance and outcome from two different meta-analytic reviews of working alliance between counsellor-client (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000). Measurement of effect sizes indicated that the relationships between alliance and outcome were fairly moderate ($d = .26$) in the earlier analysis based on 24 studies, as well as in the latter ($d = .22$), which examined 79 studies. Effect sizes of this magnitude in a complex endeavor such as therapy, where there are many factors that can potentially exert an impact on outcome (e.g., client problems and personality issues, therapist expertise and methods of intervention, issues of culture, gender, setting, and motivational issues) indicate the importance of this construct. Clearly, a single variable that accounts for effects of this magnitude has substantial clinical relevance.

**Measurement of alliance.** A number of instruments have been developed to measure aspects of the therapeutic alliance. A review of these instruments (Tichenor & Hill, 1989) concluded that the most sophisticated measures are California Psychotherapy Alliance System (Marmar, Weiss, & Gaston, 1989); the University of Pennsylvania scales which includes the Helping Alliance Questionnaire (Luborsky, McLellan, Woody, O'Brien, & Auerbach, 1985); the Therapeutic Alliance Scales (Marziali, Marmar, & Krupnick, 1981); the Vanderbilt Therapeutic Alliance Scale; and the Working Alliance Inventory (WAI; Horvath & Greenberg, 1986, 1989).

The WAI has been shown to be a reliable and solid measure of alliance. It has subscales that measure the three components of alliance that are central to the definition proposed above: bond, task, and goal. While other scales have been developed to represent the differing theoretical constructs of various schools of psychotherapy, the
WAI is pantheoretical, meaning that it allows researchers to measure and compare alliances regardless of the theoretical background and type of interventions used by the therapist. In addition, the scale was constructed to measure alliance from the perspective of both the counsellor and client. The construct of alliance provides a clear definition of relationship and captures something unique to the working relationship. Although the WAI would not be suitable in its present form to the examination of teacher-student alliance within a classroom context, there is a clear indication that the construct of working alliance may share some of the features necessary to develop positive classroom relationships.

Principal Aims of Research Program

The findings from previous research suggest that supportive teacher-student relationships are associated with social, behavioural, and academic competence, as well as overall school adjustment. However, there is a need for research examining the ratings of multiple informants on independent measures of teacher-student relationship. Further, there is no objective measure for the interpretation and understanding of the classroom behaviours that influence teacher-student relationships, and thus, the critical components of this relationship remain unclear. Clearly there are several gaps in this body of research. An important step in furthering this research is to develop a scale unique to the measurement of teacher-student relationship that considers teachers’ and students’ perceptions, and broadens the definition currently employed in the literature to consider variables unique to a classroom working relationship.

This research program sought to address several of these limitations in the literature. The primary objective was to examine whether the construct of the working
Classroom Working Alliance (and the WAI, specifically) could be modified for use in a classroom setting and whether this measure would be able to capture the associations with, and predictions of, positive school-related outcomes that have been reported in this literature review. In light of the importance and complexity of the problem, this thesis project offers two theoretically and methodologically distinct studies of classroom working alliance and positive student outcomes.

Article 1 presents an investigation of teacher and student perceptions of working alliance, as measured by an adapted version of the WAI, the *Classroom Working Alliance Inventory* (CWAI; Heath, Toste, Dallaire, & Fitzpatrick, 2007). This study explores the agreement between teacher- and student-rated indicators of alliance. The significance of working alliance is also examined in terms of its ability to predict student performance. In Article 2, the relationship between school satisfaction and working alliance among elementary-aged students is explored. Teachers’ and students’ perceptions of working alliance are considered, in terms of their ability to predict students’ ratings of school satisfaction. This research program is the first study to examine both teacher and student perceptions of the working alliance, and the differential role of these perceptions in predicting student outcomes.
Perceptions of Classroom Working Alliance and Student Performance

Jessica R. Toste, Nancy L. Heath, and Lynn Dallaire

Department of Educational and Counselling Psychology

McGill University, Montreal, Quebec

Corresponding author: Jessica R. Toste, Department of Educational and Counselling Psychology, McGill University, 3700 McTavish Street, Montreal QC, H3A 1Y2, Canada.
Tel.: 514-398-1232; Fax: 514-398-6968; E-mail: jessica.toste@mcgill.ca
Abstract

Positive teacher-student relationship has clearly been established as an important contributor to students’ social, behavioural, and academic adjustment. Nevertheless, current research has not employed relationship measures that examine both teacher and student perceptions. Furthermore, the currently employed measures lack breadth in the characterization of the teacher-student relationship in failing to assess the interactions and behaviours unique to classroom settings. Employing the construct of “working alliance” from counselling psychology, the purpose of the present study was to investigate teachers’ (N = 14) and elementary school students’ (N = 53) perceptions of their working alliance, and explore how this construct relates to student performance. Teacher and student ratings on subscales of the Classroom Working Alliance Inventory were found to be significantly related to one another. In addition, multiple regression analyses demonstrated the contribution of both teacher- and student-ratings of working alliance to students’ classroom performance.
As children make the transition from home to school, teachers become a primary source of guidance and emotional support. Each day at school, children strive to establish and maintain interpersonal relationships and to develop a sense of belonging. The quality of teacher-student relationship is a reflection of these day-to-day interactions. Children who have close, supportive relationships with their teachers feel that the teacher likes them and thinks that they are capable of learning. A positive relationship with a teacher has been shown to be a critical component in a student’s classroom success, but how can teachers develop and foster a working relationship with their students? Although the existing research has clearly established a connection between positive teacher-student relationship and students’ social, behavioural, and academic adjustment, measurement limitations have precluded current researchers from examining both teacher and student perceptions, and capturing sufficient breadth in conceptualizing teacher-student relationship. Thus, the purpose of the present study was to expand upon the literature by examining both teachers’ and students’ perceptions of their working relationship, and how this construct relates to student performance.

Review of Literature

The quality of teacher-student relationships has been shown to be an important predictor of student-related outcomes. Indeed, Bronfenbrenner (1979) claimed that the teacher-student dyad plays an essential role in children’s learning and developmental processes. Research has documented associations between aspects of teacher-student relationship and children’s behavioural and social competence (Hughes, Cavell, & Wilson, 2001; Pianta, 1994), academic achievement (Furrer & Skinner, 2003; Wentzel,
and overall school adjustment (Baker, 1999; Birch & Ladd, 1997; Murray & Greenberg, 2001).

The majority of research regarding teacher-student relationships and children’s early school adjustment builds on attachment theory (e.g., Pianta, Nimetz, & Bennett, 1997; Pianta & Steinberg, 1992). According to the attachment framework, young children form relationships with their teachers that share similar qualities with those they develop with their primary caregivers (Ainsworth & Bowlby, 1991). From an attachment perspective, children who have a close (or secure) relationship with teachers can rely on their teachers to be trustworthy, consistent, and supportive. Presumably, children with secure relationships with their teachers sense that their teachers care about them, support them, and believe in their ability to succeed. Past research has shown that achievement is enhanced by high expectations for students coupled with a classroom climate characterized by encouragement and support (Bernard, 1991; Stockard & Mayberry, 1992; Wang, Haertel, & Walberg, 1994). Secure relationships provide children with a sense of security and supportive belonging that thereby frees them to pursue other goals such as exploration, learning, and mastery (Ainsworth & Bowlby, 1991; Rey, Smith, Yoon, Somers, & Barnett, 2007).

There is an increasing recognition among educators that children’s overall adjustment and success at school requires a willingness, in addition to an ability, to meet both social and academic challenges (Wentzel, 2002). In considering this, it can be hypothesized that children who have strong teacher-student relationships become more actively engaged in the learning process and thus, experience more positive school experiences.
Teacher-Student Relationship and Children’s Adjustment

Numerous studies have found that positive relationships between teachers and children are associated with a variety of beneficial school-related student outcomes (e.g., Birch & Ladd, 1997; Hamre & Pianta, 2001; Lynch & Cicchetti, 1997). The following section will provide an overview of the literature demonstrating the influence of teacher-student relationship on children’s social and behavioural competence, academic achievement, and overall school adjustment, respectively.

Social and behavioural competence. Numerous studies have provided support for the association between children’s social and behavioural functioning and positive teacher-student relationships (e.g., Birch & Ladd, 1997; Blankemeyer, Flannery, & Vazsonyi, 2002; Dubow, Arnett, Smith, & Ippolito, 2001; Hamre & Pianta, 2001; Hughes, Cavell, & Jackson, 1999; Meehan, Hughes, & Cavell, 2003; Murray & Greenberg, 2001; Pianta, 1994; Popliger & Heath, 2005). Specifically, researchers have found that aggressive children and those with poor social skills are significantly more likely than their peers to have negative relationships with their teachers.

For example, Hamre and Pianta (2001) conducted a longitudinal study examining the trajectory of school outcomes for 179 kindergarten students (91 male, 88 female). Teachers’ perceptions of relationship, as measured by ratings on the Student-Teacher Relationship Scale (STRS; Pianta, 2001) during the children’s kindergarten year, were found to be highly associated with teachers’ ratings of behaviour problems (e.g., conduct, shy/anxious). Furthermore, teacher-rated relationship was predictive of students’ behavioural outcomes, as tapped through school’s disciplinary records, into early elementary and through the eighth grade. These results were supported by Pianta’s earlier
(1994) study of 436 children (205 male, 231 female), in which he reported that
dysfunctional teacher-student relationships in kindergarten predicted conduct problems
and poor social skills in the first grade. These studies provide evidence to support the
critical role of teacher-student relationship in children’s social and behavioural
development. However, both of the described studies assess teacher-student relationship
solely from the perspective of the teacher. In light of the present findings which suggest
that enhancement of teacher-student relationships may influence students’ classroom
behaviour, students’ perceptions may be an important consideration as it is possible that
they understand and characterize positive relationships differently than their teachers.

The association between quality of relationship and behavioural outcomes was
also supported by Hughes and colleagues (1999). In this study, they investigated the
influence of teacher-student relationships on subsequent levels of aggression among a
sample of 61 second- and third-grade students (41 male, 20 female) nominated by
teachers as aggressive. Teachers’ and students’ perceptions of relationship were
represented by a factor score that combined subscales from the Network of Relationships
Inventory (NRI; Furman & Burhmester, 1985) and the Social Support Appraisals Scale
(Dubow, Tisak, Causey, Hryshko, & Reid, 1991), and were found to significantly predict
teachers’ ratings of children’s aggression one year later. However, in considering the
findings from this study, it is important to note that the researchers did not employ
independent measures of teacher-student relationship. By examining a relationship which
develops uniquely within the classroom setting as a subdimension of different constructs,
it is unclear whether these measures are truly assessing the teacher-student relationship.
Indeed, it makes it difficult to generalize results from various studies when each is defining teacher-student relationship in a different way.

*Academic achievement.* Student achievement has also been investigated as an outcome of positive teacher-student relationships. In addition to measures of achievement such as school grades or standardized tests, a child’s academic competence can be measured by other individual characteristics which contribute to their likelihood of success. For example, children’s readiness to learn is characterized by a motivation to engage in classroom experiences and to maintain positive interactions with adults (Lynch & Cicchetti, 1997). This readiness is influenced by students’ interactions with teachers that communicate high expectations, coupled with a classroom climate characterized by encouragement and support (e.g., Stockard & Mayberry, 1992; Wang et al., 1994). Presumably, because these children’s teachers make them feel supported and capable, they behave in ways that support their cognitive development; the students may enjoy school, feel confident in their academic abilities, and be willing to actively engage in classroom activities. Indeed, these assumptions are supported by research that has shown that having a positive and supportive relationship with a teacher enhances student’s motivation, willingness to actively participate in learning activities, and academic success (e.g., DiLalla, Marcus, & Wright-Phillips, 2004; Furrer & Skinner, 2003; Hamre & Pianta, 2001; 2005; Klem & Connell, 2004; Parker & Asher, 1987; Pianta & Steinberg, 1992; Wentzel, 2002).

For instance, in their study of 641 third- through sixth-grade students (321 male, 320 female), Furrer and Skinner (2003) explored the effects of a sense of “relatedness” or belonging on children’s academic motivation and performance. Relatedness was assessed
through children’s responses on 4 items for each social partner (i.e., mother, father, teacher, classmates, and friends). Results indicated that children’s reports of relatedness to teachers was highly related to their own ratings of classroom engagement and motivation for learning. This study has critical implications for the development of positive relationships for children. Nevertheless, it may be argued that the scales used are not truly tapping teacher-student relationship independent of other contextual classroom factors (e.g., happiness, success with schoolwork). Further, the same items were used to assess relatedness for each social partner, which, once again, supports the need to elaborate our current conceptualization of teacher-student relationship.

Similarly, DiLalla and colleagues (2004) showed that teachers’ ratings of relationship, as measured by the Student-Teacher Relationship Scale (STRS; Pianta, 2001), were significantly associated with academic achievement. Analyses based on 42 children (23 male, 19 female) demonstrated that conflictual teacher-student relationships in pre-school predicted teachers’ ratings of children’s school grades 6 to 8 years later (in grades 5 through 8), beyond that explained by children’s early behavioural problems. This study makes a significant contribution to the literature in demonstrating the long-term effects of positive teacher-student relationships. It would be of interest both teachers’ and students’ perceptions of relationship and the outcome of school success.

*Overall school adjustment.* Given that students spend a significant amount of time in school and the teacher-student relationship is a key relationship within the school environment, it is not surprising that a positive relationship with a teacher is important for students’ school adjustment; particularly, how well children adapt to the school environment and other school-related experiences (Juvonen & Wentzel, 1996). Positive
teacher-student relationships have been demonstrated to be an important contributing factor to school adjustment variables, such as academic self-efficacy, self-worth, attitudes toward school, and overall school satisfaction (e.g., Baker, 1999; Birch & Ladd, 1997; Demaray, Malecki, Davidson, Hodgson, & Rebus, 2005; Murray & Greenberg, 2001; Popliger & Heath, 2005; Rey et al., 2007; Wentzel, 2002).

For example, Baker (1999) examined the association between students’ ratings of relationship with their teachers and school satisfaction among 61 children in third-through fifth-grade. Teacher-student relationship was assessed through two measures; Things That Happen in School Scale (Grannis, 1992) to tap social support, and the Psychological Safety Index (Hinman, 1993) to tap students’ sense of security and belonging in the classroom. Results indicated that students with more caring, supportive teachers were more satisfied with school than students who perceived less teacher support. Although these findings support previous research in the area, teacher-student relationship was once again assessed with measures that do not directly examine relationship.

Rey and colleagues (2007) examined teachers’ and students’ perceptions of their relationship. Eighty-nine African American children in Grades 3 through 6 (42 male, 47 female), and their teachers, independently rated the quality of their relationship on the Student-Teacher Relationship Scale (STaRS; Pianta, 2001) and completed a range of questionnaires regarding the children’s school-related adjustment, including school attitudes and classroom behaviour. It was found that children’s perceptions of the teacher-student relationship were indeed significantly related to school adjustment, and predicted numerous school outcomes variables above and beyond teachers’ perceptions.
Moreover, children who perceived a caring, emotionally supportive, and meaningful relationship with their teacher also rated themselves as behaving better in class, feeling more connected to school, and being more involved in school-related activities (e.g., clubs, sports). The findings of this study were critical in that they demonstrate the importance of examining both teacher and student perceptions of relationship, as both ratings independently influence student outcomes. However, teachers and students completed different rating scales in this study, which makes it difficult to compare and examine possible discordances in their perceptions.

**Summary.** Aspects of the teacher-student relationship have been shown to be related to students’ social and behavioural competence, academic achievement, and overall school adjustment. In measuring teacher-student relationship in the literature, there are several inconsistencies regardless of the outcome being assessed.

**Measurement of Teacher-Student Relationship**

In examining the literature on teacher-student relationships, there are several noteworthy inconsistencies in the field. The gaps in the present literature clearly demonstrate a need to develop an independent measure of teacher-student relationship that considers teachers’ and students’ perceptions separately, and broadens the definition currently employed in the literature to consider variables unique to a classroom working relationship.

Past research has shown significant associations between teacher and student perceptions of their relationship, suggesting that children are capable of forming an opinion about their relationship with their teacher in a reliable way (Rey et al., 2007). The notion that two independent raters can partially agree on the quality of a relationship
supports the idea that the teacher-student relationship is a measurable and distinct phenomenon. Only two of the reviewed studies have examined both teacher and student perceptions of relationship (Hughes et al., 1999; Rey et al., 2007), and the association between these ratings and school adjustment. However, Hughes et al. (1999) did not measure teacher-student relationship as an independent construct, but rather as a subdimension embedded within a larger scale of social support. While Rey et al. (2007) employed an independent measure of teacher-student relationship, it was only the teachers who completed this scale; students’ perceptions were measured through a separate measure of social support. With these limitations, a further inconsistency across the literature is revealed.

As evident in Hughes et al. (1999), teacher-student relationships have typically been measured either as a subdimension embedded in larger scales of social support (e.g., Malecki & Demaray, 2002) or as a single dimension based on items extracted from other scales (e.g., Blankemeyer et al., 2002). There currently exists only two validated scales which serve as independent measures of teacher-student relationship: the Student- Teacher Relationship Scale (STRS; Pianta, 1992; 2001) and the Teacher-Student Relationship Inventory (TSRI; Ang, 2005). While both of these scales have been shown to have high internal consistency and good predictive validity (Ang, 2005; Pianta, 2001), they rely solely on teachers’ perceptions. Furthermore, these scales assess relationship solely from the perspective of bond, respect, connectedness, or absence of conflict (characteristics derived from the attachment literature). This is problematic given that there are unique characteristics associated with working relationships, especially in classroom environments.
The Working Alliance

One construct of relationship that has been extensively studied and validated is the working alliance. In the counselling context, researchers have demonstrated convincingly that the quality of the alliance is deemed crucial regardless of theoretical orientation of the therapist. In essence, alliance refers to the quality and strength of the collaborative relationship (Horvath & Bedi, 2002). Findings have demonstrated that the quality of relationship, or the “alliance”, between client and counsellor is one of the best predictors of a variety of positive outcomes (e.g., Barber, Connolly, Crits-Cristoph, Gladis, & Siqueland, 2000; Horvath, 2000; Martin, Garske, & Davis, 2000; Norcross, 2002).

Bordin (1979) conceptualized the working alliance as consisting of three interdependent components: bond, task, and goal. The Working Alliance Inventory (WAI; Horvath & Greenberg, 1986, 1989) was developed based on this conceptualization, with three unique subscales, and has been shown to be a reliable measure of alliance. The aspect of bond represents the emotional component of the relationship, a complex network of positive attachments based on mutual trust, liking, respect, and caring. This represents much of what has been encompassed in explorations of teacher-student relationship. However, alliance also encompasses more cognitive aspects of relationship; including the goals established in collaboration between the two parties, as well as the tasks or means by which these goals can be reached.

The WAI provides a previously validated definition of the elements that form a positive relationship, as well as a solid foundation for assessing these elements from the
perspective of multiple informants. Thus, the present study sought to explore whether the construct of working alliance could be validated for use in the classroom.

Summary and Research Questions

Together, the findings from previous research suggest that supportive teacher-student relationships are associated with myriad school-related adjustment outcomes. However, there is a need for research examining the variables unique to a classroom setting and, specifically, a working relationship between teacher and student. The purpose of the current investigation is to explore teacher and student perceptions of working alliance, as measured by an adapted version of the WAI, the Classroom Working Alliance Inventory (CWAI; Heath, Toste, Dallaire, & Fitzpatrick, 2007). The present study builds on previous work by examining the following questions: (a) Is there agreement between teacher-rated and student-rated indicators of alliance? and (b) How much variance in the student performance can be accounted for by teacher and student ratings of alliance?

Method

Participants

Participants were 53 children (28 male, 25 female) enrolled in a public elementary school located in the greater Montreal area, and their classroom teachers (N = 14). Students were randomly selected from the class lists of the teachers who agreed to participate in the study. Children ranged in aged from 8.5 to 12.8 years (M = 123.36 months, SD = 13.47), with 16 students from grade three, 15 students from grade four, 12 students from grade five, and 10 students from grade 6. The school population is comprised largely of working class to middle class families of various cultural
backgrounds. As identified by the parents, the children’s first language was English (84.9%), French (1.9%) and other (13.2%).

Fourteen classroom teachers (3 male, 11 female) participated in this study. There were a total of 18 teachers responsible for the grades 3 to 6 classes; all teachers were approached and 4 declined participation due to previous commitments with other projects. Teachers were between the ages of 22 and 58 years ($M = 37.36, SD = 13.28$), with years of teaching experience ranging from 1 to 33 years ($M = 11.86, SD = 11.51$). Each teacher had between 2 to 5 participating students from their homeroom class. The teachers identified their first language as English (57.1%), French (28.6%), and other (14.3%).

**Measures**

*Classroom Working Alliance Inventory* (CWAI; Heath, Toste, Dallaire, & Fitzpatrick, 2007). For the purposes of the present study, the WAI Short Form (WAI-SF; Tracey & Kokotowitc, 1989; from Horvath, 1986) was adapted for use with elementary-aged students. The CWAI is a 12-item questionnaire assessing the teacher-student relationship using a 5-point likert (see Appendix 1). Parallel teacher and student forms are used, in order to tap multiple perceptions of relationship. This inventory consists of the three subscales that represent the critical components of alliance: task, bond, and goal. The task subscale focuses on the agreement and understanding of task relevance within the classroom setting. This subscale taps whether teachers and students feel that the tasks assigned in the classroom are relevant to the student’s individual learning (e.g., “What I am doing in school helps me learn better in the areas that I have difficulty”) and will help him or her achieve success (e.g., “My teacher and I agree about the things I need to do to
help me improve my schoolwork”). The bond subscale captures the respect, liking, and trust between the teacher and his/her student. For example, this subscale includes items such as “I believe my teacher likes me” and “My teacher and I trust one another”. Finally, the goal subscale measures the extent to which the teacher and student feel that they are collaborating on the goals set within the classroom. This subscale is tapping the teachers’ and students’ sense of agreement and mutual understanding about classroom objectives (e.g., “My teacher and I agree about what my difficulties are” and “We agree about what I need to do differently in school”).

To assess whether the four items that were summed to create each subscale (i.e. task, bond, goal) formed a reliable scale, Cronbach’s alpha was computed. This analysis was conducted with the teacher version of the CWAI. The alpha for the task subscale was .85, which indicates that the items form a scale that has reasonable internal consistency reliability. Similarly, the alphas for the bond subscale (.85) and goal subscale (.76) also indicated good internal consistency.

Student Performance Questionnaire (SPQ). The SPQ was developed by the researchers in order to tap academic and behavioural indices of overall performance in one particular day of school (see Appendix 2). The SPQ was administered in the form of parallel teacher and student rating scales; and both parties were asked to refer to the same date in responding to the questions. This questionnaire included 6 questions relating to student’s performance including work habits, attention, independence, behaviour, how much was learned, and enjoyment. The SPQ is also comprised of a total performance score that represents a composite of ratings on these six questions.
**Procedure**

The 18 homeroom teachers for the grades 3 to 6 classes were first approached to describe the project and obtain written consent. For each of the 14 teachers who agreed to participate, 5 students were arbitrarily selected from their class lists. Thus, a total of 70 students (35 male, 35 female) were approached to participate in the study. Parents were mailed an information letter and consent form for participation. Fifty-three parents returned consent forms (75.7% response rate) and all children gave their assent to participate prior to completing the interview session.

Children were seen at their schools during the spring months of 2005. This ensured that students and teachers had adequate time to form a relationship. Interview sessions were approximately 20 minutes long and were completed on an individual basis by a senior graduate student in educational psychology. Children completed the CWAI and SPQ, student versions. All measure items were read aloud by the researcher in order to maintain standardization, ensure understanding, and provide clarification if required.

Teachers were asked to complete a short package, including the teacher versions of the CWAI and SPQ, for each participating student from their homeroom class. The package was given to the teacher immediately following the student’s interview session and they were asked to return it to the research team leader the following day, in order to ensure that both student and teacher were using the same day as a point of reference when responding to the questions regarding the student’s classroom performance.

**Results**

The data analysis section is divided into two parts corresponding to the research questions: (a) correlational data on teachers’ and students’ perceptions of their
relationships; and (b) regression analyses pertaining to the prediction of overall student performance from teacher- and student-rated alliance variables.

**Correlations Between Raters on Alliance Variables**

To test the agreement between teacher and student perceptions of their relationships, bivariate Pearson correlations were run between teachers’ and students’ ratings on CWAI subscales: task, bond, and goal. Results indicated significant correlations between teacher and student perceptions of task and bond ($r = .32, p = .02$; $r = .30, p = .03$, respectively). Teachers’ ratings on the task subscale was significantly related to students’ perceptions of goal collaboration, $r = .28, p = .04$. In addition, teachers’ ratings of bond were related to students’ ratings of task agreement and goal collaboration ($r = .38, p = .01$; $r = .36, p = .01$, respectively). That is, teachers’ perceptions of a bond in the relationship were associated with students’ perceptions of positive working alliance. Refer to Table 1 for the complete list of correlations.

**Regression Analyses for Alliance Variables Predicting Student Performance**

An initial exploration of the distribution of teacher and student alliance subscale scores revealed approximately normal distributions, with skewness and kurtosis values lying between -1.00 and 1.00. To determine the best combination of alliance variables for the prediction of the total student performance score, separate simultaneous multiple regression analyses were run for each dependent variable, teacher-rated SPQ score, and student-rated SPQ score. One regression equation was run per rater for each set of predictor variables: teachers’ ratings of alliance variables and students’ ratings on alliance variables, for a total of 4 regression analyses. Leech, Barrett, and Morgan (2005) recommend using the simultaneous regression method if the researcher has no a priori
ideas hypotheses about which variables will create the best prediction equation and there are a reasonably small set of predictors, which is consistent with the present investigation. Therefore, this set of analyses examine how well one can predict student performance from a combination of three alliance variables, specifically, task, bond, and goal.

*Teacher-rated performance.* Two multiple regressions were conducted to determine the best combination of either teacher or student ratings of task, bond, and goal for predicting teacher-rated total performance on the SPQ. For the first analysis, the teacher-rated CWAI subscale scores served as the predictor variables and the teachers’ total SPQ score was the dependent variable. Results revealed that this combination of variables significantly predicted teacher ratings of student performance, $F(3, 49) = 12.91$, $p < .00$. The adjusted $R$ squared value was .407. This indicates that 40.7% of the variance in teachers’ perceptions of student performance was explained by the teachers’ perceptions of alliance. According to Cohen (1988), this is a large effect size.

The beta weights suggest that the task subscale contributed most to the prediction of teacher-rated student performance. However, an examination of the regression coefficients details the contribution that each of the alliance variables independently makes to the prediction. Specifically, the partial correlation explains the relationship between each predictor and the dependent variable after removing the overlap with the other predictor variables. The purpose of this type of analysis is to spot spurious correlations (i.e., correlations explained by the effect of other variables), as well as to reveal hidden correlations (i.e., correlations masked by the effect of other variables) (Tabachnick & Fidell, 2001). Squaring the partial correlation indicates the proportion of
variance in teacher-rated student performance uniquely accounted for by that variable. These results revealed that, although the task subscale predicts the most variance (8.23%), the bond subscale also predicts a noteworthy amount of variance in performance ratings (6.4%), beyond that which is predicted by task or goal. Overall, 25.62% of explanatory variance is shared between the three variables. A summary of the multiple regression analysis, including means and standards deviations, can be found in Table 2.

In the second analysis, teachers’ total SPQ score remained as the dependent variable, but student-rated CWAI subscale scores served as the predictor variables. This combination of variables also significantly predicted teacher-rated student performance, although not as strongly as the previous model, $F(3, 49) = 5.17, p = .003$. Overall, this model accounted for 19.4% of the variance in teachers’ perceptions of student performance. This is a medium effect size, as defined by Cohen (1988). An examination of the beta weights suggest that students’ rating of goal appeared to explain the most variance in predicting student performance. Further inspection of the partial correlations for the alliance variables supported this finding; the goal subscale uniquely predicted 10.3% of the variance, while the bond and task subscales did not substantially contribute to the amount of explained variance (1.2% and 0.03%, respectively). A further 7.87% was shared explanatory variance. A summary of these results can be found in Table 3.
Table 1  
*Bivariate Correlations between Teachers’ and Students’ Ratings on the CWAI*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student ratings (n = 53)</td>
<td>Teacher ratings (n = 53)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Task</td>
<td>.315*</td>
<td>.375**</td>
<td>.219</td>
</tr>
<tr>
<td>2. Bond</td>
<td>.183</td>
<td>.299*</td>
<td>.172</td>
</tr>
<tr>
<td>3. Goal</td>
<td>.279*</td>
<td>.356**</td>
<td>.172</td>
</tr>
</tbody>
</table>

* *p < .05  **p < .01

Table 2  
*Summary of Regression Analysis for Teacher Alliance Variables Predicting Teacher-Rated Student Performance (N = 53)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>pr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>4.18</td>
<td>.64</td>
<td>.63</td>
<td>.30</td>
<td>.44*</td>
<td>.22</td>
</tr>
<tr>
<td>Bond</td>
<td>4.35</td>
<td>.64</td>
<td>.46</td>
<td>.25</td>
<td>.32</td>
<td>.19</td>
</tr>
<tr>
<td>Goal</td>
<td>4.01</td>
<td>.61</td>
<td>-.12</td>
<td>.25</td>
<td>-.08</td>
<td>-.05</td>
</tr>
</tbody>
</table>

*Note. Adjusted $R^2 = .407$ (p < .00)  
* *p < .05

Table 3  
*Summary of Regression Analysis for Student Alliance Variables Predicting Teacher-Rated Student Performance (N = 53)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>pr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>4.34</td>
<td>.50</td>
<td>-.04</td>
<td>.33</td>
<td>-.02</td>
<td>-.02</td>
</tr>
<tr>
<td>Bond</td>
<td>4.43</td>
<td>.61</td>
<td>.18</td>
<td>.23</td>
<td>.12</td>
<td>.11</td>
</tr>
<tr>
<td>Goal</td>
<td>4.03</td>
<td>.67</td>
<td>.59</td>
<td>.25</td>
<td>.43*</td>
<td>.32</td>
</tr>
</tbody>
</table>

*Note. Adjusted $R^2 = .194$ (p = .003)  
* *p < .05
Student-rated performance. Since the correlational analyses indicated that there was some differentiation in perceptions of working alliance based on rater, separate multiple regression analyses were conducted with student-rated SPQ score as the dependent variable. First, the teacher-rated CWAI subscale scores were entered as the predictor variables. This combination of variables did not significantly predict students’ self-rated performance, $F(3, 49) = 1.94, p = .14$, and the adjusted $R$ squared revealed that only 5.1% of the variance was explained.

The second regression was conducted to determine the predictive value of student-rated task, bond, and goal for the dependent variable, student-rated total performance on the SPQ. Results indicated that this combination of variables significantly predicted students’ ratings of their own performance, $F(3, 49) = 10.51, p < .00$. The adjusted $R$ squared value indicates that 35.4% of the variance in students’ self-perceptions of classroom performance is explained by the model, which is a large effect size (Cohen, 1988). An examination of the beta weights suggests that the bond subscale contributed most to the prediction. However, the partial correlations detailed in the analysis of regression coefficients indicated that the goal subscale predicted 6.6% of the variance, in addition to the 9.67% explained independently by the bond subscale and the 19.05% of shared variance. Tables 4 and 5 provide a summary of the multiple regression analyses.
Table 4
Summary of Regression Analysis for Teacher Alliance Variables Predicting Students’ Self-Rated Performance (N = 53)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>SEB</th>
<th>$B$</th>
<th>$pr$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>.242</td>
<td>.241</td>
<td>.269</td>
<td>.14</td>
</tr>
<tr>
<td>Bond</td>
<td>.150</td>
<td>.199</td>
<td>.166</td>
<td>.11</td>
</tr>
<tr>
<td>Goal</td>
<td>-.125</td>
<td>.196</td>
<td>-.133</td>
<td>-.09</td>
</tr>
</tbody>
</table>

*Note. Adjusted $R^2 = .051 \ (p > .05)$

Table 5
Summary of Regression Analysis for Student Alliance Variables Predicting Students’ Self-Rated Performance (N = 53)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>SEB</th>
<th>$B$</th>
<th>$pr$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>.119</td>
<td>.188</td>
<td>.103</td>
<td>.09</td>
</tr>
<tr>
<td>Bond</td>
<td>.299</td>
<td>.131</td>
<td>.319*</td>
<td>.31</td>
</tr>
<tr>
<td>Goal</td>
<td>.261</td>
<td>.140</td>
<td>.303</td>
<td>.26</td>
</tr>
</tbody>
</table>

*Note. Adjusted $R^2 = .354 \ (p < .001)$

Discussion

The purpose of the present study was to examine the agreement between teacher and student perceptions of working alliance and, more importantly, to examine the contribution of teacher and student ratings of alliance to the prediction of student performance. Specifically, the study investigated whether working alliance variables of task, bond, and goal predicted either teacher- or self-ratings of student performance in a sample of elementary-aged children. Researchers have consistently documented the importance of teacher-student relationship for children’s school performance (e.g.,
DiLalla et al., 2004; Hamre & Pianta, 2001; Lynch & Cicchetti, 1997). However, research in this field has employed a limited conceptualization of teacher-student relationship that does not consider variables that may be unique to a working relationship in a classroom setting. The current study broadens the conceptualization of teacher-student relationship by examining the construct of the classroom working alliance.

Furthermore, past research has not taken into account the perceptions of both teachers and students. Based on a review of literature, there exist only two studies (Hughes et al., 1999; Rey et al., 2007) that have examined both teachers’ and students’ perceptions of relationship. As previously stated, neither of these studies employed the same measures of relationship for both informants, nor did they consider scales developed solely for the purpose of capturing characteristics uniquely to the teacher-student relationship. Hughes et al. (1999) measured relationship as a subdimension embedded within a larger scale of social support, whereas, Rey et al. (2007) used an independent measure of teacher-student relationship, but only to assess teachers’ perceptions. Therefore, it is not known whether teachers and students agree on their ratings of relationship, or to what extent their separate ratings on a measure of “working alliance” might predict student performance.

The degree of correspondence between teachers’ and students’ perceptions of working alliance was a key goal of this study. In the limitations of their study, Rey and al. (2007) identified the need to develop new measures that have corresponding items for teachers and children in order to make more direct comparisons. Results of the present study revealed significant moderate correlations between teacher and student ratings on the task and bond subscales, suggesting that both have similar perceptions of their
working alliance, which validates the importance of considering multiple informants in future research. In addition to agreement on subscale ratings, significant correlations were found between teacher-rated bond and students’ ratings on all three subscale scores (i.e., task, bond, goal). This finding suggests that teachers’ perceptions of bond, defined as closeness and trust, are associated not only with the students’ mutual sense of bond, but also his or her perception that school tasks are relevant and classroom goals are individualized to meet his or her needs. In past studies, researchers have employed a definition of teacher-student relationship limited to what the current study refers to as “bond” and have reported important associations between relationship and student outcomes (e.g., Birch & Ladd, 1997; Hamre & Pianta, 2001; 2005). Thus, it is not surprising that teachers’ rating of bond was found to be an important factor in students’ perceptions of classroom working alliance.

The present results revealed that teachers’ perceptions of alliance predicted their own ratings of student performance, but not the students’ self-rated performance. However, students’ perceptions of alliance were significant predictors of both teacher- and self-rated performance. This finding provides support for the use of students’ perceptions of the working alliance in investigations of school-related outcomes. Moreover, the students’ perceptions of alliance predicted performance above and beyond teachers’ relationship perceptions. These findings are consistent with previous research on children in the late-elementary grades (grades 3 to 6) that has shown unique, positive associations between student perceptions of their relationships with their teachers and indices of positive school outcomes (e.g., Furrer & Skinner, 2003; Rey et al., 2007). Importantly, this is the first study that has demonstrated validity in predicting school
performance through use of a broader conceptualization of the construct of teacher-student relationship.

The current results are consistent with previous findings that teacher reports of relationship are predictive of students’ school-related outcomes (Birch & Ladd, 1997; Rey et al., 2007). It seems that each informant’s perspective of the working alliance is especially salient to his or her own opinion about student performance. Interestingly, student reports of alliance predicted both teacher- and self-reported ratings of performance, which has not been demonstrated in previous research exploring teacher-student relationships. This finding indicates that students who believe that they have a positive working alliance with their teacher are performing well in class and have positive perceptions of their own performance as well.

Of particular interest to this investigation is the predictive value of the separate subscale scores. As previously mentioned, past research exploring teacher-student relationships has been primarily limited to the examination of variables related to “bond.” Thus, by broadening the conceptualization of relationship to examine the working alliance, it was of interest to observe whether other subscales emerged as important contributors to the prediction of student performance. Teachers’ rating of student performance was significantly predicted by both teacher- and student-rated alliance. For teachers’ perceptions of alliance, the task subscale explained the most variance in performance ratings. However, teachers’ perceptions of bond also explained a substantial amount of variance. For students’ perceptions of alliance, the goal subscale uniquely contributed the most to the prediction of teacher-rated performance. Thus, these results indicate that teachers’ opinions of whether they have shared goals with their students is
not as important a factor in predicting the way that they observe students’ classroom performance, as task or bond. Although, in considering the significant correlation between teachers’ rating of task and students’ rating of goal, it is possible that students feel that shared goals are established when they perceive that classroom tasks are relevant to them. It is interesting to note that 25.62% of the variance was explained by the three alliance subscales collectively. This suggests that although task (teachers’ perception of whether the student understood the relevance of, and completed, assigned tasks) emerged as a critical factor in determining how teachers’ rated their students’ performance, there is an important inter-play between the alliance variables.

Students’ self-rated classroom performance was not significantly predicted by teachers’ perceptions of alliance, although it was predicted by their own perceptions of working alliance. Specifically, the bond and goal subscales were significant contributors to the prediction. Therefore, students who felt closeness and trust with their teachers, as well as a belief that the teacher was considering their personal learning goals, were more likely to perceive themselves as doing well in class.

In this study, students’ actual performance was not measured in terms of school grades, test scores, or other standardized measures of achievement. Therefore, it is possible that the student outcomes measured were representing subjective perceptions of student satisfaction with the classroom experience. Future research into the contribution of classroom working alliance to specific school-related outcomes is needed. There were other limitations to this study, such as the relatively small and homogenous sample. These, and other study factors raise unanswered questions, however, they do not change the basic conclusions of the study. That is, regardless of informant, the quality of working
alliance with teachers remained an important predictor of students’ overall classroom performance. These findings have important implications for educators.

Implications

The results of this investigation have implications for school and classroom. Current school-based intervention programs place little emphasis on the teacher-student relationship; instead greater emphasis has been placed on classroom management techniques (Hughes et al., 1999). Teacher-student relationship should be addressed due to its impact on school outcomes; including students’ social, behavioural, and academic adjustment. Given that teachers are in the position to potentially initiate the steps towards a more positive working relationship, this line of research may prove to be a useful adjunct for student skills-training interventions.

Future research must consider the possible influence of a positive teacher-student working alliance on students who are experiencing social, behavioural, or academic difficulties. Past research has shown that teachers prefer children who are cooperative and prosocial to those who are antisocial and disruptive (Wentzel, 1994), perhaps because these children allow teachers to focus on teaching, and may even facilitate the lesson. It has been found that teachers have warmer relationships with students who are less active and disruptive in the classroom, and that they are more encouraging and have more patience with these students (Hamre & Pianta, 2001). However, it is those students deemed “at-risk” who are lacking the social connectedness at school that could function as a protective factor in the face of academic or life stressors. Teachers efforts to improve their relationships with students can have a significant influence on children’s overall school functioning (Rey et al., 2007).
It is essential to make school staff aware of the potentially lasting effects of the support they provide their students and the supportive environment they are creating at the school. Beck & Malley (1998) call for a new pedagogical model that promotes a sense of community and belonging by strengthening teacher-student relationships. If students feel supported by their teachers, it is likely that they will have more positive feelings about attending school, as well as toward their teachers and classmates.

Conclusion

The alliance inventory serves as a tool that captures the breadth and unique quality of the teacher-student relationship. The present results indicate that the information derived from the teacher-student working alliance can be used to enhance student performance. Therefore, this measure can be used not only to assess relationship, but also provide concrete steps for teaching alliance-building skills. Ultimately, the ability to demonstrate the working alliance as a predictor of student classroom performance will have implications for the educational system in regards to the development and promotion of quality of teacher-student relationships.
References


Connecting Text

The findings presented in Article 1 validate the working alliance as a construct that taps critical aspects of the teacher-student relationship. This study supported the use of both teachers’ and students’ perceptions of alliance, as well as the reliability of these perceptions in predicting student performance.

These results suggest future research avenues, particularly related to the examination of working alliance in association with other school-related student outcomes. As such, the manuscript that follows will build on these findings by exploring another indicator of students’ adjustment, school satisfaction. Specifically, Article 2 will explore the contribution of teacher- and student-rated alliance to students’ ratings of school satisfaction.
CHAPTER 4
ARTICLE 2

Fostering Resilient Classrooms:
Exploring the Relationship Between School Satisfaction and Teacher-Student Alliance

Jessica R. Toste and Nancy L. Heath
Department of Educational and Counselling Psychology
McGill University, Montreal, Quebec

Corresponding author: Jessica R. Toste, Department of Educational and Counselling Psychology, McGill University, 3700 McTavish Street, Montreal QC, H3A 1Y2, Canada. Tel.: 514-398-1232; Fax: 514-398-6968; E-mail: jessica.toste@mcgill.ca
Abstract

Resilient classrooms foster social and academic competence through positive learning experiences. Positive teacher-student relationships have been found to enhance children’s social and emotional well-being. Furthermore, strong teacher-student relationships give children a sense of belonging, which enhances motivation and self-esteem. All of these factors have been suggested to impact on a student’s school satisfaction. The “working alliance” taps three critical aspects of relationship, including bond, task agreement, and collaboration on goals. Recent research exploring the working alliance in classrooms has shown that it is strongly related to teacher- and student self-perceptions of performance. The current study sought to build on these findings by investigating the contribution of teacher- and student-rated working alliance to the school satisfaction of elementary-aged students (N = 50). Results indicated that students’ perceptions of working alliance, specifically their perception of bond, were most predictive of their school satisfaction. Findings support the importance of teacher-student alliance in fostering resilient classrooms and positive school experiences.
Review of Literature

School and classroom environments play a central role in children’s development. Yet, educational programs and interventions often focus on academic achievement and the assessment of difficulties, rather than attempting to identify and understand factors that contribute to the positive psychological well-being of our students. Positive psychology, defined as the study of ordinary human well-being, consists of three domains: positive subjective experiences, positive individual traits, and institutions that promote them (Seligman & Csikszentmihalyi, 2000; Sheldon & King, 2001). Characteristics such as positive self-esteem and academic competence are believed to act as buffers against the development of psychological difficulties (Masten, 2001). Thus, the application of a positive psychology framework encourages student development through building strengths and shaping environments that support adjustment; in addition, this perspective provides information about the programs and services for all students, not only those experiencing difficulties. To reap the benefits of these contributions, it is of import to understand the connections between students’ well-being and their various environmental contexts, such as schools and classrooms.

Resilient Classrooms

The contexts in which children participate have a significant impact on their adaptation and adjustment (Masten & Coatsworth, 1998). Given that children spend much of their time at school, and the degree to which this environment influences children’s experiences and self-perceptions, it is important to consider how schools and classrooms can serve as healthy environments that promote positive adjustment. Positive classroom experiences play a critical role in students’ academic success and overall well-
being. It has been suggested that if students are able to enjoy their academic experiences, then they become more willing and motivated to exert the increased effort often required to be successful in school (Meltzer et al., 2004).

Children who are successful have resources, competencies, and support from their social environments that contribute to their positive development and protect them from the stress and negative effects inherent in adverse situations (Luthar, Cicchetti, & Becker, 2000). In line with this definition of resilience, “resilient classrooms” are environments that foster social and academic competence through positive learning experiences (Doll, Zucker, & Brehm, 2004). In the following section, the literature will be discussed with a particular emphasis on school satisfaction, as one marker of positive school adjustment.

School Satisfaction and Student Adjustment

Positive school adjustment has been predominantly measured by students’ grades and test scores. However, students’ attitudes and beliefs towards their educational experiences may be more indicative of their interactions within the school environment, and as such, may be better predictors of school-related outcomes, including academic success. School satisfaction can be measured as one attitudinal marker of school adjustment (Baker, Dilly, Aupperlee, & Patil, 2003). It is considered to be the appraisal of the perceived quality of school life and because its measurement is subjective, it accounts for individual students’ perceptions of their school experiences. Although the literature on school satisfaction is sparse, it is a critical factor to examine as dissatisfaction with school has been shown to affect psychological well-being, as well as academic performance, school engagement, behavioural problems, absentee rates, and drop-out (Cock & Halvari, 1999).
It is not surprising that children who do well in school tend to be more satisfied with school. Central to this notion is the perception that one is competent, and academic self-efficacy has been found to be highly related to school satisfaction (Huebner & McCullough, 2000). Thus, a sense of competence may play a mediating role in linking educational performance to school satisfaction, or vice versa. From a positive psychology perspective, one could posit that students who have positive school experiences are more likely to have enhanced self-efficacy, which would lead to enhanced educational performance. However, how one achieves school satisfaction remains unclear.

The idea that classroom characteristics affect student satisfaction with schools is a common one (Baker, 1999; Doll, Zucker, & Brehm, 2004; Verkuyten & Thijs, 2002). However, most studies have focused on the consequences of school satisfaction, and few have examined possible predictors of school satisfaction. Although there are only a small number of studies on school satisfaction (e.g., Baker, 1999; Huebner & McCullough, 2000; Huebner, Ash, & Laughlin, 2001; Verkuyten & Thijs, 2002), this area of research attempts to understand the complex processes involved in students’ perceptions of the quality of school life. For example, some literature has explored the relationship between individual experiences, intrapersonal characteristics of students, and school satisfaction. An illustration of this is the work by Huebner and colleagues.

In a study of school satisfaction among 152 adolescents (56 male, 96 female), Huebner et al. (2001) assessed adolescents’ daily experiences, locus of control, life stressors, and school satisfaction as measured by a subscale of the Multidimensional Students’ Life Satisfaction Scale (MSLSS; Huebner, 1994). Results revealed that environmental experiences (e.g., acute major events and chronic life experiences, such as
death of a family member or persistent family stress) were related to adolescents’ school satisfaction, and that locus of control mediated the relationship between these negative life experiences and school satisfaction (Huebner et al., 2001). Further, Huebner and McCullough (2000), in a study of 92 adolescents (45 male, 42 female), demonstrated that environmental experiences and academic self-efficacy significantly contribute to the school satisfaction reports of high school students on the MSLSS. These findings have furthered our understanding of school satisfaction by demonstrating the complex interactions of variables, beyond academic achievement, that influence adolescents’ perceptions of and attitudes toward school, beyond academic. However, it is not clear whether these findings would be consistent with samples of elementary-aged students.

Another area of investigation is the specific classroom practices associated with school satisfaction (Baker, Davis, Dilly, & Lacey, 2002; Baker, 1999). Preliminary data gathered by Baker and colleagues (2002) from a cross-sectional study of children between kindergarten and fifth grade (N = 1310), suggested that the degree of clarity in classroom rules and predictable structure positively affected school satisfaction among elementary school students. Previous work by Baker (1999), which will be discussed in more depth at a later point, demonstrated that disciplinary practices were related to school satisfaction, in that students who expressed poor school satisfaction had received much more punishment than those students who had high ratings of school satisfaction.

Building on Huebner’s findings, these studies provide solid, preliminary evidence that school satisfaction is not only related to variables beyond achievement but that school satisfaction may also be influenced by malleable factors, such as teacher behaviours. The
current investigation seeks to extend on this literature by examining the association between school satisfaction and teacher-student relationships.

**Positive Teacher-Student Relationship as a Contributor to School Satisfaction**

A relationship with a teacher can be an important source of security and stability for students (Birch & Ladd, 1998; Pianta et al., 2002; Wentzel, 2002). These relationships have been found to enhance children’s social and emotional well-being, educational performance, and their sense of belonging (e.g., Beck & Malley, 1998; Hamre & Pianta, 2001; Hughes, Cavell, & Wilson, 2001; Murray & Greenberg, 2001). It has been argued that children who have positive relationships with their teachers are able to acquire skills and knowledge more easily through participation in the classroom and engagement in activities (e.g., Buhs, Ladd, & Herald, 2006; Diperna, 2006; Hambre & Pianta, 2001). Additionally, it has been shown that students with higher quality relationships are better able to communicate effectively in instructional exchanges by using their teachers as a secure base from which to explore their surroundings (e.g., Birch & Ladd, 1997; Pianta, 1994). Several studies have examined teacher-student relationship and factors associated with students’ school satisfaction, such as school engagement and academic self-efficacy.

For example, in a study of 641 third- through sixth-grade students (321 male, 320 female), Furrer and Skinner (2003) found that children who reported positive relationships with their teachers on a 4-item questionnaire demonstrated greater emotional and behavioural engagement, as captured by teacher- and self-reports, than children with less positive relationships. Further, Pianta (1994) established the predictive influence of kindergarten children’s (N = 436; 205 male, 231 female) relationships with their teachers on frustration tolerance and work habits as rated by their teachers in the
first grade. Similarly, in another study of 206 kindergarten children (108 male, 98 female), Birch and Ladd (1997) reported that teachers’ ratings of positive teacher-student relationships were directly linked with school liking, self-directedness, and cooperation in the classroom. Taken together, these studies clearly suggest that positive teacher-student relationships, as rated by the student, are associated with a variety of positive outcomes. It seems that one of the most obvious benefits of positive classroom relationships for students would be improved school satisfaction. However, only one study has directly examined the association between teacher-student relationship and school satisfaction in elementary-aged students.

Specifically, Baker (1999) examined the association between teacher-student relationships and school satisfaction among 61 third- through fifth-grade African American students. Relationship quality was assessed through students’ ratings on a scale of social support and a measure of psychological safety. Results revealed the influence of several school variables (e.g., caring and supportive teacher, positive school climate, and classroom stressors) on school satisfaction. Specifically, students’ who rated school as a more likeable and satisfying environment were found to report more caring and supportive relationships with teachers than their peers who expressed the least satisfaction with school. This study provides evidence of the importance of teacher-student relationship in enhancing students’ school satisfaction. However, it is difficult to generalize these findings due to the measurement of teacher-student relationship as simply “caring, supportive” among several other school variables. Nevertheless, these findings provide some rationale for schools to consider relationship-building as an essential tool in the creation and fostering of resilient classrooms.
Understanding Teacher-Student Relationship

In past research, as noted above, teacher-student relationships have been measured exclusively as liking, respect, trust, or connectedness (e.g., Baker, 1999; Birch & Ladd, 1997). Although it is important to encourage teachers to foster these connections with their students, the individual personalities or attitudes of students and teachers may make it difficult for this bond to develop. It is a definite challenge to teach one to develop a “liking” of a student or the characteristics of positive relationships as they have been previously measured. Further, it could be argued that teacher-student relationships require a broader conceptualization due to the nature of the classroom environment and these working relationships.

In counselling psychology, this relationship has been described as “working alliance.” The working alliance has been conceptualized as three interrelated components: bond, task, and goal (Bordin, 1979). Past researchers have explored the association between the quality of the counsellor-client working alliance and its effects on therapy progress or outcomes. Findings have consistently revealed positive associations between strong working alliance and positive outcomes (e.g., Barber, Connolly, Crits-Cristoph, Gladis, & Siqueland, 2000; Horvath, 2000; Martin, Garske, & Davis, 2000; Norcross, 2002). Indeed, working alliance is believed to be one of the best predictors of successful outcomes in therapy.

The bond component of the working alliance represents the characteristics that have been the focus most researchers have taken in studying teacher-student relationship. “Bond” represents the emotional component of a relationship and includes characteristics such as mutual trust, liking, respect, and caring. The notion of working alliance also
encompasses more cognitive and observable aspects of relationship, including the goals established in collaboration between the two parties, as well as the tasks or means by which these goals can be reached. A recent study by Toste, Heath, and Dallaire (2007) demonstrated the influence of teachers’ and students’ ratings of working alliance on perceptions of student performance. This was the first study to employ an adapted version of Working Alliance Inventory (WAI; Horvath & Greenberg, 1986; 1989), unique to classroom settings – the Classroom Working Alliance Inventory (Heath, Toste, Dallaire, & Fitzpatrick, 2007). However, there has yet to be a study examining the possible relationship between working alliance and school satisfaction.

Research Questions

The purpose of the current study was to explore the relationship between school satisfaction and working alliance with teachers among elementary-aged students. The specific aim of the study was to extend previous work by investigating the influence of a broader construct of teacher-student relationship (i.e., the working alliance) on students’ ratings of school satisfaction. Thus, the questions of interest to the present investigation are: (a) Do alliance variables predict a significant proportion of variance in students’ ratings of school satisfaction? (b) Are student- or teacher-ratings of alliance more strongly related to school satisfaction?

Method

Participants

The participants in this study were recruited within a larger research program exploring self-perceptions, depression, and response to positive feedback. The sample consisted of 50 elementary students (33 male; 17 female) in grades 4, 5, and 6. Children
ranged in age between 9.5 and 12.67 years (M = 133.22 months, SD = 11.37), with 16 students in the fourth grade, 12 students from the fifth grade, and 22 students from the sixth grade. All participants were fluent in English, and the majority (69.8%) spoke English the majority of the time at home. Of the remaining participants, 11.6% spoke French at home, 7% spoke both English and French, and 11.6% spoke a language other than English or French for the majority of the time at home. Parents reported their household income as ranging from $0-20,000 (7%), $20,000-50,000 (20.9%), $50,000-80,000 (16.3%), greater than $80,000 (43.2%), or unspecified (11.6%).

The sample also included the children’s teachers. Specifically, 8 teachers (1 male; 7 female) participated. In addition, 48 parents completed the interview described below. The remaining two parents were not able to be contacted due to relocation.

Measures

The measures administered to the students and considered within the present investigation include a series of self-report questionnaires assessing positive school adjustment, in addition to a measure tapping students’ perceptions of their relationship with their teacher. Teachers completed a questionnaire tapping perceptions of their relationship with the student; and parents completed a demographics questionnaire.

Children’s Depression Inventory (CDI; Kovacs, 1992). The CDI is a 27-item self-rated symptomatology scale devised to assess depressed affect. The inventory measures standard symptoms of depression such as disturbance in mood, pleasure-seeking capacity, self evaluations and interpersonal behaviours. Several items also address consequences of depression in specific contexts that are relevant to children, such as school, and thus suitable for use with 7 to 17 year olds. Each item gives children three response options to
rate the degree with which they believe the statement describes him/herself best in the past two weeks (representing an absence of the symptom, mild symptom, or definite symptom), with higher scores being indicative of more emotional dysfunction. An example of the statements on the CDI is as follows: “I am sad once in a while”, “I am sad many times”, or “I am sad all the time”.

The CDI is divided into five primary subscales: Negative Mood, Interpersonal Problems, Ineffectiveness, Anhedonia, and Negative Self-Esteem. In various samples, the internal consistencies Cronbach’s alpha for the CDI have been found to range from .71 to .89, indicating good reliability. The test-retest reliability also appears to have an acceptable level of stability, ranging from .38 to .87 (Kovacs, 1992).

**School Life Questionnaire (SLQ; ACER, 2003).** The SLQ was developed by the Australian Council for Educational Research, in the belief that it would assist in the examination of non-achievement schooling outcomes, such as attitudes towards school in general, towards learning, towards teachers and towards other students. This self-report questionnaire (primary school version) consists of 40 statements about school to which students are asked to indicate their level of agreement on a four-point likert scale from agree to disagree. The items encompass a number of different aspects of school life and form seven subscales. **General Satisfaction** taps positive affect and reflects favourable feelings about school as whole, while **Negative Affect** refers to negative feelings about school. The **Achievement** subscale reflects a sense of confidence in ones ability to be successful in school and **Opportunity** represents a belief in the relevance of schooling for the future. **Teachers** refers to a feeling about the adequacy of instructional interactions (this subscale was examined to ensure that it did not overlap with items tapping teacher-
student alliance); Social Integration reflects a sense of learning about getting along with other people; and finally, Adventure represents a sense of self-motivation in learning and that learning is enjoyable for its own sake.

Self Perception Profile for Children (SPPC; Harter, 1985). The SPPC is a self-report measure designed to assess the domain specific self-perceptions in children between the ages of 8 and 13. The SPPC is comprised of 36 questions; for each item, children are first asked to select which of two statements, describing different types of children, is most like them, and then they must specify whether it is somewhat or very characteristic of themselves (sort of true or really true of me). For example, “Some kids often forget what they learn BUT other kids can remember things easily”. Responses are scored on a four-point scale with higher scores indicating greater perceptions of competence in that domain.

The domains of the SPPC are as follows: Scholastic Competence which taps the child’s perception of their ability within the realm of academic performance; Social Acceptance which taps the degree to which one has friends, feels popular, and liked by others; Athletic Competence contains items that are relevant to sports and outdoor games; Physical Appearance items looks at the degree to which the child is happy with the way they look (i.e. height, weight, hair); Behavioral Conduct items draw on the degree to which children like the way they behave or act in ways they are supposed to; and Global Self Worth taps the extent to which the child likes oneself as a person, a global judgment of one’s self worth. The internal consistency reliabilities, as based on Cronbach’s alpha, have been demonstrated to be in the high range. Subscale reliability results range from .71 to .86 (Harter, 1985).
Classroom Working Alliance Inventory (CWAI; Heath, Toste, Dallaire, & Fitzpatrick, 2007). The CWAI was developed based on the Working Alliance Inventory (Horvath & Greenberg, 1986; 1989) which has been found to have strong psychometric properties. The WAI Short Form (WAI-SF; Tracey & Kokotowitc, 1989) was previously adapted for use with elementary-aged students (Heath et al., 2007; see Appendix A). The CWAI is a 12-item questionnaire assessing the teacher-student relationship using a 5-point likert scale. The inventory consists of the three subscales that represent the critical components of alliance: task, bond, and goal. Parallel teacher and student forms are used, in order to tap multiple perceptions of relationship.

The task subscale focuses on the agreement and understanding of task relevance within the classroom setting. This subscale taps whether teachers and students feel that the tasks assigned in the classroom are relevant to the student’s individual learning (e.g., “What I am doing in school helps me learn better in the areas that I have difficulty”) and will help him or her achieve success (e.g., “My teacher and I agree about the things I need to do to help me improve my schoolwork”). The bond subscale captures the respect, liking, and trust between the teacher and his/her student. For example, this subscale includes items such as “I believe my teacher likes me” and “My teacher and I trust one another”. Finally, the goal subscale measures the extent to which the teacher and student feel that they are collaborating on the goals set within the classroom. This subscale is tapping the teachers’ and students’ sense of agreement and mutual understanding about classroom objectives (e.g., “My teacher and I agree about what my difficulties are” and “We agree about what I need to do differently in school”).
To verify the reliability of the three CWAI subscales, Cronbach’s alpha was computed for this sample. For the teacher version of the CWAI, alpha levels indicated strong internal consistency for each of the task (.84), bond (.88), and goal (.91) subscales. This is consistent with previous research using the CWAI (Heath et al., 2007) in which alpha levels ranging from .76 to .85 were observed. Further analysis with the student version of the CWAI revealed moderate to strong internal consistency, with Cronbach’s alpha levels ranging from .59 to .71 (Leech, Barrett, & Morgan, 2005).

**Demographic questionnaire.** A general questionnaire tapping demographic information was created for the purpose of identifying relevant participant characteristics and for determining participants’ SES. Data was collected regarding ethnicity, language spoken in the home, household income, parental employment, and parental education.

**Procedure**

Parent and teacher consent, as well as student assent, was received prior to the first session. Testing sessions were a part of a larger project that consisted of three separate school visits. As a result of the scope of the larger project, not all measures in the current study were administered together in the same session. That is, the CDI was administered in one session, the second session consisted of several measures of academic achievement that are not part of the current investigation, and the SLQ, SPPC, and CWAI-S were all administered in the same session. The ordering of sessions was counterbalanced prior to administration to avoid any contamination of possible testing order. Each session was approximately 75 minutes in length and was completed administered individually with each participating student by a trained graduate student research assistant. Research assistants read each item aloud to the students to maintain
standardization and, because of the young age of the participants, to ensure comprehension if they had difficulty reading the questions. Testing was conducted in a private room at the students’ school. The various measures of school satisfaction and teacher-student relationship were administered in two counterbalanced sessions.

The parent measures included the demographic questionnaire, as well as an additional scale as part of the larger study. These measures were completed via a phone interview with a trained research assistant. Teachers were asked to complete the CWAI-T on their own time and return to the research team leader when finished. Teachers were compensated for their time according to the number of packages completed for each participating student in their class.

Results

This section is divided into three sections for clarity in the presentation of analyses: (a) data reduction of variables associated with school satisfaction; (b) regression analyses pertaining to the prediction of domains of school satisfaction from student-rated alliance variables; and (c) regression analyses pertaining to the prediction of domains of school satisfaction from teacher-rated alliance variables.

Data Reduction for School Satisfaction Variables

Given that students’ school satisfaction was assessed with several measures, a Principal Components Analysis (PCA) with varimax rotation was conducted to reduce the number of variables into a smaller set of variables that captures or represents the same information (Leech et al., 2005). In order to select the subscales most related to school satisfaction, bivariate Pearson correlations were run between the total score of the SLQ and subscale scores of the CDI and SPPC. The scores from the subscales of the SLQ
were summed and divided by 7 in order to obtain a mean SLQ total score. Variables that strongly correlated with the SLQ ($r > .50$) and were significant at the 0.01 level, were included in the PCA. The descriptive statistics for each of these measures and complete list of correlations provided in Table 1.

Thus, the variables used in the PCA were taken from selected subscale scores on the CDI, SLQ, and SPPC measures. An examination of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy indicated that there were a sufficient number of items predicted by each factor (.79) and Barlett’s test of sphericity was significant (< .00), demonstrating that the variables were correlated enough to provide a reasonable basis for factor analysis (cite). The scree test and Kaiser’s criterion (i.e., retaining components with eigenvalues greater than 1), two methods appropriate to use when determining the number of factors to retain in PCA (Stevens, 2002), confirmed that two factors were appropriate for the present analysis. This two-factor solution explained 64.72% of the variance. Considering the pattern of loadings that emerged, the first component appeared to strongly represent the general concept of “School Satisfaction.”. The second component was related to “Social-Emotional Adjustment,” which was examined as a component of school satisfaction in further analyses. Table 2 displays the items and factor loadings for the rotated factors; items less than .50 were omitted to improve clarity.

Using PCA, it is possible to aggregate the items that define each component in order to isolate individual participants’ scores (Fabrigar, Wegener, MacCallum, & Strahan, 1999). Therefore, factor scores derived from the PCA were saved to use as composite variables in further analyses.
### Table 1

*School Adjustment Subscale Means, Standard Deviations, and Correlations with SLQ*

<table>
<thead>
<tr>
<th>Variables</th>
<th>$M$</th>
<th>$SD$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SLQ</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Satisfaction</td>
<td>3.15</td>
<td>.67</td>
<td>--</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>3.27</td>
<td>.58</td>
<td>--</td>
</tr>
<tr>
<td>Achievement</td>
<td>3.41</td>
<td>.51</td>
<td>--</td>
</tr>
<tr>
<td>Opportunity</td>
<td>3.74</td>
<td>.34</td>
<td>--</td>
</tr>
<tr>
<td>Teachers</td>
<td>3.57</td>
<td>.43</td>
<td>--</td>
</tr>
<tr>
<td>Social Integration</td>
<td>3.12</td>
<td>.56</td>
<td>--</td>
</tr>
<tr>
<td>Adventure</td>
<td>3.03</td>
<td>.67</td>
<td>--</td>
</tr>
<tr>
<td><strong>CDI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Mood</td>
<td>48.02</td>
<td>7.02</td>
<td>-.55**</td>
</tr>
<tr>
<td>Interpersonal Problems</td>
<td>49.28</td>
<td>9.39</td>
<td>-.49**</td>
</tr>
<tr>
<td>Ineffectiveness</td>
<td>47.22</td>
<td>8.09</td>
<td>-.42**</td>
</tr>
<tr>
<td>Anhedonia</td>
<td>47.84</td>
<td>8.73</td>
<td>-.45**</td>
</tr>
<tr>
<td>Negative Self-Esteem</td>
<td>45.00</td>
<td>6.40</td>
<td>-.51**</td>
</tr>
<tr>
<td><strong>SPPC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>3.09</td>
<td>.57</td>
<td>.51**</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>3.03</td>
<td>.69</td>
<td>.26</td>
</tr>
<tr>
<td>Athletic Competence</td>
<td>2.97</td>
<td>.74</td>
<td>.21</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>3.09</td>
<td>.74</td>
<td>.21</td>
</tr>
<tr>
<td>Behavioural Conduct</td>
<td>3.08</td>
<td>.71</td>
<td>.31*</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>3.39</td>
<td>.56</td>
<td>.31*</td>
</tr>
</tbody>
</table>

*Note.* Means and standard deviations are presented for each scale. SLQ and SPPC scores are raw scores (total score is out of 4 for both measures) and the CDI scores are mean $T$-scores. Indicates significant correlation at *$p < .05$* level and **$p < .01$** level.
Table 2
*Item Loadings for Rotated Component Matrix*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading 1</th>
<th>Factor Loading 2</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLQ Adventure</td>
<td>.81</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>SPPC Scholastic Competence</td>
<td>.76</td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>SLQ Teachers</td>
<td>.75</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>SLQ Achievement</td>
<td>.73</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>SLQ General Satisfaction</td>
<td>.70</td>
<td>.54</td>
<td>.79</td>
</tr>
<tr>
<td>SLQ Opportunity</td>
<td>.66</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>CDI Negative Self-Esteem</td>
<td>.86</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>CDI Negative Mood</td>
<td>.83</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>SLQ Social Integration</td>
<td>.77</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>SLQ Negative Affect</td>
<td>.61</td>
<td>.51</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Loadings < .50 are omitted.

*Regression Analyses Pertaining to School Satisfaction Variables*

To determine how the set of alliance variables predict components of school satisfaction, separate simultaneous multiple regression analyses were run for student- and teacher-rated alliance. An initial exploration of the distribution of the teacher and student alliance subscale scores revealed approximately normal distributions, with skewness and kurtosis values lying between -1.00 and 1.00. The predictor variables, CWAI subscale scores (i.e. task, bond, goal), were each entered together into the regression analysis.

Separate equations were run for student-rated and teacher-rated alliance for each of the dependent variables, School Satisfaction and Social-Emotional Adjustment. This method of entry was chosen because the working alliance has not yet been studied as a contributor to students’ school satisfaction. Thus, it was of interest to examine the overall contribution of the alliance variables followed by an exploration of the unique contribution of each alliance variable. This particular method of regression is
recommended for testing a heuristic set of variables where the researcher has no a priori hypotheses about which variable will create the best prediction equation, which is consistent with the present investigation (Leech et al., 2005; Stevens, 2002). Specifically, do student- and teacher-ratings of alliance significantly predict school satisfaction, and how much does each alliance variable contribute to the prediction?

*Student-Rated Alliance*

*Predicting school satisfaction.* The first regression equation examined the combined contribution of the student-rated alliance variables to the prediction of School Satisfaction (Factor 1). Results were significant, \( F(3, 46) = 9.45, p < .00; \) the adjusted \( R \) squared value was .341, indicating that 34.1% of the variance in students’ ratings of School Satisfaction was explained by students’ perceptions of alliance. This is a medium effect size, according to Cohen (1988).

As suggested by the beta weights, the bond subscale seems to contribute the most to this model. Further examination of the regression coefficients, specifically the partial correlations, provides important information about the unique relationship between each predictor and the dependent variable after removing the overlap with other predictors. Squaring the partial correlation indicates the proportion of variance in teacher-rated performance uniquely accounted for by that variable. The results supported the significance of the bond subscale, as it accounted for the largest portion of variance (17.5%). Although not significant, the goal and task subscales each contributed some explanatory value (4.5% and 2%, respectively). Finally, 10.1% of variance was shared between the three variables. Details of this analysis, including means and standards deviations, are presented in Table 3.
Predicting social-emotional adjustment. Variables were entered in a similar fashion for the regression equation predicting Social-Emotional Adjustment (Factor 2). The model, including all three alliance variables as predictors, was not significant, $F(3, 46) = .45$, $p = .72$, and accounted for only 3.5% of the variance in School Satisfaction. Regression statistics are presented in Table 4.

Table 3
Summary of Regression Analysis for Student Alliance Variables Predicting School Satisfaction ($N = 50$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$\beta$</th>
<th>$pr$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>4.13</td>
<td>.65</td>
<td>.22</td>
<td>.22</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>Bond</td>
<td>4.21</td>
<td>.70</td>
<td>.57</td>
<td>.18</td>
<td>.40**</td>
<td>.42</td>
</tr>
<tr>
<td>Goal</td>
<td>4.08</td>
<td>.61</td>
<td>.36</td>
<td>.25</td>
<td>.22</td>
<td>.21</td>
</tr>
</tbody>
</table>

*Note. Adjusted $R^2 = .341$ ($p < .00$)
* $p < .05$  ** $p < .01$*

Table 4
Summary of Regression Analysis for Student Alliance Variables Predicting Social-Emotional Adjustment ($N = 50$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$B$</th>
<th>$pr$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>.15</td>
<td>.28</td>
<td>.10</td>
<td>.08</td>
</tr>
<tr>
<td>Bond</td>
<td>-.04</td>
<td>.23</td>
<td>-.03</td>
<td>-.02</td>
</tr>
<tr>
<td>Goal</td>
<td>.16</td>
<td>.31</td>
<td>.10</td>
<td>.08</td>
</tr>
</tbody>
</table>

*Note. Adjusted $R^2 = -.035$ ($p = n.s.$)*
Teacher-Rated Alliance

Predicting school satisfaction. Teachers’ ratings of alliance were entered as predictor variables in the third regression in order to examine their added contribution to the prediction of student-rated School Satisfaction (Factor 1). This model was significant, $F(3, 46) = 2.81, p < .05$, and explained 10% of the variance. According to Cohen (1988), this is a small effect size.

An examination of the beta weights and the partial correlation coefficients revealed that none of the alliance subscales made independently significant contributions. To be precise, the teacher-rated alliance variables in combination significantly predicted students’ School Satisfaction. Although, the task, bond, and goal subscales independently predicted only a small amount of variance (.01%, 1.01%, and 1.37%, respectively), the variables in combination predicted a further 6.98% of shared variance. Please refer to Table 5 for the complete details of this analysis, including means and standard deviations.

Predicting social-emotional adjustment. In the final analysis, alliance variables were entered in the regression equation predicting Social-Emotional Adjustment (Factor 2). The model was not significant, $F(3, 46) = .49, p = .69$, which is consistent with the previous finding that student-rated alliance did not significantly predict Social-Emotional Adjustment. Only 3.2% of the variance was explained by the combination of alliance variables. Regression statistics are presented in Table 6.
Table 5
Summary of Regression Analysis for Teacher Alliance Variables Predicting School Satisfaction (N = 50)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>pr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>4.22</td>
<td>.75</td>
<td>.03</td>
<td>.39</td>
<td>.02</td>
<td>.01</td>
</tr>
<tr>
<td>Bond</td>
<td>4.41</td>
<td>.72</td>
<td>.31</td>
<td>.36</td>
<td>.22</td>
<td>.13</td>
</tr>
<tr>
<td>Goal</td>
<td>4.16</td>
<td>.65</td>
<td>.28</td>
<td>.35</td>
<td>.18</td>
<td>.12</td>
</tr>
</tbody>
</table>

Note. Adjusted $R^2 = .100$ ($p < .05$)

Table 6
Summary of Regression Analysis for Teacher Alliance Variables Predicting Social-Emotional Adjustment (N = 50)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>B</th>
<th>pr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>.29</td>
<td>.41</td>
<td>.21</td>
<td>.10</td>
</tr>
<tr>
<td>Bond</td>
<td>.13</td>
<td>.38</td>
<td>.09</td>
<td>.05</td>
</tr>
<tr>
<td>Goal</td>
<td>-.34</td>
<td>.38</td>
<td>-.22</td>
<td>-.13</td>
</tr>
</tbody>
</table>

Note. Adjusted $R^2 = -.032$ ($p = \text{n.s.}$)

Discussion

The present study sought to investigate the contribution of alliance variables to the prediction of students’ ratings of school satisfaction. Additionally, it was of interest to explore whether teachers’ and students’ perceptions of alliance variables (i.e., task, bond, and goal) differentially predicted school satisfaction in a sample of elementary-aged children. Contemporary research on school satisfaction attempts to understand the complex processes accounting for student perceptions of the quality of school life (e.g., Huebner et al., 2001). However, the literature is relatively sparse, with only two studies
examining teacher-student relationship as a factor contributing directly to school satisfaction is (Baker, 1999; Furrer & Skinner, 2003).

Furthermore, past research has been limited in terms of the definition of “relationship,” which has often been measured as a subdimension of a scale of social support, or defined in terms of instructional exchanges and interactions. For example, the study conducted by Baker (1999) employed two separate measures of social support and psychological safety, to assess students’ ratings of teacher-student relationship. Not only is it critical to employ instruments that measure teacher-student relationship as its own distinct construct, but recent research has suggested that a broader conceptualization of this working relationship may be predictive of students’ school outcomes (Toste et al., 2007). Based on these initial findings and the need for a more expansive understanding of classroom relationships, the current study examined the role of the “working alliance” in determining students’ school satisfaction.

School satisfaction was examined through the use of two factors validated through PCA. The first factor represented overall school satisfaction, while the second factor was an index of students’ social-emotional adjustment. The degree to which teachers’ and students’ perceptions of alliance predicted school satisfaction was the central goal of this study. Regression analyses revealed that both teacher- and student-rated alliance significantly predicted students’ ratings of school satisfaction. Although not surprising, it is interesting to note that students’ ratings were much more predictive of their own satisfaction than teachers’ ratings (explaining 34.1% of the variance, compared to the 10% explained by teacher-rated alliance). This finding is interesting as past literature has examined primarily teachers’ perceptions of relationship and the effects on
student outcomes (e.g., Birch & Ladd, 1997; Hamre & Pianta, 2001; 2005; Pianta, 1992). Given that school satisfaction is highly related to many other positive school-related outcomes, it is critical to examine the factors that contribute to students’ positive perceptions of alliance and ensure that they are addressed in the students’ classroom experiences.

Another interesting finding was the specific facets of teacher- and student-rated alliance that were most related school satisfaction. Specifically, teachers’ ratings on the goal subscale contributed the most to school satisfaction, whereas, the bond subscale was the most important for students. The results of this study suggest that the social context of the classroom, namely the teacher-student bond, influences students’ appraisals of school as a likeable and satisfying environment. Consistent with past research (e.g., Baker, 1999), students who express more satisfaction with school, experience perceive their teachers as more caring, supportive, and collaborative than do their peers expressing less satisfaction with school.

The goal subscale also emerged as important for students, although less significant than bond. This is important to note as there appears to be interplay between the bond and goal subscales. Another critical consideration is that, although bond may predict slightly more variance than goal, the skills subsumed under this factor (e.g., warmth, liking, trust, connectedness) are difficult to teach. In contrast, school professionals can be taught how to develop shared goals and improve goal setting behaviours within the classroom. The intertwining between bond and goal for students suggests that the development of shared goals may serve to enhance students’ ratings of the bond that they have with their teacher. Further, these results suggest that students
seem to be more satisfied with their school experience when teachers feel that there are shared goals within the class.

The present results suggest that the task subscale is not capturing something unique above and beyond what is explained by the bond and goal subscales in predicting school satisfaction. However, past research employing the CWAI (Toste et al., 2007) revealed significant correlations between the subscales, which may suggest that task is encompassed within the ratings of bond and goal. The unique validity of each CWAI subscales is certainly a consideration for future research exploring working alliance in school settings. In addition, a significant portion of variance in school satisfaction ratings was shared by all three alliance variables (10.1% for student-rated alliance and 6.98% for teacher-rated alliance), which further demonstrates the complex interplay between these subscales. For example, a student’s bond with a teacher was the most salient unique predictor of students’ school satisfaction, but their satisfaction can be increased substantially if they have a strong, effective working alliance with their teacher (as defined by the combination of all three variables).

It is noteworthy that neither teacher- nor student-rated alliance predicted students’ social-emotional adjustment. In the present investigation, it was not possible to explore the factors that contributed to the social-emotional adjustment factor. It is possible that ratings of social-emotional functioning are highly related to life experiences (e.g., external factors such as parent divorce, death in the family, or persistent daily stress) separate from the teacher-student relationship, as discussed by Hueber and colleagues (2000; 2001) in their study of school satisfaction among adolescents.
Although this study underscores the important influence of working alliance on students’ satisfaction with school, it has several limitations. First, it is likely that children in this sample differed on certain variables, such as behavioural or academic competence. This could potentially have confounding effects on students’ perceptions of the relationships they have with their teachers. Further, it is also possible that students who have difficulties in school will consequently have poorer satisfaction within this setting. Future research could systematically evaluate potential factors that may influence students’ perceptions of the school environment.

Other study factors, such as the limited sample size, made it impossible to examine variables that may have had a mediating effect on teacher-student relationship or school satisfaction. One is left with the question of whether there is truly a direct link between teacher-student relationship and school satisfaction. It is arguable that children who do not experience any other difficulties (e.g., are perceived to be a “good kid”) accordingly have better experiences with their teachers and thus, are satisfied with school. Nevertheless, this does not diminish the important connection between teacher- and student-perceptions of alliance and school satisfaction that has been observed. These results have numerous implications for schools and classrooms.

**Implications and Conclusion**

The need for children to establish a sustained working relationship (or alliance) with their teachers is common to most theories of child development (Masten, Best, & Garmezy, 1990); however, the concept of teacher-student relationship has been somewhat neglected in teacher education because of the emphasis on method and curriculum development (Tyack & Cuban, 1995). Despite the fact that the working alliance is a
construct that has not yet been fully explored within an educational context, it offers great promise in terms of developing consistent, supportive, and positive relationships between teachers and students. Future studies should explore varying methods to capture the richness of teacher-student interactions within the classroom environment and identifying behaviours that contribute to the development of positive working alliances.

Students who express dissatisfaction with school may benefit from interventions to foster their affiliations with teachers in the classroom. The professional counselling literature has suggested that the convergence of counsellor and client expectations is of substantial importance in the formation of a positive and effective working alliance (Shaw, McMahon, Chan, & Hannold, 2004). Thus, it could be posited that there is a need to examine discrepancies between teacher and student expectations. If congruence between teacher-student expectations was demonstrated to be a critical variable in enhancing working alliance, as it has been shown in counselling research, schools could focus on the implementation of a training protocol to assist teachers in reducing these discrepancies. For example, this could be accomplished by meaningfully involving students in a collaborative effort to promote understanding and agreement of classroom goals, rules, structures, and activities.

It appears that students’ perceptions of a positive working alliance are an important resource for the development of children’s well-being at school. The sense of connectedness to others and support from the social environment are well-established correlates of resilience and contribute to numerous positive outcomes for children (e.g., Masten, 1994). This study provides evidence that satisfaction with school may be affected by teacher-student working alliance and suggests this area as an avenue for
prevention or early intervention programs. An orientation towards positive psychology has significant implications for educational and psychological research and practice. This perspective challenges us to consider markers of positive adjustment rather than diagnoses of problems, and to engage in preventative rather than reactive models of school services.

Teacher-student relationship is an important variable affecting both learning and psychosocial outcomes, and seems especially important to elementary-aged students (e.g., Hamre & Pianta, 2001; 2005; Rey et al., 2007). Positive working alliance fosters not only a supportive learning environment, but also a setting where students feel safe in taking risks and confident that their teacher will guide them effectively in their learning. This type of environment will enhance students’ affiliation with the school and a sense of belonging in the classroom community.
References


CHAPTER 5

Conclusion

Summary of the Research Program

The goal of the current research program was to examine the construct of working alliance, as a measure of teacher-student relationship, in order to address the characteristics exceptional to classroom contexts. This was accomplished through an examination of teacher and student perceptions of working alliance, in addition to an investigation of its influence on students’ school-related outcomes, namely student performance and school satisfaction. As such, this research program employed a measure of teacher-student alliance, the Classroom Working Alliance Inventory (CWAI; Heath, Toste, Dallaire, & Fitzpatrick, 2007), developed to directly examine teacher-student interactions as a unique working relationship.

In investigating perceptions of working alliance, this research presented evidence demonstrating the importance of considering both teacher and student ratings in our evaluations of relationship. Results revealed significant correlations between teachers’ and students’ ratings on the task and bond subscales of the CWAI, indicating that elementary-aged children are capable of critically evaluating their relationships with teachers, a notion that has been previously overlooked in much of the teacher-student relationship literature (e.g., Hambre & Pianta, 2001; 2005; Pianta, 1994). Furthermore, it seems essential to examine both teacher- and student-rated alliance, in that these ratings were differentially related to student outcomes. These findings are consistent with previous research on children in the late-elementary grades that has shown unique positive associations between student perceptions of their relationships with their teachers
and indices of positive school outcomes (e.g., Furrer & Skinner, 2003; Rey et al., 2007).

Specifically, in Article 1, students’ perceptions of positive working alliance were significant in predicting both teacher- and self-ratings of classroom performance, whereas, teachers’ perceptions of alliance only predicted their own ratings of students’ performance. In Article 2, both teacher and student ratings of working alliance demonstrated a significant contribution to the prediction of students’ school satisfaction. Not surprisingly, students’ perceptions of alliance were more highly related to their satisfaction than those of their teachers. That is to say, students who felt that they had strong, positive working alliances with their teachers were more likely to enjoy and have positive attitudes toward school, engage in classroom experiences, and express affiliation with their schools. However, as it was not feasible to examine moderating or mediating variables in these studies, it is possible there are other variables (e.g., student behaviour, achievement, social skills) that influence the development of working alliance and contribute to student outcomes. Future directions for this program of research will be to explore causal models that explain factors that contribute to the positive working alliance and potentially mediate its effects on school-related adjustment outcomes.

The working alliance encompasses three interrelated components: task, bond, and goal (Bordin, 1979; Horvath, 2000). Within the classroom, these factors represent various behaviours and interactions that take place between teachers and students. Task can be envisioned as the students’ ability and agreement to complete tasks that are relevant to working toward educational goals. Bond represents the degree to which the teacher and student connect emotionally and share mutual feelings of respect, trust, and connectedness. And finally, goal represents the extent to which the students accept the
objectives that the teacher has set out for the class, and believes that these goals take their individual needs into consideration. A further objective of this research program was to explore the independent contribution of each of these components to positive student outcomes. Results from Article 1 revealed that teachers’ rating of task contributed the most to the prediction of teacher-rated student performance. However, the bond subscale also contributed a significant amount to the prediction. In terms of students’ ratings of alliance, goal was the most significant predictor of teacher-rated performance. Finally, teachers’ ratings of alliance did not emerge as significant in predicting students’ self-rated performance, although students’ perceptions of bond and goal were significant predictors. The results reported in Article 2 revealed a similar pattern of prediction in that students’ ratings of bond and goal significantly contributed to the prediction of school satisfaction, although goal was not as influential as bond. Conversely, for teacher-rated alliance, none of the alliance subscales independently contributed a significant amount to the prediction of school satisfaction.

What does this mean in terms of understanding the construct of working alliance and its contribution to student outcomes? First, one must appreciate that there is a complex interaction among the various components of the working alliance. Interpreting these findings as though one component is “more important” than another, or that it stands alone in predicting student outcomes, is quite misleading. An important consideration when examining these results is the shared variance, that is, the portion of the total variance that is not uniquely explained by an individual subscale. To elucidate, consider the contribution of alliance to perceptions of student performance. Students’ ratings of bond and goal were found to be the most salient predictors of students’ own
performance ratings, explaining 9.67% and 6.6%, respectively. However, there is an additional 19.05% of the total variance that was shared by all three alliance variables, demonstrating the complexity of the working alliance. This suggests that a combination of strong ratings on all three variables is even more important to the prediction of student performance than a strong rating on any one subscale.

Another interesting result was the emergence of bond as a distinctly important component in measuring teacher-student working alliance. This is not entirely surprising, as past studies have found significant effects on student outcomes when employing definitions of teacher-student relationship limited to the construct of “bond” (e.g., Birch & Ladd, 1997; Hamre & Pianta, 2001; 2005). In considering this finding more critically, it is evident that bond does not independently account for the full effect of alliance. Rather, bond can be understood as playing an important role for both teacher and student in influencing both student performance and school satisfaction. Goal and task play equally important roles; however, their influence seems to differ depending on the outcome being examined. This is essential to consider in terms of providing information to teachers on developing alliance with their students. Bond is, clearly, more difficult to develop between teachers and students, and is highly influenced by personality characteristics, attitudes, and beliefs. It is often assumed that this sense of connectedness is simply present or not (e.g., you “click” with certain students, but not with others). But the construct of alliance presents a model of a working relationship between teacher and students that is much more complex. It is important to understand that bond is only one aspect of an effective working relationship and that teachers should focus on developing all aspects of alliance with their students. Fortunately, task and goal are more concrete
components, which can be negotiated with the student. This clearly suggests implications for classroom teaching and learning.

**Implications**

The results of this research program have considerable implications for schools and classrooms. Since teacher-student relationship is a contextual variable, it has often been avoided in teacher education in favour of other variables, such as teaching methods, assessment, and curriculum development, which can be more readily conceptualized and manipulated (Murray & Malmgren, 2004). The findings presented in these two studies demonstrate the importance of informing teachers and other school staff about the lasting effects of the relationships created within the classroom. To develop teacher-student alliance, cooperative learning strategies can be integrated into the curriculum, teachers can be aware of behaviours and interactions that enhance students’ sense of support and belonging, and classroom planning can take a collaborative (rather than directional) approach. The obvious impact of teacher-student relationships on students’ socioemotional, behavioural, and academic functioning (e.g., Hughes et al., 1999; Rey et al., 2007) makes it imperative that teacher education programs emphasize the importance of understanding and promoting positive working alliance.

**Concluding Comments**

From this vantage, it is easy to see how the conceptualization of teacher-student working alliance can contribute to a classroom atmosphere that fosters resilience and helps students learn. However, the working alliance is a construct that has not yet been fully explored within an educational context. Thus, it offers great promise in terms of helping foster consistent, supportive, and positive relationships between teachers and
students. Future research should explore varying methods to capture the richness of teacher-student interactions within the classroom environment and identify specific behaviours that contribute to the development of positive working alliances.
CHAPTER 6

Bibliography


*Psychotherapy relationships that work: Therapist contributions and responsiveness to patients.* New York. NY: Oxford University Press.


Appendix A: Classroom Working Alliance Inventory

Teacher and Student versions
Classroom Working Alliance Inventory
Teacher Version

Adapted with permission from WAI-SF (Horvath & Greenberg, 1986, 1989; Tracey & Kokotowitc, 1989)
© Heath, Toste, Dallaire, & Fitzpatrick, 2007

Below are some sentences that describe some different ways a teacher might feel about his/her student and the work that they do in the classroom. As you read the sentences, mentally insert the name of your student in place of ______ in the text. We would like you to answer using a five point scale. If the sentence describes the way you always feel or think circle the number 5; if you never feel or think that way, circle the number 1. Use the other numbers to describe feelings in between.

1. ______ and I agree about the things I need to do to help improve his/her schoolwork.

1 2 3 4 5
Never Rarely Sometimes Often Always

2. I am confident that what ______ is doing in school will help him/her learn better in the areas that he/she has difficulty.

1 2 3 4 5
Never Rarely Sometimes Often Always

3. I believe ______ likes me.

1 2 3 4 5
Never Rarely Sometimes Often Always

4. I believe that ______ and I agree on what he/she needs to get out of school (what he/she needs to learn and why).

1 2 3 4 5
Never Rarely Sometimes Often Always

5. I am confident in my ability to help ______ at school.

1 2 3 4 5
Never Rarely Sometimes Often Always
6. We are working towards goals that we have agreed upon together.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

7. I enjoy working with ______.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

8. I think ______ and I agree on what it is important for him/her to work on.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

9. ______ and I trust one another.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

10. ______ and I agree about what his/her difficulties are.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

11. We agree about what ______ needs to do differently in school.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

12. I think that ______ believes that what we work on in school is useful.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>
Classroom Working Alliance Inventory  
Student Version

Adapted with permission from WAI-SF (Horvath & Greenberg, 1986, 1989; Tracey & Kokotowitc, 1989)  
© Heath, Toste, Dallaire, & Fitzpatrick, 2007

I am going to read some sentences about different ways a student might feel about his/her teacher and the work that they do in class. As I read the sentences, think about your teacher. We would like to know how you feel about your teacher and your classroom. After I read the sentence, tell me how often you feel this way. We would like you to answer using the words on the card in front of you. Think about if you always feel or think that way, or if you never feel or think that way. Please try to answer right away as we want to know your first thoughts when you hear the sentence.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
</table>

1. ______ and I agree about the things I need to do to help me improve my schoolwork.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2. What I am doing in school helps me learn better in the areas that I have difficulty.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

3. I believe ______ likes me.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

4. ______ understands what I want to get out of school (what I want to learn and why).

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. I am confident in ______’s ability to help me at school.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
6. ______ and I are working towards goals that we both agree on.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

7. I feel that ______ enjoys working with me.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

8. We agree on what is important for me to work on.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

9. ______ and I trust one another.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

10. ______ and I agree about what my difficulties are.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

11. We agree about what I need to do differently in school.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

12. I believe that what I work on in school with ______ is useful.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>
Appendix B: Student Performance Questionnaire

Teacher and Student versions
**Student Performance Questionnaire (Teacher)**

We would like you to answer some questions about how your student worked in class today. Also some questions about how you work with him/her teacher in general. Please answer honestly. This information will not be shared with your student.

1. Overall, how would you say that ______ worked today in your class?

   1  2  3  4  5
   Very well  Somewhat well  Average  Somewhat poorly  Very poor

2. Today, how well would you say that ______ paid attention in your class?

   1  2  3  4  5
   Very well  Somewhat well  Average  Somewhat poorly  Very poor

3. Would you say that ______ worked independently in class today (without needing a lot of reminders to keep working)?

   1  2  3  4  5
   Very well  Somewhat well  Average  Somewhat poorly  Very poor

4. Overall, how would you say that ______ behaved in your class today?

   1  2  3  4  5
   Very well  Somewhat well  Average  Somewhat poorly  Very poor

5. How much would you say that ______ learned in class today?

   1  2  3  4  5
   A lot  Some  Average  Not very much  Not at all

6. How much would you say that ______ enjoyed your class today?

   1  2  3  4  5
   A lot  Some  Average  Not very much  Not at all
Student Performance Questionnaire (Student)

I am going to ask you some questions about how you worked in class today. Also some questions about how you work with your teacher in general. Please answer as honestly as you can. This information will not be shared with your teacher.

1. Overall, how would you say that you worked today in your class with __________?
   1  2  3  4  5
   Very well  Somewhat well  Average  Somewhat poorly  Very poor

2. How well would you say that you paid attention in class today with __________?
   1  2  3  4  5
   Very well  Somewhat well  Average  Somewhat poorly  Very poor

3. Would you say that you worked independently in class today (without needing a lot of reminders to keep working from __________)?
   1  2  3  4  5
   Very well  Somewhat well  Average  Somewhat poorly  Very poor

4. Overall, how would you say that you behaved in class today with __________?
   1  2  3  4  5
   Very well  Somewhat well  Average  Somewhat poorly  Very poor

5. How much would you say you learned in __________’s class today?
   1  2  3  4  5
   A lot  Some  Average  Not very much  Not at all

6. How much did you enjoy __________’s class today?
   1  2  3  4  5
   A lot  Some  Average  Not very much  Not at all
Appendix C: Parent, Teacher, and Student Consent Forms (Study 1)
Dear Parent/Guardian,

I am a professor in the Faculty of Education at McGill University. I am currently undertaking a research project that will examine the teacher–student relationship. This research project will examine the relationship or the “working alliance” between student and teacher. Past research has shown that the nature of the teachers / students relationship appears to have an influence on the students’ learning and motivation. The purpose of this letter is to inform you of my research project so that you and your child can decide if you would like to participate.

Participation in this project would involve your child completing a series of short questionnaires with the McGill research team. First, your child would have one short interview (approximately 20 minutes) with a research assistant. During this time, your child will be asked questions regarding how she is doing in school and about their relationship with their teacher. These interviews will be held during the school day, at a time that is convenient for your child and his/her teacher.

Please note that all information collected will be kept confidential, and all completed questionnaires from the study will be kept in a locked cabinet accessible only to the primary researcher. No identifying information will be used in any written or oral presentation of the results. Consent to participate may be withdrawn at any time. Your son/daughter’s classroom work and grades will not be affected by your decision to participate or not to participate.

Results of the study will be shared with you later in the year.

Please complete the attached consent form and return it to the school secretary, at your earliest convenience. Should you have any questions about the study, please contact me at (514) 398-3439 or nancy.heath@mcgill.ca.

Thank you for your time and consideration.

Nancy Heath, Ph.D.
Associate Professor
McGill University, Faculty of Education
Department of Educational & Counselling Psychology
INFORMED CONSENT TO PARTICIPATE IN RESEARCH – PARENT

Teacher–Student Relationship Project

• I understand that by returning this signed consent form that I am allowing my child to participate in the aforementioned research project.

• Participation in this project involves my child completing a series of short questionnaires with the McGill research team. This interview will total approximately 20 minutes and will be held during the school day, at a time that is convenient for my child and his/her teacher.

• My child is free to withdraw from the study, at anytime, without any penalty or prejudice.

• All information collected will be kept confidential, and all completed questionnaires from the study will be kept in a locked cabinet accessible only to the primary researcher. No identifying information will be used in any written or oral presentation of the results.

• My son/daughter’s classroom work and grades will not be affected by our decision to participate or not to participate.

I have read the above and I understand all of the conditions. I freely consent and voluntarily agree to have my son/daughter participate in this study.

Name of parent/guardian (please print) ________________________________

Name of child (please print) __________________________________________

Signature ________________________________    Date __________________
Dear Teacher,

I am a professor in the Faculty of Education at McGill University. I am currently undertaking a research project that will examine the teacher–student relationship. This research project will examine the relationship or the “working alliance” between teacher and student. Past research has shown that the nature of the relationship between teachers and students appears to have an influence on the students’ learning and motivation. The purpose of this letter is to inform you of my research project so that you can decide if you would like to participate.

Participation in this project would involve you completing a series of short questionnaires for each participating student in your class. This includes two short multiple-choice questionnaires (approximately 16 questions) regarding your relationship with the student and his/her performance in the classroom. You would be asked to complete this information at a time that is convenient for you. This would take approximately 10 minutes per child.

In addition, your students would also be asked to participate in this project. Those whose parents consent to their participation would be taken out of class to complete a similar series of questionnaires with a member of the McGill research team. These interviews will total approximately 20 minutes and will be held during the school day, at a time that is convenient for you and your student.

Please note that all information collected will be kept confidential, and all completed questionnaires from the study will be kept in a locked cabinet accessible only to the primary researcher. No identifying information will be used in any written or oral presentation of the results. Consent to participate may be withdrawn at any time. Results of the study will be shared with you later in the year.

Please complete the attached consent form and return it to me at your school office, at your earliest convenience. Should you have any questions about the study, please contact me at (514) 398-3439 or nancy.heath@mcgill.ca.

Thank you for your time and consideration.

Nancy Heath, Ph.D.
Associate Professor
McGill University, Faculty of Education
Department of Educational & Counselling Psychology
INFORMED CONSENT TO PARTICIPATE IN RESEARCH – TEACHER

Teacher–Student Relationship Project

• I understand that by returning this signed consent form I am agreeing to participate in the aforementioned research project.

• Participation in this project involves completing a series of short questionnaires for each student in my class. I also understand that my students will complete a similar series of questionnaires with a member of the McGill research team.

• I am free to withdraw from the study, at anytime, without any penalty or prejudice.

• All information collected will be kept confidential, and all completed questionnaires from the study will be kept in a locked cabinet accessible only to the designated research assistant.

• No identifying information will be used in any written or oral presentation of the results.

I have read the above and I understand all of the conditions. I freely consent and voluntarily agree to participate in this study.

Name (please print) _______________________________________________________

Signature ___________________________ Date ___________________________
INFORMED CONSENT TO PARTICIPATE IN RESEARCH – STUDENT

Teacher–Student Relationship Project

- I agree to participate in the research project described to me. I understand that my parents have already said that I am allowed to participate in this project.

- Participation in this project involves completing a series of short questionnaires with the McGill research team. This interviews will total approximately 20 minutes and will be held during the school day, at a time that is convenient for both me and my teacher.

- I am free to withdraw from the study, at anytime, without any penalty or prejudice.

- All information collected will be kept anonymous and confidential.

- No identifying information will be used in any written or oral presentation of the results.

- My classroom work and grades will not be affected by my decision to participate or not to participate.

I have read the above and I understand all of the conditions. I freely consent and voluntarily agree to participate in this study.

Name (please print) _______________________________________________________

Signature ___________________________ Date _____________________
Appendix D: Parent, Teacher, and Student Consent Forms

(Study 2)
Dear Parent/Guardian,

I am a professor in the Faculty of Education at McGill University and I am working on a project looking at children’s self-esteem and mood, as well as their responses to instructional encouragement and their understanding of how they are doing in different school subjects. The purpose of this letter is to tell you about the project and to ask for consent if you and your child wish to participate.

**Description:**
Previous work in the field of education has shown that students’ views of how they are doing in school seem less related to how they are actually doing and more related to how they feel in terms of mood and self-esteem. However, it is unclear how students’ thoughts about how they do are affected by feedback from teachers or instructors. Therefore, in our project, we wish to look at how children predict their performance in reading, spelling, and math. We also wish to observe how these predictions can be affected by mood, self-esteem, and/or encouragement from an instructor or teacher. This project will demonstrate the relationship between students’ emotional functioning (mood and self-esteem) and academic achievement. Furthermore, this project will also serve to illustrate the critical role of instructional encouragement and feedback. These findings will have implications for teaching and learning of students with diverse educational needs.

**Project Activities:**
Specifically, your child will be asked to complete some school tasks (reading, spelling, and math), as well as answer some questions about how he/she does on these kind of school tasks and about how he/she is feeling (mood and self-esteem). This will be done in three sessions of approximately 1 to 1 ½ hours each. These sessions will be scheduled at a time that is agreed upon with your child’s teacher in order to make sure he/she will not be missing important work in class.

We wish to work with children with all different achievement levels and academic profiles (e.g. strong in math, but some difficulty in reading; difficulty in both areas; or strong in both areas). For this reason, not all students who do the first (screening) session will complete the follow-up sessions. Nevertheless, all students will receive the benefits of the project as listed below.

Parents, as well as the child’s homeroom teacher, will be contacted and briefly interviewed regarding how they feel the child is doing in the different academic areas and in general (self-esteem and mood). Teachers will also be asked questions concerning their relationship with the student and his performance in the classroom. Please note that all information collected will be kept confidential, and all completed questionnaires will be
kept in a locked cabinet accessible only to the primary project leader. No identifying information will be used in any written or oral presentation of the results. Consent to participate may be withdrawn at any time by either you OR your child.

**Benefits:**

- Following the completion of your child’s sessions, we will provide parents with a summary report. This report will provide information regarding your child’s strengths and of his/her areas for improvement, as well as home and school strategies for working in the areas. Information on reading, spelling, and arithmetic will be provided.
- Upon completion of the project (June 2008) all participating families will be provided with a final report documenting the findings of the project and the implications for working with children on academic subjects. The role of self-esteem, mood, as well as instructor feedback and interactions in children’s beliefs about their school abilities will be shared.
- Parents of children participating will be provided with a series of free workshops presented by Dr. Heath and her project team. These workshops will address common parental concerns and will be determined based on the needs expressed by parents in interviews. Possible topics include “Talking to Teachers: How to Communicate Effectively with my Child’s Teachers” and “The ABCs of Homework Management with your Child”.

**Summary:**

We would appreciate your participation in this important project that focuses on better understanding the complicated link between self-esteem, encouragement, and school performance.

On the attached consent form, please indicate whether or not you consent to your child’s participation. This form should be returned to school as soon as possible. Should you have any questions about the project, please feel free to contact me or my research lab director at the coordinates listed below.

Sincerely,

Nancy Heath, Ph.D.                Jessica Toste, B.Ed.
McGill University, Faculty of Education        McGill University
Associate Professor                    Research Lab Director
Tel.: (514) 398-3439         Tel.: (514) 398-1232
nancy.heath@mcgill.ca          jessica.toste@mcgill.ca
The Affect of Mood, Self-Esteem, and Feedback on Students’ Academic Perceptions

CONSENT TO PARTICIPATE IN PROJECT – PARENT

- I understand that by returning this signed consent form that I am providing consent for myself and my child to participate in the project described in the attached letter.

- Participation in this project involves my child completing three sessions in which he/she will be asked to complete some academic tasks (reading, spelling, and math), say how he/she thinks he will do on these tasks, as well as answer some questions about his/her self-esteem, mood, and general well-being. Each session will last between 1 to 1 ½ hours. These sessions will be scheduled at a time that is convenient for the school and my child’s teacher.

- I understand that both I, and my child’s homeroom teacher, will also be asked to complete a short interview (in person or over the phone) that asks questions about how my child is doing academically and his/her overall well-being. This will take no more than 20 minutes to complete.

- I understand that my child will also be asked if they consent to participate before the first session. In the event that he/she does not agree to provide consent, he/she will NOT participate. Thus, both parent and child consent is required for participation.

- My child and I are both free to withdraw from the study, at anytime, without any penalty or prejudice.

- All information collected will be kept confidential, and all completed questionnaires from the project will be kept in a locked cabinet accessible only to the primary project leader. No identifying information will be used in any written or oral presentation of the results.

I have read the above and I understand all of the conditions. I freely consent and voluntarily agree to have my child participate in this project.

☐ YES, I consent
☐ NO

Signature: ___________________________ Date: ___________________________

Name of parent/guardian (please print): ________________________________

Name of student (please print): ________________________________

Student’s date of birth (month/day/year): ________ Grade: _____ Teacher: _________
Dear Teacher,

I am a professor in the Faculty of Education at McGill University and I am working on a project looking at children’s self-esteem and mood, as well as their responses to instructional encouragement and their understanding of how they are doing in different school subjects. The purpose of this letter is to tell you about the project and to ask for consent if you and your child wish to participate.

Description:
Previous work in the field of education has shown that students’ views of how they are doing in school seem less related to how they are actually doing and more related to how they feel in terms of mood and self-esteem. However, it is unclear how students’ thoughts about how they do are affected by feedback from teachers or instructors. Therefore, in our project, we wish to look at how children predict their performance in reading, spelling, and math. We also wish to observe how these predictions can be affected by mood, self-esteem, and/or encouragement from an instructor or teacher. This project will demonstrate the relationship between students’ emotional functioning (mood and self-esteem) and academic achievement. Furthermore, this project will also serve to illustrate the critical role of instructional encouragement and feedback. These findings will have significant implications for teaching and learning of students with diverse educational needs.

Project Activities:
If you agree to participate, we would distribute parental consent forms to all of the students in your class. Participation in this project would involve you completing a package of several short questionnaires for each student who receives permission to participate. We wish to receive your views, as the teacher, concerning your interactions with the student and his/her performance in the classroom. This package would take no more than 20 minutes. You will be asked to complete the questionnaires at your convenience and return to the designated project team member.

In addition, your students would also be asked to participate in this project. Specifically, your student will be asked to complete some school tasks (reading, spelling, and math), as well as answer some questions about how he/she feels about the kind of school tasks and about how he/she is feeling (mood and self-esteem). This will be done in three sessions which will take place at the school and will be scheduled at a time that is convenient for you and your student.

Please note that all information collected will be kept confidential, and all completed questionnaires will be kept in a locked cabinet accessible only to the primary project...
leader. No identifying information will be used in any written or oral presentation of the results. Consent to participate may be withdrawn at any time by you, the student, or your student’s parents.

**Benefits:**
- Upon completion of the project (June 2008) a final report documenting the findings of the project and the implications for working with children on academic subjects will be made available to all participating teachers. The role of self-esteem, mood, as well as instructor feedback and interactions in children’s beliefs about their school abilities will be shared. In addition, teachers will receive a package including resources and strategies for assisting students with learning difficulties.
- Teachers will be provided with a free workshop presented by Dr. Heath and her project team. This workshop will focus on the findings of this project and implications for teaching students with diverse learning needs.

**Summary:**
We would appreciate your participation in this important project that focuses on better understanding the complicated link between self-esteem, encouragement, and school performance. If you would like to participate, please sign and return the attached consent form. Should you have any questions about the project, please feel free to contact one of us at the coordinates listed below.

Sincerely,

Nancy Heath, Ph.D.      Jessica Toste, B.Ed.
McGill University, Faculty of Education      McGill University
Associate Professor      Research Lab Director
Tel.: (514) 398-3439      Tel.: (514) 398-1232
nancy.heath@mcgill.ca      jessica.toste@mcgill.ca
The Affect of Mood, Self-Esteem, and Feedback on Students’ Academic Perceptions

CONSENT TO PARTICIPATE IN PROJECT – TEACHER

- I understand that by returning this signed consent form that I am providing consent to participate in the project described in the attached letter.

- I understand that I will be asked, as a classroom teacher, to complete a short package with three questionnaires that ask questions about how my student is doing academically and his/her overall well-being. This will take no more than 20 minutes to complete.

- I understand that my student and his/her parent will also be asked for consent to participate. In the event that either party does not agree to provide their own consent, this student will NOT participate.

- I am free to withdraw from the study, at anytime, without any penalty or prejudice.

- All information collected will be kept confidential, and all completed questionnaires from the project will be kept in a locked cabinet accessible only to the primary project leader. No identifying information will be used in any written or oral presentation of the results.

I have read the above and I understand all of the conditions. I freely consent and voluntarily agree to participate in this project.

Name of teacher (please print): ______________________________________________

Grade(s): ________________

Room number: ____________

Signature: ____________________________ Date: __________________
I agree to participate in the research project described to me. I understand that my parents have already said that I am allowed to participate in this project.

Participation in this project involves completing three sessions in which I will be asked to complete some academic tasks (reading, spelling, and math), say how I think I will do on these tasks, as well as answer some questions about my self-esteem, mood, and general well-being (including how I think I am doing in school). These sessions will be approximately 4 hours total, and will be held during the school day, at a time that is convenient for both me and my teacher.

I understand that my parents and my homeroom teacher will also be asked to complete a short interview that asks questions about my well-being and how I am doing in school.

I am free to withdraw from the study, at anytime, without any penalty or prejudice.

All information collected will be kept anonymous and confidential.

No identifying information will be used in any presentations of the results.

My classroom work and grades will not be affected by my decision to participate or not to participate.

I have read the above and I understand all of the conditions. I freely consent and voluntarily agree to participate in this project.

Name (please print): ____________________________________________________________________________

Signature: ___________________________ Date: ____________________
Appendix E: Ethics Certificates
CERTIFICATE OF ETHICAL ACCEPTABILITY FOR FUNDING AND NON-FUNDED RESEARCH INVOLVING HUMANS

The Faculty of Education Ethics Review Board consists of 6 faculty members appointed by the Faculty of Education, an appointed member from the community, and the Chair of the Ethics Review Board.

The undersigned considered the application for certification of the ethical acceptability of the project entitled:

The Importance of The Teacher-Student Relationship

as proposed by:

Applicant's Name: Lynn Dallaire
Applicant's Signature: ________________________________
Date: 2004/11/15
Degree / Program / Course: M.Ed. / Inclusive Education / # 697

The application is considered to be:
A Full Review
A Renewal for an Approved Project

The review committee considers the research procedures and practices as explained by the applicant in this application, to be acceptable on ethical grounds.

1. Prof. René Turcotte
   Department of Kinesiology and Physical Education
   Signature / date

2. Prof. Ron Morris
   Department of Integrated Studies in Education
   Signature / date

3. Prof. Ron Stringer
   Department of Educational and Counselling Psychology
   Signature / date

4. Prof. Joan Russell
   Department of Integrated Studies in Education
   Signature / date

5. Prof. Doreen Starkie-Meyering
   Department of Integrated Studies in Education
   Signature / date

6. Prof. Ada Sinclair
   Department of Educational and Counselling Psychology
   Signature / date

Office of the Associate Dean (Research & Graduate Students)
Faculty of Education, Room 230
Tel: (514) 398-7039  Fax: (514) 398-1527

Office Use Only
REB #: 482-1104  APPROVAL PERIOD: Dec 14, 2004 to Dec 14, 2005
(Updated September 2003)
Project Title: Depression, positive illusions, and the self-protective hypothesis in children and adolescents with learning disabilities

Type of Review: Expedited Review _X_  Full Review ___

Principal Investigator: Dr. Nancy L. Heath  Dept: Educational and Counselling Psychology

Phone #: (514) 398-1232  Fax #: (514) 398-6968  Email: nancy.heath@mcgill.ca

Mailing Address (if different than Dept.): 

Status:  Faculty _X_  Postdoctoral Fellow ___  Other (specify) ___
Ph.D. Student ___  Master’s Student ___  Undergraduate ___

Type of Research:  Faculty Research _X_  PhD Thesis ___
MA Thesis ___  Independent Study Project ___
Other (specify) ___  Master’s Project ___
Course Assignment (specify course name and #) ___

Faculty Supervisor (for student PIs): 

Co-Investigator(s) (list name/status/affiliation): 

List all funding sources for this project and project titles (if different from the above). Indicate the Principal Investigator of the award if not yourself.

Awarded: Social Sciences and Humanities Research Council – Grant (2005-2008)

Pending: N/A

Principal Investigator Statement: I will ensure that this project is conducted in accordance with the policies and procedures governing the ethical conduct of research involving human subjects at McGill University.

Principal Investigator Signature: __________________________ Date: June 23/2005

Student’s Faculty Supervisor Statement: I have read and approved this project and affirm that it has received the appropriate academic approval. I will ensure that the student investigator is aware of the applicable policies and procedures governing the ethical conduct of human subject research at McGill University and I agree to provide all necessary supervision to the student.

Faculty Supervisor Signature: __________________________ Date: 

Checklist for Application for a Certificate of Ethical Acceptability

This checklist is designed to help you make sure your application includes all of the required materials:

☐ Completed application form with the signature of the principal investigator, and for students, the faculty supervisor.
☐ Recruitment ads or letters of invitation
☐ Consent forms (for all participants or their guardians and for all research procedures) and assent forms or scripts (if research participants are children)
☐ Letters requesting access to a research site (e.g. a school)
☐ Research tools (questionnaires, interview guides, tests, etc.)

Please provide 3 copies of the complete application materials for an expedited review, and 8 copies for a full review.

6/22/05
Faculty of Education – Review Ethics Board
Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 562-0705
Project Title: Depression, positive illusions, and the self-protective hypothesis in children and adolescents with learning disabilities
Applicant’s Name: Nancy Heath

Status: Faculty

Supervisor’s Name: Department: ECP

Granting Agency and Title (if applicable):

Type of Review: Expedited ✓ Full

This project was reviewed by: Starke-Meyerring/Stringer

Approved by

Roy Lyster, Ph.D.
Chair, Education Ethics Review Board

Approval Period: Aug 15/05 to Aug 15/06

All research involving human subjects requires review on an annual basis. An Annual Report/Request for Renewal form should be submitted at least one month before the above expiry date. If a project has been completed or terminated for any reason before the expiry date, a Final Report form must be submitted. Should any modification or other unanticipated development occur before the next required review, the RED must be informed and any modification can’t be initiated until approval is received. This project was reviewed and approved in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Subjects and with the Tri-Council Policy Statement on the Ethical Conduct for Research Involving Human Subjects.

8/11/05