

11-3-2015

Parent Predictors of Social-Emotional Strengths in Kindergartners

Kayla Nicole Larosa

University of South Florida, knlawler@mail.usf.edu

Follow this and additional works at: <http://scholarcommons.usf.edu/etd>

 Part of the [Psychology Commons](#)

Scholar Commons Citation

Larosa, Kayla Nicole, "Parent Predictors of Social-Emotional Strengths in Kindergartners" (2015). *Graduate Theses and Dissertations*.
<http://scholarcommons.usf.edu/etd/6532>

This Dissertation is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.

Parent Predictors of Social-Emotional Strengths in Kindergarteners

by

Kayla LaRosa

A thesis submitted in partial fulfillment
of the requirements for the degree of
Education Specialist
Department of Educational and Psychological Studies
College of Education
University of South Florida

Co-Major Professor: Julia Ogg, Ph.D.
Co-Major Professor: Shannon Suldo, Ph.D.
Robert Dedrick, Ph.D.

Date of Approval:
November 3, 2016

Keywords: Parent involvement, Parenting practices, Empathy, Self-Regulation, Social
Competence, SEARS

Copyright © 2016, Kayla LaRosa

ACKNOWLEDGEMENTS

I would like to thank my entire thesis committee for their time, energy, and support they have contributed in order to make this project possible. Dr. Julia Ogg, thank you for your constant support, feedback, and motivation to ensure that this project was conducted in a quality manner. Without the countless hours you contributed to support me in this project, its completion would not have been possible. I am extremely grateful for the time and commitment you have given to support me throughout the entire process. I would also like to thank Dr. Shannon Suldo and Dr. Robert Detrick for their time and commitment to this project, and their willingness to provide me with assistance and feedback whenever needed. I would also like to thank my husband and my parents for being supportive of the continuous hours that were put into the project, and constantly motivating me to be persistent and to produce my best work. Without all of you, this project would not have been possible.

TABLE OF CONTENTS

List of Tables	vi
Abstract	x
Chapter One: Introduction	1
Statement of the Problem.....	1
Purpose of the Study	6
Definitions of Key Terms	7
Parent involvement in educational settings.....	7
Parental self-efficacy	7
Parental role construction	7
Parental time and energy.....	8
Parental knowledge and skills.....	8
Parent involvement with child's teacher.....	8
Trust of child's teacher	8
Parent involvement at home.....	8
Instrumental involvement in learning	8
Management of home learning environment	8
Supportive parental involvement	8
Parent practices	8
Appropriate discipline.....	9
Harsh and inconsistent discipline.....	9
Positive verbal discipline	9
Monitoring	9
Praise and incentives.....	9
The Social-Emotional Assets and Resilience Scales (SEARS)	9
Empathy	9
Self-regulation.....	9
Social competence	10
Responsibility	10
Research Question	10
Hypotheses.....	10
Significance of the Study	11
Chapter Two: Literature Review	13
Positive Psychology	13
Social-Emotional Strengths	14
Definitions of Social-Emotional Strengths	16
Parenting Variables.....	19
Major Theories of Parent Involvement.....	22

Hoover-Dempsey and Sandler (2005) Model	22
Level one.....	23
Level one and a half	25
Level two	26
Level three	26
Level four.....	26
Level five	27
Fantuzzo et al. (2004) model	28
General Parenting Practices	29
Harsh discipline	29
Clear expectations.....	30
Appropriate discipline, positive verbal discipline, and praise and incentives	30
Monitoring	32
Links between parenting practices and academic success	32
Parenting Variables and Social-Emotional Strengths.....	33
Parents and Teachers as Informants of Student Skills in Social-Emotional Domains	35
Gaps in the Literature.....	37
Conclusion	38
 Chapter Three: Method	 40
Participants.....	40
Child participants	41
Teacher Participants.....	45
Parent Participants	45
Measures	45
Parent measures	45
Social-Emotional Assets and Resiliency Scales-Parent (SEARS-P; Merrell et al., 2010).....	46
Parent Involvement Project Parent Questionnaire-Modified (PIPQ-M; Hoover-Dempsey & Sandler, 2005)	47
Teacher Involvement Questionnaire (Parent Version; Fast Track, 2011).....	48
Parenting Practices Interview (Webster-Stratton, 1998)	49
Parent Support for Learning Scale (PSLS; Rogers et al., 2013).....	50
Trust Scale from the Family–School Relationship Survey (Adams & Christenson, 2000)	52
Teacher measures.....	52
Procedures.....	59
Data Analysis	61
Primary Analyses	62
 Chapter Four: Results	 64
Variable Construction	64

Examining Assumptions	66
Parent-rated sample.....	66
Teacher-rated sample	67
Descriptive Analyses	70
SEARS-TSF total strengths score ($n = 166$).....	70
SEARS-P total strengths score ($n = 122$).....	71
SEARS-TSF individual item ratings: Teacher sample ($n = 166$)	72
SEARS-P subscale ratings: Parent-rated strengths sample ($n = 122$).....	73
Parenting measures	75
Scale Reliability	78
Correlation Analyses.....	79
Comparison between U.S. and Canadian Sample.....	96
Primary Analyses	97
Research question one.....	97
Self-regulation/responsibility.....	98
Social competence	100
Empathy	102
Parent total strengths.....	104
Total strengths teacher	107
Summary of hierarchical regression analysis	109
Independent <i>t</i> -tests	112
Parent-rated strengths sample	112
Teacher-rated strengths sample.....	113
Chapter Five: Discussion	114
Parenting Variables Significantly Correlated with Social-Emotional Strengths	115
Parent-rated strengths sample	115
Teacher-rated sample	116
Parenting Variables as Predictors of Social-Emotional Strengths.....	117
Parent-rated self-regulation/responsibility.....	118
Parent-rated social competence.....	119
Parent-rated empathy	120
Total parent-rated strengths	122
Total teacher-rated strengths.....	123
Summary	124
Significant Individual Predictors	126
Teacher versus Parent Ratings of Youths' Strengths.....	126
Contributions to the Literature.....	128
Implications for School Psychologists.....	132
Limitations and Future Directions	134
Conclusion	136
References.....	138

Appendices.....	153
Appendix A: Parent Demographic Questionnaire	154
Appendix B: Parent Involvement Project Parent Questionnaire-Modified (PIPQ-M)	159
Appendix C: Fast Track Project Parent—Teacher Involvement Questionnaire (Parent Version).....	161
Appendix D: Parenting Practices Interview (Webster-Stratton, 1998).....	162
Appendix E: Parental Support for Learning Scale (school entry; PSLS) Formerly the Family-School Questionnaire Parent Form (school entry)-FSQ.....	181
Appendix F: Trust scale from the Family-School Relationship Survey	183
Appendix G: Independent Samples <i>t</i> -Tests.....	184
Appendix H: Institutional Research Board Review	187

LIST OF TABLES

Table 1. Definitions of Social-Emotional Skills	19
Table 2. Hoover-Dempsey and Sandler Model (2005).....	23
Table 3. Parenting Constructs	33
Table 4. Demographic Information for Parent-Rated Strengths Sample ($n = 122$).....	41
Table 5. Demographic Information for Teacher-Rated Strengths Sample ($n = 166$)	42
Table 6. Measures and Sample items.....	53
Table 7. Measures and Cronbach's Alpha based on Extant Literature	56
Table 8. Date Measures Collected	59
Table 9. Construction of Variables	64
Table 10. Descriptive Statistics for Variables of Interest in Parent-Rated Strengths Sample ($n = 122$)	67
Table 11. Descriptive Statistics for Variables of Interest in Teacher-Rated Strengths Sample ($n = 166$)	68
Table 12. Comparison of Teacher, Parent, and Normative Sample's Total Social-Emotional Strengths	71
Table 13. Individual Items Requiring Further Assessment: Teacher-Rated Strengths Sample ($n = 166$)	72
Table 14. Parent Ratings of Self-Regulation/Responsibility, Social Competence, and Empathy in Parent-Rated Strengths Sample ($n = 122$)	74
Table 15. Mean Scores of Current Sample compared to Normative or Comparative Sample Scores	76
Table 16. Cronbach's Alpha	77

Table 17. Correlation between Parent Practices Interview for Parent-Rated Strengths Sample ($n = 118-119$).....	79
Table 18. Correlation between Parent Practices Interview for Teacher-Rated Strengths Sample ($n = 152-155$).....	80
Table 19. Correlation between Variables on the Parent Involvement Project Questionnaire-Modified for the Parent-Rated Strengths Sample ($n = 120$).....	81
Table 20. Correlation between Variables on the Parent Involvement Project Questionnaire-Modified for the Teacher-Rated Strengths Sample ($n = 156$).....	81
Table 21. Correlations between Fast Track, Parent Support for Learning Scale, and Trust Scale for the Parent-Rated Strengths Sample ($n = 117-120$)	81
Table 22. Correlations between Fast Track, Parent Support for Learning Scale, and Trust Scale for the Teacher-Rated Strengths Sample ($n = 149-156$)	83
Table 23. Correlation between Social-Emotional Assets and Resilience Scales-Parent ($n = 119-121$).....	84
Table 24. Correlation between Parent Involvement Project Questionnaire-Modified and Parent Practices Interview for the Parent-Rated Strengths Sample ($n = 118-120$)	85
Table 25. Correlation between Parent Involvement Project Questionnaire-Modified and Parent Practices Interview for the Teacher-Rated Strengths Sample ($n = 152-156$)	85
Table 26. Correlation between Fast Track, Parent Support for Learning Scale, and Trust Scale and Parenting Practices Interview on the Parent-Rated Strengths Sample ($n = 115-120$).....	86
Table 27. Correlation between Fast Track, Parent Support for Learning Scale, and Trust Scale and Parenting Practices Interview on the Teacher-Rated Strengths Sample ($n = 147-156$).....	87
Table 28. Correlations between Fast Track, Parent Support for Learning Scale, and Trust Scale and Parent Involvement Project Questionnaire-Modified for the Parent-Rated Strengths Sample ($n = 116-121$).....	88

Table 29. Correlations between Fast Track, Parent Support for Learning Scale, and Trust Scale and Parent Involvement Project Questionnaire-Modified for the Teacher-Rated Strengths Sample ($n = 149-156$)	89
Table 30. Correlations between Parenting Practices Interview, Parent Involvement Project Questionnaire-Modified, Fast Track, Parent Support for Learning Scale, and Trust and Social-Emotional Assets and Resilience Scales in the Parent-Rated Sample ($n = 115-121$)	91
Table 31. Correlations between Parenting Practices Interview, Parent Involvement Project Questionnaire-Modified, Fast Track, Parent Support for Learning Scale, and Trust and Social-Emotional Assets and Resilience Scales for Teacher-Rated Strengths Sample ($n = 152-165$).....	92
Table 32. Parenting Practices, Parental Involvement, Social-Emotional Strengths, and demographic Variables for the Parent-Rated Sample ($n = 116-120$)	93
Table 33. Parenting Practices, Parental Involvement, Social-Emotional Strengths, and Demographic Variables for the Teacher-Rated Strengths Sample ($n = 153-156$).....	94
Table 34. Model 1: Gender and Socioeconomic Status as Predictors of Parent-Rated Self-Regulation/Responsibility ($n = 117$)	97
Table 35. Model 2: Parenting Variables, Gender, and Socioeconomic Status as Predictors of Parent-Rated Self-Regulation/Responsibility ($n = 112$).....	98
Table 36. Model 3: Gender and Socioeconomic Status as Predictors of Parent-Rated Social Competence ($n = 113$).....	99
Table 37. Model 4: Parenting Variables, Gender, and Socioeconomic Status as Predictors of Parent-Rated Social Competence ($n = 113$).....	100
Table 38. Model 5: Gender and Socioeconomic Status as Predictors of Parent-Rated Empathy ($n = 119$)	102
Table 39. Model 6: Parenting Variables, Gender, and Socioeconomic Status as Predictors of Parent-Rated Empathy ($n = 114$)	103
Table 40. Model 7: Gender and Socioeconomic Status as predictors of Total Parent-Rated Social-Emotional Strengths ($n = 118$)	104
Table 41. Model 8: Parenting Variables, Gender, and Socioeconomic Status	

as Predictors of Total Parent-Rated Social-Emotional Strengths ($n = 113$)	105
Table 42. Model 9: Gender and Socioeconomic Status as Predictors of Total Teacher-Rated Social-Emotional Strengths ($n = 154$)	106
Table 43. Model 10: Parenting Variables, Gender, and Socioeconomic Status as Predictors of Total Teacher-Rated Social-Emotional Strengths ($n = 143$).....	107
Table 44. Summary of Variance Explained in Hierarchical Regression Analysis for Variables Predicting Social-Emotional Domains ($n = 112-154$)	109
Table 45. Significant Individual Predictors for All Regression Models.....	110
Table 46. Independent Samples t -tests comparing Males and Females for Parent-Rated Strengths Sample ($n = 122$).....	111
Table 47. Independent Samples t -tests Comparing Males and Females for Teacher- Rated Strengths Sample ($n = 122$)	112
Table 48. Percentage of Variance Explained for Outcome Variables	124
Table 49. Significant Individual Predictors of Outcome Variables.....	125

ABSTRACT

Strengths-based assessment is providing an alternative to the typical way that psychologists approach mental health in the literature. Social-emotional strengths are multidimensional, positive indicators of mental health that include Social Competence, Self-Regulation, Empathy, and Responsibility. Limited research has been conducted to examine the potential connection between parental involvement in children's education, specifically in the areas of supporting a child's learning at home, parental involvement within educational settings, and parenting practices (discipline, Monitoring, use of Praise and Incentives) in connection with social-emotional strengths. With an emphasis on prevention of mental health problems, parents are an important and potentially untapped resource for school-based interventions to promote social-emotional strengths. Multiple informants in strengths-based assessment has also received limited attention in the research, therefore potential differences in parent and teacher ratings of social-emotional strengths were explored.

The relationships between parenting variables and social-emotional strengths were examined. The sample included 166 kindergarten children. Teacher ratings of children's strengths were available for all 166 of these children. Parent ratings of children's strengths were available for a subset ($n = 122$) of these 166 children. Participants were from both the U.S. and Canada. Measures used to assess parenting variables included the Parent Involvement Project Questionnaire-Modified, the Fast Track Project Parent-Teacher Involvement Questionnaire, the Parent Practices Interview, Parental Support for Learning Scale, Trust Scale from the Family-

School Relationship Survey, and the Social-Emotional Assets and Resilience Scale (SEARS)-Parent, and the SEARS-Teacher short form. All together, parenting variables explained 37% of the variance in Self-Regulation/Responsibility, 29% of the variance in Social Competence, 29% of the variance in Empathy, 37% of the variance in Total Social-Emotional Strengths as rated by parents, and 20% of the variance in Total Strengths as rated by teachers. In terms of individual predictors of the parent-rated strengths sample, Positive Verbal Discipline and gender (female status) were significant positive predictors of Self-Regulation/Responsibility. This indicated that the higher the use of Positive Verbal Discipline, the higher the levels of Self-Regulation/Responsibility. Supportive Parent Involvement, Positive Verbal Discipline, and gender (female status) significantly predicted Social Competence, also in a positive direction. This demonstrated that the higher the level of Supportive Parent Involvement and Positive Verbal Discipline, the higher the level of Social Competence. Parent perception of his/her Time and Energy, Praise and Incentives, and the child's gender (female status) positively predicted Empathy; Monitoring negatively predicted Empathy. For Time and Energy and Praise and Incentives, this indicated that the higher the level of these parenting variables, the more positively Empathy was rated by parents. Monitoring moved in the opposite direction of Empathy; as Monitoring increased, Empathy decreased. Positive Verbal Discipline and gender (female status) predicted Total Strengths rated by parents in a positive direction; as Positive Verbal Discipline increased, so did Total Parent-Rated Strengths. For teacher ratings of strengths, Trust of the child's teacher and gender (female status) predicted Total Strengths in a positive direction. This indicated that as Trust of the child's teacher increased, so did the level of teacher-rated Total Social-Emotional Strengths. Female status was consistently associated with more positive ratings of the social-emotional domains and Total Social-Emotional Strengths.

Teachers and parents had moderate levels of association ($r = .48$) in rating of kindergarten students' Total Social-Emotional Strengths. In summary, all parenting variables were predictive or associated with social-emotional outcomes except for Appropriate Discipline, and Monitoring had a negative relationship with parent-rated Empathy. Socioeconomic status was also not found to be significantly predictive or associated with social-emotional domains. Parenting practices such as Positive Verbal Discipline and gender were particularly predictive of social-emotional domains. Implications for research and practice are outlined.

CHAPTER ONE: INTRODUCTION

Statement of the Problem

The field of psychology has a history of focusing on diagnosis and pathology, however a strengths-based approach is becoming more popular (Suldo & Shaffer, 2008). Schools have become a part of the strengths-based movement by working to develop strengths in youth, in part through Social-Emotional Learning (SEL) programs. Heo and Squires (2012) state that social-emotional development in children is a critical part of their learning, as well as their well-being. Wong, Li-Tsang, and Siu (2014) also argue that in order for a child to be academically successful and function well in the school setting, social-emotional development is essential. Research has supported these statements by finding that social-emotional strengths predict positive school adjustment, as well as academic achievement (Denham, 2006; Hair, Halle, Terry-Humen, Lavelle, & Calkins, 2006; Shields et al., 2001). For example, one example of social-emotional strengths predicting positive school adjustment is that preschoolers rated higher in emotional regulation (the ability to regulate behaviors and emotions) were found to be better adjusted to school at the end of the school year (Shields et al., 2001). However, even with the growing support and findings related to social-emotional skills and the movement of positive psychology, much of the literature has focused on pathology in youth. For example, 90% of 100,000 abstracts in psychology from 1887-2003 were found to be related to psychopathology and mental illness (Huebner & Gilman, 2003). From 1972 to 2006, depression research publications were five times more prevalent than well-being research publications (Hefferon & Boniwell, 2011).

The literature continues to expand in pointing out the relationship between positive social-emotional strengths and academic and social outcomes, as well as the negative effects of poor social-emotional development. Raver and Knitzer (2002) discuss that as young as preschool, children with social-emotional difficulties are responded to negatively, are less likely to be accepted by their teachers and peers, and receive less positive feedback and less instruction. As a result, these children attend school less, like school less, and therefore, learn less in school.

Another study focused on longitudinal outcomes of prosocial behavior (i.e., Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000) found that prosocial behavior in third grade had a positive relationship with academic achievement and social preferences (positive peer relations) on the participants in eighth grade. Results also indicated that prosocial behavior in third grade resulted in prosocial behavior in eighth grade. Prosocial behavior also appeared to strongly predict academic achievement, even after controlling for variability in academic achievement through structural equation modeling (Caprara et al., 2000). Hair et al. (2006) also found that children who were rated as having risks in social-emotional areas had the worst academic outcomes, while children who had the highest positive social-emotional and physical development had the best outcomes in school readiness and achievement and social adjustment.

Educators also appear to recognize that social-emotional strengths are important in academic success. In a national survey conducted by the U.S. Department of Education's National Center for Education Statistics (2010) given to 1,448 kindergarten teachers, teachers rated effective communication in regards to thoughts and emotions as one of the key characteristics for kindergarten readiness (Hair et al., 2006). Ladd, Birch, and Buhs (1999) also found that kindergarteners who exhibited prosocial behavior were more likely to have a higher number of mutual friends and be more accepted by classmates than those students who exhibited

antisocial behavior. These same students who developed more relationships also demonstrated independent and cooperative classroom participation and higher levels of achievement. O'Neil, Welsh, Parke, Wang, and Strand (1997) had similar findings when assessing peer rejection in kindergarteners. Results indicated that those students with higher levels of peer rejection had higher amounts of academic difficulties, and those students who are rejected in kindergarten appear to represent the most consistently disadvantaged group of students in later grades. Disadvantaged in this group was defined by these students having poorer classroom habits and social skills, while also performing worse in language, reading, and math than students who were more accepted by their peers in kindergarten (O'Neil et al., 1997).

Despite research indicating that social-emotional strengths have a positive relationship with academic achievement and positive peer relationships, definitions of social-emotional strengths vary. Measures of social-emotional domains throughout the literature are also varied due to the different definitions for social-emotional skills. For example, social-emotional strengths have been measured through assessing prosocial play (Fantuzzo, McWayne, & Perry, 2004), Self-Regulation (McClelland, Acock, & Morrison, 2006; Merrell, Felver-Gant, Tom, 2010) and Social Competence (Merrell et al., 2010). However, measures in past research fail to take a multidimensional look at social-emotional domains. Recently, research has supported the presence of four domains of social-emotional strengths including Empathy, Self-Regulation, Social Competence, and Responsibility (Merrell et al., 2010).

One measure of the four domains listed above is the Social Emotional Assets and Resilience Scales (SEARS). The SEARS is a strengths-based measure, which assesses social-emotional domains multidimensionally and includes Empathy, Self-Regulation, Social Competence, and Responsibility (Merrell et al., 2010). Female students with higher levels of

Empathy at ages 8-9 were found to have higher levels of achievement in reading and spelling at ages 10-11 (Feshbach & Feshbach, 1987). Social Competence and emotional regulation have also been found to predict higher academic achievement (Caprara et al., 2000; Hair et al., 2006; Raver & Knitzer, 2002). Despite these findings, positive outcomes associated with Empathy and Responsibility have received less attention in the literature when compared to Social Competence and Self-Regulation. However, McClelland and colleagues (2006) have found that Self-Regulation and Responsibility were predictive of early academic skills as well.

Parents play a role in the development of his/her child's social-emotional skills (Fantuzzo et al., 2004), as well as in his/her child's education. Parental Involvement (PI) in education indicates that parents value school, which increases a child's outlook that school is important (Hoover-Dempsey & Sandler, 1997). Based on the literature, PI in a child's education, supportive parenting practices, and the use of appropriate and consistent discipline have been linked to positive outcomes (Gutman & McLoyd, 2000; McMahon & Forehand, 2003; Simpkins, Weiss, McCartney, Kreider, & Dearing, 2006; Webster-Stratton, 2005). For example, students who are higher-achieving have more supportive conversations with their parents than lower-achieving students (Gutman & McLoyd, 2000). Maternal warmth defined as a positive or negative emotional climate has also been found to moderate the relationship between parent involvement with his/her child's education and academic achievement of the child (Simpkins et al., 2006). Controlling parenting practices, harsh discipline, a lack of PI at home to support children's learning, and PI in educational settings, has been linked to poorer outcomes when compared to more positive parenting practices and higher levels of PI in both educational settings and supporting learning at home (Niggli, Trautwein, Schnyder, Ludtke, & Neumann, 2007; Peek Corbin-Staton, 2009, Pomerantz & Eaton, 2001). Studies have shown that parents

who inconsistently discipline their children, lack warmth, or are physically abusive have children who are more at risk for social and conduct problems (Patterson & Capaldi, 1991; Patterson & Stouthamer-Loeber, 1984; Reid, Taplin, & Loeber, 1981; Webster-Stratton, 1990).

Hoover-Dempsey and Sandler (1997) and Fantuzzo and colleagues (2004) have created theoretical frameworks that have largely impacted research on PI in a child's education. Hoover-Dempsey and Sandler (2005) outline five levels of parental involvement in a child's education. The first level features factors that contribute to parental involvement forms (i.e., home-based, school-based, and parent/teacher or parent/school communication), which include parents' motivational beliefs, their perception of invitations to become involved, and their perceived life context (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). Level one and a half includes the parents' values, goals, expectations, and aspirations that contribute to their various forms of involvement (Walker et al., 2005). Level two features learning mechanisms used by parents during involvement activities and level three includes the students' perception of these activities. Finally, level four consists of student attributes related to student achievement, and level five is the students' level of achievement in education.

Fantuzzo and colleagues (2004) define parental involvement in a child's education as having three components including Home-Based Involvement, School-Based Involvement, and Home-School Conferencing. Examples of Home-Based Involvement include creating strategies and a positive environment for learning at home, while School-Based Involvement includes volunteering to go on class field trips (Fantuzzo et al., 2004). Home-Based Conferencing is considered to be interaction between the parents and teachers in regards to the student (Fantuzzo et al., 2004). These two models have contributed theoretical structure on PI research. Nevertheless, PI continues to have varying definitions throughout research, or varying

components in what contribute to PI. A more consistent definition of PI is needed to synthesize research findings on the effect it has on children's outcomes.

Components of PI may be broken up into PI to support learning at home and PI in educational settings, but there is disagreement in the literature about whether PI at home or PI at school is more important in children's success. For example, Fan and Chen (1999) found in a meta-analysis of general PI that parent supervision at home had the weakest relationship with student achievement at school when compared to parental aspiration/expectations for children's educational achievement, parent participation in school activities, and communication with the child about school. Other studies, such as Fantuzzo et al. (2004), found that later preschool competencies had the highest relationship with home-based PI, and high levels of home-based PI were also associated with low levels of behavior problems in the classroom. Because of these conflicting results, clarification is needed in regards to the importance of PI at home versus PI at school. In addition, PI is often examined in terms of effects on negative outcomes, such as behavioral challenges, rather than the relationship with positive outcomes, such as social-emotional strengths.

Purpose of the Study

The purpose of this study was to conduct an analysis of an archival data set to contribute to the literature regarding which parenting variables predict social-emotional strengths in early childhood. Specifically, this study provides a multidimensional definition of PI that includes PI to support learning at home, PI in educational settings, and general parenting practices, as well as a multidimensional definition of social-emotional strengths including Self-Regulation, Empathy, Social Competence, and Responsibility. The effect that parenting styles and PI in a child's education have on children's outcomes is often focused on the child's academic achievement, or

on the role that negative parenting styles or lack of PI may play in contributing to emotional and behavioral issues. Research is rarely concentrated on the association of these variables with promoting social-emotional strengths.

This study also looked at cross informant ratings of students' social-emotional strengths, by assessing the agreement between parent and teacher report of students' strengths, as well as whether the similar parenting involvement variables predict both parent and teacher ratings of student's strengths. Assessing agreement across settings and raters provided more information on social-emotional strengths.

Definitions of Key Terms

Although PI has been defined in various ways throughout the literature, this study discussed PI in children's education, specifically in terms of supporting the child's education at school and supporting learning at home. Parenting practices were also assessed and included disciplinary practices, use of praise and incentives, and levels of parental monitoring of the child.

Parent involvement in educational settings. Parent participation in activities at the school, such as helping with a school event or serving on a parent-teacher advisory board (Hoover-Dempsey & Sandler, 1997). The decision for a parent to become involved in his/her child's education is comprised of parental self-efficacy, parental role construction, parental time and energy, parental knowledge and skills, parental involvement with the child's teacher, and the trust of the teacher (Hoover-Dempsey & Sandler, 1997).

Parental self-efficacy. Parents' beliefs about his/her ability to influence his/her child's outcomes and learning in school (Hoover-Dempsey & Sandler, 1997).

Parental role construction. Parent beliefs related to the role they play in his/her child's education (Hoover-Dempsey & Sandler, 1997).

Parental time and energy. Parents' perceptions of time demands that influence involvement in his/her child's education (Hoover-Dempsey & Sandler, 2005).

Parental knowledge and skills. Parents' perceptions of their skills and knowledge to help with their child's homework and school activities (Hoover-Dempsey & Sandler, 1997).

Parent involvement with child's teacher. The frequency of contact between a child's parent and the child's teacher.

Trust of child's teacher. Parents' level of trust in the teacher in instructing, disciplining, and promoting positive traits in their child.

Parent involvement at home. Parent involvement in home activities related to school and in support of the child's learning including instrumental involvement in learning, management of the home learning environment, and whether involvement in learning is supportive (Hoover-Dempsey & Sandler, 1997).

Instrumental involvement in learning. Parent participation in reading to his/her child or helping with schoolwork (Rogers, Markel, Midgett, Ryan, & Tannock, 2013).

Management of home learning environment. Parent actions or behavior for setting rules, expectations, and providing encouragement around the learning environment in the home (Rogers et al., 2013).

Supportive parental involvement. Parent support and encouragement related to the child's learning in the home (Rogers et al., 2013).

Parenting practices. Parenting behaviors such as discipline, Monitoring, and use of Praise and Incentives.

Appropriate discipline. Nonviolent approaches to discipline including the use of time-out, ignoring, warning of potential consequences, redirection, setting realistic and clear expectations, Monitoring, and distraction (Webster-Stratton, 1998).

Harsh and inconsistent discipline. Inconsistent or harsh discipline consists of the parent letting the child get away with things when the parent feels the child should be punished, changing his/her mind because of the child's arguments or excuses after deciding the child should be punished, raising his/her voice to scold or yell at the child, threatening to punish his/her child, becoming angry with the child, and/or letting arguments build up and saying something he/she did not mean (Webster-Stratton, 1998).

Positive verbal discipline. Ignoring, warning of potential consequences, redirection, setting realistic and clear expectations (Webster-Stratton, 1998).

Monitoring. The amount of supervision the parent provides to his/her child (Webster-Stratton, 1998).

Praise and incentives. Providing verbal or non-verbal recognition for good behavior and offering rewards or reinforcement for the behavior (Webster-Stratton, 2011).

The Social-Emotional Assets and Resilience Scales (SEARS). This measure of strength is available in teacher, parent, and student report. It assesses four types of strengths, defined below.

Empathy. The ability to understand how others feel (Merrell et al., 2010).

Self-regulation. The ability to identify and change negative thoughts, sustains self-control when upset, is able to handle problems, and expresses disagreement without fighting (Merrell et al., 2010).

Social competence. The ability to sustain friendships, communicate effectively, and fit in with peers (Merrell, 2011).

Responsibility. Being dependable by listening, settling disagreements, and accepting Responsibility (Merrell et al., 2010).

Research Question

The following research question was included in order to explore parent predictors of social-emotional strengths in youth. Parenting variables that were examined included those related to school and others related to the home. Differences in teacher and parent informants of social-emotional strengths were also explored.

1. To what extent, if any, do parenting variables (Self-Efficacy, Role Construction, Time and Energy, Knowledge and Skills, Parent Involvement with his/her child's teacher, Trust of child's teacher, Appropriate Discipline, Harsh and Inconsistent Discipline, Positive Verbal Discipline, Praise and Incentives, Monitoring, Clear Expectations, Instrumental Involvement in learning, Management of Home Learning Environment, and Supportive Parental Involvement) predict social-emotional strengths (Social Competence, Self-Regulation, Empathy, and Responsibility) in kindergartners?

a. When social emotional strengths (Social Competence, Self-Regulation, Empathy, Responsibility, and Total Social-Emotional Strengths) are rated by their parents?

b. When Total Social-Emotional Strengths are rated by their teachers?

Hypotheses

This researcher hypothesized that parenting variables would predict social-emotional strengths in kindergartners. Research has previously indicated that parenting is an important

aspect of social-emotional development (Pianta, 1997; McMahon & Forehand, 2003; Niehaus & Adelson, 2014, Webster-Stratton, 2005). This hypothesis was also based on research by McMahon and Forehand (2003) and Webster-Stratton (2005), which indicated that positive and consistent behavior management strategies promote Self-Regulation in youth. High levels of all parenting variables—aside from harsh and inconsistent discipline and controlling parenting practices—were hypothesized to result in a higher level of Total Social-Emotional Strengths. This hypothesis resulted from findings that high levels of monitoring led to prosocial behavior prior to adolescence (Power & Bradley-Klug, 2013), as well as research indicating that uninvolved parents demonstrating low levels of monitoring and supervision led to lack of development of Empathy in older students (Schaffer, Clark, & Jeglic, 2009). Pianta (1997) also found that the stronger the parent-child relationship, the better able the child is to regulate his or her emotions. Therefore, higher levels of parenting variables were expected to be predictive of social-emotional strengths in kindergarteners for all variables but harsh and consistent discipline. Lower levels of harsh and inconsistent discipline were hypothesized to be more predictive of social-emotional strengths.

In regard to comparing parent versus teacher ratings of social-emotional strengths, it was expected that the relationships between parenting variables and social-emotional skills would be the same for parent ratings and teacher ratings of social-emotional strengths because previous research had found that parents and teachers tend to moderately agree in their ratings of social-emotional skills (Crane, Mincic, & Winsler, 2011).

Significance of the Study

This study was designed to make several contributes to the existing literature. The first contribution was a multidimensional framework of PI in their child's education, that included

aspects of parent involvement in educational settings, parenting practices for discipline, and PI to support learning at home. Other definitions of PI in the literature have failed to include all of these components.

The second aspect this study contributed to the literature was a focus on positive indicators of mental health, or social-emotional strengths. While many studies have looked at the relationship that parents have with his/her child's academic success, or have researched the effect of parenting practices on child's behavior, few have looked at what aspects of parenting are associated with social-emotional strengths. The studies that do measure social-emotional domains tend to focus on isolated definitions of social-emotional skills, rather than a multidimensional view of social-emotional domains. Therefore, this study contributed to the literature, a multidimensional look at parenting variables and social-emotional strengths, the ability parenting variables had to predict various social-emotional strengths, and differences between parent and teacher informants of social-emotional strengths in youth.

CHAPTER TWO: LITERATURE REVIEW

The purpose of this study was to assess to what extent, if any, parenting variables predicted social-emotional strengths in youth. This literature review provides an overview of positive psychology, a field of psychology that urges attention away from focusing on deficits, to promoting strengths and preventing illness and disorder. The benefits of using strength-based assessment when assessing social-emotional skills are also discussed. In the following sections, the importance of PI in children's academic success and development of social-emotional skills is introduced. Last, an overview of research indicating how PI is associated with social-emotional outcomes will be provided, as well as a summary of research on parent and teacher agreement on reporting the presence of strengths-based indicators of mental health.

Positive Psychology

Psychology has traditionally focused on psychopathology, with an emphasis on finding symptoms or deficits in order to diagnose and treat mental illness (Gilman & Huebner, 2003). Seligman and Csikszentmihalyi (2000) described the focus of psychology as a disease framework that considers individuals as having “damaged brains and damaged childhood” (p. 6). However, this framework does not focus on the prevention of mental illness or capitalizing on individual strengths. In fact, Allen and Graden (2002) even described this approach as admiring the problem and not taking a proactive approach to solving it. Seligman and Csikszentmihalyi (2000) stated that researchers focused on prevention have found that individuals have strengths

that can protect against mental illness, and that an emphasis only on human weaknesses does not allow psychologists to effectively treat mental illness. Seligman and Csikszentmihalyi (2000) also encouraged psychologists to look at individuals through a more “positive” lens by focusing on well-being, contentment and satisfaction, hope and optimism, and flow and happiness. Individual traits such as courage, capacity for love and a career, perseverance, and other strengths of character should also be a focus according to Seligman and Csikszentmihalyi (2000). Positive psychology combats the typical approach to mental illness by focusing on and promoting strengths and is defined as the “scientific study of optimal human functioning” (Linley, Joseph, Harrington, & Wood, 2006, p. 8). In fact, this aligns with the historical goal of psychology to make lives better. Prior to World War II, there were three goals of psychology that included curing mental illness, making all lives productive and fulfilling, and to identify and culminate talent (Seligman & Csikszentmihalyi, 2000). Positive psychology thus encourages the field to redirect attention to some of its roots.

Social-Emotional Strengths

With the shift towards focusing on strengths, rather than psychopathology, social-emotional skills are becoming increasingly emphasized. However, even the research discussing the importance of social-emotional development tends to emphasize the negatives. For example, in a policy paper written by Raver and Knitzer (2002) in which they argued for the need of social-emotional school readiness in three and four year old children, they approached their argument by discussing pathology. For example, they discuss how emotional and behavioral issues may have a negative relationship with school performance, which is predictive of later school performance. Because emotional and behavioral issues have been associated with these negative results, the authors point out that public policy has begun to advocate for programs that

develop social-emotional and behavioral competence in early childhood, particularly for those at risk for emotional and behavioral issues (Raver & Knitzer, 2002). Rather than taking the approach of the benefits that social-emotional development can have in promoting school success, Raver and Knitzer (2002) advocate for the importance of social-emotional development in youth as a way to avoid social-emotional and behavioral difficulties, especially in students who are considered at-risk. Prevention of negative outcomes is important, but not synonymous with promotion of well-being and other positive indicators of flourishing.

Programs focusing on social, behavioral, and emotional skills aimed towards prevention and early intervention may begin as young as during infancy, as emotional and behavioral issues may be visible, as young as three to five years of age (Raver & Knitzer, 2002). However, there has been little research dedicated to social-emotional issues for the ages of three to five years (Raver & Knitzer, 2002). The research that does focus on preschool children appears to be highly focused on deficits in individuals. For example, research has indicated that children displaying anti-social behavior are less likely to be accepted by peers and teachers, and are less likely to receive positive feedback and receive less instruction from their teachers than their typically functioning peers (Raver & Knitzer, 2002). These children are also more likely to drop out of school, be held back a grade, and engage in delinquent acts (Raver & Knitzer, 2002). In contrast, social-emotional strengths have been linked to positive outcomes in this age group. Specifically, higher self-control (and lower amounts of acting out) is a better predictor of academic performance than cognitive abilities or family background (Raver & Knitzer, 2002).

In summary, although the research on the importance of social-emotional development is growing, much of the literature appears to focus on identifying emotional and behavioral issues or targeting students who are at-risk for social-emotional difficulties. Prevention and early

identification studies relevant to promoting social development also appear to focus on issues that can result from emotional and behavioral difficulties, rather than benefits that may arise from developing social-emotional strengths. The importance of building social-emotional strengths as a way to develop success for all students requires more attention in the literature.

Definitions of Social-Emotional Strengths

The identified domains of social-emotional strengths have differed throughout the literature. Therefore, in this section social-emotional strengths will be defined, as well as the different ways in which social-emotional skills are measured.

Social-Emotional Learning (SEL) is a way of promoting social, emotional, and behavioral competence that has become increasingly prevalent in school systems and is focused on prevention. Social-Emotional Learning involves building students' abilities to manage emotions, problem-solve, and form positive relationships (Zins, Elias, Greenberg, & Weissberg, 2000). SEL has been associated with increases in academic outcomes, physical health, citizenship, as well as with decreases in emotional problems such as: substance abuse, unhappiness, and maladjustment (Elias et al., 1997; Zins, Bloodworth, Weissberg, & Wahlberg, 2007).

The Collaborative for Academic, Social, and Emotional Learning (CASEL) outlines five core competencies of social-emotional learning. The core competencies include self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2013). Merrell (2011) has also conducted research to empirically define key social-emotional strengths in the development of the SEARS. The SEARS measures four domains of social-emotional strengths and resilience including Self-Regulation (able to identify and change negative thoughts), Social Competence (able to make friends easily), Empathy (understanding

how others feel), and Responsibility (being dependable by accepting Responsibility, listening, etc.; Merrell et al., 2010). Self-Regulation and Responsibility are grouped together on this measure and therefore, will be discussed as a combined domain in this study. An exploratory factor analysis (EFA) was conducted by Merrell and colleagues (2010) in order to explore which domains should be represented on the SEARS. At first, eight factors were discovered and explained 55.72% of the variance, but results were found to be uninterpretable. Therefore, the EFA was rerun to force a three-factor solution and reduce commonalities between variables and accounted for 48.8% of the variance in items. Despite deciding on the three-factor model to represent the SEARS-P (Self-Regulation/Responsibility, Empathy, and Social Competence), the authors note that all four separate constructs were essential in creating the items for this measure (Merrell et al., 2010). A comparison between the definitions discussed above is shown in Table 1. There is some overlap between the social-emotional areas emphasized by both the CASEL, Merrell, and others; however, despite definitions being similar, different word choices are selected to define similar concepts.

Researchers have also measured social-emotional skills by looking at prosocial behavior. Caprara et al. (2000) defined prosocial behavior as cooperating, helping, sharing, and consoling. Similar to Social Competence, prosocial behavior was also found to have a positive relationship with academic outcomes. Hair et al. (2006) took a different approach when looking at social-emotional domains by assessing children's positive development, social/emotional and health strengths, social/emotional risks, and health risks. Positive development was broken into two categories including social development and emotional development. Social development was defined in this study as the ability to form relationships with teachers or peers, while emotional development was defined as being sensitive to others' feelings and being able to express oneself

appropriately. In this study, social-emotional skills were measured based on parent and teacher report, and were considered social/emotional and health strengths if the parent/teacher rating was above average for health or physical well-being and social/emotional well-being. Parents and teachers were asked to rate whether the participating children (17,219 kindergarteners) were on track in their development or how frequently they displayed certain behaviors. Sample areas in which the participants were rated included self-control, social interaction, impulsivity, and externalizing and internalizing problem behaviors. Therefore, social-emotional strengths in this particular study consisted of an above average amount of self-control, ease with social interaction, and lower levels of impulsivity, externalizing, and internalizing problem behaviors.

Raver and Knitzer (2002) point out that despite the growing research that indicates that social-emotional development is just as important as cognitive development or academic achievement in children's outcomes, there is still great variations in defining social-emotional domains in the literature. An example of this is demonstrated in Caprara and colleague's (2000) emphasis on social-emotional strengths as above average skills in self-control and social interaction, and low levels of impulsivity and mental health problems. This definition of social-emotional strengths differs from Merrell's (2001) strengths-based focus on having skills in Self-Regulation, Empathy, Responsibility, and Social Competence.

Another example of differing definitions of social-emotional strengths includes the use of the term social-emotional competence. Merrell (2011) defines social-emotional competence as maintaining friendships, feeling comfortable in peer groups, and using effective verbal communication (Merrell, 2011). Wilzenski and Coomey (2008) define social-emotional competence as individuals being able to manage emotions, care for others, and behave in a

responsible manner. Therefore, definitions of the same concept appear to differ from researcher to researcher.

Table 1

Definitions of Social-Emotional Skills

CASEL (2013)	Merrell (2011)	Other studies
Self-Awareness: Ability to recognize one's thoughts and emotions and the influence they have on behavior.		
Self-Management: Ability to effectively regulate thoughts, behaviors, and emotions in various situations.	Self-Regulation: Ability to identify and change negative thoughts.	
Social Awareness: Ability to take the perspective of others, understand norms for behavior, and recognize resources and support.	Empathy: Understanding how others feel.	Emotional Development: Sensitive to others' feelings and expressing oneself appropriately (Hair et al., 2006).
Relationship Skills: Ability to maintain positive relationships with diverse individuals or groups.	Social Competence: Maintains friendships, communicates effectively, and is comfortable in groups.	Social Development: Ability to form relationships with teachers and peers (Hair et al., 2006).
Responsible Decision Making: Ability to make good decisions based on ethics, safety, and evaluation of consequences	Responsibility: Being dependable.	Prosocial Behavior: Cooperating, helping, sharing, and consoling (Caprara et al., 2000).

In summary, despite the wide variety of definitions used to describe social-emotional strengths and the variety of specific social-emotional skills that are assessed in research, there appears to be agreement that a focus on measuring social-emotional strengths, or using strengths-based assessment is important in promoting positive mental health.

Parenting Variables

An important aspect of studying social emotional skills is considering how they develop. Looking at children ecologically, there are a number of factors that may contribute to children's social-emotional strengths. Parents, considered to be a part of a child's microsystem according to Bronfenbrenner's ecological model, are found to be an important contributor to children's success in learning and in school (U.S. Department of Education, 1994). In fact, part of the No Child Left Behind (NCLB), which is included in Title I legislation created for educating the disadvantaged (Peek Corbin-Staton, 2009), includes PI in a child's education in their educational expectations. Henderson and Mapp (2002) point out that PI is important in student achievement because when there is collaboration between families, schools, and communities, children do better in school, like school more, and stay in school longer. The United States Department of Education adds that children do better in school and schools improve when parents are involved in their children's education (Lewis & Henderson, 1998).

Research has indicated that parent involvement at home has been linked to higher academic achievement (Fan & Chen, 2001; Gutman & Midgley, 2000; Pelletier & Brent, 2002), an increase in achievement in reading (Evans & Shaw, 2008; Evans, Shaw, & Bell, 2000), writing (Epstein, Simon, & Salinas, 1997; Reutzell, Fawson, & Smith, 2006), and math (Izzo, Weissberg, Kasprow, & Fendrich, 1999; LeFevre et al., 2009). Parent involvement at home has also been associated with a more positive attitude toward school (Gonzalez-DeHass, Willems, & Holbein, 2005), lower dropout rates (Rumberger, 1995), and fewer special education placement and retention (Miedel & Reynolds, 1999). Unfortunately, parent involvement appears to decrease as students get older and their autonomy in school increases (McCullough, 2002), although research indicates that parent involvement at home during elementary school may

predict high school academic success (Barnard, 2004). School and community involvement have been included as important factors in creating effective schools throughout thirty-five years of research (Marzano, 2003), as well as critical factors in children's learning (Epstein, 1995).

However, there is some disagreement in regards to what components should be included as part of PI. While some models of PI may only discuss PI in school, Fantuzzo et al. (2004) emphasize the importance of PI at home and the positive relationship it has with prosocial play behaviors, behavior adjustment in children, and the promotion of positive outcomes in children. Rogers et al. (2013) highlight the importance of modeling, reinforcement, and instruction when providing support at home for learning. Webster-Stratton (1998) also point out the importance of using modeling and reinforcement, as well as other positive, supportive, and consistent parenting practices when disciplining a child in order to develop social behavior within a normal range. Praise, encouragement, and incentives have also been shown to contribute to higher achievement among students in school (Gutman & McLoyd, 2000; Simpkins et al., 2006).

While these studies of PI appear to look at academic achievement, conduct and social problems, and normal social behavior, social-emotional strengths do not appear to be highlighted in research on PI in the home, in school, and within general parenting practices. Webster-Stratton (1998) discuss how risk factors of families appear to be correlated with conduct and social problems in youth, indicating that parenting factors are important in predicting social outcomes. Although Webster-Stratton (1998) look at parenting practices and competencies and the effect on Social Competence, they appear to only discuss low and normal Social Competence rather than discussing social-emotional strengths.

An overview of major theories of PI in children's education is provided next, along with a discussion of general parenting practices. Because of a lack of extant research linking PI and

general parenting practices to social-emotional strengths, these parenting variables will be defined and described in connection to improving academic outcomes and improving social outcomes.

Major Theories of Parent Involvement

In this section, various models of PI in children's education are discussed, as well as the benefits that PI has on children's outcomes. Specifically, the review focuses on the Hoover-Dempsey and Sandler (2005) model and Fantuzzo, McWayne, Perry, and Child's (2004) models of parental involvement which have received a lot of attention in the literature.

Hoover-Dempsey and Sandler (2005) model. Hoover-Dempsey and Sandler outline five levels of parental involvement. Level one includes factors contributing to parental involvement forms, including parents' motivational beliefs, the parents' perceptions of invitations from others to become involved, and the parents' perceived life context, all of which are defined as level one (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). Level one and a half are parental involvement forms including the parents' values, goals, expectations, and aspirations; home-based involvement; school-based involvement; and parent/teacher or parent/school communication (Walker et al., 2005). Level two is learning mechanisms used by parents during involvement activities, while level three is student perceptions of these activities. Level four are student attributes conducive to student achievement, and level five is student achievement (Walker et al., 2005). Table 2 depicts an overview of the levels of the Hoover-Dempsey and Sandler Model (2005).

Table 2

Hoover-Dempsey and Sandler Model (2005)

Level	Description of Level
Level 1-Parents' motivational beliefs, perceptions of invitations for involvement from others, and perceived life context.	-Parents' motivational beliefs: Combination of parental self-efficacy and role construction. -Perceptions of invitations for involvement: Perception of specific invitations from the school, child, and teacher. -Parents' perceived life context: Perception of time and energy and knowledge and skills.
Level 1.5-Parents' Involvement Forms	-School-based and home-based behaviors.
Level 2-Learning Mechanisms Used by Parents during Learning Activities	-Encouragement, modeling, reinforcement, instruction.
Level 3-Mediated by Student Perceptions of Learning Mechanisms Used by Parents	-Encouragement, modeling, reinforcement, instruction.
Level 4-Student Attributes Conducive to Achievement	-Academic self-efficacy, intrinsic motivation to learn, self-regulatory strategy knowledge and use, social self-efficacy for relating to teachers.
Level 5-Student Achievement	

Level one. The first level consists of factors that contribute to parents' involvement forms. The first factor, parents' motivational beliefs are defined as parental role construction and parental self-efficacy, while the perceptions of invitations to become involved is defined as perceptions of general invitations from the school, specific invitations from the child, and invitations from the teacher. Parents' perceived life context is made up of the parents' perception of their time and energy, as well as their knowledge and skills. Parent construction of their parental role is described as what the parent believes he/she should do related to his or her child's education, as well as in general, how individual members of a group should behave. If

the parent believes they should become involved in their child's education and this is an appropriate way for them to behave, they are likely to become involved in their child's education. However, if it is a cultural norm to not become involved in the child's education and trust the school in their ability to be accountable for the child's education, the parent is not likely to become involved in his or her child's education (Hoover-Dempsey & Sandler, 1997).

Part of this Role Construction included parent's child-rearing beliefs. Child-rearing beliefs focused on ensuring a child develops obedience, conforms to the norm, and demonstrates good behavior have been associated with poorer outcomes in school. However, parents whose child-rearing beliefs are concentrated on forming personal Responsibility and respect have been linked to better school performance (Hoover-Dempsey & Sandler, 1997). Hoover-Dempsey and Sandler (1997) explain that child-rearing beliefs are linked to both a parent and a child's behavior, and parents who value obedience and conformity are likely to teach their children to listen and obey to what their teacher says, while if the parent values creativity and personal Responsibility they are more likely to take an active role in their child's education and encourage their child to become active in their own learning as well.

The second factor in parents' motivational beliefs is parental Self-Efficacy (Hoover-Dempsey, 2005). Hoover-Dempsey and Sandler (1997) define parental Self-Efficacy as parents' beliefs about their ability to impact a child's school learning and developmental and educational outcomes. The idea behind this description is that parents will think through what the outcomes are likely to be if they become involved in their child's education. If parents feel they will highly benefit their child's education, they will set high goals, and have a higher sense of Self-Efficacy. In turn, this effects the amount of effort and perseverance that is put into action as far as PI in school. Individuals with low Self-Efficacy are likely to think they do not have control

over outcomes, and are likely to give up or avoid situations which they feel may be difficult (Bandura, 1989). Parent Self-Efficacy was found to be positively associated with involvement in children's education, as well as amount of time that is volunteered at school (Hoover-Dempsey & Sandler, 1997). Overall, this indicates that parents who feel their efforts will positively impact their child's educational outcomes, or have higher Self-Efficacy, are more likely to become involved with their child's school.

The second factor in level one is perceptions of invitations from the school, child, or teacher. If the parent is invited to become involved in school more often, he or she is more likely to be involved, especially when parental Self-Efficacy is high. Invitations that come from the child are also indicative that the child would like the parent to become involved at their school. When parent Role Construction or Self-Efficacy is low, invitations to become involved are increasingly important.

The third factor in level one is the parents' perceived life context, which is comprised of the parents' perception of their Time and Energy, and Knowledge and Skills. If parents choose to become involved, they choose specific activities based on their a) perceptions of their own skills, interests, and abilities; b) time and energy; and c) their perception of invitations to become involved from their children, their child's teacher, and school (Hoover-Dempsey & Sandler, 1997). Time and energy is considered to be a barrier in most cases to parental involvement in school as employment, family demands, or other environmental factors can place expectations on parents making it difficult to become involved in their child's education (Makarewicz, 2015).

Level one and a half. Level one and a half includes the parents' involvement forms, including school-based and home-based behavior. Home-based involvement included someone in the family having talks with the child about school, supervising the child's homework, helping

them study for tests, reading with the child, and/or practicing academic skills such as spelling or math with the child. School-based activities included helping at the child's school, attending special events at school, volunteering to go on class trips, attending Parent/Teacher Association (PTA) meetings, and/or going to the school's open house (Hoover-Dempsey & Sandler, 2005).

Level two. The second level consists of learning mechanisms used by parents during learning activities, including modeling, reinforcement, encouragement, and instruction. School is reinforced and learning supported when parents take an interest in learning. Parents also can provide praise and/or incentives to their children due to their success in learning, which reinforces the child's desire to do well in school. Last, instruction occurs directly from the parents when they are involved in their child's education. Direct instruction from parents may be open-ended (questioning and requesting the child to plan and anticipate), or close-ended (commanding correct answers and working problems the right way). Open-ended direct instruction tends to facilitate cognitive complexity and factual knowledge, whereas close-ended direct instruction encourages factual knowledge only (Hoover-Dempsey & Sandler, 1995).

Level three. On level three, Hoover-Dempsey and Sandler (1997) discussed mediating variables of parent involvement which include parents' use of developmentally appropriate involvement strategies and the fit between parents' involvement actions and expectations. This describes the fit between the parents' involvement strategies and the child's developmental level and the school's expectations. In the 2005 model, Hoover-Dempsey and Sandler describe the child's perception of the mediating variables playing a part in their own success.

Level four. Hoover-Dempsey and Sandler (1997) described level four as child/student attributes conducive to achievement. This includes skills and knowledge and the child's personal sense of efficacy for doing well in school. Similar to parental Self-Efficacy, children's self-

efficacy is their belief that they are able to positively influence their own educational outcomes. Encompassed in the child's self-efficacy is his or her belief in the strength of their own knowledge and skills. Intrinsic motivation to learn is described as a genuine interest in school that sustains engagement, and using self-regulatory strategies are defined as behaving in ways to support learning such as setting goals and using effective time-management (Parent Institute, 2012).

Level five. Level five is student achievement, which is believed to predict student outcomes to a certain degree (Parent Institute, 2012).

Overall, Hoover-Dempsey and Sandler (2005) highlighted a total of six levels of PI in school including factors that make up parental involvement forms, parental involvement forms, learning mechanisms used by parents during involvement activities, the mediation of student perceptions of learning mechanisms used by parents, student attributes that contribute to their achievement, and student achievement. Where parents stand on each of these factors influences their decision to become involved in school and ultimately their child's educational outcomes.

Validation of this model of parental involvement is demonstrated through a study completed by Green, Walker, Hoover-Dempsey, and Sandler (2007). In an analysis of 853 parent responses of elementary school students, the Hoover-Dempsey and Sandler (1997) five level model of parental involvement in children's education accounted for a significant portion of variance in parent report of his or her own home-based and school-based PI when controlling for socio-economic status (Green et al., 2007). When separating the fifth and sixth grades from the younger grades, the model continued to account for a significant portion of variance (Green et al., 2007). Youth in fifth and sixth grade were looked at separately from first to third grade due to parental involvement in children's education tending to decrease as students get older

(Green et al., 2007). School-based involvement accounted for 48.8% of the variance in parent responses to his or her own levels of school-based PI, and 51.2% of variance in parent reports of his or her home-based involvement in their child's education (Green et al., 2007). This difference between home-based involvement and school-based involvement in children's education was found to be significant, and specific child invitations for a parent to be involved in his or her child's education were found to account for the variance between types of involvement (Green et al., 2007).

Fantuzzo et al. (2004) model. Another conceptualization of parental involvement in a child's education is described by Fantuzzo et al. (2004). Fantuzzo and colleagues describe PI as having three main domains which include home-based involvement, school-based involvement, and home-school conferencing.

Fantuzzo et al. (2004) developed the three domains of parent involvement by analyzing the Family Involvement Questionnaire (FIQ), which asks primary care providers to rate their involvement in their child's early education. It is comprised of 42 Likert scale questions and defines School-Based Involvement as activities and behaviors that parents engage in inside the school setting in order to benefit their children. Examples include volunteering in the classroom or going on class trips. Home-school conferencing was defined as communication behaviors between parents and the school in regards to progress and educational experiences of the child. Home-school conferencing examples included discussing ways to develop learning at home or communicating about any learning difficulties or accomplishments the child may have. Home-based involvement was defined as behaviors that parents engage in at home that actively encourage a positive learning environment for their children.

Results from Fantuzzo and colleagues' (2004) study of 144 urban, Head Start children ages 46 to 68 months indicated that PI in children's education was positively associated with behavioral adjustment outcomes and student learning. Two of the components of PI in this study, School-based involvement and home-school conferencing, had a stronger relationship with behavioral adjustment and learning when combined with home-based involvement. Preschool classroom competencies (classroom and learning behavior and vocabulary skills) had the strongest relationship with home-based involvement (i.e., reading to the child at home, providing a place for the child's academic activities at home, and asking the child about school), over school-based involvement and home-school conferencing. High levels of home-based involvement were also associated with lower levels of behavior problems in the classroom (Fantuzzo et al., 2004). Therefore, it appears that PI emphasizing school-based involvement or home-school conferencing should be combined with PI in the home (Fantuzzo et al., 2004). Also, PI appears to be positively related to both educational and social-emotional outcomes.

In summary, PI models have indicated that PI in children's education is important in children's educational and social-emotional outcomes. However, research has raised questions about whether PI in educational settings or PI to support a child's learning at home are relatively more important in children's outcomes. Limited research has also focused on the relationship of a multidimensional view of PI and the link with social-emotional outcomes.

General Parenting Practices

In addition to parental school involvement, the types and style of interactions between parents and children in general (i.e., regarding school-related issues or social interchanges in other domains) have also been shown to have a positive relationship with children's academic and social-emotional outcomes. Parent practices characterize a parent's discipline style,

parenting style, and parenting skills. In the following section, general parenting practices that are often referenced in the literature are described.

Harsh discipline. One parenting practice, Harsh Discipline style, is described by Webster-Stratton (1998) as slapping, hitting, yelling, whipping, and prolonged confinement. Children with social and conduct problems had higher rates of parents who used harsh, inconsistent, and less supportive discipline (Webster-Stratton, 1998). High levels of harsh and relaxed discipline has also been found to be associated with high levels of internalizing problems during early and middle childhood (Parent, McKee, & Forehand, 2016). Harsh punishment has also been found to be associated with the severity of Oppositional Defiant Disorder (ODD) symptoms, and when combined with inconsistent discipline, predictive of elevated ODD symptoms among five to ten-year-olds experiencing low peer acceptance and high peer rejection (Tung & Lee, 2014).

Clear expectations. Consistent discipline is defined as consistency in following through, predictability of parent responses, and confidence in parenting (Webster-Stratton, 1998). In order to deliver consistent discipline, parents must set Clear Expectations for their children. This includes letting your child know what to expect if they misbehave, using consistent discipline techniques, and having clear rules about responsibilities and routines inside and outside the home. As described above, inconsistent discipline was associated with social and conduct problems in children (Webster-Stratton, 1998). An intervention implemented with three to 12-year-olds and their caregivers focused on improving parenting practices (including increasing parent's ability to set Clear Expectations) was found to increase parent's skill set in setting Clear Expectations, reduce behavior problems, and increase the youth's Social Competence in both parent and teacher ratings of this domain (Kjøbli, Hukkelberg, & Ogden, 2013).

Appropriate discipline, positive verbal discipline, and praise and incentives. Other parenting practices commonly described in the literature are Appropriate Discipline and Positive Verbal Discipline. Appropriate Discipline includes nonviolent approaches to discipline including the use of time-out, ignoring, warning of potential consequences, redirection, setting realistic and Clear Expectations, Monitoring, and distraction (Webster-Stratton, 1998). Although these constructs can be defined similarly in the literature (Positive Verbal Discipline also includes appropriate methods of disciplining your child), the Parent Practices Interview used in the current study separates Appropriate Discipline and Positive Verbal Discipline into different subscales. Appropriate Discipline is defined as disciplining a child consistently after giving a warning of implementing a disciplinary action, allowing a child to make up for their mistake, giving a child time out or taking away privileges if they misbehave, and checking up on the child's behavior in other settings.

Positive Verbal Discipline is characterized as discussing a behavior problem with your child, allowing them to make up for their mistake, allowing the child to ask questions, praising and rewarding the child for doing something positive, and praising on more occasions than criticizing the child. Therefore, Praise and Incentives is included as an aspect of Positive Verbal Discipline. However, in the current study, specific methods of Praise and Incentives are assessed such as complimenting, hugging, kissing, and/or giving points, stars, or toys as a reward for the child performing various positive behaviors. The difference between Praise and Incentives and Positive Verbal Discipline is that Positive Verbal Discipline emphasizes disciplining a child in a positive way, while balancing praise with the need to discipline.

Praise and Incentives assesses the frequency and variety of praise and rewards that are offered to a child for positive behavior. These parenting practices have been connected to social-

emotional domains, as four-year-old children whose scores fell within the normal range on various assessments of Social Competence had mothers who gave significantly higher amounts of praise, were nurturing and supportive, had a positive affect, and were competent in discipline (Webster-Stratton, 1998). The use of Praise and Incentives for performing a desirable behavior, such as engaging with peers pro-socially, may also increase the future frequency of the behavior. Therefore, research indicates that the use of Praise and Incentives and both Positive Verbal and Appropriate Discipline can support the development of social-emotional strengths in early childhood.

Monitoring. Monitoring can also be described as a skill that falls under Appropriate Discipline. However, the focus of Monitoring in the current study is the amount of supervision a child receives from the parent, and the parent's awareness of what the child is doing while not in his or her presence. High levels of Monitoring is typically associated with more prosocial behavior in children prior to adolescence, where levels of Monitoring tend to decrease as children get older and are assumed to become more independent (Power & Bradley-Klug, 2013). In a longitudinal study, low levels of maternal supervision (and a history of maternal smoking and alcohol use) at age five was predictive of the presence of an alcohol disorder in early adulthood (Hayatbakhsh et al., 2008).

Links between parenting practices and academic success. Parenting practices have also been shown to have an effect on academic achievement. In a meta-analysis conducted by Rosenwig (2000), seven parenting practices were found to have a significant, positive relationship with students' academic achievement. These parenting practices consisted of having educational aspirations for his/her child, providing his/her child with autonomy in completing academic tasks, being engaged in the child's education, providing the child with emotional

support, participating in school, and providing learning experiences for the child (Peek Corbin-Staton, 2009). Parenting practices were also found to contribute to lack of academic achievement. The eight parenting practices found to contribute to low academic achievement included, putting restrictions on the child for not receiving satisfactory grades, not being engaged in his/her child's education, being tolerant of academic achievement that is not acceptable to the school, not providing his/her child with autonomy in completing academic tasks, and being controlling or engaging in high levels of surveillance when the child is completing work (Rosenwig, 2000).

In summary, general parenting practices also appear to have a positive relationship with a child's academic and social-emotional success. Therefore, it appears that the links between PI in children's education, parenting practices, and children's social-emotional strengths should be further investigated. PI models seem to indicate that PI to support learning at home and PI within educational settings both have a relationship with positive outcomes for children.

To summarize the variety of parenting constructs that are prevalent in the literature, Table 3 lists the constructs that have been described in this section.

Table 3

<i>Parenting Constructs</i>
Parental Involvement in Educational Settings
Parental Self-Efficacy
Parental Role Construction
Parent Time and Energy
Parent Knowledge and Skills
Parent Involvement with the Child's Teacher
Trust of the Child's Teacher
Parental Involvement at Home
Instrumental Involvement in Learning
Management of Home Learning Environment
Supportive Parental Involvement
Parenting Practices
Appropriate Discipline

Table 3 (Continued)

Harsh and Inconsistent Discipline
Positive Verbal Discipline
Monitoring
Praise and Incentives
Clear Expectations

Parenting Variables and Social-Emotional Strengths

Although much research on parenting variables and child outcomes has focused on academics, research indicated that parent-child relationships and positive parenting practices were critical in forming social-emotional strengths. Pianta (1997) pointed out that the higher the strength of a parent-child relationship, the better the child's ability is to regulate his or her emotions in behavior in the home, school, and other settings. Fostering a positive attachment between parent and child also increased positive interactions with adults and peers outside of just the home setting. The use of behavior management strategies by parents including clear expectations, positive reinforcement, attention, praise, privileges, directions for compliance, token economies, and infrequent and strategic use of punishment were also shown to contribute to Self-Regulation in youth (McMahon & Forehand, 2003; Webster-Stratton, 2005). Niehaus and Adelson (2014) found that higher levels of school support predicted higher levels of parental involvement, while higher levels of parental involvement predicted lower amounts of social-emotional concerns in English language learners.

García and Gracia (2009) also found that teenagers in Spanish families with responsive parents had more positive scores on measures of psychological maladjustment (indicating a lower prevalence of maladjustment) than other parenting styles where parents may be more demanding or less responsive. Measures of psychological maladjustment in this study consisted of "hostility/aggression, negative self-esteem, negative self-adequacy, emotional

irresponsiveness, emotional instability, and negative worldview” (García and Gracia, 2009, p. 101). Social Competence may also be negatively affected by parents whom are controlling and display Harsh and Inconsistent Discipline, due to findings that authoritarian parenting styles discouraged children from engaging in peer play in Chinese immigrant families (Cheung, 2013).

In regards to Empathy, research on uninvolved parenting styles (low levels of Monitoring and supervision) throughout an individual’s life has been linked to the lack of development of Empathy and the presence of antisocial behavior later in life when parenting styles and antisocial behavior were assessed among undergraduate students (Schaffer, Clark, & Jeglic, 2009). Therefore, research appeared to support the connection between PI in children’s education, positive parenting practices, and social-emotional domains.

Parents and Teachers as Informants of Student Skills in Social-Emotional Domains

In this section, literature discussing parent and teachers’ abilities to judge or report on various indicators of social-emotional-behavioral functioning (i.e., mental health) is examined.

Subjective well-being is considered to be a key positive indicator of mental health. Urhahne and Zhu (2015) assessed teacher’s ability to judge their students’ subjective well-being in school. In this study, subjective well-being in school was defined as the student’s positive affect and cognitions towards school in comparison to their negative affect and cognitions towards school. This included 6 total areas including: 1. “positive emotions towards school, 2. enjoyment in school, 3. positive academic self-competence, 4. absence of physical complaints in school, 5. absence of social problems in school, and 6. absence of worries about school” (Urhahne & Zhu, 2015, p.2). Findings from this study of 800 eighth grade students include that teachers judged their students’ subjective well-being in school with low to moderate accuracy when compared to the students self-report of their subjective well-being (Urhahne & Zhu, 2015).

Teachers were able to capture positive aspects of well-being with higher correspondence between teacher and student self-report ratings when compared to teacher and student agreement on negative aspects (physical, social, or psychological problems) (Urhahne & Zhu, 2015).

When comparing parent and teacher ratings of strengths on the Strengths and Difficulties Questionnaire (SDQ), a review of 48 studies ($N = 131,223$) showed moderate internal consistency on the prosocial and emotional scale (Stone, Otten, Engels, Vermulst, & Janssens, 2010). Stone and colleagues (2010) reported this may be due to a halo effect that impacts teacher ratings, as one class of behavior influences the rating of other behaviors.

In another study using strengths-based assessment, Crane et al. (2011) assessed parent and teacher agreement of social-emotional protective factors as measured by the Devereux Early Childhood Assessment (DECA). In a sample of 7,756 children ages 3 and 4, correlations between parents and teachers were as follows: .20 on the Attachment subscale, .24 on the Initiative subscale, .26 for Behavioral Concerns, .27 for Total Protective Factors, and .28 for the Self-Control subscale. This suggests low to moderate correspondence between parent and teacher perceptions of students' strengths.

When assessing negative indicators of mental health, or psychopathology, research has indicated that identifying or being aware of psychopathology may depend on whether the youth is experiencing internalizing or externalizing issues, as well as familiarity with the problem and the willingness to accept a diagnosis (Logan & King, 2001). Prior research has provided support for teachers as relatively accurate reporters of students' levels of externalizing problems (Richardson, Caldarella, Young, Young, & Young, 2009). However, teachers may not be as accurate at identifying internalizing symptoms. In a study of 233 middle school students, the 19 participating teachers often overlooked students with elevated levels of internalizing distress

such as depressive symptomatology (Gelley, 2014). In a study of more relevance to the current study given the sample age, Cunningham and Suldo (2014) found that teachers of elementary school children identified approximately 50% of children with elevated symptoms of depression and 41% of children with elevated anxiety. In sum, such studies suggest teachers may be imperfect informants of their students' levels of emotional distress. Parents may also be relatively less attuned to their children's emotional health, as prior research finds that parents tend to perceive their child's externalizing issues, or the comorbidity of externalizing and internalizing issues, as needing more attention than the prevalence of internalizing disorders alone (Curley Hankinson, 2009). In terms of familiarity with the issue, or willingness to accept that a mental health problem may exist, mothers have been found to seek out services for their child (when the child is experiencing mental health issues) more often than fathers (Curley Hankinson, 2009). Taken together, these studies suggest that teachers or parents ratings of a child's social-emotional-behavior may not be completely accurate, and influenced by factors ranging from type of child behavior to informant priorities.

Gaps in the Literature

It appears to be unclear which aspects of general parental involvement are most related to positive outcomes for kindergarten students. In a meta-analysis of PI studies, Fan and Chen (1999) found that parental home supervision had the weakest relationship with student's academic achievement with the mean age of participants being around five-years-old. Aspirations or expectations for the child's educational achievement had the strongest relationship with the student's academic achievement (Fan & Chen, 1999).

There have also been several definitions and domains included in descriptions of general PI including parenting practices, behaviors, aspirations for their children's school success,

communication with children about school, participation in their child's school activities, communication with teachers about their child, and rules at home that are related to education. This wide variety of definitions has created confusion in the research. Fan and Chen (2001) stated that the variety of definitions of parent involvement has contributed to variability in findings related to PI's effect on children's academic success. Fan and Chen (2001) also pointed out that PI research in the past has been done without theoretical frameworks. However, they highlight that Epstein, Hoover-Dempsey, and Sandler have begun to create PI frameworks to change how this research is conducted.

While parenting variables have been linked to academic achievement, there appears to be a lack of attention to the relationship parenting variables may have with social-emotional variables, particularly on social-emotional strengths. With the increase in focusing on strengths in psychology, and a goal towards prevention and early identification, it appears there is a need to look at the connection between parent involvement, parenting practices, and social-emotional strengths.

Conclusion

In conclusion, it is important to look at the connection between parenting variables and social-emotional strengths multidimensionally, as parental involvement, parenting practices, and social-emotional strengths have been found to be essential aspects of children's success. This study contributed to the literature because of the emphasis on looking at PI in educational settings, PI to support learning at home, parenting practices, and measuring social-emotional strengths in kindergarteners. Because previous research on PI has included a variety of definitions, this study used a multidimensional measure for social-emotional strengths, while contributing to the lack of literature on Empathy and Responsibility. A multidimensional

measure of PI was also used in this study. Information on to what extent PI in children's education and parenting practices predicted social-emotional strengths contributed to practice because parenting variables may be a new area of emphasis for school-based interventions in order to promote social-emotional strengths in youth.

CHAPTER THREE:

METHOD

The purpose of this study was to analyze to what extent, if any, parenting variables (i.e., parenting practices and parental involvement) predicted both parent and teacher-rated social-emotional strengths in kindergarten students. Additionally, this study assessed which parenting variables were most indicative of social-emotional strengths. The ability of the parenting variables under investigation in the current study to predict social-emotional strengths was analyzed separately when parents rated their own children's strengths versus when the students' teachers rated their strengths. The study was quantitative, and the research questions were answered through the use of a secondary data source. The original data were collected through a longitudinal study conducted over the course of one academic year. This chapter discusses the participants and design features (such as measures used) that contributed to the archival dataset, then provides an overview of the analyses conducted in the current study.

Participants

Data from a larger, longitudinal study conducted by Ogg, Volpe, and Rodgers (2011) were examined for the current study. The data originated from a study investigating various parent and child factors and the relationship with kindergarten success. The data were collected over the 2011-2012 school year and the study was approved by the Institutional Review Board (IRB) at the University of South Florida (USF), as well as through the participating school districts. Data from kindergarten students, parents, and teachers were collected at two different sites, one in the southeastern United States and one in Canada.

Child participants. In the larger study, student participants were kindergarteners enrolled in public school in either Canada or the southeastern United States. Inclusion criteria for the larger study included the following:

1. Students must be enrolled in kindergarten at a public school.
2. Both parents and students must speak English. To determine this with the Canadian sample, students were required to attend an English School Board to ensure that participants spoke English, as French speaking families are not able to attend these schools.
3. The student must live with their parent(s).
4. The parent must give consent for the student to participate.
5. The student's teacher must agree to participate
6. Students were excluded if they had repeated kindergarten.

Exclusion criteria 1-6 yielded a sample of 181 in the larger study.

In the current study, the exclusion criteria used for the larger study were also applied. In addition, participants were also excluded if the Social Emotional Assets and Resilience Scales-Parent (SEARS-P) version was not completed by the child's parent, or the SEARS-Teacher Short Form (TSF) was not completed by the student's teacher. Given that more students were missing data on the SEARS-P than on the SEARS-TSF, the sample was separated into two in order to conduct separate analyses, one in which parents rated their children on social-emotional strengths (referred to as the parent-rated strengths sample), and the other where teachers rated Total Strengths (referred to as the teacher-rated strengths sample). This was conducted in order to maximize the sample size for each research question. The parent-rated strengths sample consisted of 122 students. Fifty-nine participants were excluded due to the parents not completing the SEARS-P and one due to not living with his or her parent ($181-59 = 122$). The

teacher-rated strengths sample included data from 166 students. Fourteen participants were excluded due to the teacher not completing the SEARS-TSF and one due to not living with his or her parent (181-15 =166). It is important to note that although the sample was separated into two, each sample is largely overlapping. The demographic information for the parent-rated strengths sample can be seen in Table 4, and the teacher-rated strengths sample, in Table 5.

Table 4

Demographic Information for Parent-Rated Strengths Sample (n = 122)

Variable	N (%)
Location	
Tampa	84 (68.9)
Montreal	38 (31.1)
Family Income	
Less than \$5,000	1 (.8)
\$5,001-\$10,000	6 (4.9)
\$10,001-\$20,000	3 (2.5)
\$20,001-\$30,001	7 (5.7)
\$30,001-\$40,000	14 (11.5)
\$40,001-\$50,000	9 (7.4)
\$50,001-\$60,000	13 (10.7)
\$60,001+	65 (53.3)
Missing	4 (3.3)
Parent Race	
American Indian, Alaskan Native, or Aboriginal	1 (.8)
Asian	3 (2.5)
Black or African American	9 (7.4)
Hispanic or Latino	18 (14.8)
Caucasian or White	82 (67.2)
Multi-Racial	4 (3.3)
Other	2 (1.6)
Missing	3 (2.5)
Parent Relationship with Child	
Biological Mother	113 (92.6)
Biological Father	6 (4.9)
Adoptive Mother	1 (.8)
Missing	2 (1.6)
Parent Education	
Less than high school	2 (1.6)
High school or GED	41 (33.6)

Table 4 (Continued)

Some college, 2-year college or vocational	16 (13.1)
Bachelor's degree	18 (14.8)
Some Graduate work	10 (8.2)
Master's degree	19 (15.6)
Doctoral degree	14 (11.5)
Missing	2 (1.6)
Age of Child	
5 years	80 (65.6)
6 years	37 (30.3)
7 years	1 (.8)
Missing	4 (3.3)
Child's Gender	
Male*	66 (54.1)
Female*	53 (43.4)
Missing	3 (2.5)
Race of Child	
American Indian, Alaskan Native, or Aboriginal	1 (.8)
Asian	2 (1.6)
Black or African American	8 (6.6)
Hispanic or Latino	18 (14.8)
Caucasian or White	76 (62.3)
Multi-Racial	10 (8.2)
Other	3 (2.5)
Missing	4 (3.3)

Note. Male was coded as 1; female as 2.

Table 5

Demographic Information for Teacher-Rated Strengths Sample (n = 166)

Variable	N (%)
Location	
Tampa	96 (57.8)
Montreal	70 (42.2)
Family Income	
Less than \$5,000	1 (.6)
\$5,001-\$10,000	8 (4.8)
\$10,001-\$20,000	3 (1.8)
\$20,001-\$30,001	12 (7.2)
\$30,001-\$40,000	16 (9.6)
\$40,001-\$50,000	12 (7.2)
\$50,001-\$60,000	17 (10.2)
\$60,001+	85 (51.2)

Table 5 (Continued)

Missing	12 (7.2)
Parent Race	
American Indian, Alaskan Native, or Aboriginal	1 (.6)
Asian	7 (4.2)
Black or African American	10 (6.0)
Hispanic or Latino	21 (12.7)
Caucasian or White	108 (65.1)
Multi-Racial	6 (3.6)
Other	2 (1.2)
Missing	11 (6.6)
Parent Relationship with Child	
Biological Mother	142 (85.5)
Biological Father	13 (7.8)
Adoptive Mother	1 (.6)
Missing	10 (6.0)
Parent Education	
Less than high school	4 (2.4)
High school or GED	50 (30.1)
Some college, 2-year college or vocational	25 (15.1)
Bachelor's degree	26 (15.7)
Some Graduate work	14 (8.4)
Master's degree	22 (13.3)
Doctoral degree	15 (9.0)
Missing	10 (6.0)
Age of Child	
5 years	105 (63.3)
6 years	48 (28.9)
7 years	1 (.6)
Missing	12 (7.2)
Child's Gender	
Male*	84 (50.6)
Female*	71 (42.8)
Missing	11 (6.8)
Race of Child	
American Indian, Alaskan Native, or Aboriginal	1 (.6)
Asian	4 (2.4)
Black or African American	9 (5.4)
Hispanic or Latino	20 (12.0)
Caucasian or White	99 (59.6)

Table 5 (Continued)

Multi-Racial	17 (10.2)
Other	4 (2.4)
Missing	12 (7.2)

Note. Male was coded as 1; female as 2.

Teacher participants. Kindergarten teachers from seven U.S. schools and seven Canadian schools were participants in this study. The original study included 33 teachers (Ogg et al., 2011). All teachers were female. Teachers were responsible for recruitment of student participants and completed questionnaires in the spring. Data from teachers' ratings of students' strengths were used in the current study.

Parent participants. During the fall and spring, parent participants completed rating scales to report their children's behavior and their involvement in their child's education. Parent demographics are shown in Table 4 and 5. Data from parents' ratings of parent involvement and practices, as well as student strengths were used in the current study.

Measures

A variety of assessments were given to assess parenting variables and social-emotional outcomes in youth. Although data were collected three times in the larger study, the current study only analyzed data collected on parenting involvement and practices variables (rated by parents) during the fall of 2011, and student strengths (rated by parents and teachers) in the spring of 2012.

Parent measures. Parents completed a demographic form, containing 16 questions regarding their child, ethnicity, level of education, and family income. Family income and level of education were averaged together in order to determine the socioeconomic status (SES) of students in this study. Lower scores represent lower student SES, while higher scores represent higher student SES. Other parent measures are discussed below.

Social-Emotional Assets and Resiliency Scales-Parent (SEARS-P; Merrell et al., 2010). The Social-Emotional Assets and Resiliency Scales-Parent (SEARS-P) was completed by one parent or caregiver per participant in the spring in order to assess social-emotional strengths in youth. The SEARS-P contains 39 items with three scales including, Social Competence (10 items), Self-Regulation/Responsibility (22 items), and Empathy (7 items). Self-Regulation and Responsibility were originally separate constructs, with Self-Regulation being defined as controlling one's emotions when upset, and Responsibility as being dependable and accepting Responsibility. However, these scales were combined in the parent version due to the EFA conducted by Merrell and colleagues (2010) that produced a three-factor model.

Responses on the SEARS-P ask about the frequency which best describes their child's social skills or competencies in the three domains over the last six months. Parents choose from "never," "sometimes," "often," and "always" (Merrell et al., 2010, p. 531). Some example questions or statements were, "People think he/she is fun" (Social Competence), "Knows when people are upset" (Empathy), and "Thinks beforehand" (Self-Regulation/Responsibility; Merrell et al., 2010, p. 533).

In prior research with 2,356 parents or guardians of children ages 5-18, Merrell et al. (2010) found that for the entire SEARS-P, all 39 items, there was a strong internal consistency, with a Cronbach's alpha of .96. The Self-Regulation/Responsibility subscale was found to have an internal consistency of .95, the Social Competence scale an internal consistency of .89, and .87 for the Empathy subscale (Merrell et al., 2010). Inter-rater reliability between a mother-father pairing had a Pearson product-moment correlation of .72 for the total score on the SEARS-P, which represents a strong correlation (Merrell et al., 2010). Inter-rater reliability between mother and father ratings was .71 for Self-Regulation/Responsibility, .68 for Social Competence,

and .65 for Empathy (Merrell et al., 2010). In light of the strong association between mothers' and fathers' ratings in the current student, SEARS-P ratings from only one parent/caregiver per participant were sought.

The SEARS also appears to be valid based on convergent evidence, or the comparability to other measures that measure the same constructs. When looking at the *Social Skills Rating Scale* social skills scale (SSRS; Gresham & Elliot, 1990), and the Social Competence scale on the *Home and Community Social Behavior Scales* (HCSBS; Merrell & Caldarella, 2002), both measures of social-emotional strengths, the correlations were strong at .71 and .74 for the SSRS, and .87 and .80 for the HCBS. These correlations indicated that the SEARS measures social-emotional constructs similarly to the HCBS and the SSRS (Merrell et al., 2010). Both the HCBS and SSRS are standardized measures that have been shown to have strong psychometric properties (Merrell et al., 2010).

Parent Involvement Project Parent Questionnaire-Modified (PIPQ-M; Hoover-Dempsey & Sandler, 2005). The Parent Involvement Project Parent Questionnaire-Modified (PIPQ-M; Hoover-Dempsey & Sandler, 2005) was adapted from the original version (PIPQ) in order to make the wording more appropriate for kindergarten students. Permission was obtained from the authors to modify the measure. There are four scales on the PIPQ-M consisting of Parental Self-Efficacy (5 items), Parental Role Construction (10 items), Parental Time and Energy (5 items), and Parental Knowledge and Skills (6 items). Examples of Parental Self-Efficacy items included, "I know how to help my child do well in school" and "I feel successful about my efforts to help my child learn." Parental Role Construction questions included, "I believe it's my Responsibility to volunteer at the school" and "I believe it's my Responsibility to make the school better." Last, Parental Time and Energy and Parental Knowledge and Skills

included items such as, “I have enough time and energy to help out at my child’s school” and “I know enough about the subjects of my child’s homework to help him or her.” Ratings of each scale range from 1 (*disagree very strongly*) to 6 (*agree very strongly*). In a study of 495 parents of elementary and middle school students, internal consistency reliability for the Parental Self-Efficacy subscale was found to be .78, .84 for Parental Time and Energy, and .83 for Parental Knowledge and Skills (Hoover-Dempsey & Sandler, 2005). This study was conducted in order to determine parents’ choices for becoming involved in their child’s education. In a separate study of 877 parents of elementary and middle school students focused on parent motivation for becoming involved in his or her child’s education, the Parental Role Construction subscale was found to have an internal consistency of .62 for Parental Role Construction (Hoover-Dempsey & Sandler, 2005). Both of these studies were used to create a reliable and valid measure of parent involvement in children’s education and understand the causes of the involvement.

Teacher Involvement Questionnaire (Parent Version; Fast Track, 2011). The FAST Track is a measure of PI that parents completed in the fall. PI in this measure was based on the frequency in which parents and teachers were in contact with one another. The full scale has 26 items, but only items 1-10 or the Frequency of Parent-Teacher Contact subscale were administered for this study. Examples of items include, “In the past year, you have called your child’s teacher” and “In the past year, you have been invited to your child’s school for a special event (such as a book fair).” Responses were rated on a 5-point Scale ranging from 1 (*Never*) to 5 (*More than once per week*). In a study of 453 parents of second grade students, the subscale specific to assessing frequency of parent and teacher contact on the Teacher Involvement Questionnaire had an alpha of .77 (Walters, 2001).

Parenting Practices Interview (Webster-Stratton, 1998). In the fall, parents completed a self-report measure of their parenting practices related to discipline, praise, and expectations. Six scales were formed from these responses: Appropriate Discipline (nonviolent approaches to discipline including Time-Out or warning the child of potential consequences), Harsh and Inconsistent Discipline (letting the child get away with things, threatening to punish the child, letting arguments build up, and/or saying something hurtful to the child that the parent did not mean), Positive Verbal Discipline (ignoring, warning of potential consequences, or redirection), Monitoring (The amount of supervision the parent provides to his or her child; Webster-Stratton, 1998), Praise and Incentive (providing verbal or non-verbal recognition for good behavior and offering rewards or reinforcement for the behavior; Webster-Stratton, 2011), and Clear Expectations (parent has made clear rules and expectations and disciplines his or her child when or if the child disobeys expectations; Webster-Stratton, 1998). Physical Punishment is featured on the original measure, but was removed for the current study. Examples of items included asking how often the following things happened, "...If you warn your child that you will discipline him/her if she doesn't stop, how often do you actually discipline him/her if she/he keeps on misbehaving" (Appropriate Discipline) and "...How often is your child getting around the rules that you have set" (Harsh and Inconsistent Discipline; Webster-Stratton, 1998). Response options to these items vary from never (1) to always (7), where higher scores tend to be more desirable on all parenting practices (aside from Harsh and Inconsistent Discipline). In prior research with 426 parents of 4-year-old low-income children enrolled in Head Start, estimates of internal consistency for this measure include: .75 for the Harsh Discipline subscale, .62 for the Inconsistent Discipline subscale, .82 for Appropriate Discipline, .72 for Positive Parenting (includes Positive Verbal Discipline and Praise and Incentives), .62 for Clear

Expectations, and .64 for Monitoring (Webster-Stratton, Reid, & Hammond, 2001). Often validity evidence on this measure is gathered through its use as an outcome measure for parenting interventions. For example, in the parent intervention study described in chapter two by Kjøbli and colleagues (2013), the improvement in the use of Clear Expectations and other parenting practices was measured with the PPI, and these improvements were linked to an increase in youth Social Competence.

Parent Support for Learning Scale (PSLS; Rogers et al., 2013). The PSLS is a new measure of parental involvement related to the child's learning at home. This scale contains several subscales including Parental Management of the Home Learning Environment, Supporting Parent Involvement, Instrumental Involvement, and Controlling Parent Involvement. Parental Management of the Home Learning Environment consists of characteristics of home based involvement that foster the child's intellectual functioning (Rogers et al., 2013). Parental Management of the Home Learning Environment includes items such as, "My mother provides different kinds of things to read, such as magazines, stories, and nonfiction." Another example of this domain is, "My mother makes me do homework at a certain time." Supportive Involvement at home includes parent support and encouragement with his or her child's learning in the home (Rogers et al., 2013). Sample items include, "I support my child in the things he/she does in school," and "I try to make my child feel confident in his/her school work." Instrumental Involvement is defined as parent participation in reading to his or her child or helping with schoolwork (Rogers, Markel, Midgett, Ryan, & Tannock, 2013). Items on this subscale include, "I read to my child before he/she goes to sleep," "I often help my child with his/her schoolwork," and "I talk to my child about things that he/she is learning." Controlling parent involvement in the home was described as the parent's use of commands, punishment, and

coercive interaction in the home (Rogers et al., 2013). However, this subscale was not used for the current study due to having an unacceptable alpha level. Examples of Supportive PI include, “I support my child in the things he/she does in school” and “I am very patient when it comes to my child’s education.” Response options for all of the subscales range from 1 (*strongly disagree*) to 5 (*strongly agree*). Due to this being a new measure, there is little research on the internal consistency of the PSLs. In a study exploring the factor structure and reliability of the PSLs-M (mother version), items on the scale accounted for 32% of variance in responses and an exploratory factor analysis (EFA) indicated four factors including: Instrumental Involvement, Supportive Involvement, Controlling Involvement, and Management of the Home Learning Environment (Rogers, Markel, Midgett, Ryan, & Tannock, 2013). Rogers and colleagues (2013) designed the PSLs in order to measure parental behaviors and parental emotional tone, and found that Management of the Home Learning Environment and Parent Participation with Homework (Instrumental Involvement) were factors that fell under parental behavior. Supportive and Controlling Parental Involvement fell under parental emotional tone (Rogers et al., 2013). The EFA also revealed a four-factor structure (featuring the same subscales) for the PSLs-F (father version), and items on scale accounted for 36% of variance in responses (Rogers et al., 2013). It should be noted that although the EFA found a four-factor structure, only three factors were used in the current study due to the Controlling Involvement subscale having a low alpha level. As a part of the larger study, alpha levels of the other subscales were found to be acceptable with the Instrumental Involvement scale having an alpha of .76, Supportive Parental Involvement an alpha of .67, and Management of the Home Learning Environment .74 (Ogg et al., 2011).

Trust Scale from the Family–School Relationship Survey (Adams & Christenson, 2000). Parents completed the Trust Scale from the Family-School Relationship Survey in the fall. The Trust Scale consists of 20 items, all starting with the phrase, “I am confident that my child’s teachers...” and following with items like “Will do a good job teaching my child academic subjects” and “Will do a good job encouraging my child’s sense of self-esteem.” Response options to these items vary from 0 (*strongly disagree*) to 3 (*strongly agree*). Items were derived from a literature review and informal interview with parents and teachers. In a sample of 1,234 parents of kindergarten through 12th grade students, reliability for the Trust Scale was found to be .96 for parents (Adams & Christenson, 2000).

Teacher measures. The SEARS teacher report (SEARS-T-SF; Merrell, 2011) was also given to classroom teachers knowledgeable of student’s social-emotional strengths in the classroom (Merrell, 2011). The short-form version was administered, which includes 12 items representing the four domains of social-emotional skills (social-competence, Self-Regulation, Responsibility, and Empathy). At least two items on the measure represented each of the four different domains. Examples of Empathy includes understanding how others feel (Merrell et al., 2010), while Self-Regulation includes the ability to identify and change negative thoughts (Merrell et al., 2010). Social Competence includes the “ability to maintain friendships with his or her peers, engage in effective verbal communication, and feel comfortable around groups of peers” (Merrell, 2011, p. 3), and Responsibility involves being dependable (Merrell et al., 2010).

The short form for teachers was designed to take two minutes to complete, and questions are answered on an ordinal scale of never, sometimes, often, and almost always in regards to how the student had thought, felt, and behaved for the last three to six months. In the development of the SEARS-T long form, 418 teachers rated 1,673 students in kindergarten

through 12th grade. The SEARS-T short form was created by selecting items off of the long form with the highest reliability (Nese, Doerner, Romer, Kaye, Merrell, & Tom, 2012). The SEARS-T-SF has been found to have high test-retest reliability, as well as high internal consistency. Internal consistency was found to be at an alpha level of .93, and the correlation between the total scores from the short form and the long form was .98 (Nese et al., 2012). Test-retest reliability of the short form was assessed in a sample of 30 teacher ratings of 118 elementary students and was found to be .9 when teachers rated on two separate occasions two weeks apart (Nese et al., 2012). Nese and colleagues (2012) had 92 teachers rate students in kindergarten through sixth grade using the SEARS-T-SF and School Social Behavior Scales (SSBS; Merrell, 2002) in order to assess convergent validity. Convergent validity between the Peer Relations subscale on the SSRS and the SEARS-T-SF was found to be .88 (Nese et al., 2012). Correlations between parent and teacher ratings of Total Social-Emotional Strengths on the SEARS could not be located in the manual or in articles that reported using both scales. See Table 6 below for an overview of measures, subscales, and sample items for each subscale. Also, see Table 7 for number of items and the Cronbach's alpha for all measures and their subscales based on the extant literature.

Table 6

Measures and Sample Items

Measure/Subscale	Sample Items
Parent Involvement Project Questionnaire-Modified	
Parental Self-Efficacy	-“I know how to help my child do well in school” -“I don’t know how to help my child make good grades in school.”
Parental Role Construction	-“I believe it's my Responsibility to volunteer at the school.” -“I believe it's my Responsibility to stay on top of things at school.”
Parental Time and Energy	-“I have enough time and energy to help out at my child's school.” -“I have enough time and energy to supervise my child's homework (schoolwork).”
Parental Knowledge and Skills	-“I know enough about the subjects of my child's homework to help him or her.” -“I know how to explain things to my child about his or her homework.”
Parent Practices Interview	
Appropriate Discipline	-“In general, how often do the following things happen? If you warn your child that you will discipline him/her if she doesn’t stop, how often do you actually discipline him/her if she/he keeps on misbehaving?” -“The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)? Get your child to correct the problem or make up for his/her mistake?”
Harsh and Inconsistent Discipline	-“The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)? Raise your voice (scold or yell). -“If your child hit another child, how likely is it that you would discipline your child in the following ways? Raise your voice (scold or yell).”

Table 6 (Continued)

Positive Verbal Discipline	<p>-“If your child hit another child, how likely is it that you would discipline your child in the following ways? Get the child to correct the problem or make up for his/her mistake.”</p> <p>-“The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)? Discuss the problem with the child or ask questions.”</p>
Monitoring	<p>-“About how many hours in the last 24 hours did your child spend at home without adult supervision, if any?”</p> <p>-“What percentage of the time do you know where your child is when she/he is away from your direct supervision?”</p>
Praise and Incentives	<p>-“This is a list of things that parents might do when their child behaves well or does a good job at something. In general, how often do you do each of the following things when your child behaves well or does a good job? Praise or compliment your child.”</p> <p>-“This is a list of things that parents might do when their child behaves well or does a good job at something. In general, how often do you do each of the following things when your child behaves well or does a good job? Give your child a hug, kiss, pat, handshake, or ‘high five.’”</p>
Clear Expectations	<p>-“The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)? Give your child extra work chores.”</p> <p>-“If your child hit another child, how likely is it that you would discipline your child in the following ways? Give your child extra work chores.”</p>
Parent Support for Learning Scale	
Instrumental Involvement	<p>-“I read to my child before he/she goes to sleep.”</p> <p>-“I help my child with schoolwork that he/she does not understand.”</p>

Table 6 (Continued)

Supportive Parental Involvement	-“I support my child in the things he/she does in school.” -“I am very patient when it comes to my child’s education.”
Management of Home Learning Environment	-“I often bring home educational activities for our family.” -“I always keep track of my child’s schoolwork.”
Social-Emotional Assets and Resilience Scales-Parent	
Self-Regulation/Responsibility	-“Stays calm...” -“Is good at understanding...”
Social Competence	-“Other people like...him/her” -“Is comfortable talking...”
Empathy	-“Feels sorry for other people...” -“Knows when people are upset...”
Social-Emotional Assets and Resilience Scales-Teacher Short Form	
Total social-emotional Strengths	-“Is comfortable talking...” -“Knows how to identify...thoughts.”

Table 7

Measures and Cronbach's Alpha based on Extant Literature

	Subscales	Number of Items:	Completed by:	α from previous research
Parent Involvement Project Questionnaire-Modified (Hoover-Dempsey & Sandler, 2005)	Self-Efficacy	5	Parents	.77
	Role Construction	10		.76
	Time and Energy	5		.73
	Knowledge and Skills	4		.77
Fast Track Project Parent-Teacher Involvement Questionnaire (Malone, 2000)	0	10	Parents	.74 from the larger study
Parent Practices Interview (Webster-Stratton, 1998)	Appropriate Discipline	12	Parents	.82
	Harsh and Inconsistent Discipline	15		Harsh-.75 Inconsistent-.62
	Positive Verbal Discipline	9		.72
	Monitoring	5		.64
	Praise and Incentive	11		.72
	Clear Expectations	6		.62
Parent Support for Learning Scale (Rogers et al., 2013)	Instrumental Involvement in Learning	6	Parents	.76
	Supportive-Controlling Parental Involvement	11		.67; .35
	Management of Home Learning Environment	7		.74 from the larger study

Table 7 (Continued)				
Trust Scale from Family School Relationship Survey (Adams & Christenson, 2000)	0	20	Parents	.96
Social-Emotional Assets and Resilience Scales-Parent (Merrell et al., 2010)	Total	39	Parents	.96
	Self-Regulation/Responsibility			.95
	Social Competence			.89
	Empathy			.87
Social-Emotional Assets and Resilience Scales-Teacher Short Form (Merrell, 2011)	Total Score for Social-Emotional Strengths	12	Teachers	.93

Procedures

Participants in the U.S. were recruited through the principal investigator of the original study (Dr. Ogg) sending an email to the Direction of Psychological Services in order to have all school psychologists in a large, southeastern district featuring urban, suburban, and rural settings, in order to recruit kindergarten teachers for the study. After teachers volunteered to participate in the study, the principal investigator met with each school to discuss participation in the study. If teachers agreed to participate in the study after learning about the requirements, two copies of consent forms were sent home to parents of all children in the teacher's classroom. Parents were instructed to return one consent form, and to keep the other copy for themselves. Students were awarded a small prize, such as a sticker or a small toy if they returned the consent form from their parents.

Participants in Canada were recruited by the co-principal investigator meeting (Dr. Rogers) with school principals, and if the principals expressed interest, the investigator then met with kindergarten teachers. If the teachers agreed to the requirements of the study, two consent forms were again sent home to parents. Parents were also instructed to return one consent form and keep the other copy for their records.

Parents who returned the consent form to participate in the study were given a packet of surveys to complete in the fall (November 2011). The demographic form, PIPQ-M, Fast Track Project Parent-Teacher Involvement Questionnaire, Parenting Practices Interview, PSLS, and the Trust Scale from the Family-School Relationship Survey was administered in the fall, while the SEARS-P, SEARS-TSF and additional measures not planned for analysis in the current study were given in the spring. Information on when the measures were collected can be seen in Table 8.

Table 8

Date Measures Collected

Measure	Wave 1 11/2011	Wave 2 2/2012	Wave 3 5/2012
Demographic Form	X		
Parent Involvement Project Questionnaire- Modified	X		X
Fast Track Project Parent-Teacher Involvement Questionnaire	X		X
Parent Practices Interview	X		
Parent Support for Learning Scale	X		X
Trust Scale from Family School Relationship Survey	X		X
Social-Emotional Assets and Resilience Scales- Parent			X
Social-Emotional Assets and Resilience Scales- Teacher Short Form			X

Note. The “X” denotes that this is the wave or date in which the measure was collected.

After completing the surveys, parents were asked to return them to the school in a sealed envelope. Research team members were also available at the schools on specific dates and parents were given the option to return the surveys directly to research team members. Parents were given a \$10 gift card upon completion of the surveys at each time point. To confirm the parents had received the incentive, forms were sent home for them to sign and return stating they obtained the gift card.

Teachers who consented to participate in the study were provided with surveys in the spring (May 2012). This survey contained the SEARS-TSF, and teachers were required to complete the measure in certain period of time. The principal investigator's contact information was provided to the teachers in case they had any questions. Upon completion of the surveys, research members and the principal investigator picked up the surveys from the school and a \$10 gift card was given for each student survey that was completed. In the larger study, each teacher completed between two to 11 packets ($M = 5.36$, $SD = 2.17$), based on the number of children with parental consent in their classroom.

Data collected from these two locations were entered into an Excel spreadsheet by members of a research team. Data were checked for errors by randomly selecting 10% of the code numbers to be cross-checked. The principal investigator also compared data entry to questionnaire responses and did not participate in the first round of data entry. Accuracy in data entry was found to be high at 97.4% to 100%.

Data Analysis

In order to answer the research question posed in this study, a series of statistical analyses were conducted. First, descriptive statistics were also conducted to look at gender, ethnicity, age, and socio-economic status of the study sample. In addition, the U.S. versus Canadian samples were compared by running independent samples-t-tests. Next, preliminary analyses were run with the primary variables under investigation in the current study, including means, standard deviations, ranges, skewness, and kurtosis. Average scores for each measure were compared to scores from the normative sample. To assess internal consistency within this sample, Cronbach's alpha were calculated for each of the variables. Correlations between the

variables were examined. All preliminary analyses were conducted separately between the parent-rated and teacher-rated strengths samples.

Primary analyses. To answer the research question in the current study, inferential statistics were conducted. The research question included the following:

1. To what extent, if any, do parenting variables (Self-Efficacy, Role Construction, Time and Energy, Knowledge and Skills, PI with their child's teacher, Trust of child's teacher, Appropriate Discipline, Harsh and Inconsistent Discipline, Positive Verbal Discipline, Praise and Incentives, Monitoring, Clear Expectations, Instrumental Involvement in learning, Management of Home Learning Environment, and Supportive PI) predict social-emotional strengths (Social Competence, Self-Regulation, Empathy, Responsibility, and Total Social-Emotional Strengths) in kindergartners?
 - a. When social emotional strengths are rated by their parents?
 - b. When Total social emotional Strengths are rated by their teachers?

For research question 1b, it should be noted that because the SEARS-T was a short form, the extent to which parenting variables predict social-emotional strengths (when rated by teachers) was only assessed in terms of the total score for social-emotional strengths rather than for each domain.

To assess what domains of parenting were most predictive of social-emotional strengths in kindergartners, multiple regression analyses were conducted. Assumptions of multiple regression (linear relationship, multivariate normality, no/little multi-collinearity, no auto-correlation, homoscedasticity) were checked using scatter plots, histograms to check normality, and by calculating correlation coefficients. Correlations between variables were examined in order to assess the relationship between variables and to determine which demographic variables

to control for within the multiple regression equations. Multiple regression analyses were conducted separately for parent and teacher ratings of social-emotional strengths as indicated by the SEARS. First, gender and socioeconomic status were predictor variables without including parenting variables, in order to determine how much variance was accounted for by these child characteristics. This step was conducted for each of the outcome variables in the parent-rated strengths sample, including Self-Regulation/Responsibility, Social Competence, Empathy and Total Strengths, as well as the outcome variables in the teacher-rated strengths sample (Total Strengths). In a second model for all of the dependent variables (parent-rated Self-Regulation/Responsibility, Social Competence, Empathy, and Total Strengths; teacher-rated Total Strengths) the parenting variables were added to the model. An example of the regression equations can be seen below:

$$\hat{Y}_{\text{Social Competence}} = A + B_X \text{Gender} + B_X \text{Socioeconomic Status} + B_X \text{Harsh/Inconsistent Discipline} + B_X \text{Self-Efficacy} + B_X \text{Role Construction} + \dots + B_X \text{Supportive Parental Involvement}$$

$$\hat{Y}_{\text{Total Social-Emotional Strengths}} = A + B_X \text{Gender} + B_X \text{Socioeconomic Status} + B_X \text{Self-Efficacy} + B_X \text{Role Construction} + B_X \text{Time and Energy} + \dots + B_X \text{Supportive Parental Involvement}$$

CHAPTER FOUR:

RESULTS

In this chapter, results of the analyses conducted in order to answer the research questions will be discussed. The following sections will outline the variable construction, data screening, descriptive analysis, scale reliability, correlation analyses, and the results from the multiple regression analyses.

Variable Construction

Almost all variables were constructed by calculating the mean of the item scores. The only exception was gender, which was computed from the parent's response to the Child's gender on the Demographic Form. In order to compute a variable, 70-92% of the items on the subscale related to the variable had to be completed. The percentage required for each variable was determined by reviewing the scoring guidelines for each measure. In the case that guidelines were available (e.g., must have 80% of items to calculate total), this was used to construct the variable. For variables where the authors of the scale did not provide guidance a criterion of 70% was set. Predictor variables included Self-Efficacy, Role Construction, Time and Energy, Knowledge and Skills, PI with the child's teacher, Trust of child's teacher, Appropriate Discipline, Harsh and Inconsistent Discipline, Positive Verbal Discipline, Praise and Incentives, Monitoring, Clear Expectations, Instrumental Involvement in learning, Management of the Home Learning Environment, Supportive PI, gender, and socioeconomic status. Gender and socioeconomic status were added as predictor variables due to being highly correlated with many predictor and outcome variables. Outcome variables including Self-

Regulation/Responsibility, Empathy, Social Competence, and Total Social-Emotional Strengths as rated by parents and teachers. The specifics for how each variable was computed can be seen in Table 9.

Table 9

Construction of Variables

Variable	Measure	How it Was Constructed
Self-Efficacy Role Construction Time & Energy Knowledge & Skills	PIPQ-M	Subscale means were calculated to correspond with each variable. To score the subscales reliably, 70-80% of items had to be completed.
PI with their child's teacher	Fast Track Project Parent— Teacher Involvement Questionnaire	Subscale means were calculated to correspond with each variable. 70% of items had to be completed.
Trust of child's teacher	Trust scale from the Family- School Relationship Survey	Subscale means were calculated to correspond with each variable. 70% of items had to be completed.
Appropriate Discipline Harsh & Inconsistent Discipline Positive Verbal Discipline Praise & Incentives Monitoring Clear Expectations	Parenting Practices Interview	Subscale means were calculated to correspond with each variable. 70% of items must have been completed.
Instrumental Involvement in Learning Supportive Parental Involvement Management of the Home Learning Environment	PSLS	Subscale means were calculated to correspond with each variable. 70-80% of the items on the subscale had to be completed.
Gender	Demographic Form	Based on response to Child's Gender. 1-male; 2-female.

Table 9 (Continued)

Socioeconomic Status	Demographic Form	-Parent's Level of Education: 1-less than high school; 2-high school or General Education Diploma (GED); 3-some college, 2 year college or vocational, 4-Bachelor's degree, 5-some graduate work, 6-Master's degree; 7-Doctoral degree. -Family Income per Year: 1-less than \$5,000; 2-\$5,001-\$10,000; 3-\$10,001-\$20,000; 4-\$20,001-\$30,000; 5-\$30,001-\$40,000; 6-\$40,001-\$50,000; 7-\$50,001-\$60,000; 8-\$60,001+ The mean of these items were calculated in order to yield an overall socioeconomic status indicator.
Parent-Rated Self-Regulation/Responsibility Empathy Social Competence Total Social-Emotional Strengths	SEARS-P	Subscale means were calculated to correspond with all variables. The "total" score reflects the mean of all the items from each subscale. Merrell et al. (2011) suggest that 86%-91% of items are completed to score each subscale.
Teacher-Rated Total Social-Emotional Strengths	SEARS-TSF	92% of items must be completed to score this variable reliably (Merrell et al., 2011). The "total" score reflects the mean of all the items.

Note. PIPQ-M=Parent Involvement Project Questionnaire-Modified, PSLs=Parent Support for Learning Scale, SEARS-P=Social Emotional Assets and Resilience Scales-Parent, SEARS-T=Social Emotional Assets and Resilience Scales-Teacher.

Examining Assumptions

Parent-rated sample. Values for skewness and kurtosis were used to evaluate univariate normality and values for each measure are provided in Table 10. For the parent sample, Positive Verbal Discipline had a kurtosis of 3.88, and Monitoring a kurtosis of 3.40. No other variables had skewness and kurtosis values greater than |1.5|. Outliers were identified by calculating z-scores for each of the variables. Values were considered outliers if the z-values fell outside the

range of -3 to +3 (Tabachnick & Fidell, 1989). In terms of z -scores, Self-Efficacy was found to have one value of -3.39, Knowledge and Skills a value of -4.07, Positive Verbal Discipline a -3.70 and -4.45, Monitoring a -4.54 and two values of -3.04, and Supportive PI a -3.01. After visually examining all outliers, it was determined that they were possible values and it was determined that they would be retained for subsequent analyses.

Teacher-rated sample. Univariate normality was also evaluated in the teacher sample as displayed in Table 11. Self-efficacy had a kurtosis of 5.24 and Monitoring 4.01. No other variables had a skewness or kurtosis greater than |2|. Z -scores were also calculated in order to identify outliers, and the range of -3 to +3 was again used to identify an outlier (Tabachnick & Fidell, 1989). Self-efficacy had two values outside of this range: -3.05 and -5.43. Time and Energy also had a value of -3.68, as well as Knowledge and Skills with a -3.28 and -4.02. Appropriate discipline had one value of -3.10, Positive Verbal Discipline a -3.56 and -4.30, Clear Expectations a 3.08 and a -3.37, and Supportive PI a -3.09 and -4.52. These outliers were also retained for subsequent analyses after visual inspection revealed that they were possible values and were visually similar to other values in the sample.

Table 10

Descriptive Statistics for Variables of Interest in Parent-Rated Strengths Sample (n=122)

Variable	N	Minimum	Maximum	M	SD	Skewness	Kurtosis
Socioeconomic Status	120	1.50	7.50	5.25	1.48	-0.40	-0.52
PIPQ-M							
Self-Efficacy	120	2.80	6.00	5.16	0.70	-0.88	0.82
Role Construction	120	3.50	6.00	4.83	0.57	-0.17	-0.60
Time/Energy	120	2.80	6.00	4.87	0.73	-0.20	-0.50
Knowledge/Skills	120	2.50	6.00	5.23	0.67	-0.97	1.51
Fast Track							
Parent/Teacher Involvement	120	0.90	3.60	2.25	0.50	0.25	-0.19
Trust in Teacher	120	1.70	3.00	2.66	0.41	-0.77	-1.05
Parent Support for Learning Scale							
Instrumental Involvement	117	3.33	5.00	4.55	0.42	-0.80	-0.19
Management of the Home Learning Environment	117	2.86	5.00	4.28	0.49	-0.47	-0.19
Supportive Parental Involvement	117	3.40	5.00	4.54	0.38	-0.62	-0.47
Parent Practices Interview							
Appropriate Discipline	119	2.58	6.50	4.78	0.87	-0.38	-0.26
Harsh/Inconsistent Discipline	119	1.47	4.60	2.91	0.68	0.37	-0.24
Positive Verbal Discipline	118	2.44	7.00	5.76	0.75	-1.48	3.88
Monitoring	118	3.70	7.00	6.43	0.60	-1.57	3.40
Praise and Incentives	118	2.50	6.09	4.36	0.85	0.08	-0.83
Clear Expectations	118	2.33	6.67	4.03	0.88	0.90	0.46
SEARS-P							
Self-Regulation/Responsibility	120	0.45	2.95	1.55	0.53	0.50	0.11
Social Competence	121	0.80	3.00	2.15	0.51	-0.24	-0.57
Empathy	122	0.86	3.00	2.06	0.54	-0.18	-0.72
Total Parent-Rated Strengths	121	0.64	2.97	1.80	0.47	0.29	-0.02

Note. PIPQ-M = Parent Involvement Project Questionnaire-Modified; SEARS-P = Social-Emotional Assets and Resilience Scale-Parent version.

Table 11

Descriptive Statistics for Variables of Interest in Teacher-Rated Strengths Sample (n =166)

Variable	N	Minimum	Maximum	M	SD	Skewness	Kurtosis
Socioeconomic Status	156	1.50	7.50	5.21	1.44	-0.39	-0.47
PIPQ-M							
Self-Efficacy	156	1.00	6.00	5.10	0.76	-1.60	5.24
Role Construction	156	3.50	6.00	4.83	0.57	-0.12	-0.58
Time/Energy	156	2.00	6.00	4.80	0.76	-0.43	0.38
Knowledge/Skills	156	2.50	6.00	5.19	0.67	-0.90	1.36
Fast Track							
Parent/Teacher Involvement	156	1.00	3.60	2.20	0.51	0.39	-0.29
Trust in Teacher							
	156	1.45	3.00	2.62	0.44	-0.70	-1.05
Parent Support for Learning Scale							
Instrumental Involvement	149	3.00	5.00	4.49	0.44	-0.68	-0.19
Management of the Home Learning Environment	149	2.86	5.00	4.24	0.51	-0.35	-0.47
Supportive Parental Involvement	149	2.60	5.00	4.50	0.42	-1.05	1.98
Parent Practices Interview							
Appropriate Discipline	155	1.78	6.50	4.69	0.94	-0.30	-0.27
Harsh/Inconsistent Discipline	155	1.47	4.60	2.84	0.66	0.40	-0.09
Positive Verbal Discipline	154	2.44	7.00	5.70	0.76	-1.11	2.24
Monitoring	152	3.70	7.00	6.43	0.60	-1.72	4.01
Praise and Incentives	154	2.50	6.09	4.36	0.81	0.08	-0.72
Clear Expectations	154	2.33	6.67	3.99	0.87	1.00	0.86
SEARS-TSF							
Total Teacher-Rated Strengths	165	0.64	3.00	1.95	0.64	-0.17	-0.99

Note. PIPQ-M = Parent Involvement Project Questionnaire-Modified; SEARS-P = Social-Emotional Assets and Resilience Scale-Parent version.

Descriptive Analyses

SEARS-TSF total strengths score ($n = 166$). Based on the normative sample used for the SEARS-TSF, Merrell (2011) suggests that if scores are in the 21st percentile or above (total raw score ≥ 14 on SEARS-TSF) this indicates that the child has average to excellent social-emotional competencies (tier one), while if their scores are in the seventh to 19th percentile (total raw score eight to 13) these students should receive a more comprehensive assessment and be considered to receive intervention (tier two). Students below the seventh percentile (total raw score ≤ 7) are considered to be at high-risk for having social-emotional deficits and should also be considered for intervention (tier three). Youth who had items on the SEARS-TSF that were rated a 0 or 1 also require further analysis to see if the items pair together and could inform intervention. The sum raw scores from this sample were examined in relation to the SEARS norm group for the purposes of better understanding the relative level of social-emotional strengths of children in the current study. In summary, when looking at Total Social-Emotional Strengths as rated by the teacher ($n = 166$), 146 (88.0%) students fell into tier one, 19 kindergartners or 11.4%, had a score below the 18th percentile (tier two), and no students had a total score less than seven (tier three). One student (0.6%) was missing data for the Total Teacher-Rated Strengths score.

In the normative sample, 80% were considered to be in tier one, which reflects average to excellent social-emotional skills and is considered to be the normal range. According to the normative sample, 15% of the sample should be considered at risk and in tier two, indicating that these students may need further assessment of their social-emotional skills. Therefore, the percentage of students in tier two and tier three in the current sample is slightly lower than the normative sample (11.4% versus 15%; 0% versus 5%). However, the percentage of students rated as having average to excellent social-emotional competencies in the current sample was

higher (88%) than the 80% of students in the normative sample who scored in tier one. This indicates that the current sample has higher Total Teacher-Rated Strengths when compared to the normative sample. Further comparison of SEARS-TSF scores in the normative and current sample can be found in Table 12.

SEARS-P total strengths score ($n = 122$). For the SEARS-P, tier three includes scores that fall less than the first to fifth percentile (total raw score 0-43), tier two the sixth to 19th percentile (total raw score 44-57), and tier one the 21st to >99th percentile (total raw score 58-117). Parents in the parent-rated strengths sample rated 92 (75.4%) of their children as having average to excellent social-emotional strengths (tier one), 19 (15.6%) as needing consideration for further assessment (tier two), and 10 (8.2%) as high-risk in terms of their social-emotional skills (tier three). One (0.8%) of the parent-rated total scores were missing. In comparison to the normative sample, parents rated their children as being in tier one slightly less (75.4% versus 80%) and in tier two about the same as the normative sample (15.6% versus 15%). Parents also rated a higher percentage of youth in tier three (8.2% versus 5%). Comparisons across samples can be seen in Table 12. Overall, parents rated their children in social-emotional strengths as scoring in tier one less than teachers (75.4% versus 88%), and in tier two and tier three more than teachers (15.6% versus 11.4%; 8.2% versus 0%), where tier two and tier three are indicative of needing further support in Total Social-Emotional Strengths. This indicates that parents identified more kindergartners, or more of their own children as needing further assessment or intervention in social-emotional strengths than their child's teachers.

Table 12

Comparison of Teacher, Parent, and Normative Sample's Total Social-Emotional Strengths

Teacher-Rated Strengths Sample (<i>n</i> = 166) <i>N</i> (%)	Parent-Rated Strengths Sample (<i>n</i> = 122) <i>N</i> (%)	Percentile	Skills Competency	% Expected in Tier/Normative Sample
146 (88.0)	92 (75.4)	21 st to >99 th	Average to Excellent/Tier 1	80%
19 (11.4)	19 (15.6)	6 th to 19 th	Tier 2/Consider whether further intervention is needed.	15%
0 (0)	10 (8.2)	<1 st to 5 th	High-risk/Tier 3	5%
1 (0.6)	1 (0.8)		Missing Score	

SEARS-TSF individual item ratings: Teacher sample (*n* = 166). Teacher ratings of individual items as 0 or 1 (*0=never thought, felt, or behaved in that way; 1=sometimes thought/felt/behaved in that way*) can be seen in Table 13. Merrell (2011) suggested looking at items individually to assess for ratings of 0 or 1 to determine if items can be grouped to inform intervention. The highest percentage of students rated as 0 or 1 were on the following items: being able to identify and change negative thoughts (45.2%), thinking of problems in ways that help (44.5%), can identify errors in thinking (40.3%) and tries to understand how other students are feeling when they appear to not be doing well (39.7%). It should be noted that lower scores on these items are likely due to the current developmental level of the kindergarten students, as the items listed require higher-level thinking abilities which may not be age appropriate.

Table 13

Individual Items Requiring Further Assessment: Teacher-Rated Strengths Sample (n = 166)

Item from SEARS-TSF (Merrell, 2011)	N (%) Rated as “Never” or “Sometimes”
1. “Is comfortable talking ...”	42 (25.3)
2. “Makes friends...”	41 (25.7)
3. “Tries to understand others...”	66 (39.7)
4. “People think she/he is fun...”	41 (24.7)
5. “Understands people...”	57 (34.3)
6. “Cares what happens...”	43 (25.9)
7. “Is dependable...”	50 (30.1)
8. “Thinks of her/his problems...”	74 (44.5)
9. “Accepts Responsibility...”	41 (24.7)
10. “Knows how to identify thoughts...”	75 (45.2)
11. “I trust...”	40 (24.1)
12. “Can identify errors...”	67 (40.3)

Note. Items were rated as 0 or 1, indicating the student never or sometimes engages in the item. This rating indicates a need for further assessment, and possibly intervention.

SEARS-P subscale ratings: Parent-rated strengths sample (n = 122). Rather than identifying individual items in need of further assessment on the SEARS-P, scores for the specific domain ratings (Self-Regulation/Responsibility, Social Competence, and Empathy) were explored. Each domain featured its own standards for what scores fell into the various tiers. For Self-Regulation/Responsibility, percentile scores < 1 to fifth percentile to the 33th percentile (raw score zero to 18) were considered tier three, sixth to the 19th percentile (raw score 19-27) tier

two, and all percentiles above (raw score 28 and above) tier one. For parent-rated Self-Regulation/Responsibility, nine kindergartners (7.4%) were rated as falling in tier three, 23 (18.9%) in tier two, and 88 (72.1%) in tier one. Two (1.6%) were missing data for Self-Regulation/Responsibility.

For Social Competence, percentile scores less than the first to the fourth percentile (raw score zero to 10) were considered tier three, scores in the sixth percentile to the 18th percentile (raw score 11-15) tier two, and scores in the 22nd percentile and above (raw score 16 and above) tier one. In the current sample, two students (1.6%) were rated as falling in tier three, 12 (9.8%) in tier two, and 107 (87.7%) in tier one. One (0.8%) were missing data for Social Competence.

Finally, for parent-rated Empathy, scores in the first to third percentile (raw score zero to seven) were considered tier three, scores in the seventh to 20th percentile (raw score eight to 11) tier two, and 27th to >99th percentile (raw score 12-21) tier one. In the current sample, four (3.3%) were rated in tier three, 24 (19.7%) in tier two, and 94 (77.0%) in tier one.

In summary, parents as a whole rated their children lower in tier one, and higher in tier two and tier three for Self-Regulation/Responsibility than expected. The opposite was found for Social Competence. Parents as a whole rated their children higher in tier one, and lower in tier two and three than expected, indicating that this was a domain that the current sample had higher levels of strengths than the normative sample. Last, a slightly lower percentage of students were rated as being in tier one for Empathy, while rated higher in tier two than expected based on the normative sample. These results can be seen in Table 14.

Table 14

Parent Ratings of Self-Regulation/Responsibility, Social Competence, and Empathy in Parent-Rated Strengths Sample (n =122)

SEARS-P Domain	Tier 1 N (%)	Tier 2 N (%)	Tier 3 N (%)	Missing N (%)
Self-Regulation/ Responsibility	88 (72.1)	23 (18.9)	9 (7.4)	2 (1.6)
Social Competence	107 (87.7)	12 (9.8)	2 (1.6)	1 (0.8)
Empathy	94 (77.0)	24 (19.7)	4(3.3)	0 (0.0)

Note. 80% is expected to fall in tier one, 15% in tier two, and 5% in tier three (Merrell, 2011). Tier one indicates average to excellent skills in the domain, while tier two indicates that further assessment or intervention may be needed. Tier three suggests that the youth is at high-risk, or needs further development in the social-emotional domain.

Parenting measures. For the parenting measures, normative sample mean scores were compared to the current samples' mean scores and can be seen in Table 15. In the current study, both the parent-rated strengths and teacher-rated strengths samples' mean scores for Self-Efficacy on the PIPQ-M were slightly higher than the scores found in Rogers, Wiener, Marton, and Tannock (2009). This indicated a higher level of these variables in the current study's sample.

On the PSLS, the mean scores of the normative sample were taken from Rogers and colleagues (2009). The mean scores on both Instrumental and Supportive PI were found to be higher in the current parent-rated strengths and teacher-rated strengths samples when compared to the normative sample. However, there was no measure of Management of the Home Learning Environment in Rogers and colleagues (2009), and therefore, the mean scores could not be compared.

The current parent-rated strengths and teacher-rated strengths sample had a higher level of Parent-Teacher Involvement than the normative sample (Malone, 2000) on the *Parent-*

Teacher Involvement Questionnaire, indicating that the current sample had higher levels of involvement between the parent and his or her child's teacher when compared to the normative sample. These findings were consistent with those for the Trust scale from the *Family-School Relationship Survey*; the current parent-rated strengths and teacher-rated strengths sample had higher levels of Trust in their child's teacher than the normative sample (Adams & Christenson, 2000). It should be noted that Adams and Christenson (2000) highlighted in their study that the higher the grade level (elementary, middle, and high), the lower the amount of Trust parents had in their child's teacher. For the purpose of comparing mean scores in the current sample to the normative sample, means were compared for parents of kindergarteners through fifth grade (Adams & Christenson, 2000), with parents of just kindergarteners. Therefore, if Trust goes down as grade level goes up it would be expected that the mean score for Trust in the current sample would be higher than the mean score for Trust in the normative sample.

On the *Parenting Practices* scale, in a study of socioeconomically disadvantaged and ethnically diverse participants conducted by Leijten, Raaijmakers, Orobio de Castro, Van den Ban, Matthys (2015), mean scores for the control group at pre-test (not receiving a parenting intervention) were found to be lower in use of Appropriate Discipline than the current study's parent and teacher sample, and higher in the use of Harsh and Inconsistent Discipline, Praise and Incentives, and Clear Expectations. Therefore, the current study's sample appeared to use more Appropriate Discipline than the normative sample, and less Harsh and Inconsistent Discipline, Praise and Incentives, and setting Clear Expectations than the normative sample (Leijten et al., 2015). In a study focused on preventing conduct problems in Head Start children by Webster-Stratton (1998), after receiving a parent training on positive discipline strategies and parenting skills, parents in Webster Stratton's study still had lower levels of Positive Verbal Discipline

when compared to the current study's sample. Normative and/or comparative studies relative to Monitoring in early childhood as measured on the Parenting Practices Interview could not be located.

Table 15

Mean Scores of Current Sample Compared to Normative or Comparative Sample Scores

Measure	Normative/ Comparative Sample Score	Parent-Rated Strengths Sample		Teacher-Rated Strengths Sample	
		<i>M</i> (<i>n</i> = 122)	<i>SD</i> (<i>n</i> = 122)	<i>M</i> (<i>n</i> = 166)	<i>SD</i> (<i>n</i> = 166)
PIPQ-M					
Self-Efficacy	4.43	5.16	0.70	5.10	0.76
Role Construction	4.83	4.83	0.57	4.83	0.57
Time and Energy	4.81	4.87	0.73	4.80	0.76
Knowledge and Skills	5.21	5.23	0.67	5.19	0.67
PSLS					
Instrumental Involvement	3.94	4.55	0.42	4.49	0.44
Supportive Parental Involvement	4.27	4.54	0.38	4.50	0.42
Fast Track					
Parent-Teacher Involvement	1.42	2.25	0.50	2.20	0.51
Trust from the Family-School Relationship Survey	2.14	2.66	0.41	2.62	0.44
Parent Practices Interview					
Appropriate Discipline	4.19	4.78	0.87	4.69	0.94
Harsh and Inconsistent Discipline	3.12	2.91	0.68	2.84	0.66

Table 15 (Continued)

Praise and Incentives	4.59	4.36	0.85	4.36	0.81
Clear Expectations	4.08	4.03	0.88	3.99	0.87
Positive Verbal Discipline	3.72	5.76	0.75	5.70	0.76
Monitoring	X	6.43	0.60	6.43	0.60

Note. PIPQ-M=Parent Involvement Project Questionnaire-Modified, PSLS=Parent Support for Learning Scale. X indicates that a normative/comparative study could not be located in order to compare mean scores.

Scale Reliability

To determine the internal consistency of the measures and subscales, Cronbach's alpha was calculated. The alphas for both the overall measure and the subscales can be seen in Table 16. Most alphas were acceptable, however, the alpha for Monitoring and Supportive PI were below .7. A Cronbach's alpha above .7 indicates an acceptable level, while below .7 is considered poor or unacceptable (Gliem & Gliem, 2003).

Table 16

Cronbach's Alpha

	Subscales	Number of Items	α for Parent Sample ^a	α for Teacher Sample ^b
PIPQ-M (Hoover-Dempsey & Sandler, 2005)	Self-Efficacy	5	.75	.77
	Role Construction	10	.77	.77
	Time and Energy	5	.76	.75
	Knowledge and Skills	4	.83	.78
Fast Track Project Parent-Teacher Involvement Questionnaire (Malone, 2000)	Total	10	.73	.76

Table 16 (Continued)

Parent Practices	Appropriate Discipline	12	.78	.79
Interview	Harsh/Inconsistent Discipline	15	.82	.81
(Webster-Stratton, 1998)	Positive Verbal Discipline	9	.76	.75
	Monitoring	5	.42	.43
	Praise and Incentives	11	.74	.70
	Clear Expectations	6	.78	.78
PSLS	Instrumental Involvement	6	.74	.76
(Rogers et al., 2013)	Supportive PI	5	.59	.67
	Management of Home Learning Environment	7	.74	.73
Trust Scale from	Total	20	.98	.98
(Adams & Christenson, 2000)				
SEARS-P	Total	39	.96	
(Merrell, 2011)	Self-Regulation/Responsibility	22	.95	
	Social Competence	10	.88	
	Empathy	7	.83	
SEARS-TSF	Total Score for Social-Emotional Strengths	12		.93
(Merrell, 2011)				

Note. PIPQ-M=Parent Involvement Project Questionnaire-Modified, PSLs=Parent Support for Learning Scale, SEARS-P=Social Emotional Assets and Resilience Scales-Parent, SEARS-TSF=Social Emotional Assets and Resilience Scales-Teacher Short Form.

^aParent sample references the parent-rated strengths sample ($n = 122$).

^bTeacher sample references the teacher-rated strengths sample ($n = 166$).

Correlation Analyses

In order to determine correlations between variables, Pearson product-moment correlations (PPMCs) were calculated for the parent-rated and teacher-rated strengths samples. Correlation tables included the correlation of items from a single measure and also across multiple measures (Table 17-24).

First, correlations between variables on the PPI were calculated (Table 17 and 18). For the parent-rated strengths sample, Appropriate Discipline had a significant positive correlation with Harsh and Inconsistent Discipline ($r = .20$), Positive Verbal Discipline ($r = .27$), Praise and

Incentives ($r = .32$), and Clear Expectations ($r = .42$). Harsh and Inconsistent Discipline had a significant negative correlation with Positive Verbal Discipline ($r = -.25$). Positive Verbal Discipline was positively correlated with Monitoring ($r = .26$) and Praise and Incentives ($r = .27$), while Monitoring had a significant positive correlation with Clear Expectations ($r = .20$). Praise and Incentives also had a significant positive correlation with Clear Expectations ($r = .34$).

Table 17

*Correlation between Parent Practices Interview for Parent-Rated Strengths Sample
(n = 118-119)*

	Appropriate Discipline	Harsh/ Inconsistent Discipline	Positive Verbal Discipline	Monitoring	Praise/ Incentives	Clear Expectations
Appropriate Discipline	1	.20*	.27**	.10	.32**	.42**
Harsh and Inconsistent Discipline		1	-.25**	-.15	.01	-.08
Positive Verbal Discipline			1	.26**	.27**	.18
Monitoring				1	.14	.20*
Praise and Incentives					1	.34**
Clear Expectations						1

* $p < .05$; ** $p < .01$.

For the teacher-rated strengths sample, correlations between variables on the PPI can be seen in Table 18. Appropriate Discipline had significant positive correlations with Harsh/Inconsistent Discipline ($r = .22$), Positive Verbal Discipline ($r = .34$), Praise and Incentives ($r = .26$), and Clear Expectations ($r = .45$). Harsh and Inconsistent Discipline had a significant negative correlation with Positive Verbal Discipline ($r = -.21$). Positive Verbal Discipline was positively correlated with Monitoring ($r = .22$), Praise and Incentives ($r = .26$),

and Clear Expectations ($r = .19$). Monitoring and Praise and Incentives had significant positive correlations with Clear Expectations ($r = .18; .31$).

Table 18

Correlation between Parent Practices Interview for Teacher-Rated Strengths Sample (n = 152-155)

	Appropriate Discipline	Harsh/ Inconsistent Discipline	Positive Verbal Discipline	Monitoring	Praise/ Incentives	Clear Expectations
Appropriate Discipline	1	.22*	.34**	.11	.26**	.45**
Harsh and Inconsistent Discipline		1	-.21*	-.11	-.01	-.06
Positive Verbal Discipline			1	.22*	.26**	.19*
Monitoring				1	.12	.18*
Praise and Incentives					1	.31**
Clear Expectations						1

* $p < .05$; ** $p < .01$.

Correlations for the PIPQ-M in the parent-rated strengths sample were also calculated (Table 19). Self-Efficacy had a significant positive correlation with Role Construction ($r = .32$), Time and Energy ($r = .58$), and Knowledge and Skills ($r = .66$). Role Construction had significant positive correlations with Time and Energy ($r = .58$) and Knowledge and Skills ($r = .47$), and Time and Energy was positively correlated with Knowledge and Skills ($r = .64$).

Table 19

Correlation between Variables on the Parent Involvement Project Questionnaire-Modified for the Parent-Rated Strengths Sample (n = 120)

	Self-Efficacy	Role Construction	Time and Energy	Knowledge and Skills
Self-Efficacy	1	.32**	.58**	.66**
Role Construction		1	.58**	.47**
Time and Energy			1	.64**
Knowledge and Skills				1

* $p < .05$; ** $p < .01$.

In the teacher-rated strengths sample, for the PIPQ-M, Self-Efficacy had a significant positive correlation with Role Construction ($r = .18$), Time and Energy ($r = .58$), and Knowledge and Skills ($r = .69$). Role Construction was significantly positively correlated with Time and Energy ($r = .45$) and Knowledge and Skills ($r = .36$), and Time and Energy had a significant positive correlation with Knowledge and Skills ($r = .63$).

Table 20

Correlation between Variables on the Parent Involvement Project Questionnaire-Modified for the Teacher-Rated Strengths Sample (n = 156)

	Self-Efficacy	Role Construction	Time and Energy	Knowledge and Skills
Self-Efficacy	1	.18*	.58**	.69**
Role Construction		1	.45**	.36**
Time and Energy			1	.63**
Knowledge and Skills				1

* $p < .05$; ** $p < .01$.

Correlations between variables on the Fast Track, PSLS, and Trust scale for the parent-rated strengths sample were also compared in Table 21. Parent/Teacher Involvement had a significant positive correlation with Instrumental Involvement ($r = .20$) and Management of the Home Learning Environment ($r = .24$). Supportive Parental Involvement was significantly and positively correlated with Instrumental Involvement ($r = .62$), Management of the Home Learning Environment ($r = .55$), and Trust ($r = .36$). Instrumental Involvement had significant

positive correlations with Management of the Home Learning Environment ($r = .60$) and Trust ($r = .39$). Management of the Home Learning Environment also had a significant positive correlation with Trust ($r = .26$).

Table 21

Correlations between Fast Track, Parent Support for Learning Scale, and Trust Scale for the Parent-Rated Strengths Sample ($n = 117-120$)

	Parent/ Teacher Involvement	Supportive PI	Instrumental Involvement	Management of Home Learning Environment	Trust
Parent/Teacher Involvement	1	.12	.20*	.24*	.14
Supportive Parental Involvement		1	.62**	.55**	.36**
Instrumental Involvement			1	.60**	.39**
Management of Home Learning Environment				1	.26**
Trust					1

Note. PI = Parental Involvement.

* $p < .05$; ** $p < .01$.

For the teacher-rated strengths sample, Parent/Teacher Involvement had a significant positive correlation with Instrumental Involvement ($r = .19$) and Management of the Home Learning Environment ($r = .33$). Supportive PI was positively correlated with Instrument Involvement ($r = .64$), Management of the Home Learning Environment ($r = .55$), and Trust ($r = .35$). Instrumental Involvement had a significant positive correlation with Management of the Home Learning Environment ($r = .60$) and Trust ($r = .36$), and Management of the Home Learning Environment was positively correlated with Trust ($r = .25$).

Table 22

Correlations between Fast Track, Parent Support for Learning Scale, and Trust Scale for the Teacher-Rated Strengths Sample (n = 149-156)

	Parent/Teacher Involvement	Supportive Parental Involvement	Instrumental Involvement	Management of Home Learning Environment	Trust
Parent/Teacher Involvement	1	.13	.19*	.33*	.14
Supportive Parental Involvement		1	.64**	.55**	.35**
Instrumental Involvement			1	.60**	.36**
Management of Home Learning Environment				1	.25**
Trust					1

* $p < .05$; ** $p < .01$.

For the SEARS-P (Table 23), Self-Regulation/Responsibility had a significant positive correlation with Empathy ($r = .64$), Social Competence ($r = .72$), and Total Strengths rated by parents ($r = .96$). As one explanation for the high correlation between Self-Regulation/Responsibility and the Total Strengths score, it should be noted that Self-Regulation/Responsibility items make up half of the Total Strengths score when rated by parents. Empathy was positively correlated with Social Competence ($r = .57$) and, as expected, Total Strengths ($r = .80$). Last, Social Competence also had a significant positive correlation with Total Strengths ($r = .82$).

Table 23

Correlation between Social-Emotional Assets and Resilience Scales-Parent (n = 119-121)

	Self-Regulation/ Responsibility	Empathy	Social Competence	Total Strengths Rated by Parents
Self-Regulation/ Responsibility	1	.64**	.72**	.96**
Empathy		1	.57**	.80**
Social Competence			1	.82**
Total Strengths Rated by Parents				1

* $p < .05$; ** $p < .01$.

Correlations were then calculated between the PIPQ-M and the PPI for the parent-rated strengths sample (Table 24). Self-efficacy had a significant positive correlation with Appropriate Discipline ($r = .27$), Positive Verbal Discipline ($r = .34$), Monitoring ($r = .33$), and Clear Expectations ($r = .24$). There was a significant negative correlation between Self-Efficacy and Harsh and Inconsistent Discipline ($r = -.19$). Role Construction had significant positive correlations with Appropriate Discipline ($r = .19$), Positive Verbal Discipline ($r = .31$) and Praise and Incentives ($r = .19$). Role Construction had a significant negative correlation with Harsh and Inconsistent Discipline ($r = -.21$). Time and Energy was positively correlated with Appropriate Discipline ($r = .28$), Positive Verbal Discipline ($r = .39$) and Monitoring ($r = .29$). Time and Energy had a negative significant correlation with Harsh and Inconsistent Discipline ($r = -.18$). Knowledge and Skills also had positive correlations with Appropriate Discipline ($r = .30$), Positive Verbal Discipline ($r = .28$), and Monitoring ($r = .31$). There was a significant negative correlation between Knowledge and Skills and Harsh and Inconsistent Discipline ($r = -.19$).

Table 24

Correlation between Parent Involvement Project Questionnaire-Modified and Parent Practices Interview for the Parent-Rated Strengths Sample (n = 118-120)

	Appropriate Discipline	Harsh/ Inconsistent Discipline	Positive Verbal Discipline	Monitoring	Praise and Incentives	Clear Expectations
Self-Efficacy	.27**	-.19*	.34**	.33**	.12	.24**
Role Construction	.19*	-.21*	.31**	.09	.19*	.06
Time and Energy	.28**	-.18*	.39**	.29**	.16	.19
Knowledge and Skills	.30**	-.19*	.28**	.31**	.10	.17

* $p < .05$; ** $p < .01$.

For the teacher-rated strengths sample, Self-Efficacy had a positive correlation with Appropriate Discipline ($r = .24$), Positive Verbal Discipline ($r = .33$), and Monitoring ($r = .23$). Role Construction had a significant positive correlation with Positive Verbal Discipline ($r = .28$) and Time and Energy was positively correlated with Appropriate Discipline ($r = .28$), Positive Verbal Discipline ($r = .39$), and Monitoring ($r = .29$). Time and Energy had a significant negative correlation with Harsh and Inconsistent Discipline ($r = -.18$). Last, Knowledge and Skills was positively correlated with Appropriate Discipline ($r = .21$), Positive Verbal Discipline ($r = .25$), and Monitoring ($r = .23$; Table 25).

Table 25

Correlation between Parent Involvement Project Questionnaire-Modified and Parent Practices Interview for the Teacher-Rated Strengths Sample (n = 152-156)

	Appropriate Discipline	Harsh/ Inconsistent Discipline	Positive Verbal Discipline	Monitoring	Praise and Incentives	Clear Expectations
Self-Efficacy	.24**	-.10	.33**	.23**	.07	.13
Role Construction	.13	-.14	.28**	.05	.15	.14
Time and Energy	.28**	-.18*	.39**	.29**	.16	.19
Knowledge and Skills	.21*	-.09	.25**	.23*	.05	.13

* $p < .05$; ** $p < .01$.

Next, correlations were calculated between the variables on the Fast Track, PSLS, Trust scale, and PPI (Table 26). Parent/Teacher Involvement had a significant positive correlation with Monitoring ($r = .23$) and Praise and Incentives ($r = .21$). Instrumental Involvement had a positive correlation with Appropriate Discipline ($r = .21$), Positive Verbal Discipline ($r = .45$), Monitoring ($r = .34$), Praise and Incentives ($r = .21$). There was a significant negative correlation between Instrumental Involvement and Harsh and Inconsistent Discipline ($r = -.23$). Supportive Involvement had a significant positive correlation with Positive Verbal Discipline ($r = .27$) and Monitoring ($r = .29$). Management of the Home Learning Environment had positive correlations with Positive Verbal Discipline ($r = .37$), Monitoring ($r = .33$), and Clear Expectations ($r = .25$), while its correlation with Harsh and Inconsistent Discipline was negative ($r = -.24$). Trust of the child's teacher was positively correlated with Appropriate Discipline ($r = .27$) and Positive Verbal Discipline ($r = .32$).

Table 26

Correlation between Fast Track, Parent Support for Learning Scale, and Trust Scale and Parenting Practices Interview on the Parent-Rated Strengths Sample (n = 115-120)

	Appropriate Discipline	Harsh/ Inconsistent Discipline	Positive Verbal Discipline	Monitoring	Praise and Incentives	Clear Expectations
Parent/Teacher Involvement	.18	-.09	.14	.23*	.21*	.17
Instrumental Involvement	.21*	-.23*	.45**	.34**	.21*	.15
Supportive Involvement	.11	-.19	.27**	.29**	.06	.07
Management of Home Learning Environment	.16	-.24**	.37**	.33**	.16	.25*
Trust of Child's Teacher	.27**	-.00	.32**	.12	.16	.07

* $p < .05$; ** $p < .01$.

Correlations for the Fast Track, PSLS, Trust scale, and PPI were also calculated within the teacher-rated strengths sample (Table 27). Parent/Teacher Involvement had a significant positive correlation with Positive Verbal Discipline ($r = .18$) and Clear Expectations ($r = .16$). Instrumental Involvement had a significant positive correlation with Appropriate Discipline ($r = .32$), Positive Verbal Discipline ($r = .47$), Monitoring ($r = .28$), Praise and Incentives ($r = .27$), and Clear Expectations ($r = .19$). Next, Supportive PI had a positive correlation with Appropriate Discipline ($r = .19$), Positive Verbal Discipline ($r = .36$), and Monitoring ($r = .23$). Management of the Home Learning Environment was positively correlated with Positive Verbal Discipline ($r = .40$), Monitoring ($r = .24$), Praise and Incentives ($r = .21$), and Clear Expectations ($r = .30$). However, it was negatively correlated with Harsh and Inconsistent Discipline ($r = -.17$). Last, Trust of the Child's Teacher had a significant positive correlation with Appropriate Discipline ($r = .30$) and Positive Verbal Discipline ($r = .33$).

Table 27

Correlation between Fast Track, Parent Support for Learning Scale, and Trust Scale and Parenting Practices Interview on the Teacher-Rated Strengths Sample ($n = 147-156$)

	Appropriate Discipline	Harsh/ Inconsistent Discipline	Positive Verbal Discipline	Monitoring	Praise and Incentives	Clear Expectations
Parent/Teacher Involvement	.12	-.01	.18*	.08	.12	.16*
Instrumental Involvement	.32**	-.16	.47**	.28**	.27**	.19*
Supportive Involvement	.19*	-.10	.36**	.23*	.15	.07
Management of Home Learning Environment	.16	-.17*	.40**	.24**	.21*	.30**
Trust of Child's Teacher	.30**	.04	.33**	.08	.12	.10

* $p < .05$; ** $p < .01$.

Correlations were also calculated to determine the relationship between the variables on the Fast Track, the PSLS, the Trust scale, and the PIPQ-M in the parent-rated strengths sample (Table 28). Parent/Teacher Involvement had a significant positive correlation with Self-Efficacy ($r = .24$), Role Construction ($r = .26$), Time and Energy ($r = .36$) and Knowledge and Skills ($r = .27$). Instrumental Involvement was positively correlated with Self-Efficacy ($r = .46$), Role Construction ($r = .33$), Time and Energy ($r = .53$) and Knowledge and Skills ($r = .45$). Supportive Involvement had significant positive correlations with Self-Efficacy ($r = .49$), Role Construction ($r = .27$), Time and Energy ($r = .38$), and Knowledge and Skills ($r = .36$). Management of the Home Learning Environment was also positively correlated with all of the variables on the PIPQ-M, including Self-Efficacy ($r = .48$), Role Construction ($r = .36$), Time and Energy ($r = .52$), and Knowledge and Skills ($r = .55$). Trust of the child's teacher had significant positive correlations with Self-Efficacy ($r = .25$), Role Construction ($r = .29$), and Time and Energy ($r = .22$).

Table 28

Correlations between Fast Track, Parent Support for Learning Scale, and Trust Scale and Parent Involvement Project Questionnaire-Modified for the Parent-Rated Strengths Sample (n = 116-121)

	Self-Efficacy	Role Construction	Time and Energy	Knowledge and Skills
Parent/Teacher Involvement	.24**	.26**	.36**	.27**
Instrumental Involvement	.46**	.33**	.53**	.45**
Supportive Involvement	.49**	.27**	.38****	.36**
Management of Home Learning Environment	.48**	.36**	.52**	.55**
Trust of Child's Teacher	.25*	.29**	.22*	.23

* $p < .05$; ** $p < .01$.

In the teacher-rated strengths sample, there were many significant positive correlations. In fact, all variables had significant positive correlations with each other. Parent/Teacher Involvement had a positive correlation with Self-Efficacy ($r = .21$), Role Construction ($r = .31$), Time and Energy ($r = .37$), and Knowledge and Skills ($r = .25$). Instrumental Involvement was positive correlated with Self-Efficacy ($r = .48$), Role Construction ($r = .29$), Time and Energy ($r = .53$), and Knowledge and Skills ($r = .40$). Supportive PI had positive and significant correlations with Self-Efficacy ($r = .58$), Role Construction ($r = .19$), Time and Energy ($r = .47$), and Knowledge and Skills ($r = .40$). Management of the Home Learning Environment was positively correlated with Self-Efficacy ($r = .45$), Role Construction ($r = .37$), Time and Energy ($r = .57$), and Knowledge and Skills ($r = .47$). Last, Trust of the child's teacher had significant positive correlations with Self-Efficacy ($r = .25$), Role Construction ($r = .21$), Time and Energy ($r = .26$), and Knowledge and Skills ($r = .22$).

Table 29

Correlations between Fast Track, Parent Support for Learning Scale, and Trust Scale and Parent Involvement Project Questionnaire-Modified for the Teacher-Rated Strengths Sample (n = 149-156)

	Self-Efficacy	Role Construction	Time and Energy	Knowledge and Skills
Parent/Teacher Involvement	.21*	.31**	.37**	.25**
Instrumental Involvement	.48**	.29**	.53**	.40**
Supportive Involvement	.58**	.19*	.47**	.40**
Management of Home Learning Environment	.45**	.37**	.57**	.47**
Trust of Child's Teacher	.25**	.21*	.26**	.22*

* $p < .05$; ** $p < .01$.

Correlations between all parenting variables and domains on the SEARS-P were also calculated (Table 30). In the parent-rated strengths sample, Harsh and Inconsistent Discipline had a significant negative correlation with Total Strengths rated by parents ($r = -.19$), and Positive Verbal Discipline had significant positive correlations with Self-Regulation/Responsibility ($r = .43$), Social Competence ($r = .36$), Empathy ($r = .35$), and Total Parent-Rated Strengths ($r = .43$). Monitoring and Clear Expectations had a significant positive correlation with Self-Regulation/Responsibility ($r = .21; .26$). Praise and Incentives was positively correlated with Empathy ($r = .23$) and Total Parent-Rated Strengths ($r = .20$).

For PI measures, Parental Self-Efficacy had significant positive correlations across all SEARS-P variables, including Self-Regulation/Responsibility ($r = .44$), Social Competence ($r = .30$), Empathy ($r = .34$), and Total Parent-Rated Strengths ($r = .41$). Parental Role Construction was also positive correlated with all SEARS-P variables, including Self-Regulation/Responsibility ($r = .34$), Social Competence ($r = .32$), Empathy ($r = .29$), and Total Parent-Rated Strengths ($r = .36$). Parental Time and Energy was positively correlated with Self-Regulation/Responsibility ($r = .44$), Social Competence ($r = .32$), Empathy ($r = .42$), and Total Strengths (parent-rated; $r = .46$). Parental Knowledge and Skills also had positive correlations with Self-Regulation/Responsibility ($r = .34$), Social Competence ($r = .32$), Empathy ($r = .24$), and Total Strengths rated by the parent ($r = .35$). Instrumental Involvement, Management of the Home Learning Environment, and Supportive Involvement were also all positively correlated with Self-Regulation/Responsibility ($r = .41; .42; .37$), Social Competence ($r = .30; .36; .36$), Empathy ($r = .37; .30; .26$), and Total Parent-Rated Strengths ($r = .42; .44; .39$). Trust of the child's teacher had a significant positive correlation with Self-Regulation/Responsibility ($r = .19$).

Table 30

Correlations between Parenting Practices Interview, Parent Involvement Project Questionnaire-Modified, Fast Track, Parent Support for Learning Scale, and Trust and Social-Emotional Assets and Resilience Scales in the Parent-Rated Sample (n = 115-121)

	Parent Sample			
	Self-Regulation/ Responsibility	Social Competence	Empathy	Total Strengths
Parenting Practices				
Appropriate Discipline	.12	.13	.09	.13
Harsh/Inconsistent Discipline	-.17	-.17	-.13	-.19*
Positive Verbal Discipline	.43**	.36**	.35**	.43**
Monitoring	.21*	.16	.01	.17
Praise/Incentives	.16	.18	.23*	.20*
Clear Expectations	.26*	.04	.11	.19
Parental Involvement				
Self-Efficacy	.44**	.30**	.34**	.41**
Role Construction	.34**	.32**	.29**	.36**
Time and Energy	.44**	.32**	.42**	.46**
Knowledge and Skills	.34**	.32**	.24*	.35**
Parent/Teacher Involvement	.18	.13	.11	.18
Instrumental Involvement	.41**	.30**	.37**	.42**
Management of Home Learning Environment	.42**	.36**	.30**	.44**
Supportive Involvement	.37**	.36**	.26*	.39**
Trust of Child's Teacher	.19*	.08	.14	.16

* $p < .05$; ** $p < .01$.

For the teacher-rated strengths sample, Positive Verbal Discipline and Self-Efficacy had significant positive correlations with Total Social-Emotional Strengths as rated by teachers ($r = .28$). All PI variables except for Management of the Home Learning Environment were significantly correlated with Total Strengths as rated by teachers and can be seen in Table 31.

Table 31

Correlations between Parenting Practices Interview, Parent Involvement Project Questionnaire-Modified, Fast Track, Parent Support for Learning Scale, and Trust and Social-Emotional Assets and Resilience Scales for Teacher-Rated Strengths Sample (n = 152-165)

Parenting Variables	Teacher Sample Total Strengths
Parenting Practices	
Appropriate Discipline	.08
Harsh/Inconsistent Discipline	-.14
Positive Verbal Discipline	.28**
Monitoring	.03
Praise/Incentives	.04
Clear Expectations	.06
Parental Involvement	
Self-Efficacy	.28**
Role Construction	.25**
Time and Energy	.21*
Knowledge and Skills	.20*
Parent/Teacher Involvement	.18*
Instrumental Involvement	.28**
Management of Home Learning Environment	.16
Supportive Involvement	.22*
Trust of Child's Teacher	.36**

* $p < .05$; ** $p < .01$.

Correlations between demographic variables and predictor and outcome variables were also calculated for both the parent-rated strengths and teacher-rated strengths samples.

Demographic variables included age, socioeconomic status, and gender. Gender was coded as one equal to male, and two equal to female. For the parent-rated strengths sample (Table 32), Clear Expectations had a significant negative correlation with socioeconomic status ($r = -.19$), while Parental Role Construction and Knowledge and Skills had a positive correlation with socioeconomic status ($r = .20$; $.27$). Outcome variables, Self-Regulation/Responsibility ($r = .35$), Empathy ($r = .27$), and Total Parent-Rated Strengths ($r = .32$) had significant positive correlations with the child's gender (i.e., female children were rated higher than male children).

Table 32

Parenting Practices, Parental Involvement, Social-Emotional Strengths, and Demographic Variables for the Parent-Rated Sample (n = 116-120)

Parent Sample	Socioeconomic status	Child's age	Child's gender
Parenting Practices			
Appropriate Discipline	-.04	.03	-.06
Harsh/Inconsistent Discipline	-.02	.01	-.00
Positive Verbal Discipline	.18	.01	.01
Monitoring	-.05	.03	-.02
Praise/Incentives	-.11	-.06	-.18
Clear Expectations	-.19*	.04	.03
Parental Involvement			
Self-Efficacy	.16	.04	.18
Role Construction	.20*	-.01	.04
Time and Energy	.14	.02	.09
Knowledge and Skills	.27**	.02	.12
Parent-Rated Social-Emotional Strengths			
Self-Regulation/Responsibility	.05	.17	.35**
Social Competence	.16	.04	.15
Empathy	.06	.11	.27**
Total Strengths	.08	.14	.32**

Note. Gender was coded with 1 = male and 2= female. Higher value is indicative of superior socioeconomic status.

* $p < .05$; ** $p < .01$.

In the teacher-rated strengths sample (Table 33), age, socioeconomic status, and gender were also the demographic variables. In this sample, gender was also coded as male equal to 1, and female equal to two. Praise and Incentives and Total Teacher-Rated Strengths had a significant positive correlation with the child's gender ($r = .27$; $.30$). Knowledge and Skills had a significant positive correlation with socioeconomic status ($r = .22$) and Total Strengths was positive correlated with the child's age ($r = .24$).

Table 33

Parenting Practices, Parental Involvement, Social-Emotional Strengths, and Demographic Variables for the Teacher-Rated Strengths Sample (n = 153-156)

Teacher Sample	Socioeconomic status	Child's age	Child's gender
Parenting Practices			
Appropriate Discipline	.03	.05	-.07
Harsh/Inconsistent Discipline	.06	.01	.02
Positive Verbal Discipline	.14	.01	-.02
Monitoring	-.04	.02	-.02
Praise/Incentives	-.12	-.05	-.18*
Clear Expectations	-.12	.03	.05
Parental Involvement			
Self-Efficacy	.14	.11	.13
Role Construction	.12	-.09	.03
Time and Energy	.08	.05	.02
Knowledge and Skills	.22*	.04	.10
Teacher-Rated Social-Emotional Strengths			
Total Strengths	.10	.24**	.30**

Note. Gender was coded with 1 = male and 2= female.

* $p < .05$; ** $p < .01$.

Finally, correlations between the parent-rated Total Social-Emotional Strengths on the SEARS-P and the teacher-rated Total Social-Emotional Strengths on the SEARS-TSF were calculated within the parent-rated Total Strengths sample and the teacher-rated Total Strengths sample. In both the parent-rated and teacher-rated strengths samples, Total Strengths rated by the parent had a significant, moderate and positive correlation with Total Strengths rated by the teacher ($r = .48$). Therefore, the correlation between parent and teacher ratings of Total Strengths in the parent-rated sample and the teacher-rated sample were exactly the same.

Comparison between U.S. and Canadian Sample

In order to assess whether there were significant differences in means for all continuous variables between participants from the U.S. and Canada, independent sample *t*-tests were also conducted within each sample (Appendix I). For the parent-rated strengths sample, statistically significant differences were found between the U.S. ($M = 6.57$, $SD = 0.45$) and Canada ($M = 6.10$, $SD = 0.76$) for Monitoring ($t [116] = 4.20$, $p < .01$), Praise and Incentives (U.S., $M = 4.50$, $SD = 0.86$; Canada, $M = 4.04$, $SD = 0.73$; $t [116] = 2.81$, $p < .01$), as well as Trust (U.S., $M = 2.74$, $SD = 0.37$; Canada, $M = 2.47$, $SD = 0.45$; $t [118] = 3.33$, $p < .01$). There were also statistically significant mean differences between participants from the U.S. ($M = 2.36$, $SD = 0.50$) and Canada ($M = 2.01$, $SD = 0.39$) for Parent/Teacher Involvement ($t [118] = 3.72$, $p < .05$), Instrumental Involvement (U.S., $M = 4.61$, $SD = 0.38$; Canada, $M = 4.42$, $SD = 0.46$; $t [115] = 2.40$, $p < .05$) and Trust of the child's teacher (U.S., $M = 2.74$, $SD = 0.37$; Canada, $M = 2.47$, $SD = 0.45$; $t [118] = 3.33$, $p < .01$).

For the teacher-rated strengths sample, statistically significant differences in means were found for Monitoring (U.S., $M = 6.56$, $SD = 0.50$; Canada, $M = 6.23$, $SD = 0.68$; $t [150] = 3.37$, $p < .01$), Praise and Incentives (U.S., $M = 4.47$, $SD = 0.85$; Canada, $M = 4.19$, $SD = 0.71$; $t [152] = 2.18$, and $p < .05$), Clear Expectations (U.S., $M = 4.14$, $SD = 0.86$; Canada, $M = 3.76$, $SD = 0.84$; $t [152] = 2.65$, $p < .05$). Mean differences that were also statistically significant included Parent/Teacher Involvement (U.S., $M = 2.34$, $SD = 0.50$; Canada, $M = 1.98$, $SD = 0.43$; $t [154] = 4.58$, $p < .01$), Instrumental Involvement (U.S., $M = 4.60$, $SD = 0.40$; Canada, $M = 4.32$, $SD = 0.46$; $t [147] = 3.87$, $p < .01$), Management of the Home Learning Environment (U.S., $M = 4.32$, $SD = 0.48$; Canada, $M = 4.11$, $SD = 0.52$; $t [147] = 2.48$, $p < .05$), and Trust of the child's teacher (U.S., $M = 2.71$, $SD = 0.39$; Canada, $M = 2.47$, $SD = 0.46$; $t [154] = 3.54$, $p < .01$). Although

some of the values were statistically different between the U.S. and Canadian samples, the clinical significance of these findings was small. For example, for most of the significant differences, on average, the parents in both samples were rating their children at the same anchor (e.g., between a 4 and 5). Thus it was decided to retain both U.S. and Canadian participants for subsequent analyses.

Primary Analyses

A total of 10 multiple regression analyses were conducted in order to answer the research question posed in this study. Key assumptions essential for multiple regression analyses were considered and are described in combination with the results for each regression equation.

Research question one. In order to assess which parenting variables (Self-Efficacy, Role Construction, Time and Energy, Knowledge and Skills, Parent Involvement with their child's Teacher, Trust of child's teacher, Appropriate Discipline, Harsh and Inconsistent Discipline, Positive Verbal Discipline, Praise and Incentives, Monitoring, Clear Expectations, Instrumental Involvement in learning, Management of the Home Learning Environment, and Supportive Parental Involvement) were predictive of Social-emotional Strengths (Social Competence, Self-Regulation, Empathy, Responsibility, and Total Strengths) in kindergartners, a hierarchical multiple regression analysis was conducted. For each outcome variable, two multiple regression models were run (total of ten models). The first model included gender and socioeconomic status as predictors of the outcome. The second model added the parent variables as predictor variables to the first model. Results from multiple regression analyses can be seen in Table 36 through Table 45. For all analyses, an alpha level of .05 was set in order to determine statistical significance.

Self-regulation/responsibility. Gender and socioeconomic status were predictors in the first model in order to assess to what degree they predicted parent-rated Self-Regulation-Responsibility.

The results of model one were significant $F(2, 111) = 7.05, p < .001$ and can be said to explain 12% of the variance in parent-rated Self-Regulation/Responsibility (see Table 34). Significant individual predictors were gender ($\beta = .07, p < .01$), indicating that for every one standard deviation increase in gender led to a .07 increase in parent-rated Self-Regulation/Responsibility. This indicates that being female was associated with having higher parent-rated Self-Regulation/Responsibility.

To evaluate the assumptions underlying the multiple regression analysis the residuals from the model were examined. Skewness and kurtosis values for the residuals suggested no major departures from normality. Visual analysis of the scatter plots of the residuals against the predictor variables showed no evidence of violations of the homoscedasticity assumption.

Table 34

Model 1: Gender and Socioeconomic Status as Predictors of Parent-Rated Self-Regulation/Responsibility (n = 117)

Variable	B (SE)	B	Sig. (p)
Gender	.35 (.10)	.33	.00**
Socioeconomic Status	.02 (.03)	.07	.47
R ²	.12**		
F	7.05		

Note. Gender was coded with 1 = male and 2= female.

* $p < .05$; ** $p < .01$. ** R^2 indicates p -value $< .001$.

Next, in model two the parenting variables were added as predictor variables in addition to socioeconomic status and gender. Self-Regulation/Responsibility remained the outcome variable in this multiple regression equation. To evaluate multicollinearity of the predictor

variables, correlations between the predictor variables were calculated. The highest correlation between the predictors was $r = -.37$ (Knowledge/Skills and Parental Self-Efficacy) and the VIFs for all independent variables were less than 10, suggesting no major problems with multicollinearity.

Model two was significant $F(17, 111) = 5.25, p < .001$, and accounted for 49% of the variance in Self-Regulation/Responsibility (see Table 35). The parenting variables explained an additional 37% of the variance in Self-Regulation/Responsibility than gender and socioeconomic status alone, and the R^2 change was significant $F(15, 94) = 4.55, p < .01$.

Significant individual predictors included Positive Verbal Discipline ($\beta = .30, p < .01$), which indicated that for every one standard deviation unit increase in Positive Verbal Discipline there was a .30 standard deviation increase in Self-Regulation/Responsibility. Gender was also a significant individual predictor ($\beta = .34, p < .01$), also indicating that for every one standard deviation increase in gender leads to a .34 increase in Self-Regulation/Responsibility. In other words, female status was associated with higher levels of parent-rated Self-Regulation/Responsibility.

Assumptions underlying the multiple regression were again examined by an analysis of the residuals from the model. Skewness and kurtosis values for the residuals suggested no major departures from normality, and visual analysis showed no evidence of violations of the homoscedasticity assumption.

Table 35

Model 2: Parenting Variables, Gender, and Socioeconomic Status as Predictors of Parent-Rated Self-Regulation/Responsibility (n = 112)

Variable	B (SE)	B	Sig. (p)
Role Construction	.15 (.10)	.16	.12
Time and Energy	.07 (.09)	.10	.41
Knowledge and Skills	-.06 (.10)	-.08	.52
Trust	-.10 (.12)	-.07	.41

Table 35 (Continued)

Self-Efficacy	.15 (.10)	.18	.11
Instrumental Involvement	-.08 (.15)	-.06	.59
Supportive Parental Involvement	.22 (.15)	.16	.14
Management of the Home Learning Environment	.14 (.12)	.13	.25
Appropriate Discipline	-.10 (.06)	-.15	.12
Harsh/Inconsistent Discipline	.02 (.07)	.03	.75
Positive Verbal Discipline	.22 (.07)	.30	.00**
Monitoring	.02 (.08)	.02	.85
Clear Expectations	.07 (.06)	.12	.21
Parent/Teacher Involvement	.03 (.09)	.03	.70
Praise and Incentives	.05 (.05)	.08	.37
Gender	.36 (.09)	.34	.00**
Socioeconomic Status	-.03 (.03)	-.07	.44
R ²	.49**		
F	5.25		

Note. Gender was coded with 1 = male and 2= female.

* $p < .05$; ** $p < .01$. ** R^2 indicates p -value $< .001$.

Social competence. Socioeconomic status and gender were used in a regression equation as predictors of parent-rated Social Competence for model three. This model was not significant, nor was there any significant individual predictors (Table 38).

Table 36

Model 3: Gender and Socioeconomic Status as Predictors of Parent-Rated Social Competence (n = 113)

Variable	B (SE)	B	Sig. (p)
Gender	.16 (.10)	.35	.12
Socioeconomic Status	.05 (.03)	.14	.14
R ²	.04		
F	2.48		

* $p < .05$; ** $p < .01$.

In model four, the parenting variables were added to the model with socioeconomic status and gender as predictor variables and parent-rated Social Competence as the outcome variable.

All VIFs were below ten, and the highest correlation between predictors was $r = -.28$ (Positive

Verbal Discipline and socioeconomic status) demonstration no major issues with multicollinearity.

Model four was significant $F(17, 112) = 2.79, p < .001$, and accounted for 33% of the variance in parent-rated Social Competence (see Table 37). The parenting variables explained an additional 29% of the variance in Social Competence over and above that explained by gender and socioeconomic status, and the R^2 change was significant $F(15, 95) = 2.75, p < .01$.

Significant individual predictors included Positive Verbal Discipline ($\beta = .25, p < .05$), indicating that for every one standard deviation increase in Positive Verbal Discipline leads to a .25 increase in parent-rated Social Competence. Supportive PI was another significant individual predictor ($\beta = .30, p < .05$), indicating that for every one standard deviation increase in Supportive PI leads to a .30 increase in parent-rated Social Competence. Last, gender was a significant individual predictor ($\beta = .22, p < .05$), indicating that for every one standard deviation increase in gender leads to a .22 increase in Social Competence. This indicates that being female was associated with higher levels of parent-rated Social Competence.

To examine the underlying assumptions of the multiple regression an analysis was conducted of the residuals from the model. Skewness and kurtosis values suggested no major departures from normality, and a visual analysis provided no evidence of violations of the homoscedasticity assumption.

Table 37

Model 4: Parenting Variables, Gender, and Socioeconomic Status as Predictors of Parent-Rated Social Competence (n = 113)

Variable	B (SE)	B	Sig. (p)
Role Construction	.15 (.11)	.16	.16
Time and Energy	-.03 (.10)	-.04	.77
Knowledge and Skills	.07 (.11)	.09	.50
Trust	-.25 (.13)	-.20	.06
Self-Efficacy	.01 (.10)	.01	.94
Instrumental Involvement	-.21 (.17)	-.17	.21

Table 37 (Continued)

Supportive Parental Involvement	.41 (.17)	.30	.02*
Management of the Home Learning Environment	.17 (.13)	.17	.19
Appropriate Discipline	.03 (.07)	.06	.61
Harsh/Inconsistent Discipline	-.02(.08)	-.02	.81
Positive Verbal Discipline	.17 (.08)	.25	.03*
Monitoring	.01 (.08)	.01	.93
Clear Expectations	-.08(.06)	-.14	.20
Parent/Teacher Involvement	.02 (.10)	.02	.85
Praise and Incentives	.10 (.06)	.17	.09
Gender	.23 (.10)	.22	.02*
Socioeconomic Status	-.01 (.04)	-.03	.74
R ²	.33**		
F	2.79		

Note. Gender was coded with 1 = male and 2= female.

* $p < .05$; ** $p < .01$. ** R^2 indicates p -value $< .001$.

Empathy. Gender and socioeconomic status were also assessed for their ability to predict parent-rated Empathy in model five. This model was not significant, however, gender was a significant individual predictor of parent-rated Empathy ($\beta = .26, p < .05$), indicating that for every one standard deviation increase in gender led to a .27 increase in Empathy (see Table 38) and that being female was correlated with higher levels of parent-rated Empathy.

Again, in order to evaluate the assumptions underlying the multiple regression analysis the residuals were examined. Skewness and kurtosis values for the residuals suggested no major departures from normality. Visual analysis of the scatter plots of the residuals against the predictor variables also showed no evidence of violations of the homoscedasticity assumption.

Table 38

Model 5: Gender and Socioeconomic Status as Predictors of Parent-Rated Empathy (n = 119)

Variable	B (SE)	B	Sig. (p)
Gender	.29 (.10)	.26	.01*
Socioeconomic Status	.03 (.03)	.07	.43
R ²	.06		
F	4.55		

Note. Gender was coded with 1 = male and 2= female.

* $p < .05$; ** $p < .01$.

In model six, the parenting variables were added to the model with gender and socioeconomic status as predictor variables and parent-rated Empathy was the outcome variable. No major problems with multicollinearity were detected with the highest correlation again being $r = -.37$ (Instrumental Involvement and Supportive PI), and all VIFs under ten.

Model six was significant $F(17, 113) = 3.31, p < .001$, and accounted for 37% of the variance in parent-rated Empathy (see Table 39). The parenting variables explained an additional 29% of the variance in Empathy over and above that explained by gender and socioeconomic status, and the R^2 change was significant $F(15, 96) = 2.98, p < .01$.

Significant individual predictors included Time and Energy ($\beta = .33, p < .05$), Monitoring ($\beta = -.20, p < .05$), Praise and Incentives ($\beta = .22, p < .05$), and gender ($\beta = .27, p < .01$). This indicated that for every one standard deviation increase in the predictor variable leads to a .33 increase in Empathy for Time and Energy, a -.20 decrease in Empathy for Monitoring, a .22 increase in Empathy for Praise and Incentives, and a .27 increase in Empathy for gender. This indicates that being female was associated with higher levels of parent-rated Empathy.

The underlying visual analysis of the scatter plots of the residuals against the predictor variables provided no evidence of violations of the homoscedasticity assumption.

Table 39

Model 6: Parenting Variables, Gender, and Socioeconomic Status as Predictors of Parent-Rated Empathy (n = 114)

Variable	B (SE)	B	Sig. (p)
Role Construction	-.01 (.11)	-.01	.94
Time and Energy	.25 (.10)	.33	.01*
Knowledge and Skills	-.09 (.11)	-.11	.38
Trust	-.14 (.13)	-.10	.30
Self-Efficacy	.10 (.10)	.12	.31
Instrumental Involvement	.06 (.17)	.05	.71
Supportive Parental Involvement	.11 (.17)	.08	.50
Management of the Home Learning Environment	.07 (.13)	.06	.60
Appropriate Discipline	-.06 (.07)	-.10	.36
Harsh/Inconsistent Discipline	-.00 (.07)	-.00	.99
Positive Verbal Discipline	.14 (.08)	.20	.06
Monitoring	-.18 (.08)	-.20	.04*
Clear Expectations	-.02(.06)	-.03	.75
Parent/Teacher Involvement	-.00 (.10)	-.00	.97
Praise and Incentives	.14 (.06)	.22	.03*
Gender	.29 (.10)	.27	.00**
Socioeconomic Status	-.01 (.04)	-.03	.75
R ²	.37**		
F	3.31		

Note. Gender was coded with 1 = male and 2= female.

* $p < .05$; ** $p < .01$. ** R^2 indicates p -value $< .001$.

Parent total strengths. Model seven included gender and socioeconomic status as predictor variables and Total Parent-Rated social-emotional Strengths as the outcome variable.

Model seven was significant $F(2, 112) = 6.17, p < .01$, and accounted for 10% of the variance in parent-rated Total Social-Emotional Strengths (see Table 40). Significant individual predictors included gender ($\beta = .30, p < .01$), signifying that for every one standard deviation increase in gender there was a .30 increase in Total Parent-Rated Strengths (female status was associated with higher Total Parent-Rated Strengths).

Assumptions underlying the multiple regression analysis the residuals from the model were also examined. No major departures from normality were found when assessing skewness and kurtosis values for the residuals. Visual analysis of the scatter plots of the residuals against the predictor variables also showed no evidence of violations of the homoscedasticity assumption.

Table 40

Model 7: Gender and Socioeconomic Status as Predictors of Total Parent-Rated Social-Emotional Strengths (n = 118)

Variable	B (SE)	B	Sig. (p)
Gender	.30 (.09)	.30	.00**
Socioeconomic Status	.03 (.03)	.08	.36
R ²	.10*		
F	6.17		

Note. Gender was coded with 1 = male and 2= female.

* $p < .05$; ** $p < .01$. * R^2 indicates p -value $< .05$.

The parenting variables were then added to the model with gender and socioeconomic status as predictor variables of Total parent-rated social-emotional Strengths in model eight. Analysis of correlations and VIFs showed no major issues for multicollinearity as VIFs were below ten and the highest correlation was $r = -.38$ between Harsh/Inconsistent Discipline and Appropriate Discipline.

Model eight was significant $F(17, 112) = 5.01, p < .001$, and accounted for 47% of the variance in Total Social-Emotional Strengths as rated by parents (see Table 41). The parenting variables explained an additional 37% of the variance in parent-rated Total Strengths over and above that explained by than gender and socioeconomic status, and the R^2 change was significant $F(15, 95) = 4.46, p < .01$.

Significant individual predictors included Positive Verbal Discipline ($\beta = .28, p < .01$) and gender ($\beta = .34, p < .01$). This indicates that for every one standard deviation increase in the predictor variable, this would lead to a .28 increase in Total Social-Emotional Strengths as rated by parents for Positive Verbal Discipline, and a .34 increase in Total Strengths for gender.

To evaluate the assumptions underlying the multiple regression analysis the residuals from the model were analyzed. Skewness and kurtosis values for the residuals suggested no major departures from normality. Visual analysis of the scatter plots of the residuals against the predictor variables showed no evidence of violating the homoscedasticity assumption.

Table 41

Model 8: Parenting Variables, Gender, and Socioeconomic Status as Predictors of Total Parent-Rated Social-Emotional Strengths (n = 113)

Variable	B (SE)	B	Sig. (p)
Role Construction	.11 (.09)	.13	.23
Time and Energy	.10 (.08)	.14	.24
Knowledge and Skills	-.04 (.09)	-.05	.68
Trust	-.19 (.10)	-.16	.07
Self-Efficacy	.06 (.08)	.08	.47
Instrumental Involvement	-.06 (.14)	-.05	.67
Supportive Parental Involvement	.25 (.13)	.20	.07
Management of the Home Learning Environment	.19 (.11)	.19	.08
Appropriate Discipline	-.04 (.05)	-.07	.50
Harsh/Inconsistent Discipline	-.01 (.06)	-.01	.90
Positive Verbal Discipline	.18 (.06)	.28	.00**
Monitoring	-.04 (.07)	-.05	.57
Clear Expectations	-.01(.05)	-.02	.86
Parent/Teacher Involvement	.05 (.08)	.05	.53
Praise and Incentives	.08 (.05)	.14	.11
Gender	.33 (.08)	.34	.00**
Socioeconomic Status	-.03 (.03)	-.10	.28
R ²	.47**		
F	5.01		

Note. Gender was coded with 1 = male and 2= female.

* $p < .05$; ** $p < .01$. ** R^2 indicates p -value $< .001$.

Total strengths teacher. For the teacher sample, first, gender and socioeconomic status were tested as predictor variables in model nine (Table 42).

Model nine was significant $F(2, 142) = 6.80, p < .05$, and accounted for 9% of the variance in Total socio-emotional Strengths rated by the teacher. Gender was a significant individual predictor ($\beta = .28, p < .05$), indicating that for every one standard deviation increase in gender, there was a .28 increase in Total Social-Emotional Strengths as rated by teachers (female status was associated with higher Total Parent-Rated Strengths).

Table 42

Model 9: Gender and Socioeconomic Status as Predictors of Total Teacher-Rated Social-Emotional Strengths (n = 154)

Variable	B (SE)	B	Sig. (p)
Gender	.35 (.10)	.28	.00**
Socioeconomic Status	.04 (.04)	.09	.27
R ²	.09*		
F	6.80		

Note. Gender was coded with 1 = male and 2 = female.

* $p < .05$; ** $p < .01$. *R² indicates p -value $< .05$.

The parenting variables were then added to the model with gender and socioeconomic status as predictor variables and Total teacher-rated social-emotional Strengths as the outcome variable (model ten). Due to teacher-rated social-emotional strengths being rated on a short form which produces only a Total Strengths score, the teacher-rated strengths sample only included one outcome variable. No major issues were detected in the analysis of correlations or in the VIFs for multicollinearity. The highest correlation between predictor variables was $r = -.47$ between Knowledge and Skills and Self-Efficacy.

Model ten was significant $F(17, 142) = 3.01, p < .001$, and accounted for 29% of the variance in teacher-rated Total Social-Emotional Strengths (see Table 43). The parenting

variables explained an additional 20% of the variance in Total Teacher-Rated Strengths over and above that explained by gender and socioeconomic status, and the R^2 change was significant $F(15, 125) = 2.37, p < .05$.

Significant individual predictors included Trust of the child's teacher ($\beta = .27, p < .01$), indicating that for every one standard deviation increase in Trust leads to a .27 increase in Total Strengths rated by the child's teacher. Gender was also a significant individual predictor ($\beta = .20, p < .05$), which also indicates that for every one standard deviation increase in the predictor variable would lead to a .20 increase in Total Teacher-Rated Strengths. This suggests that being female is associated with higher teacher ratings of Total Social-Emotional Strengths.

Visual analysis of the scatter plots of the residuals against the predictor variables showed no evidence of violating the homoscedasticity assumption. Skewness and kurtosis values for the residuals suggested no major departures from normality.

Table 43

Model 10: Parenting Variables, Gender, and Socioeconomic Status as Predictors of Total Teacher-Rated Social-Emotional Strengths (n = 143)

Variable	B (SE)	B	Sig. (p)
Role Construction	.10 (.11)	.09	.35
Time and Energy	-.03 (.10)	-.04	.74
Knowledge and Skills	-.07 (.11)	-.07	.53
Trust	.40 (.13)	.27	.00**
Self-Efficacy	.20 (.11)	.23	.07
Instrumental Involvement	.20 (.18)	.14	.25
Supportive Parental Involvement	-.05 (.18)	-.03	.78
Management of the Home Learning Environment	-.16 (.14)	-.12	.27
Appropriate Discipline	.00 (.07)	.00	.97
Harsh/Inconsistent Discipline	-.12 (.08)	-.13	.15
Positive Verbal Discipline	.08 (.08)	.09	.37
Monitoring	-.07 (.09)	-.07	.40
Clear Expectations	-.01 (.07)	-.02	.85
Parent/Teacher Involvement	.13 (.11)	.10	.24
Praise and Incentives	-.02 (.07)	-.02	.78
Gender	.26 (.11)	.20	.01*
Socioeconomic Status	.05 (.04)	.10	.23

Table 43 (Continued)

R ²	.29**
F	3.01

Note. Gender was coded with 1 = male and 2= female.

* $p < .05$; ** $p < .01$. ** R^2 indicates p -value $< .001$.

Summary of hierarchical regression analysis. In summary, parenting variables explained an additional 37% of the variance in parent-rated Self-Regulation/Responsibility and Total Parent-Rated Strengths over and above that explained by gender and socioeconomic status, and an additional 29% in parent-rated Social Competence and Empathy. For Total Teacher-Rated Strengths, an additional 20% of the variance was explained by parenting variables over and above that explained by than gender and socioeconomic status. Table 44 displays the amount of variance explained in each model from the hierarchical regression analysis. Positive Verbal Discipline and gender were significant individual predictors of Self-Regulation/Responsibility, Social Competence, and parent-rated Total Strengths. Supportive PI was also predictive of Social Competence, while Time and Energy, Monitoring (negative relationship), Praise and Incentives, and gender were significant individual predictors of Empathy. Last, Trust and the child's gender were predictive of teacher-rated Total Strengths. A summary table of significant and non-significant individual predictors for each outcome variable can be seen in Table 45.

Table 44

Summary of Variance Explained in Hierarchical Regression Analysis for Variables Predicting Social-Emotional Domains

Predictor Variable	Outcome Variable				
	Self-Regulation/Responsibility (%) <i>n</i> = 112-117	Social Competence (%) <i>n</i> = 113	Empathy (%) <i>n</i> = 114-119	Total parent-rated Strengths (%) <i>n</i> = 113-118	Total teacher-rated Strengths (%) <i>n</i> = 143-154
Model: Gender and socioeconomic status	12	4	6	10	9
Model: Gender, socioeconomic status + parenting variables	49	33	37	47	29

Note. Models including Self-Regulation/Responsibility, Social Competence, Empathy, and Total Parent-Rated Strengths were completed in the parent-rated strengths sample (*n* = 122). Models including Total Teacher-Rated Strengths as the outcome variable were completed in the teacher-rated strengths sample (*n* = 166).

Table 45

Significant Individual Predictors for All Regression Models

Predictor Variable	Outcome Variable				
	Self-Regulation/ Responsibility <i>n</i> = 112-117	Social Competence <i>n</i> = 113	Empathy <i>n</i> = 114-119	Total Parent- Rated Strengths <i>n</i> = 113-118	Total Teacher- Rated Strengths <i>n</i> = 143-154
Role Construction	ns	ns	ns	ns	ns
Time and Energy	ns	ns	+	ns	ns
Knowledge and Skills	ns	ns	ns	ns	ns
Trust	ns	ns	ns	ns	+
Self-Efficacy	ns	ns	ns	ns	ns
Instrumental Involvement	ns	ns	ns	ns	ns
Supportive Parental Involvement	ns	+	ns	ns	ns
Management of the Home Learning Environment	ns	ns	ns	ns	ns
Appropriate Discipline	ns	ns	ns	ns	ns
Harsh/Inconsistent Discipline	ns	ns	ns	ns	ns
Positive Verbal Discipline	+	+	ns	+	ns
Monitoring	ns	ns	-	ns	ns
Clear Expectations	ns	ns	ns	ns	ns
Parent/Teacher Involvement	ns	ns	ns	ns	ns
Praise and Incentives	ns	ns	+	ns	ns
Gender	+	+	+	+	+
Socioeconomic Status	ns	ns	ns	ns	ns

Note. ns=Not a significant individual predictor of the outcome variables. – indicates the predictor variable has a negative relationship with the outcome variable; as the outcome variable increases, the predictor variable decreases. + indicates a positive relationship with the outcome variable; as the outcome variable increases, the predictor variable also increases.

Independent *t*-Tests

Parent-rated strengths sample. Due to gender being a significant individual predictor for all regression equations, independent samples *t*-tests were conducted in order to determine if mean differences between males and females for all outcome variables were statistically significant in the parent-rated strengths sample. First, there was a significant difference between mean scores for males ($M = 1.39, SD = 0.51$) and females ($M = 1.75, SD = 0.48$) on Self-Regulation/Responsibility, $t(115) = -3.97, p < .01$. There was also a statistically significant difference between mean scores for males ($M = 1.94, SD = 0.54$) and females ($M = 2.23, SD = 0.48$) for Empathy, $t(117) = -3.03, p < .01$. Last, there was a statistically significant difference between mean scores for males ($M = 1.67, SD = 0.46$) and females ($M = 1.97, SD = 0.43$) on Total Strengths when rated by parents, $t(116) = -3.59, p < .01$. The mean difference between males and females for Social Competence was not significant (see Table 46). Females had statistically significant higher mean scores for Self-Regulation/Responsibility, Empathy, and Total Strengths when rated by parents. In other words, females were rated as having more skills in these domains than males when rated by their parents.

Table 46

Independent Samples t-tests Comparing Males and Females for Parent-Rated Strengths Sample (n = 122)

Outcome Variable	Male			Female			<i>t</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	
Self-Regulation/ Responsibility	64	1.39	0.51	53	1.75	0.48	-3.97**
Social Competence	65	2.09	0.55	53	2.24	0.46	-1.64
Empathy	66	1.94	0.54	53	2.23	0.48	-3.03**
Total Strengths	65	1.67	0.46	53	1.97	0.43	-3.59**

Note. Value reported in *t*-test column is the value for *t*-statistic if equal variances are assumed. Male was coded as 1; female as 2.

* $p < .05$, ** $p < .01$, two-tailed.

Teacher-rated strengths sample. An independent samples *t*-test was also conducted for the teacher-rated strengths sample in order to assess the presence of statistically significant differences in group means for Total Strengths when rated by teachers. There was a statistically significant difference between mean scores for males ($M = 1.76$, $SD = 0.65$) and females ($M = 2.14$, $SD = 0.57$) on Total Strengths when rated by teachers, $t(152) = -3.83$, $p < .01$ (Table 47). Females were higher than males, which was indicative that females were rated by teachers as having more social-emotional strengths.

Table 47

Independent Samples t-tests Comparing Males and Females for Teacher-Rated Strengths Sample (n = 122)

Outcome Variable	Male			Female			<i>t</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	
Total Strengths	83	1.76	0.65	71	2.14	0.57	-3.83**

Note. Value reported in *t*-test column is the value for *t*-statistic if equal variances are assumed. Male was coded as 1; female as 2.

* $p < .05$, ** $p < .01$, two-tailed.

CHAPTER FIVE: DISCUSSION

The purpose of this study was to determine to what extent parenting variables predict social-emotional strengths in early childhood. Parenting variables included a multidimensional definition of Parental Involvement (PI) that included PI to support learning at home, PI in educational settings, and general parenting practices. Social-emotional strengths were also defined multidimensionally, and included Self-Regulation/Responsibility, Empathy, and Social Competence. Last, this study examined strengths when reported by teachers and by parents.

This study is important because of its contribution to the literature regarding the multidimensional definition of PI and social-emotional strengths, but also in its assessment of the ability of parenting variables to predict social-emotional outcomes, specifically social-emotional strengths. Parenting styles and PI in a child's education are often focused on the child's educational outcomes, or on negative aspects of parenting and its contribution to emotional and behavioral issues. Results from this study provide information on developing social-emotional strengths in youth in order to nurture positive outcomes in the areas of academic achievement, school adjustment, and positive peer relationships, as well as reduce emotional and behavioral issues and encourage well-being in youth. In the following section, the results from the current study will be discussed, as well as contributions to the literature, limitations of the study, and future directions and implications for researchers and school psychologists.

Parenting Variables Significantly Correlated with Social-Emotional Strengths

Parent-rated strengths sample. There were a number of parenting variables that were significantly correlated with the outcome variables in the expected directions consistent with previous literature. In the parent-rated strengths sample, many parenting practices were associated with social-emotional strengths. Harsh and Inconsistent Discipline had a significant negative relationship with parent-rated Total Strengths, Monitoring had a significant positive relationship with Self-Regulation/Responsibility, Praise and Incentives was positively associated with Empathy, and Clear Expectations had a positive relationship with Self-Regulation/Responsibility. Positive Verbal Discipline also had a significant positive relationship with all four outcome variables (Self-Regulation/Responsibility, Social Competence, Empathy, and Total Strengths). Positive Verbal Discipline included getting the child to correct his/her mistake if he or she misbehaves, discussing the misbehavior or problem with the child, and praising and rewarding the child on more occasions than he or she is criticized. For the positive relationships, this indicates as the amount of the parenting variable goes up, so does the social-emotional domain. For Harsh and Inconsistent Discipline, as the use of it decreases, Total parent-rated social-emotional Strengths increase.

For PI variables, there were also many significant correlations with social-emotional domains. Self-Efficacy, Role Construction, Time and Energy, Knowledge and Skills, Instrumental Involvement, Management of the Home Learning Environment, and Supportive PI, were all positively correlated with all of the social-emotional outcome variables. This indicates that as the use or level of PI in these areas go up, the social-emotional skill or Total Strengths in the youth also increases.

Teacher-rated sample. In the teacher-rated strengths sample, Positive Verbal Discipline, Self-Efficacy, Role Construction, Time and Energy, Knowledge and Skills, Parent/Teacher Involvement, Instrumental Involvement, Supportive Involvement, and Trust of the Child's teacher all had significant positive associations with Total Strengths when rated by the teacher.

Variables that did not have a significant association with social-emotional strengths, despite contrary findings in previous literature, included Appropriate Discipline and Socioeconomic Status.

In terms of socioeconomic status having no significant correlation with the outcome variables, this was somewhat unexpected due to previous findings indicating a significant association between the two. For example, in Winer and Thompson (n.d), the level of education of the mother, their household income, and symptoms of depression were all shown to have a short-term relation to a preschooler's understanding of emotions, and a long-term relation to children's development of Social Competence throughout early childhood. However, mother's education level was found to be the strongest predictor of a child's understanding of emotions at age four, rather than socioeconomic status. Similar to Winer and Thompson (n.d.), the current study computed socioeconomic status by finding the mean of family income and the parent's level of education. Gershoff, Aber, Raver, and Lennon (2003) also found that out of 21,255 kindergartners, there was an association between family income and material hardship (slightly different approach to measuring socioeconomic status than the current study) with the children's social-emotional and cognitive skills. Upon testing pathways of these associations, it became evident that as family income increased, parent investment in their child's school increased, and in turn, so did the child's cognitive and academic skills. The higher the family income also led to less family hardship, which increased the use of positive parenting practices, and reduced the

presence of behavior problems in youth (Gershoff et al., 2003). This demonstrates that although socioeconomic status appears to play a role in social-emotional strengths based on prior research, social-emotional strengths were also associated with positive parenting practices and PI in the current study. This is promising because parenting variables are more malleable than socioeconomic status.

In regard to Appropriate Discipline not having a significant association with social-emotional domains, it may be important to look at the difference between Appropriate Discipline and Positive Verbal Discipline, which did have many positive associations with other variables. Appropriate Discipline appears to emphasize disciplining consistently and appropriately, whereas Positive Verbal Discipline is more focused on providing the child with the opportunity to make up for their mistakes and praising and rewarding them for his or her behavior. Therefore, one would expect that while consistency in discipline is important, that Positive Verbal Discipline is more connected to the development of social-emotional strengths due to its emphasis on providing teaching moments and praising and rewarding the child for his or her positive behavior, not just providing Appropriate Discipline strategies for problematic behavior.

Parenting Variables as Predictors of Social-Emotional Strengths

The results of the current study demonstrated that parenting variables were significant in predicting social-emotional strengths in youth. When parenting variables were assessed for the degree in which they explained variance in addition to gender and socioeconomic status, the percentage of variance explained by parenting variables was over and above that explained by gender and socioeconomic. Findings for the models that included parenting variables (models 2, 4, 6, 8, and 10) will be discussed.

Parent-rated self-regulation/responsibility. All parenting variables in combination with gender and socioeconomic status accounted for 49% of the variance in parent-rated Self-Regulation/Responsibility. The parenting variables explained an additional 37% of the variance in Self-Regulation/Responsibility beyond that accounted for by gender and socioeconomic status.

Significant predictors of Self-Regulation/Responsibility included Positive Verbal Discipline and gender. These findings are consistent with the extant literature that has found positive and consistent behavior management strategies (i.e., Positive Verbal Discipline; Praise and Incentives; Clear Expectations) to be associated with the development of Self-Regulation in youth (McMahon & Forehand, 2003; Webster-Stratton, 2005). Dennis (2006) also found that parenting variables such as approach, avoidance, control, and warmth were associated with a child's ability to regulate his or her emotions during a free play time and a waiting task. In other words, when a child must use Self-Regulation during a potentially frustrating task, the parent's approach (i.e., whether they emphasize potential rewards of Self-Regulation and discuss positive outcomes versus emphasizing threats if regulation is not used) impacts how effectively the child is able to use Self-Regulation skills (Dennis, 2006). These findings reflect the positive impact the use of Positive Verbal Discipline, warmth, and control has on children's social-emotional competencies, especially during potentially frustrating tasks in which Self-Regulation skills may be required. If the parent redirects the child to more positive rewards and outcomes by using their social-emotional skills and outlines clear expectations for doing so, the child is also more likely to demonstrate Self-Regulation skills (Dennis, 2006).

In terms of gender, Dennis (2006) found that girls had greater inhibitory control when compared to boys ($M = 4.79$ versus $M = 4.52$), supporting the findings of the current study that

gender was a significant individual predictor of Self-Regulation/Responsibility. Independent samples *t*-tests also indicated that female status was associated with higher parent ratings of Self-Regulation/Responsibility and that the mean differences between males and females for this outcome variable were significant.

Parent-rated social competence. For Social Competence, 33% of the variance was explained by the parenting variables, gender, and socioeconomic status. The parenting variables explained an additional 29% of the variance in parent-rated Social Competence beyond that accounted for by gender and socioeconomic status.

For Social Competence, significant individual predictors that were consistent with previous literature included Supportive PI, Positive Verbal Discipline, and gender. Previous research indicating that four-year-olds with average levels of Social Competence had mothers who used Positive Verbal Discipline, Praise and Incentives, and were supportive (Webster-Stratton, 1998). More specifically, in this study (Webster-Stratton, 1998) of 394 Head Start mothers, participants were randomly assigned to a control or intervention group designed to increase parent effectiveness. The intervention taught Positive Verbal Discipline including the use of Praise and Incentives, setting Clear Expectations, and being involved in the child's learning (PI at home/Supportive PI). As a result of the intervention, parents in this group were found to use less critical remarks, commands, and harsh discipline, while feeling more positive and competent regarding their parenting practices. Children of the parents in the intervention group were also reported as more socially competent by their teachers when their parents were involved in their child's education (Webster-Stratton, 1998).

As described above, Kjøbli and colleagues (2013) conducted a randomized control trial of a parent practice intervention that also found that when parent's skills in Positive Verbal

Discipline and other areas increased, so did children's Social Competence. In summary, prior research supports that Supportive PI and Positive Verbal Discipline are predictive of Social Competence.

Previous literature has also found that controlling or harsh parenting practices and a lack of PI at home and at school, has been linked to poorer outcomes when compared to more positive parenting practices and higher levels of PI (Niggli et al., 2007; Peek Corbin-Staton, 2009, Pomerantz & Eaton, 2001). Therefore, one would expect that Supportive PI would be associated with overall positive outcomes, such as developing strengths in Social Competence. However, more research is needed to explore the relationship between Supportive PI and Social Competence.

Gender was also a significant individual predictor, indicating that female status was more predictive of higher levels of Social Competence. This finding was consistent with previous research that indicated that in a study of 49 kindergarten students, teachers rated the girls higher in Social Competence when compared to boys (Schmidt, Demulder, & Denham, 2002). However, independent samples *t*-tests revealed that this was the only outcome variable that did not have statistically significant differences between the mean scores of males and females. Despite the difference in mean scores not being statistically significant, (males: $M = 2.09$, $SD = 0.55$ versus females: $M = 2.24$, $SD = 0.46$), females scoring higher than males in Social Competence showed the same trend as previous research.

Parent-rated empathy. When predicting Empathy, parenting variables, socioeconomic status, and gender explained 37% of the variance. The parenting variables explained an additional 29% of the variance in parent-rated Empathy beyond that accounted for by gender and socioeconomic status.

Significant individual predictors included Time and Energy, Monitoring (negative relationship), Praise and Incentives, and gender. Independent samples *t*-tests revealed that differences in female and male status for this variable were statistically significant, indicating that females were rated by parents as having higher levels of Empathy.

No literature could be located supporting the ability of parental Time and Energy to predict Empathy in youth. However, one hypothesis for why this was a significant individual predictor could be that if a parent has enough time and energy to help out at school, support the child in their homework, and communicate effectively with their child's teacher (all subscale items for Time and Energy) the child may learn that it is a positive to care about and support others, all aspects of Empathy as defined on the SEARS-P.

Prior research on Monitoring (i.e., child is supervised or the parent knows where the child is if not under their direct supervision) indicated that findings related to the negative relationship between this parenting variable and parent-rated Empathy was not expected. For example, low levels of supervision and Monitoring have been found to be associated with low levels of Empathy and antisocial behavior in adulthood (Schaffer, Clark, & Jeglic, 2009). Higher levels of Monitoring has also been associated with more prosocial behavior in early childhood (Power & Bradley-Klug, 2013). Therefore, one would anticipate a positive relationship between Monitoring and parent-rated Empathy. However, one hypothesis for why Monitoring had a negative relationship with parent-rated Empathy could be due to where kindergartens are developmentally. Kindergarten students may exhibit lower levels of Empathy due to their developmental stage, but have high levels of supervision from their parents. In the current study, there was a limited range of variability in Monitoring due to the participants all being kindergarten students. The Monitoring subscale also had a low Cronbach's alpha, which is a

limitation for this variable. Further research is needed to clarify the relationship between Monitoring and parent-rated Empathy.

As indicated in prior chapters, more attention has been paid in the literature to the development of Social Competence and Self-Regulation. Therefore, in terms of Praise and Incentives, no studies could be located to support that it is predictive of Empathy. However, in reviewing the literature, Empathy tends to be included as a component of Social Competence, while Praise and Incentives tends to be included as an aspect of Positive Verbal Discipline strategies. As previous chapters explained in more detail, PI and positive parenting practices such as Positive Verbal Discipline can positively impact social-emotional outcomes. Therefore, considering Praise and Incentives as an aspect of Positive Verbal Discipline strategies would also make this finding consistent with previous literature. However, further research is needed to connect positive parenting practices with Empathy.

In terms of gender, Roberts and Strayer (1996) found that when friends, teachers, and parents evaluated the levels of Empathy in five, nine, and 13 year olds in response to laboratory tasks, girls were found to have higher mean scores of Empathy than boys, described themselves as more empathetic, and demonstrated more facially empathic responses to lab tasks than boys. This study supports the finding that teachers may perceive girls to be more empathetic, as female status was associated with higher levels of Empathy in the current study.

Total parent-rated strengths. For Total Social-Emotional Strengths rated by parents, parenting variables, gender, and socioeconomic status predicted 47% of the variance. The parenting variables explained an additional 37% of the variance in parent-rated Total Strengths beyond that accounted for by gender and socioeconomic status.

Gender and Positive Verbal Discipline were the significant individual predictors.

Independent samples *t*-tests in the current study also revealed that differences in female and male status for Total Strengths rated by parents was statistically significant, indicating that female status was indicative of higher levels of Total Strengths when rated by parents.

The presence of Positive Verbal Discipline as a significant individual predictor is consistent with findings stated above. For gender, previous research has indicated that there are significant differences between parent, teacher, and student ratings of male versus female social-emotional skills on the SEARS (Romer, Ravitch, Tom, Merrell, & Wesley, 2011). In Romer and colleagues (2011), girls were rated as having higher levels of social-emotional skills, regardless of the rater. This supports the current study's findings that female status was associated with higher Total Strengths as rated by parents.

Total teacher-rated strengths. Parenting variables, socioeconomic status, and gender accounted for 29% of the variance in the teacher-rated Total Strengths. The parenting variables explained an additional 20% of the variance in Total Teacher-Rated Strengths beyond that accounted for by gender and socioeconomic status.

Trust of the child's teacher and gender were significant predictors for Total Social-Emotional Strengths as rated by teachers. Independent samples *t*-tests in the current study again revealed that differences in female and male status for this outcome variable were statistically significant, indicating that female status was associated with higher levels of Total Strengths when rated by teachers.

These findings appear consistent with Raver and Knitzer's (2002) conclusions that children exhibiting social-emotional difficulties as early as preschool, are responded to negatively, and are less likely to be accepted by their teachers and peers. These students also

receive less positive feedback and less instruction (Raver & Knitzer, 2002). As a result, these children attend school less, like school less, and therefore, learn less in school (Raver & Knitzer, 2002). Parents of children with social-emotional difficulties may be more likely to not trust their teachers if the teacher has a more negative relationship with their child. In contrast, it seems that students with higher levels of social-emotional strengths would be more likely to be accepted by their teachers and receive positive feedback, resulting in parental trust of their child's teacher.

In terms of gender, Merrell, Cohn, and Tom (2011) found that upon validating the SEARS-T, there were significant gender differences in teacher ratings of Total Social-Emotional Strengths, which supports findings that gender was a significant individual predictor of Total Strengths rated by teachers and that female status was indicative of a higher amount of Total Strengths as rated by teachers. In sum, teachers may perceive girls are having more social-emotional strengths when compared to boys.

Summary. Results were consistent with the hypothesis that parenting variables would predict social-emotional strengths, as parenting has consistently been included as an important aspect of social-emotional development (McMahon & Forehand, 2003; Niehaus & Adelson, 2014; Pianta, 1997; Webster-Stratton, 2005). This finding is also consistent with previous studies such as Denham, Renwick, and Holt (1991) that found mother-child interaction to be a predictor of preschoolers' social-emotional competence. Predictors of social-emotional competence included the ability to support the child, set clear expectations and limits, lack hostility towards the child, appear confident in having a successful interaction, and allowing the child to experience autonomy during the interaction (Denham et al., 1991). These variables are similar to ones discussed in this study including supportive PI, clear expectations, positive verbal discipline or praise and incentives, and lower amounts of monitoring to facilitate autonomy. Sheridan,

Knoche, Edwards, Bovaird, and Kupzyk (2010) also conducted a randomized control trial of a parent engagement intervention designed to facilitate school readiness and measured its effect on social-emotional outcomes. In their review of the literature, they highlight three dimensions of parental engagement that have been found to be highly predictive of social-emotional competencies in youth. These dimensions include parental warmth and sensitivity, support for the child's autonomy, and PI in the child's learning (Sheridan et al., 2010). Sheridan and colleagues (2010) found that the parental engagement intervention that aimed to increase the dimensions of parental engagement mentioned above was effective in increasing social-emotional competence in socioeconomically disadvantaged preschoolers ($N = 220$), when compared to the control group. In summary, all of the studies mentioned found that parenting variables were associated with social-emotional strengths in early childhood. The percentage of variance explained for each regression equation can be seen in Table 48.

Table 48

Percentage of Variance Explained for Outcome Variables

Outcome Variable	Variance Explained by Model including parenting variables, gender, and socioeconomic status (%)
Parent-Rated Self-Regulation/Responsibility ($n = 112$)	49
Parent-Rated Social Competence ($n = 113$)	33
Parent-Rated Empathy ($n = 114$)	37
Total Social-Emotional Strengths Rated by Parents ($n = 113$)	47
Total Social-Emotional Strengths Rated by Teachers ($n = 143$)	29

Note. The n displayed is the sample size present in each regression equation.

Significant Individual Predictors

Overall, seven of the total fifteen parenting variables (47%) were found to be significant individual predictors of social-emotional strengths. Variables that were the most consistently predictive of social-emotional strengths included Positive Verbal Discipline, which was a significant individual predictor for three of the five outcome variables. Other variables that were significant predictors or trended towards significance more than once included Supportive PI, Trust of the child's teacher, and Praise and Incentives. Significant individual predictors of the outcome variables can be seen in Table 49.

Table 49

Significant Individual Predictors of Outcome Variables

Significant Individual Predictors	Outcome Variable
<i>Positive Verbal Discipline and gender</i>	Self-Regulation/Responsibility
Supportive Parental Involvement, Positive Verbal Discipline, and <i>gender</i>	Social Competence
Time and Energy, Monitoring*, Praise and Incentives, and <i>gender</i>	Empathy
<i>Positive Verbal Discipline and gender</i>	Total Social-Emotional Strengths rated by parents
Trust and <i>gender</i>	Total Social-Emotional Strengths rated by teachers

Note. Items are italicized if found to be a significant individual predictor more than once.

* indicates that the predictor had a negative relationship with the outcome variable.

Teacher versus Parent Ratings of Strengths

When comparing teacher versus parent ratings of Total Social-Emotional Strengths, parenting variables, socioeconomic status, and gender predicted 47% of the variance in Total Strengths when rated by parents, versus 29% of the variance in Total Strengths when rated by teachers. Correlations between ratings of Total Strengths on the SEARS by parents and teachers in the current study was $r = .48$, indicating a moderate level of association between parent and

teacher ratings of Total Social-Emotional Strengths. Parents also rated their children less positively on the SEARS, when compared to their child's teachers. For example, the mean score for Total Parent-Rated Strengths was 1.80 ($SD = 0.47$), where the mean score for Total Teacher-Rated Strengths was 1.95 ($SD = 0.64$; a higher mean equals a higher total score). The difference in mean scores for Total Strengths rated by teachers versus parents was statistically significant $t(117) = -4.16, p < .001$.

Moderate levels of agreement is consistent with previous studies that discuss parent versus teacher ratings of students' social-emotional strengths. For example, Renk and Phares (2004) conducted a meta-analysis of 74 studies on the relationship between the use of multiple informants and ratings of Social Competence. This meta-analysis included a wide range of students, starting with kindergarten and expanding all the way to high school. Of the 74 studies, 16 included comparing parent and teacher ratings of Social Competence. On average, in early childhood there was a moderate correlation between parent and teacher ratings of broad social-emotional strengths ($r = .42$), which is consistent with the findings in the current study.

Previous studies of strengths-based measures such as the DECA have also found the tendency for parents to rate their children less positively in terms of strengths than the child's teacher. For example, in a study consisting of publicly funded education programs, Crane (2009) found that parent ratings were less positive than teacher ratings at one-time point in the study. This is consistent with the current study's findings that parents had a tendency to rate their children less positively on the SEARS than their child's teacher. This finding may be due to the variability of social-emotional strengths a child is presenting at home versus school, the differences in structure and expectations at home versus school, or due to variability in raters. In

addition, because parents were rating both parenting variables and the social-emotional strengths there may be shared rater variance versus when teachers were rating the strengths.

Contributions to the Literature

The current study contributes to the existing literature by incorporating a multidimensional definition of PI. Other existing studies have failed to take PI in a child's education, parenting practices for discipline, and PI to support learning at home into account, and have instead looked at these areas in isolation. Looking at these areas multidimensionally is important because previous studies have called into question whether PI at home, or PI in school is more important in impacting student outcomes. Therefore, an addition to the literature is the results demonstrated that PI at home, PI in educational settings, and parenting practices were all significant predictors of social-emotional strengths. However, parenting practices were particularly predictive of strengths, as parenting variables in this domain were present as significant individual predictors in three regression equations. Without assessing parenting variables multidimensionally, we would not be able to compare these various components of parenting.

The finding that parenting practices are particularly predictive of social-emotional strengths is a contribution to the literature because parenting interventions have been found to be effective in improving parenting practices and reducing behavior problems in the literature. For example, Kjøbli and colleagues (2013) implemented a parent training program focused on increasing positive parenting practices such as setting Clear Expectations, and decreasing the use of Harsh Discipline. Results indicated that the parent training was effective in both of these goals, as well as in decreasing the intensity and prevalence of problem behaviors in children aged three to 12.

Nowak and Heinrichs (2008) also conducted a meta-analysis of the effectiveness of the Triple P parent training program, which indicated that parenting practices improved and that problem behaviors decreased. The meta-analysis included families from Australia, Asia, the U.S., and Europe, indicating it is applicable to various different countries and ethnicities. Similar findings have been concluded in reviews of the effectiveness of Parent-Child Interaction Therapy (PCIT) and The Incredible Years Parent Training program (IY; Kjøbli et al., 2013). More specifically, previous research has also indicated that IY is effective for minority populations and for lower socioeconomic Status groups (Scott, Sylva, Doolan, Price, Jacobs, Crook, et al., 2010). In this study (Scott et al., 2010), the mean age of youth was 5.18 ($SD = 0.30$), 33% were ethnic minorities, 53% lived in public housing, and 40% of the families had less than a \$280 weekly income. IY was found to increase the use of Praise and Incentives and Positive Verbal Discipline, and decrease the use of Harsh Discipline (Scott et al., 2010).

According to Pidano and Allen (2015) parenting training programs such as IY have also been shown to increase parental self-efficacy in terms of their parenting practices and reduce levels of stress. In a study focused on increasing the parenting practices of neglectful parents (Letarte, Normandeau, & Allard, 2010) parents also reported an increase in their level of parenting skills specifically in the areas of increasing the use of Positive Verbal Discipline, Praise and Incentives, and Appropriate Discipline, and decreasing the use of Harsh Discipline and physical punishment.

These findings from the extant literature and the finding that parenting practices are particularly predictive of social-emotional strengths in the current study allow us to improve already effective parenting programs with an emphasis on particular parenting practices such as

Positive Verbal Discipline, Praise and Incentives, and Time and Energy in order to increase social-emotional strengths in youth.

Despite the research showing the effectiveness of training focused on improving parenting practices, research in this area has been overwhelmingly explored with the mindset of the negative impact it can have on youth, rather than the positive. By looking at the ability these parenting variables have to promote social-emotional strengths, a proactive, rather than reactive approach is taken. This emphasis on psychopathology in the literature and the tendency to look at only negative parenting factors and their contribution to psychopathology or undesired behavior is another contribution to the literature. This study was conducted through a positive psychology framework, and assessed the ability parenting variables have to predict strengths in youth rather than psychopathology. Social-emotional strengths also tend to be assessed as isolated skills, rather than viewed multidimensionally. Therefore, the current study contributes to the literature by looking at Self-Regulation/Responsibility, Empathy, Social Competence, and Total Social-Emotional Strengths.

In terms of findings, contrary to what was hypothesized, most, but not all parenting variables were significant predictors of social-emotional strengths in kindergartners. Significant individual predictors of strengths included all parenting variables except Appropriate Discipline, and socioeconomic status. However, Monitoring had a negative relationship with parent-rated Empathy, which was opposite of what was expected. Variables related to PI at home, PI at school, and parenting practices were all significant in predicting social-emotional strengths. This indicates that taking a multidimensional approach to working with parents to develop social-emotional strengths is needed, rather than developing one area over the other.

When comparing parent versus teacher ratings of Total Strengths, differences were present in the ability of parenting variables to predict social-emotional strengths in kindergartners. The use of positive parenting strategies such as Positive Verbal Discipline was a significant predictor of Total Strengths as rated by parents, which indicates that parents may be more likely to see social-emotional strengths in their children through the use of their own strategies. However, the parent's Trust of his/her child's teacher was the only significant predictor of Total Strengths rated by teachers other than gender, which may indicate that parent's Trust of his/her child's teacher may impact teacher's ratings of student social-emotional strengths at school. One possible explanation for why high levels of trust is positively associated with teacher's ratings of social emotional strengths is because when parents trust the child's teacher more, the teacher may have a stronger relationship with the child, which could impact their social emotional skills. This hypotheses, as well as alternative explanations should be examined in future research. In addition, variables relative to PI at school were the only significant individual predictors of Total Social-Emotional Strengths as rated by teachers, and parenting practices were the only significant individual predictors of Total Social-Emotional Strengths as rated by parents (other than gender). This may indicate the potential for teachers to only consider school-based variables in ratings of student social-emotional strengths, while parents may only consider home-based factors or their own skills that impact social-emotional domains when rating their child's strengths. No other studies were located that explore the relationship of Trust and ratings of student social-emotional strengths. Therefore, this indicates a contribution to the literature, and an area in need of future research. An additional contribution to the literature are the findings that these parenting variables significantly predict Total Strengths, due to prior research being focused on the impact parental involvement has on

academic achievement, or parenting practices have on psychopathology, rather than social-emotional strengths.

Implications for School Psychologists

The current study features several implications for school psychologists. When looking at students ecologically, school psychologists may wish to include parents in universal programming to promote social-emotional strengths in their students, in selective intervention for students who have been identified as needing to increase their strengths, or in students exhibiting an intense need in terms of social-emotional strengths. The current study includes a strengths-based measure (the SEARS), in which school psychologists could use to identify students' strengths multidimensionally and take a positive psychology approach to intervening with students by recruiting parents to promote strengths, rather than only including them when something is wrong. When assessing what parenting factors to focus on to promote strengths in their students, school psychologists can also turn to the multidimensional view used in the current study, and the individual predictors that were significant in predicting Total Social-Emotional Strengths. Specifically, school psychologists could work with parents to develop their use of positive verbal discipline and praise and incentives, work with them to develop supportive PI focused on learning at home, problem-solve issues related to time and energy, collaborate with teachers to increase or build trust, and improve parental self-efficacy and management of the home learning environment. Promoting these parenting factors may supplement an evidence-based SEL program, and promote generalization and maintenance of social-emotional skills in students. One SEL program that incorporates parents is the Promoting Alternative Thinking Strategies (PATHS) curriculum, which is designed to be used by classroom teachers, and consists of 40-52 lessons for students from pre-kindergarten to sixth grade (Kuschè &

Greenberg, 1994). The PATHS curriculum focuses on emotional literacy, self-control, Social Competence, positive peer relationships, and interpersonal problem-solving skills, while reducing aggression and behavior problems (Kuschè & Greenberg, 1994). Research has shown that it is effective in improving academic performance, increasing positive social behavior, and reducing conduct problems and emotional distress (Kuschè & Greenberg, 1994). In order to incorporate parents, parent letters are sent home with information on what students are doing, and activities to do at home are also provided. Although this SEL program did not speak to this directly, these resources can promote supportive PI related to learning social-emotional skills at home due to their distribution of information to parents. Allowing parents to feel knowledgeable about what their child is learning can build the parents' self-efficacy in helping their child, and may also build trust between the parent and the teacher because the teacher is connecting the parent to the child's learning and providing learning opportunities at home. The PATHS curriculum may also be improved by including the parenting variables that were particularly predictive in the current study. School psychologists may supplement the PATHS curriculum by educating parents on Positive Verbal Discipline strategies and the use of Praise and Incentives, while collaborating with the teacher to promote Trust between the parent and teacher and increase PI strategies such as Supportive PI and Time and Energy. Last, the school psychologist can educate the parent on the role that gender may play in perception of social-emotional strengths.

The Incredible Years is a behavioral parenting training intervention that features a parent, child, and a teacher program (Webster-Stratton, 2013). Overall, the goal of each program as outlined by Webster-Stratton (2013) is to increase protective factors and decrease risk factors, with proximal outcomes including increased school readiness, social competence, and emotion

regulation for students. For parents, short-term outcomes include improved parenting interactions and relationships. For teachers, proximal outcomes are improved teaching and relationships with both parents and students (Webster-Stratton, 2013). Distal outcomes for all three programs are all focused on youth and include: increased academic achievement, reduction in school drop-outs, reduced drug and alcohol problems, and decreased amount of conduct problems and criminal activity (Webster-Stratton, 2013). Goals and objectives included in the parenting program that were significant individual predictors or were positively associated with social-emotional strengths in the current study are: teach parents to use Praise and Incentives, establish rules and routines (Clear Expectations), use Positive Verbal Discipline, support the student's learning (Management of the Home Learning Environment/Supportive PI), and become involved with their teacher (which is impacted by parental Self-Efficacy and Time and Energy; Webster-Stratton, 2013).

Limitations and Future Directions

Limitations for the current study included that the sample was a convenience sample. Teachers were also all female, although education is a career that is highly represented by women. Third, parenting variables were assessed to see to what extent they predict social-emotional strengths, although this relationship may be bi-directional, or social-emotional strengths in kindergartners may also promote positive parenting behaviors. Parents were also asked to self-report their own PI and parenting practices, which may lead to biased or inaccurate reporting. Last, the assumption of independence of observations was also violated because multiple data points were collected from the same rater—the teachers.

Other limitations included that some measures featured low reliability, including Monitoring and Supportive PI. Monitoring had a Cronbach's alpha level of .42 and .43 when

calculated in both the parent-rated strengths and teacher-rated strengths sample, while Supportive PI had an alpha level of .67 in the teacher-rated strengths sample, and .59 in the parent-rated strengths sample. Although the subscales featured good levels of reliability, the combination of Self-Regulation and Responsibility on the SEARS-P as one subscale is also a limitation due to the differing definitions of these two social-emotional domains. Assessing Self-Regulation and Responsibility separately may have provided a better look at social-emotional strengths in kindergarten students; however, combining these scales is in accordance with recommendations in the manual following developmental studies in which these factors failed to be discrete.

A comparison of the Canadian versus U.S. group means also revealed significant mean level differences between the following variables: Monitoring, Praise and Incentives, Clear Expectations, Trust of the child's teacher, Parent/Teacher Involvement, Instrumental Involvement, and Management of the Home Learning Environment. This indicates that samples were significantly different in mean scores, however, they were analyzed together rather than being separated into two separate samples. As a result, it may be difficult to generalize findings across both samples without further information on the differences in these variables between participants from the U.S. and from Canada.

Future directions for research may include further assessment of differences between parent and teacher ratings of social-emotional strengths and potentially what these may look like at each grade level. Grade specific norms should be developed in order to ensure that social-emotional ratings are based on what is developmentally appropriate for the student's current age. One example of a variable that had limited variability due to what was developmentally appropriate for kindergartners in the current study was parental Monitoring. For example, one question on this subscale asked, "About how many hours in the last 24 hours did your child

spend at home without adult supervision, if any?" In kindergarten it would not be developmentally appropriate to leave a child alone at home, therefore, the range of responses for this item and others on the subscale was limited.

Understanding the role that gender may play in parent and teacher ratings of strengths should also be evaluated, as both parents and teachers may be more likely to rate females higher on social-emotional domains. Further exploration of potential differences between students' displays of social-emotional strengths in home versus school may also be an area for future research, as well as examining the potential for a bi-directional relationship between predictor and outcome variables, or the ability social-emotional strengths may have to predict parenting variables.

Conclusion

In conclusion, the present study demonstrated that taken altogether, parenting variables (and gender) were significant predictors of social-emotional strengths in kindergartners. For example, Positive Verbal Discipline and gender significantly predicted Self-Regulation/Responsibility; Supportive PI, Positive Verbal Discipline, and gender significantly predicted Social Competence; and Time and Energy, Praise and Incentives, and gender predicted Empathy. Monitoring was also a significant individual predictor of Empathy, but had a negative relationship. Positive Verbal Discipline and gender predicted Total Strengths as rated by parents; and Trust and gender predicted Total Strengths as rated by teachers. Gender was a significant individual predictor for all outcome variables, and therefore, may play a role in parent and teacher ratings of student social-emotional strengths. All other parenting variables aside from Appropriate Discipline had significant correlations with social-emotional domains, although Trust had a negative correlation with outcome variables aside from Total Strengths

rated by teachers. When comparing the ability parenting variables had to predict Total Social-Emotional Strengths as rated by parents versus teachers, a larger percentage of variance was explained for Total Strengths as rated by parents. It should be noted that the amount of variance explained may be inflated due to parents rating themselves in the various parenting domains. Parent and teacher ratings of student strengths were moderate.

Implications for school psychologists are that they may work with parents to develop skills in the areas found to be significantly predictive of social-emotional strengths in kindergartners, in order to promote strengths. Further research is need to clarify differences between parent and teacher ratings of Total Strengths, and to examine the potential for a bi-directional relationship between parenting variables and social-emotional strengths.

REFERENCES

- Adams, K. S., & Christenson, S. L. (2000). Trust and the family-school relationship: Examination of parent-teacher differences in elementary and secondary grades. *Journal of School Psychology, 38*, 477-497.
- Allen, S. J., & Graden, J. L. (2002). Best practices in collaborative problem solving for intervention design. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology* (4th ed., pp. 565–582). Bethesda, MD: National Association of School Psychologists.
- Bandura, A. (1989). Regulation of cognitive processes through perceived self-efficacy. *Developmental Psychology, 25*, 729-735.
- Barnard, W. M. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review, 26*, 39–62. doi:10.1016/j.childyouth.2003.11.002
- Caprara, G. V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. G. (2000). Prosocial foundations of children's academic achievement. *Psychological Science, 11*(4), 302-306. doi: 10.1111/1467-9280.00260
- CASEL. (2013). Effective social and emotional learning programs: Preschool and elementary school edition. Retrieved from <http://static1.squarespace.com/static/513f79f9e4b05ce7b70e9673/t/526a220de4b00a92c90436ba/1382687245993/2013-casel-guide.pdf>
- Cheung, K. (2013). Relations between parenting behaviors, parent traits, and children's social competence in Chinese immigrant families. (Doctoral Dissertation). Retrieved from

ProQuest. New York University, New York, NY.

- Crane, J. (2009). Preschool children with special educational needs: Achievement, retention, & classification through second grade. Unpublished doctoral dissertation, George Mason University.
- Curley Hankinson, J. (2009). Child psychopathology, parental problem perception, and help-seeking behaviors. *Graduate Theses and Dissertations*. Retrieved from <http://scholarcommons.usf.edu/etd/2000>
- Denham, S. A. (2006). Social-emotional competence as support for school readiness: What is it, and how do we assess it? *Early Education and Development*, 17(1), 57 – 89. doi: 10.1207/s15566935eed1701_4
- Denham, S. A., Renwick, S. M., & Holt, R.W. (1991). Working and playing together: Prediction of preschool social-emotional competence from mother-child interaction. *Child Development*, 62(2), 242-249.
- Dennis, T. (2006). Emotional Self-Regulation in preschoolers: The interplay of child approach reactivity, parenting, and control capacities. *Developmental Psychology*, 42(1), 84-97. doi: 10.1037/0012-1649.42.1.84
- Edwards, C. P., Sheridan, S. M., & Knoche, L. (2010) Parent-child relationships in early learning. In B. McGaw and P. Peterson (Eds.), *International encyclopedia of education* (5th ed., pp. 438-443). Oxford, England: Elsevier.
- Epstein, J. L., Simon, B. S., & Salinas, K. C. (1997). Involving parents in homework in the middle grades (Research Bulletin No. 18). Bloomington, IN: Phi Delta Kappan/Center for Evaluation, Development and Research.
- Evans, M. A., Shaw, D., & Bell, M. (2000). Home literacy activities and their influence on early

- literacy skills. *Canadian Journal of Experimental Psychology/Revue canadienne de psychologie experimentale*, 54, 65-75. doi:10.1037/h0087330
- Evans, M. A. & Shaw, D. (2008). Home grown for reading: Parental contributions to young children's emergent literacy and word recognition. *Canadian Psychology/Psychologie canadienne*. Special Issue: Literacy Development in Canada, 49, 89-95. doi:10.1037/0708-5591.49.2.89
- Fan, X. & Chen, M. (1999). Parental involvement and students' academic achievement: A meta-analysis. Paper presented at the 1999 Annual Meeting of the American Educational Research Association, Montreal, Canada.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13, 1-22. doi:10.1023/A:1009048817385
- Fantuzzo, J., McWayne, C., & Perry, M. A. (2004). Multiple dimensions of family involvement and their relations to behavioral and learning competencies for urban, low-income children. *School Psychology Review*, 33(4), 467-480.
- Feshbach, N. D., & Feshbach, S. (1987). Affective processes and academic achievement. *Child Development*, 58(5), 1335-1347. doi: 10.2307/1130625.
- García, F. & Gracia, E. (2009). Is always authoritative the optimum parenting style? Evidence from Spanish families. *Adolescence*, 44(173), 101-131.
- Gelley, C. (2014). Accuracy of educators in identifying middle school students with elevated levels of anxiety or depression. *Graduate Theses and Dissertations*. Retrieved from <http://scholarcommons.usf.edu/etd/5221>
- Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting cronbach's alpha reliability coefficient for likert-type scales. Refereed paper presented at the Midwest

Research to Practice Conference in Adult, Continuing, and Community Education.

Retrieved from <http://www.ssnpstudents.com/wp/wp-content/uploads/2015/02/Gliem-Gliem.pdf>

- Gonzalez-DeHass, A. R., Willems, P. P., & Holbein, M. F. D. (2005). Examining the relationship between parental involvement and student motivation. *Educational Psychology Review*, 17, 99–123. doi:10.1007/s10648-005-3949-7
- Green, C. L., Walker, J. T., Hoover-Dempsey, K. V., & Sandler, H. M. (2007). Parents' motivations for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology*, 99(3), 532-544. doi:10.1037/0022-0663.99.3.532
- Gresham, F. M., & Elliott, S. N. (1990). Social skills rating system. Circle Pines, MN: American Guidance Service.
- Gershoff, E. T., Aber, J. L., & Raver, C. C. (2003). Child poverty in the U. S.: An evidence-based conceptual framework for programs and policies. In R. M. Lerner, F. Jacobs, & D. Wertlieb (Eds.), *Handbook of applied developmental science* (2nd ed., pp. 81–136). Thousand Oaks, CA: Sage.
- Gutman, L. M., & McLoyd, M. C. (2000). Parents' management of their children's education within the home, at school and in the community: An examination of African American families living in poverty. *Urban Review*, 32, 1–24. doi:10.1023/A:1005112300726
- Gutman, L. M., & Midgley, C. (2000). The role of protective factors in supporting the academic achievement of poor African American students during the middle school transition. *Journal of Youth and Adolescence*, 29, 233–248. doi:10.1023/A:1005108700243

- Hair, E., Halle, T., Terry-Humen, E., Lavelle, B., & Calkins, J. (2006). Children's school readiness in the ECLS-K: Predictions to academic, health, and social outcomes in first grade. *Early Childhood Research Quarterly*, 21, 431-454. doi: 10.1016/j.ecresq.2006.09.005
- Hayatbakhsh, M. R., Mamun, A. A., Najman, J. M., O'Callaghan, M. J., Bor, W., & Alati, R. (2008). Early childhood predictors of early substance use and substance use disorders: Prospective study. *Australian & New Zealand Journal of Psychiatry*, 42(8), 720-731. doi:10.1080/00048670802206346
- Hefferon, K., & Boniwell, I. (2011). *Positive psychology: theory, research and applications* [electronic resource]. Maidenhead, Berkshire, England: McGraw Hill Open University Press, 2011.
- Henderson, A., & Mapp, K., (2002). A new wave of evidence: The impact of school, family, and community connections on student achievement. National Center for Family and Community Connections with Schools. Austin, TX.
- Heo, K. H., & Squires, J. (2012). Cultural adaptation of a parent completed social emotional screening instrument for young children: Ages and stages questionnaire-social emotional. *Early Human Development*, 88, 151-158.
- Hoover-Dempsey, K.V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3-42.
- Hoover-Dempsey, K.V., & Sandler, H. M. (2005). Final performance report for OERI grant # R305T010673: The social context of parental involvement: A path to enhanced achievement. Presented to Project Monitor, Institute of Education Sciences, U.S. Department of Education, March 22, 2005.

- Huebner, E. S., & Gilman, R. (2003). Toward a focus on positive psychology in school psychology. *School Psychology Quarterly*, 18(2), 99-102.
doi:10.1521/scpq.18.2.99.21862
- Izzo, C. V., Weissberg, R. P., Kasprow, W. J., & Fendrich, M. (1999). A longitudinal assessment of teacher perceptions of parent involvement in children's education and school performance. *American Journal of Community Psychology*, 27, 817-839.
doi:10.1023/A:102226262598
- Kjøbli, J., Hukkelberg, S., & Ogden, T. (2013). A randomized trial of group parent training: reducing child conduct problems in real-world settings. *Behaviour research and Therapy*, 51(3), 113-121.
- Kuschè, C. A., & Greenberg, M. T. (1994) *The PATHS Curriculum*. Seattle: Developmental Research and Programs.
- Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70(6), 1373-1400.
- LeFevre, J., Skwarchuk, S., Smith-Chant, B., Kamawar, D., Bisanz, J., & Fast, L. (2009). Home numeracy experiences and children's math performance in the early school years. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 41, 55-66. doi:10.1037/a0014532
- Leijten, P., Raaijmakers, A. J., Orobio de Castro, B., Van den Ban, E., & Matthys, W. (2015). Effectiveness of the incredible years parenting program for families with socioeconomically disadvantaged and ethnic minority backgrounds. *Journal of Clinical Child and Adolescent Psychology*, 0(0), 1-15. doi: 10.1080/15374416.2015.1038823

- Letarte, M. J., Normandeau, S., & Allard, J. (2010). Effectiveness of a parent training program “Incredible Years” in a child protective service. *Child Abuse and Neglect*, 34, 253–261.
- Lewis, A., & Henderson, A. (1998). Urgent message: Families crucial to school reform. Washington, DC: Center for Law and Education, Inc.
- Linley, P. A., Joseph, S., Harrington, S., & Wood, A. M. (2006). Positive psychology: Past, present, and (possible) future. *Journal of Positive Psychology*, 1, 3–16.
- Makarewicz, C. (2015). Examining the influence of the urban environment on parent’s time, energy, and resources for engagement in their children’s learning. *Dissertation Abstracts International Section A*, 75.
- Malone, P. S. (2000). Parent and teacher involvement measure—Teacher year 5 update. Fast Track Project Technical Report Update. Retrieved from http://www.fasttrackproject.org/techrept/p/ptt/ptt_tr5.pdf
- Marzano, R. (2003). *What works in schools*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McCullough, J. R. (2002). Developmental changes in the relationship between parent involvement in education and children’s academic achievement. *Dissertation Abstracts International: Section B. Sciences and Engineering*, 63, 567.
- McMahon, R. J., & Forehand, R. L. (2003). *Helping the noncompliant child: Family-based treatment for oppositional behavior* (2nd ed.). New York, NY: Guilford.
- Merrell, K. M., & Caldarella, P. (2002). *Home and community social behavior scales*. Baltimore, MD: Paul H. Brookes Publishing.

- Merrell, K. M., Cohn, B. P., & Tom, K. M. (2011). Development and validation of a teacher report measure for assessing social-emotional strengths of children and adolescents. *School Psychology Review*, 40(2), 226-241.
- Merrell, K. W., Felver-Gant, J. C., & Tom, K. M. (2010). Development and validation of a parent report measure for assessing social-emotional competencies of children and adolescents. *Journal of Child and Family Studies*, 20, 529-540.
- Merrell, K. W. (2011). *Social-emotional assets and resilience scales (SEARS)*. Lutz, FL: Psychological Assessment Resources.
- Miedel, W. T., & Reynolds, A. J. (1999). Parent involvement in early intervention for disadvantaged children: Does it matter? *Journal of School Psychology*, 37, 379–402. doi:10.1016/S0022-4405(99)00023-0
- Nese, R. N. T., Doerner, E., Romer, N., Kaye, N. C., Merrell, K. W., & Tom, K. M. (2012). Social emotional assets and resilience scales: Development of a strength-based short-form behavior rating scale system. *Journal for Educational Research Online*, 4(1), 124-139.
- Niehaus, K., & Adelson, J. L. (2014). School support, parental involvement, and academic and social-emotional outcomes for English language learners. *American Educational Research Journal*, 51(4), 810-844. doi:10.3102/0002831214531323
- Niggli, A., Trautwein, U., Schnyder, I., Ludtke, O., & Neumann, M. (2007). Parental homework support can be beneficial, but parental intrusion is detrimental: Family background, parental homework supervision, and performance gains. *Psychologie in Erziehung und Unterricht*, 54, 1–14.

- Nowak, C., & Heinrichs, N. (2008). A comprehensive meta-analysis of Triple P-Positive Parenting Program using hierarchical linear modeling: Effectiveness and moderating variables. *Clinical Child and Family Psychology Review*, 11, 114–144.
- Ogg, J. A., Volpe, R. J., & Rogers, M. A. (2011). Understanding the relationship between inattention and early literacy trajectories in kindergarten. *School Psychology Quarterly*, doi:10.1037/spq0000130
- O’Neil, R., Welsh, M., Parke, R. D., Wang, S., & Strand, C. (1997). A longitudinal assessment of the academic correlates of early peer acceptance and rejection. *Journal of Clinical Child Psychology*, 26(3), 290 – 303. doi: 10.1207/s15374424jccp2603_8
- Parent, J., McKee, L. G., & Forehand, R. (2016). Seesaw discipline: The interactive effect of harsh and lax discipline on youth psychological adjustment. *Journal of child and family studies*, 25(2), 396-406.
- Patterson, G. R., & Capaldi, D. (1991). Antisocial parents: Unskilled and vulnerable. In P. Cowan & M. Hertherington (Eds.), *Family transitions* (pp. 195-218). Hillsdale, NJ: Erlbaum.
- Patterson, G. R., & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. *Child Development*, 55, 1299-1307.
- Peek Corbin-Staton (2009). Contexts of parental involvement: An interpretive synthesis of qualitative literature using the meta-interpretation method. Unpublished Doctoral Dissertation. George Washington University: Washington, D.C.
- Pelletier, J., & Brent, J. M. (2002). Parent participation and children’s school readiness: The effects of parental self-efficacy, cultural diversity and teacher strategies. *International Journal of Early Childhood*, 34, 45–60.

- Pianta, R.C. (1997). Adult-child relationship processes and early schooling. *Early Education and Development*, 8, 11-26.
- Pidano, A. P., & Allen, A. (2015). The Incredible Years series: A review of the independent research base. *Journal of Child & Family Studies*, 24(7), 1898-1916.
- Pomerantz, E. M., & Eaton, M. M. (2001). Maternal intrusive support in the academic context: Transactional socialization processes. *Developmental Psychology*, 37, 174–186.
doi:10.1037/0012-1649.37.2.174
- Power, T. J., & Bradley-Klug, K. L. (2013). *Pediatric school psychology: Conceptualization, applications, and strategies for leadership development*. New York, NY: Routledge.
- Raver, C. C., & Knitzer, J. (2002). *Ready to enter: what research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children*. New York, NY: National Center for Children in Poverty.
- Reid, J., Taplin, P., & Loeber, R. (1981). A social interactional approach to the treatment of abusive families. In R. B. Stuart (Ed.), *Violent behavior: Social learning approaches to prediction management and treatment* (pp. 83-101). New York, NY: Brunner/Mazel.
- Renk, K., & Phares, V. (2004). Cross-informant ratings of Social Competence in children and adolescents. *Clinical Psychology Review*, 24, 239-254. doi: 10.1016/j.cpr.2004.01.004
- Reutzell, D. R., Fawson, P. C., & Smith, J. A. (2006). Words to go! Evaluating a first-grade parent involvement program for “making” words at home. *Reading Research and Instruction*, 45, 119–159.
- Richardson, M. J., Caldarella, P., Young, B. J., Young, E. L., & Young, K. R. (2009). Further validation of the systematic screening for behavior disorders in middle and junior high school. *Psychology in the Schools*, 46, 605-615. doi:10.1002/pits.20401

- Roberts, W., & Strayer, J. (1996). Empathy, emotional expressiveness, and prosocial behavior. *Child Development, 67*(2), 449-470.
- Rogers, M. A., Markel, C., Ryan, B. A., Midgett, J., & Tannock, R. (2013) Measuring child perceptions of parental involvement in conjoint behavioral consultation: Factor structure and reliability of the Parental Support for Learning Scale. *Assessment for Effective Intervention, 39*(3), 170. doi:10.1177/1534508413493110
- Rogers, M. A., Wiener, J., Marton, I., & Tannock, R. (2009). Parental involvement in children's learning: Comparing parents of children with and without attention-deficit/hyperactivity disorder (ADHD). *Journal of School Psychology, 47*, 167-185.
- Romer, N., Ravitch, N. K., Tom, K., Merrell, K. W., & Wesley, K. L. (2011). Gender differences in positive social-emotional functioning. *Psychology in the Schools, 48*(10), 958-970. doi:10.1002/pits.20604
- Rosenwig, C. (2000). A meta-analysis of parenting and school success: the role of parents in promoting students' academic performance. Ph.D. Dissertation, Hofstra University, United States, New York.
- Rumberger, R. W. (1995). Dropping out of middle school: A multi-level analysis of students and schools. *American Educational Research Journal, 32*, 583-625. doi:10.2307/1163325
- Ryoji, S., Sugisawa, Y., Tong, L., Tanaka, E., Watanabe, T., Onda, Y., Kawashima, Y., Hirano, M., Tomisaki, E., Mochizuki, Y., Morita, K., Amarsanaa, G. Y., Yato, Y., Yamakawa, N., & Anme, T. (2012). Influence of maternal praise on developmental trajectories of early childhood Social Competence. *Creative Education, 4*, 533-539.
- Schaffer, M., Clark, S., & Jeglic, E. L. (2009). The role of Empathy and parenting style in the development of antisocial behaviors. *Crime and Delinquency, 55*(4), 586-599.

- Schmidt, M. E., Demulder, E. K., & Denham, S. A. (2002). Kindergarten social-emotional competence: Developmental predictors and psychosocial implications. *Early Child Development and Care*, 172, 451-462.
- Scott, S., Sylva, K., Doolan, M., Price, J., Jacobs, B., Crook, C., et al. (2010). Randomised controlled trial of parent groups for child antisocial behavior targeting multiple risk factors: The SPOKES project. *Journal of Child Psychology and Psychiatry*, 51(1), 48–57. doi:10.1111/j.1469-7610.2009.02127.x
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14. doi: 10.1037//0003-066X.55.1.5
- Sheridan, S. M., Glover, T., Kwon, K., & Garbacz, S. A. (2009). Conjoint behavioral consultation: Preliminary findings of child outcomes and the mediating effect of parent-teacher relationships. Paper presented at the Second Annual Conference on Research on Educational Effectiveness: Methods That Matter, Crystal City, VA. Retrieved from <http://files.eric.ed.gov/fulltext/ED524647.pdf>
- Sheridan, S. M., Knoche, L. L., Edwards, C. P., Bovaird, J. A., & Kupzyk, K. A. (2010). Parent engagement and school readiness: Effects of the getting ready intervention on preschool children's social-emotional competences. *Early Education Development*, 21(1), 125-156. doi: 10.1080/10409280902783517.
- Shields, A., Dickstein, S, Seifer, R, Giusti, L, Maagee, K. D., & Spritz, B. (2001). Emotional competence and early school adjustment: A study of preschoolers at risk. *Early Education and Development*, 12(1), 73- 96. doi: 10.1207/s15566935eed1201_5
- Simpkins, S. D., Weiss, H. B., McCartney, K., Kreider, H. M., & Dearing, E. (2006). Mother-child relationship as a moderator of the relation between family educational

- involvement and child achievement. *Parenting: Science and Practice*, 6, 49–57.
doi:10.1207/s15327922par0601_2
- Stone, L. L., Otten, R., Engels, R. C., Vermulst, A. A., & Janssens, J. M. (2010).
Psychometric properties of the parent and teacher versions of the strengths and
difficulties questionnaire for 4- to 12-year-olds: A review. *Clinical Child and Family
Psychology Review*, 13(3), 254–274. Retrieved from <http://doi.org/10.1007/s10567-010-0071-2>.
- Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model
of mental health in youth. *School Psychology Review*, 37(1), 52-68.
- Tabachnick, B.G., & Fidell, L.S. (1989). *Using multivariate statistics* (2nd ed.). New York, NY:
HarperCollins Publishers, Inc.
- Tung, I., & Lee, S. S. (2014). Negative parenting behavior and childhood oppositional defiant
disorder: Differential moderation by positive and negative peer regard. *Aggressive
Behavior*, (1), 79-90. doi:10.1002/ab.21497
- Urhahne, D., & Zhu, M. (2015). Accuracy of teachers' judgments of students' subjective well-
being. *Learning and Individual Differences*, 43, 226-232.
doi:10.1016/j.lindif.2015.08.007
- U.S. Department of Education, National Center for Education Statistics. (2010). Early childhood
longitudinal study, kindergarten class of 1998-99 (ECLS-K) kindergarten through fifth
grade approaches to learning and Self-Description Questionnaire (SDQ) items and
public-use data files. (NCES 2010-070). Washington, DC: Author.
- Walker, J. M. T., Wilkins, A. S., Dallaire, J. R., Sandler, H. M., & Hoover-Dempsey, K.V.
(2005). Parental involvement: Model revision through scale development. *The*

- Elementary School Journal*, 106(2), 85-104. Retrieved from <http://www.jstor.org/stable/10.1086/499193>
- Walters, E. (2001). Parent teacher involvement questionnaire (parent version): Technical report. Retrieved from <http://www.fasttrackproject.org/techrept/p/ptp/ptp3tech.pdf>
- Wilczenski, F. L., & Coomey, S. M., (2008). Best practices in service-learning: Enhancing the social/emotional and academic competence of all students. In A. Thomas, & J. Grimes, (Eds). *Best practices in school psychology*, V. Bethesda, MD: The National Association of School Psychologists.
- Webster-Stratton, C. (1990). Stress: A potential disruptor of parent perceptions and family interactions. *Journal of Clinical Child Psychology*, 19, 302-312.
- Webster-Stratton, C. (1998). Preventing conduct problems in Head Start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology*, 66, 715 –730. doi:10.1037/ 0022-006X.66.5.715
- Webster-Stratton, C. (2005). *The incredible years: A trouble-shooting guide for parents of children aged 2-8 years*. Seattle, WA: Incredible Years.
- Webster-Stratton, C. (2011). *The incredible years: Parents, teachers, and children's training series*. Seattle, WA: The Incredible Years.
- Webster-Stratton, C. (2013). The incredible years programs. Retrieved from <http://incredibleyears.com/programs/>
- Webster-Stratton, C., Reid, M. J., & Hammond, M. (2001). Preventing conduct problems, promoting Social Competence: A parent and teacher partnership in Head Start. *Journal of Clinical Child Psychology*, 3, 283-302.
- Winer, A.C., & Thompson, R. A. (n.d.) How poverty and depression impact a child's social and

emotional competence. Retrieved from http://poverty.ucdavis.edu/sites/main/files/file-attachments/policy_brief_thompson_risk_print.pdf.

Wong, A., Li-Tsang, C., & Siu, A. (2014). Effect of a social emotional learning programme for primary school students. *Hong Kong Journal of Occupational Therapy*, 24(2), 56-63.

Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Wahlberg, H. J. (2007). The scientific base linking social and emotional learning to school success. *Journal of Educational and Psychological Consultation*, 17(2-3), 191-210. doi: 10.1080/10474410701413145

Zins, J. E., Elias, M. J., Greenberg, M. T., & Weissberg, R. P. (2000). Promoting social and emotional competence in children. In K. M. Minke & G. C. Bear (Eds.), *Preventing school problems-promoting school success: Strategies and programs that work* (pp. 71–100). Bethesda, MD: National Association of School Psychologists.

APPENDICES

Appendix A: Parent Demographic Questionnaire

Table A1

Parent Survey

General

VARIABLE NAME	DESCRIPTION
Child Code	Unique identifier for each participant
Res_site	Indicates which site the data came from (1=Tampa; 2=Montreal)
School Code	Unique identifies for each school site
Teacher Code	Unique identifier for each teacher participant
Combination	Order of surveys for parent survey packet—only recorded for Tampa site—Montreal did not record this data, but did counterbalance using same method as Tampa.

General Notes

- Order of file: parent data, child data, teacher data
- All variables that start with a “P” came from the parents
- T1 indicates Time 1 (parent and child data collected)
- T2 indicates Time 2 (child data collected)
- T3 indicates Time 3 (parent, child, and teacher data collected)

Table A2

Demographic Form

This measure was completed by the parent about themselves, their partner (if applicable), and their child.

VARIABLE NAME	QUESTION	RESPONSE OPTIONS
PDem1	Rater's relationship to child.	1 Biological Mother 2 Biological Father 3 Stepparent 4 Foster Parent 5 Other (specify) 6 Adoptive Mother 7 Adoptive Father

		8 Parent's Partner (living in household) 9 Other adult relative
PDem1	Specify if not one of PDem1 above	Specify for other
PDem2	Your race/ethnicity	1 American Indian or Alaska Native or Aboriginal 2 Asian 3 Black or African American 4 Hispanic or Latino 5 Native Hawaiian or Pacific Islander 6 Caucasian or White 7 Multi-racial 8 Other
PDem2Specify	Specify if not one of PDem2 above	Specify for other or multi-racial
PDem3	Your level of education (check highest completed)	1 Less than high school 2 High school or GED 3 Some college, 2 year college or vocational 4 Bachelor's degree 5 some graduate work 6 Master's degree 7 Doctoral degree
PDem4	On average how many hours per week do you work?	1 = 0-5 2 = 6-20 3 = 21-40 4 = 40 or more
PDem5	Number of adults in the home who care for the children	List the actual number
PDem6	What is your marital status	1 = single, never married 2 = divorced

		<p>3 = living together as if married</p> <p>4 = separated</p> <p>5 = married</p> <p>6 = widowed</p>
PDem7	Spouse's/partner's relationship to the child	<p>1 Biological Mother</p> <p>2 Biological Father</p> <p>3 Stepparent</p> <p>4 Foster Parent</p> <p>5 Other (specify)</p> <p>6 Adoptive Mother</p> <p>7 Adoptive Father</p> <p>8 Parent's Partner (living in household)</p> <p>9 Other adult relative</p>
PDem7specify	Specify if not one of PDem7 above	Specify for other
PDem8		<p>1 Less than high school</p> <p>2 High school or GED</p> <p>3 Some college, 2 year college or vocational</p> <p>4 Bachelor's degree</p> <p>5 some graduate work</p> <p>6 Master's degree</p> <p>7 Doctoral degree</p>
PDem9	On average, how many hours per week does your spouse/partner work?	<p>1 = 0-5</p> <p>2 = 6-20</p> <p>3 = 21-40</p> <p>4 = 40 or more</p>
PDem10	What is the primary language spoken in your home?	<p>1 = English</p> <p>2 = French</p> <p>3 = Chinese</p>

		4 = Russian 5 = Spanish 6 = Vietnamese 7 = Korean 8 = Other
PDem10specify	Specify if not one of PDem10 above	Specify for other
PDem11	Family Income per year	1 = less than \$5000 2 = \$5001-10000 3 = 10001-20000 4 = 20001-30000 5 = 30001-40000 6 = 40001-50000 7 = 50001-60000 8 = 60001+
PChilddem1	Child's Gender	1 = male 2 = female
Pchilddem2	Child's data of birth	
Pchilddem2months	Child's age in month	Calculated by date survey was filled out (page 1 of demographic form)
Pchilddem3	Child's race/ethnicity	1 American Indian or Alaska Native or Aboriginal 2 Asian 3 Black or African American 4 Hispanic or Latino 5 Native Hawaiian or Pacific Islander 6 Caucasian or White 7 Multi-racial 8 Other
Pchilddem3specify	Specify for Pchilddem3 above	

Pchilddem4	In the past 2 years, has your child seen a counselor, therapist, psychologist, psychiatrist, social worker or other mental health professional for treatment for mental health or behavior problems s/he may have been having?	1 = yes 2 = no 3 = don't know
Pchilddem5	Is this child taking any medications for ADHD, OCD, or other behavioral or mental disorder?	1 = yes 2 = no

Appendix B: Parent Involvement Project Parent Questionnaire-Modified (PIPQ-M)

VARIABLE NAME: PT1PIPQB1-24 (Time 1, items 1-24)

PT3PIPQ1-26 (Time 1, items 1-26)

This scale is based on Hoover-Dempsey and Sandler's (2005) PIPQ. The changes that were made to the scale used in this study included:

- Some items deleted for school entry version (2 items, see below).
- Word "homework" changed to "schoolwork".
- Not all subscales from Parent Involvement Project Parent Questionnaire used.
- Items of subscales interspersed throughout questionnaire.

All scales used in this study are positively phrased except for the **3 bolded items below**. Participants were to respond to each item listed below using the following scale:

Table B1

Response Scale

Disagree very strongly	Disagree	Disagree just a little	Agree just a little	Agree	Agree very strongly
1	2	3	4	5	6

Parental Self-Efficacy (5 items):

1. I know how to help my child do well in school.
- 5. I don't know how to help my child make good grades in school. (REVERSED ITEM)**
- 10. I don't know if I'm getting through to my child. (REVERSED ITEM)**
- 16. I don't know how to help my child learn. (REVERSED ITEM)**
20. I feel successful about my efforts to help my child learn.

Parental Role Construction (10 items):

3. I believe it's my Responsibility to volunteer at the school.
6. I believe it's my Responsibility to stay on top of things at school.
9. I believe it's my Responsibility to help my child with homework. (schoolwork)
11. I believe it's my Responsibility to make the school better.
14. I believe it's my Responsibility to support decisions made by the teacher.
18. I believe it's my Responsibility to talk with other parents from my child's school.
19. I believe it's my Responsibility to make sure the school has what it needs.
21. I believe it's my Responsibility to communicate with my child's teacher regularly.

24. I believe it's my Responsibility to explain tough assignments (modified: school work) to my child.

23. I believe it's my Responsibility to talk with my child about the school day.

Parental Time and Energy (5 items):

2. I have enough time and energy to help out at my child's school.

8. I have enough time and energy to supervise my child's homework (schoolwork).

13. I have enough time and energy to attend special events at school.

17. I have enough time and energy to help my child with homework. (schoolwork)

22. I have enough time and energy to communicate effectively with my child's teacher.

Parental Knowledge and Skills (6 items):

4. I know enough about the subjects of my child's homework to help him or her.

7. I know how to explain things to my child about his or her homework.

12. I have the skills to help out at my child's school.

15. I know how to supervise my child's homework.

25. I know about volunteering opportunities at my child's school. **(deleted for school entry version)**

26. I know about special events at school. **(deleted for school entry version)**

References

Hoover-Dempsey, K.V., & Sandler, H.M. (2005). Final Performance Report for OERI Grant # R305T010673: The Social Context of Parental Involvement: A Path to Enhanced Achievement. Presented to Project Monitor, Institute of Education Sciences, U.S. Department of Education, March 22, 2005.

Walker, J.M., Wilkins, A.S., Dallaire, J., Sandler, H.M., & Hoover-Dempsey, K.V. (2005). Parental involvement: Model revision through scale development. Elementary School Journal, 106(2); 85-104

<http://www.vanderbilt.edu/peabody/family-school/scaledescriptions.html>

Appendix C: Fast Track Project Parent—Teacher Involvement Questionnaire (Parent Version)

VARIABLE NAME: PT1Fast1-10 (Time 1, items 1-10)

PT3Fast1-10 (Time 3, items 1-10)

Only items 1-10 were administered. Full scale has 26 items.

At time one, responded to each item listed below using the following scale:

Table C1

Response Scale

Never	Once or twice a year	Almost every month	Almost every week	More than once per week
1	2	3	4	5

1. In the past year, you have called your child's teacher
2. In the past year, your child's teacher has called you.
3. In the past year, your have written your child's teacher.
4. In the past year, your child's teacher has written you.
5. In the past year, you stopped by to talk to your child's teacher.
6. In the past year, you have been invited to your child's school for a special event (such as a book fair).
7. In the past year, you have visited your child's school for a special event (such as a book fair).
8. In the past year, you have been invited to attend a parent-teacher conference.
9. In the past year, you have attended a parent-teacher conference.
10. In the past year, you have attended a PTA meeting.

References

Conduct Problems Prevention Research Group (CPPRG). (1991). *Parent-Teacher Involvement Questionnaire: Parent Version*.

Available <http://fasttrackproject.org/techrept/p/ptp/ptpo.pdf>

<http://fasttrackproject.org/techrept/p/ptp/>

Subscale information: <http://fasttrackproject.org/techrept/p/ptp/ptp1tech.pdf>

- Frequency of Parent-Teacher Contact (items 1-4)
- This is the only full subscale that we have
- Parent's Involvement and Volunteering at School (5-7, 9, 10, 18-22)
- Quality of the Relationship Between Parent and Teacher (items 11-17)—similar to our Trust measure
- Parent's Endorsement of Child's School (23-26)

Appendix D: Parenting Practices Interview (Webster-Stratton, 1998)

VARIABLE NAME: PT1PRACT1a-14d (Time 1)

At time 1, parents completed a slightly modified version of the Parenting Practices Interview. *“This questionnaire is adapted from the Oregon Social Learning Center's Discipline Questionnaire and revised for young children. It can be administered as an interview or used as a self-report questionnaire and is completed by the child's primary caregiver.”*

The measure includes the following scales: Appropriate Discipline, Harsh & Inconsistent Discipline, Positive Verbal Discipline, Monitoring, Praise & Incentive, and Clear Expectations. We removed the Physical Punishment Scale. Table 1 below outlines each subscale with the item number, actual item wording, and response options.

Please note the following information from Webster-Stratton on using this measure:

“Before computing summary scale scores, scale values for several items were re-scaled or reversed. Items that were not rated on 7-point scales were converted to 7-point scales.” **All highlighted items need to be recoded or reversed as described. Summary scale scores were computed as the average of the component items. The range of values for the summary scale scores is 1 to 7.**

FOR 1D, 2D AND 3D, Webster Stratton has Threaten to punish (but not really punish him/her). We just have the Threaten to punish part.

Table D1

Parenting Practices Interview

Appropriate Discipline:

ITEM #	ITEM	RESPONSE OPTIONS
4B	In general, how often do the following things happen? If you warn your child that you will discipline him/her if she doesn't stop, how often do you actually discipline him/her if she/he keeps on misbehaving?	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
1C	The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)?	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME

	Get your child to correct the problem or make up for his/her mistake?	5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
3C	If your child refused to do what you wanted him/her to do, how likely is it that you would use each of the following discipline techniques. Get your child to correct the problem or make up for his/her mistake.	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
1E	The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)? Give him/her a brief time out away from family.	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
2E	If your child hit another child, how likely is it that you would discipline your child in the following ways? Give him/her a time out away from family?	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
3E	If your child refused to do what you wanted him/her to do, how likely is it that you would use each of the following discipline techniques. Give him/her a time out away from family?	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME

		5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
1G	<p>The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)?</p> <p>Take away privileges (like TV, playing with friends)</p>	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
2G	<p>If your child hit another child, how likely is it that you would discipline your child in the following ways?</p> <p>Take away privileges (like TV, playing with friends)</p>	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
3G	<p>If your child refused to do what you wanted him/her to do, how likely is it that you would use each of the following discipline techniques.</p> <p>Take away privileges (like TV, playing with friends)</p>	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
10B	<p>Please rate how likely you are to do the following things</p> <p>When your child does NOT complete his/her chores, how likely are you to punish your child (such as taking away a privilege or grounding him/her).</p>	1 = NOT AT ALL LIKELY 2 = SLIGHTLY LIKELY 3 = SOMEWHAT LIKELY 4 = MODERATELY LIKELY 5 = QUITE LIKELY

		6 = VERY LIKELY 7 = EXTREMELY LIKELY
10C	Please rate how likely you are to do the following things When your child fights, steals, or lies, how likely are you to punish your child.	1 = NOT AT ALL LIKELY 2 = SLIGHTLY LIKELY 3 = SOMEWHAT LIKELY 4 = MODERATELY LIKELY 5 = QUITE LIKELY 6 = VERY LIKELY 7 = EXTREMELY LIKELY
14B	How much do you agree or disagree with the following statements? Parents who check up on how their child behaves at friends' houses are too anxious about their child.	1 = STRONGLY DISAGREE 2 = DISAGREE 3 = SLIGHTLY DISAGREE 4 = NEITHER AGREE OR DISAGREE 5 = SLIGHTLY AGREE 6 = AGREE 7 = STRONGLY AGREE NEEDS TO BE REVERSED

Harsh and Inconsistent Discipline:

ITEM #	ITEM	RESPONSE OPTIONS
1B	The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)? Raise your voice (scold or yell).	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS

2B	If your child hit another child, how likely is it that you would discipline your child in the following ways? Raise your voice (scold or yell).	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
3B	If your child refused to do what you wanted him/her to do, how likely is it that you would use each of the following discipline techniques. Raise your voice (scold or yell).	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
1D	The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)? Threaten to punish him/her.	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
2D	If your child hit another child, how likely is it that you would discipline your child in the following ways? Threaten to punish him/her.	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN

		7 = ALWAYS
3D	<p>If your child refused to do what you wanted him/her to do, how likely is it that you would use each of the following discipline techniques.</p> <p>Threaten to punish him/her.</p>	<p>1 = NEVER</p> <p>2 = SELDOM</p> <p>3 = SOMETIMES</p> <p>4 = ABOUT HALF THE TIME</p> <p>5 = OFTEN</p> <p>6 = VERY OFTEN</p> <p>7 = ALWAYS</p>
4E	<p>In general, how often do the following things happen?</p> <p>How often do you show anger when you discipline your child?</p>	<p>1 = NEVER</p> <p>2 = SELDOM</p> <p>3 = SOMETIMES</p> <p>4 = ABOUT HALF THE TIME</p> <p>5 = OFTEN</p> <p>6 = VERY OFTEN</p> <p>7 = ALWAYS</p>
4F	<p>In general, how often do the following things happen?</p> <p>How often do arguments with your child build up and you do or say things you don't mean to?</p>	<p>1 = NEVER</p> <p>2 = SELDOM</p> <p>3 = SOMETIMES</p> <p>4 = ABOUT HALF THE TIME</p> <p>5 = OFTEN</p> <p>6 = VERY OFTEN</p> <p>7 = ALWAYS</p>
4A	<p>In general, how often do the following things happen?</p> <p>If you ask your child to do something and she/he doesn't do it, how often do you give up trying to get him/her to do it?</p>	<p>1 = NEVER</p> <p>2 = SELDOM</p> <p>3 = SOMETIMES</p> <p>4 = ABOUT HALF THE TIME</p> <p>5 = OFTEN</p>

		6 = VERY OFTEN 7 = ALWAYS
4C	In general, how often do the following things happen? How often does your child get away with things that you feel she/he should have been disciplined for?	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
4D	In general, how often do the following things happen? If you have decided to punish your child, how often do you change your mind based on your child's explanations, excuses, or arguments?	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
4G	In general, how often do the following things happen? How often is your child getting around the rules that you have set?	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
4H	In general, how often do the following things happen? How often does the kind of punishment you give your child depend on your mood?	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME

		5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
01A	The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)? Ignore it.	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
3A	If your child refused to do what you wanted him/her to do, how likely is it that you would use each of the following discipline techniques. Ignore it.	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS

Positive Verbal Discipline:

ITEM #	ITEM	RESPONSE OPTIONS
2C	If your child hit another child, how likely is it that you would discipline your child in the following ways? Get the child to correct the problem or make up for his/her mistake.	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS

1I	<p>The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves (that is, does something she/he is not supposed to do)?</p> <p>Discuss the problem with the child or ask questions.</p>	<p>1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS</p>
2I	<p>If your child hit another child, how likely is it that you would discipline your child in the following ways?</p> <p>Discuss the problem with the child or ask questions.</p>	<p>1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS</p>
3I	<p>If your child refused to do what you wanted him/her to do, how likely is it that you would use each of the following discipline techniques.</p> <p>Discuss the problem with the child or ask questions.</p>	<p>1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS</p>
10A	<p>Please rate how likely you are to do the following things:</p> <p>When your child completes his/her chores, how likely are you to praise or reward your child?</p>	<p>1 = NOT AT ALL LIKELY 2 = SLIGHTLY LIKELY 3 = SOMEWHAT LIKELY 4 = MODERATELY LIKELY 5 = QUITE LIKELY 6 = VERY LIKELY 7 = EXTREMELY LIKELY</p>

6	In an AVERAGE week, how often do you praise or reward your child for doing a good job at home or school?	1 = less than once per week 2 = about once per week 3 = a few times per week but not daily 4 = about once a day 5 = 2-5 times per day 6 = 6-10 times per day 7 = more than 10 times per day
7A	Within the LAST 2 DAYS, how many times did you Praise or compliment your child for anything she/he did well?	1 = NEVER 2 = ONCE 3 = TWICE 4 = 3 TIMES 5 = 4 TIMES 6 = 5 TIMES 7 = 6 OR 7 TIMES 8 = MORE THAN 7 TIMES 9 = NOT WITH MY CHILD IN THE LAST TWO DAYS THIS ITEM NEEDS TO BE RECODED AS FOLLOWS: (1, 9 = 1) (2 = 2) (3 = 3) (4 = 4) (5, 6 = 5) (7 = 6) (8 = 7)
8D	Please rate how much you agree or disagree with the following statements: It is important to praise children when they do well.	1 = STRONGLY DISAGREE 2 = DISAGREE 3 = SLIGHTLY DISAGREE 4 = NEITHER AGREE OR DISAGREE 5 = SLIGHTLY AGREE 6 = AGREE 7 = STRONGLY AGREE

8E	<p>Please rate how much you agree or disagree with the following statements:</p> <p>I would like to praise my child more often than criticize him/her but it is hard to find behaviors to praise.</p>	<p>1 = STRONGLY DISAGREE</p> <p>2 = DISAGREE</p> <p>3 = SLIGHTLY DISAGREE</p> <p>4 = NEITHER AGREE OR DISAGREE</p> <p>5 = SLIGHTLY AGREE</p> <p>6 = AGREE</p> <p>7 = STRONGLY AGREE</p> <p>NEEDS TO BE REVERSED</p>
----	--	--

Monitoring:

ITEM #	ITEM	RESPONSE OPTIONS
11	About how many hours in the last 24 hours did your child spend at home without adult supervision, if any?	<p>1 = NONE</p> <p>2 = LESS THAN ½ HOUR</p> <p>3 = ½ - 1 HOUR</p> <p>4 = 1-1 ½ HOUR</p> <p>5 = 1 ½ - 2 HOURS</p> <p>6 = 2-3 HOURS</p> <p>7 = 3-4 HOURS</p> <p>8 = MORE THAN 4 HOURS</p> <p>THIS ITEM NEEDS TO BE RECODED AS FOLLOWS:</p> <p>1= 1</p> <p>2= 2</p> <p>3= 3</p> <p>4= 4</p> <p>5= 5</p> <p>6= 6</p>

		<p>7, 8 = 7</p> <p>THIS ITEM ALSO NEEDS TO BE REVERSED</p> <p>1=7</p> <p>2=6</p> <p>3=5</p> <p>4=4</p> <p>5=3</p> <p>6=2</p> <p>7=1</p> <p>So, putting it all together:</p> <p>1=7</p> <p>2=6</p> <p>3=5</p> <p>4=4</p> <p>5=3</p> <p>6=2</p> <p>7=1</p> <p>8=1</p>
13A	What percentage of the time do you know where your child is when she/he is away from your direct supervision?	<p>1 = NONE OR ALMOST NONE</p> <p>2 = ABOUT 25%</p> <p>3 = ABOUT 50%</p> <p>4 = ABOUT 75%</p> <p>5 = ALL OR ALMOST ALL</p> <p>THIS ITEM NEEDS TO BE RECODED AS:</p> <p>1= 1</p> <p>2 = 2.5</p> <p>3 = 4</p> <p>4= 5.5</p>

		5= 7
13B	What percentage of the time do you know exactly what your child is doing when she/he is away from you?	<p>1 = NONE OR ALMOST NONE</p> <p>2 = ABOUT 25%</p> <p>3 = ABOUT 50%</p> <p>4 = ABOUT 75%</p> <p>5 = ALL OR ALMOST ALL</p> <p>THIS ITEM NEEDS TO BE RECODED AS:</p> <p>1= 1</p> <p>2 = 2.5</p> <p>3 = 4</p> <p>4= 5.5</p> <p>5= 7</p>
14C	Giving children lots of free, unsupervised time helps them learn to be more responsible.	<p>1 = STRONGLY DISAGREE</p> <p>2 = DISAGREE</p> <p>3 = SLIGHTLY DISAGREE</p> <p>4 = NEITHER AGREE NOR DISAGREE</p> <p>5 = SLIGHTLY AGREE</p> <p>6 = AGREE</p> <p>7 = STRONGLY AGREE</p> <p>REVERSE ITEM</p>
12	Within the LAST 2 DAYS, about how many total hours was your child involved in activities outside your home without adult supervision, if any?	<p>1 = NONE</p> <p>2 = LESS THAN ½ HOUR</p> <p>3 = ½ - 1 HOUR</p> <p>4 = 1-1 ½ HOUR</p> <p>5 = 1 ½ -2 HOURS</p> <p>6 = 2-3 HOURS</p> <p>7 = 3-4 HOURS</p>

		<p>8 = MORE THAN 4 HOURS</p> <p>THIS ITEM NEEDS TO BE RECODED AS FOLLOWS:</p> <p>1= 1</p> <p>2= 2</p> <p>3 = 3</p> <p>4 = 4</p> <p>5 = 5</p> <p>6 = 6</p> <p>7, 8 = 7</p> <p>THIS ITEM ALSO NEEDS TO BE REVERSED</p> <p>1=7</p> <p>2=6</p> <p>3=5</p> <p>4=4</p> <p>5=3</p> <p>6=2</p> <p>7=1</p>
--	--	---

Praise and Incentives (Positive Parenting):

ITEM #	ITEM	RESPONSE OPTIONS
5B	<p>This is a list of things that parents might do when their child behaves well or does a good job at something. In general, how often do you do each of the following things when your child behaves well or does a good job?</p> <p>Praise or compliment your child.</p>	<p>1 = NEVER</p> <p>2 = SELDOM</p> <p>3 = SOMETIMES</p> <p>4 = ABOUT HALF THE TIME</p> <p>5 = OFTEN</p> <p>6 = VERY OFTEN</p> <p>7 = ALWAYS</p>

5C	<p>This is a list of things that parents might do when their child behaves well or does a good job at something. In general, how often do you do each of the following things when your child behaves well or does a good job?</p> <p>Give your child a hug, kiss, pat, handshake, or “high five”</p>	<p>1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS</p>
5D	<p>This is a list of things that parents might do when their child behaves well or does a good job at something. In general, how often do you do each of the following things when your child behaves well or does a good job?</p> <p>Buy something for him/her (such as a special food, a small toy) or give him/her money for good behavior.</p>	<p>1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS</p>
5E	<p>This is a list of things that parents might do when their child behaves well or does a good job at something. In general, how often do you do each of the following things when your child behaves well or does a good job?</p> <p>Give him/her an extra privilege (such as cake, go to the movies, special activity for good behavior)</p>	<p>1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS</p>
5F	<p>This is a list of things that parents might do when their child behaves well or does a good job at something. In general, how often do you do each of the following things when your child behaves well or does a good job?</p> <p>Give points or starts on a chart.</p>	<p>1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS</p>
7B	<p>Within the LAST 2 DAYS, how many times did you:</p>	<p>1 = NEVER 2 = ONCE</p>

	<p>Give him/her something extra, like a small gift, privileges, or a special activity with you, for something he/she did well?</p>	<p>3 = TWICE 4 = 3 TIMES 5 = 4 TIMES 6 = 5 TIMES 7 = 6 OR 7 TIMES 8 = MORE THAN 7 TIMES 9 = NOT WITH MY CHILD IN THE LAST TWO DAYS</p> <p>THIS ITEM NEEDS TO BE RECODED AS FOLLOWS: (1, 9 = 1) (2 = 2) (3 = 3) (4= 4) (5, 6 = 5) (7 = 6) (8 = 7)</p>
8A	<p>Please rate how much you agree or disagree with the following statements:</p> <p>Giving children a reward for good behavior is bribery.</p>	<p>1 = STRONGLY DISAGREE 2 = DISAGREE 3 = SLIGHTLY DISAGREE 4 = NEITHER AGREE OR DISAGREE 5 = SLIGHTLY AGREE 6 = AGREE 7 = STRONGLY AGREE</p> <p>NEEDS TO BE REVERSED</p>
8B	<p>Please rate how much you agree or disagree with the following statements:</p> <p>I shouldn't have to reward my children to get them to do things they are supposed to do.</p>	<p>1 = STRONGLY DISAGREE 2 = DISAGREE 3 = SLIGHTLY DISAGREE 4 = NEITHER AGREE OR DISAGREE 5 = SLIGHTLY AGREE 6 = AGREE 7 = STRONGLY AGREE</p>

		NEEDS TO BE REVERSED
8C	Please rate how much you agree or disagree with the following statements: I believe in using rewards to teach my child how to behave.	1 = STRONGLY DISAGREE 2 = DISAGREE 3 = SLIGHTLY DISAGREE 4 = NEITHER AGREE OR DISAGREE 5 = SLIGHTLY AGREE 6 = AGREE 7 = STRONGLY AGREE
8G	Please rate how much you agree or disagree with the following statements: If a child is having trouble doing something she/he is supposed to do (such as going to bed, picking up toys), it is a good idea to set up a reward or an extra privilege for doing it.	1 = STRONGLY DISAGREE 2 = DISAGREE 3 = SLIGHTLY DISAGREE 4 = NEITHER AGREE OR DISAGREE 5 = SLIGHTLY AGREE 6 = AGREE 7 = STRONGLY AGREE
10D	Please rate how likely you are to do the following things: When your child goes to bed or gets up on time, how likely are you to praise or reward your child?	1 = NOT AT ALL LIKELY 2 = SLIGHTLY LIKELY 3 = SOMEWHAT LIKELY 4 = MODERATELY LIKELY 5 = QUITE LIKELY 6 = VERY LIKELY 7 = EXTREMELY LIKELY

Clear Expectations:

ITEM #	ITEM	RESPONSE OPTIONS
1H	The following is a list of things that parents have told us they do when their children misbehave. In general, how often do you do each of the following things when your child misbehaves	1 = NEVER 2 = SELDOM

	(that is, does something she/he is not supposed to do)? Give your child extra work chores.	3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
2H	If your child hit another child, how likely is it that you would discipline your child in the following ways? Give your child extra work chores.	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
3H	If your child refused to do what you wanted him/her to do, how likely is it that you would use each of the following discipline techniques. Give your child extra work chores.	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = ABOUT HALF THE TIME 5 = OFTEN 6 = VERY OFTEN 7 = ALWAYS
9A	Please rate how much you agree with the following statements: I have made clear rules or expectations for my child about chores.	1 = STRONGLY DISAGREE 2 = DISAGREE 3 = SLIGHTLY DISAGREE 4 = NEITHER AGREE OR DISAGREE 5 = SLIGHTLY AGREE 6 = AGREE 7 = STRONGLY AGREE
9B	Please rate how much you agree with the following statements:	1 = STRONGLY DISAGREE 2 = DISAGREE 3 = SLIGHTLY DISAGREE

	I have made clear rules or expectations for my child about not fighting, stealing, lying, etc.	4 = NEITHER AGREE OR DISAGREE 5 = SLIGHTLY AGREE 6 = AGREE 7 = STRONGLY AGREE
9C	Please rate how much you agree with the following statements: I have made clear rules or expectations for my child about going to bed and getting up on time.	1 = STRONGLY DISAGREE 2 = DISAGREE 3 = SLIGHTLY DISAGREE 4 = NEITHER AGREE OR DISAGREE 5 = SLIGHTLY AGREE 6 = AGREE 7 = STRONGLY AGREE

References

Incredible Year Measures: <http://www.incredibleyears.com/Measures/em.asp>

Scoring Data for LIFT Parenting Practices: <http://www.incredibleyears.com/Measures/ppi-t1t3.pdf>

Appendix E: Parental Support for Learning Scale (school entry; PSLS) formerly the Family-School Questionnaire Parent Form (school entry)-FSQ

VARIABLE NAME: PT1FSQ1M-38M (Time 1, 38 items, completed by mom)
 PT1FSQ1D-38D (Time 1, 38 items, completed by dad)
 PT3FSQM1-M38 (Time 3, 38 items, completed by mom)
 PT3FSQD1-D38 (Time 3, 38 items, completed by dad)

For this scale, there were both mother and father versions. All items require the parent to respond to the items listed below using the following response options:

Table E1

Response Scale

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Items are organized into the following subscales.

Instrumental Involvement in Learning:

- 7. I read to my child before he/she goes to sleep.
- 9. I help my child with schoolwork that he/she does not understand.
- 18. I often help my child with his/her schoolwork.
- 19. My child and I read together sometimes.
- 23. I rarely help my child with schoolwork. (REVERSED)**
- 29. I talk to my child about things that he/she is learning.

Supportive-Controlling Parental Involvement:

- 4. I support my child in the things he/she does in school.
- 5. I am very patient when it comes to my child's education.
- 8. I push my child to be the best in the class. (REVERSED)**
- 12. I am never satisfied with my child's school performance. (REVERSED)**
- 16. I try to make my child feel confident in his/her school work.
- 21. I punish my child if he/she does poorly in school. (REVERSED)**
- 25. I try to make my child feel smart in his/her schoolwork.
- 28. I think my child is lazy when it comes to school. (REVERSED)**
- 30. I am very strict when it comes to schoolwork. (REVERSED)**

35. I am still pleased, even if my child does not make the top of the class.
- 36. I try to make my child feel guilty when he/she does poorly in school.
(REVERSED)**
- 37. If my child's schoolwork is not good enough, I will restrict his/her free time.
(REVERSED)**

Management of Home Learning Environment:

10. I often bring home educational activities for our family.
11. I always keep track of my child's schoolwork.
13. I take my child to special places, like museums and fairs, where we can learn new things.
14. I decide how much TV my child can watch on school days.
26. I set rules on the kinds of TV shows my child can watch.
27. I provide different kinds of things to read, like magazines, stories, and non-fiction.
38. We have lots of helpful books or a computer at home that my child can use for his/her school work.

References

- Rogers, M.A., Markel, C., Ryan, B.A., Midgett, J., & Tannock, R. (in press) Assessing child perceptions of parental involvement in Conjoint Behavioral Consultation: Factor structure and reliability of The Parental Support for Learning Scale. *Assessment for Effective Intervention*.

Appendix F: Trust scale from the Family-School Relationship Survey

VARIABLE NAME: PT1Trust1-20 (Time 1, 20 items)

PT3Trust1-20 (Time 3, 20 items)

The Trust scale from the Family School Relationship Survey was used. Differences from the original scale are noted below. Parents responded to the following stem for all items: *I am confident that my child's teachers* using the following response options.

Table F1

Response Scale

Strongly Disagree	Disagree	Agree	Strongly Agree
0	1	2	3

1. Will do a good job teaching my child academic subjects.
2. Will do a good job teaching my child to follow rules and directions.
3. Will do a good job helping my child to resolve conflicts with peers.
4. Will do a good job participating in my child's education. (*ORIGINAL WORDING: Are doing a good job encouraging my participation in my child's education.*)
5. Will do a good job disciplining my child.
6. Will be easy to reach when I have a question or problem.
7. Will make me aware of all the information I need about my child. (*ORIGINAL WORDING: Keep me aware of all of the information I need related to school.*)
8. Will do a good job encouraging my child's sense of self esteem.
9. Will do a good job encouraging my child to have a positive attitude toward learning.
10. Will do a good job helping my child understand his/her moral and ethical responsibilities.
11. Will be friendly and approachable.
12. Will be receptive to my input and suggestions.
13. Will be sensitive to cultural differences.
14. Will respect me as a competent teacher.
15. Will be committed to my child's education. (*NOT ON ORIGINAL SCALE*)
16. Will be worthy of my respect.
17. Will have my child's best interests at heart.
18. Will do a good job keeping me well-informed of my child's progress.
19. Will care about my child.
20. Will do what is best for my child in the classroom

References

- Adams, K. S., & Christenson, S. L. (2000). Trust and the family-school relationship: Examination of parent-teacher differences in elementary and secondary grades. *Journal of School Psychology, 38*, 477-497.

Appendix G: Independent Samples *t*-Tests

Table G1

Independent Samples t-tests Comparing U.S. and Canada for Parent-Rated Strengths Sample (n = 122)

	U.S.			Canada			<i>t</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	
Parenting Practices							
Appropriate Discipline	83	4.86	.83	36	4.60	.93	ns
Harsh/ Inconsistent Discipline	83	2.85	.65	36	3.04	.75	ns
Positive Verbal Discipline	82	5.83	.71	36	5.61	.81	ns
Monitoring	82	6.57	.45	36	6.10	.76	4.20**
Praise/Incentives	82	4.50	.86	36	4.04	.73	2.81*
Clear Expectations	82	4.13	.88	36	3.80	.84	ns
Parental Involvement							
Self-Efficacy	84	5.23	.67	36	4.99	.73	ns
Role Construction	84	4.85	.55	36	4.77	.62	ns
Time and Energy	84	4.91	.74	36	4.77	.69	ns
Knowledge and Skills	84	5.29	.63	36	5.09	.75	ns
Parent/Teacher Involvement	84	2.36	.50	36	2.01	.39	3.72**
Instrumental Involvement	82	4.61	.38	35	4.42	.46	2.40*
Management of Home Learning Environment	82	4.32	.48	35	4.18	.52	ns
Supportive Involvement	82	4.57	.37	35	4.47	.40	ns
Trust of child's teacher	84	2.74	.37	36	2.47	.45	3.33**
Parent-Rated Social-Emotional Strengths							
Self-Regulation/Responsibility	84	1.59	.54	36	1.47	.49	ns
Social Competence	83	2.18	.53	38	2.07	.48	ns

Empathy	84	2.08	.57	38	2.03	.47	ns
Total Strengths	84	1.83	.49	36	1.73	.42	ns
Demographic Variables							
Socioeconomic Status	84	5.22	1.58	36	5.33	1.22	ns

* $p < .05$, ** $p < .01$, two-tailed.

Note. Value reported in t-test column is the value for t -statistic if equal variances are assumed.

Table G2

Independent Samples t-tests Comparing U.S. and Canada for Teacher-Rated Strengths Sample (n = 166)

	U.S.			Canada			<i>t</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	
Parenting Practices							
Appropriate Discipline	95	4.81	.85	60	4.50	1.04	ns
Harsh/Inconsistent Discipline	95	2.80	.65	60	2.89	.66	ns
Positive Verbal Discipline	94	5.80	.73	60	5.56	.79	ns
Monitoring	93	6.56	.50	59	6.23	.68	3.37*
Praise/Incentives	94	4.47	.85	60	4.19	.71	2.18*
Clear Expectations	94	4.14	.86	60	3.76	.84	2.65*
Parental Involvement							
Self-Efficacy	96	5.18	.79	60	4.98	.69	ns
Role Construction	96	4.87	.56	60	4.77	.60	ns
Time and Energy	96	4.87	.80	60	4.67	.67	ns
Knowledge and Skills	96	5.27	.66	60	5.06	.67	ns
Parent/Teacher Involvement	96	2.34	.50	60	1.98	.43	4.58**
Instrumental Involvement	92	4.60	.40	57	4.32	.46	3.87**
Management of Home Learning Environment	92	4.32	.48	57	4.11	.52	2.48*
Supportive Involvement	92	4.55	.42	57	4.40	.41	2.22*

Table G2 (Continued)

Trust of child's teacher	96	2.71	.39	60	2.47	.46	3.54**
Teacher-Rated Social-Emotional Strengths							
Total Strengths	95	2.02	.66	70	1.86	.61	ns
Demographic Variables							
Socioeconomic Status	96	5.20	1.55	60	5.23	1.24	ns

* $p < .05$, ** $p < .01$, two-tailed.

Appendix H: Institutional Research Board Review



RESEARCH INTEGRITY AND COMPLIANCE
 Institutional Review Boards, FWA No. 00001669
 12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
 (813) 974-5638 • FAX(813)974-7091

January 26, 2016

Kayla LaRosa
 Educational and Psychological Studies
 Tampa, FL 33612

RE: **Not Human Subjects Research Determination**
 IRB#: Pro00024776
 Title: Parent Predictors of Social-Emotional Strengths in Kindergartners

Dear Ms. LaRosa:

The Institutional Review Board (IRB) has reviewed your application and determined the activities do not meet the definition of human subjects research. Therefore, this project is not under the purview of the USF IRB and approval is not required. If the scope of your project changes in the future, please contact the IRB for further guidance.

All research activities, regardless of the level of IRB oversight, must be conducted in a manner that is consistent with the ethical principles of your profession. Please note that there may be requirements under the HIPAA Privacy Rule that apply to the information/data you will utilize. For further information, please contact a HIPAA Program administrator at 813-974-5638.

We appreciate your dedication to the ethical conduct of research at the University of South Florida. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

Kristen Salomon, Ph.D., Vice Chairperson
 USF Institutional Review Board