THE IMPACT OF SCHOOL-BASED CHILD CENTERED PLAY THERAPY ON
ACADEMIC ACHIEVEMENT, SELF-CONCEPT, AND TEACHER-CHILD
RELATIONSHIP STRESS

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Blanco, Pedro J. *The impact of school-based child centered play therapy on academic achievement, self-concept, and teacher-child relationship stress.* Doctor of Philosophy (Counseling), May 2009, 111 pp., 15 tables, 1 figure, references, 92 titles.

This study examined the effectiveness of child centered play therapy (CCPT) with academically at-risk 1st graders. In this quasi-experimental design, twenty-one 1st grade students were assigned to the experimental group and 20 students were assigned to the no treatment control group. The children in the experimental group received two 30 minute play therapy sessions per week for the duration of eight weeks.

Three hypotheses were analyzed. A two-factor repeated measures analysis of variances (SPANOVA) were performed on each dependent variable to determine if the experimental group performed differently from the control group across time according to the pretest and posttest results of the Young Child’s Achievement Test (YCAT), the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSAYC), and the Student-Teacher Relationship Scale (STRS). Additionally, partial $\eta^2$ was calculated to determine practical significance. One hypothesis was retained at the .05 level of significance.

Findings indicated that academically at-risk 1st graders who participated in CCPT scored statistically significant higher on academic achievement. Specifically, children assigned to the experimental group demonstrated a statistically significant increase in Early Achievement Composite ($p = .03$) when compared to children assigned to the no treatment control group. No statistical significant results were found on Self-Concept and Student-Teacher Relationship Stress.
ACKNOWLEDGEMENTS

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>CHAPTERS</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>01</td>
</tr>
<tr>
<td>Statement of the problem</td>
<td>03</td>
</tr>
<tr>
<td>Related Literature</td>
<td>03</td>
</tr>
<tr>
<td>Academic Achievement</td>
<td>04</td>
</tr>
<tr>
<td>Emotional Health</td>
<td>04</td>
</tr>
<tr>
<td>Self-Concept</td>
<td>08</td>
</tr>
<tr>
<td>Early Research</td>
<td>08</td>
</tr>
<tr>
<td>Contemporary Research</td>
<td>11</td>
</tr>
<tr>
<td>Student-Teacher Relationship</td>
<td>15</td>
</tr>
<tr>
<td>Child Centered Play Therapy</td>
<td>22</td>
</tr>
<tr>
<td>Academic Achievement</td>
<td>24</td>
</tr>
<tr>
<td>IQ scores Research</td>
<td>25</td>
</tr>
<tr>
<td>Learning and Language Research</td>
<td>28</td>
</tr>
<tr>
<td>Reading Improvement Research</td>
<td>29</td>
</tr>
<tr>
<td>Contemporary Research</td>
<td>33</td>
</tr>
<tr>
<td>Self-Concept</td>
<td>38</td>
</tr>
<tr>
<td>Early Research</td>
<td>39</td>
</tr>
<tr>
<td>Contemporary Research</td>
<td>41</td>
</tr>
<tr>
<td>Student-Teacher Relationship</td>
<td>44</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>46</td>
</tr>
<tr>
<td>2. METHODS AND PROCEDURES</td>
<td></td>
</tr>
<tr>
<td>Hypothesis</td>
<td>48</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>49</td>
</tr>
<tr>
<td>Instruments</td>
<td>51</td>
</tr>
</tbody>
</table>
### RESULTS AND DISCUSSION

#### Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>73</td>
</tr>
<tr>
<td>3</td>
<td>74</td>
</tr>
</tbody>
</table>

#### Clinical Significance

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement Outcomes</td>
<td>76</td>
</tr>
<tr>
<td>Self-Concept Outcomes</td>
<td>78</td>
</tr>
<tr>
<td>Student-Teacher Relationships Outcomes</td>
<td>79</td>
</tr>
</tbody>
</table>

#### Discussion

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td>81</td>
</tr>
<tr>
<td>Self-Concept</td>
<td>86</td>
</tr>
<tr>
<td>Student-Teacher Relationship</td>
<td>89</td>
</tr>
</tbody>
</table>

#### Limitations

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendations for Further Research</td>
<td>92</td>
</tr>
</tbody>
</table>

#### Implications and Conclusion

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>REFERENCES</td>
<td>105</td>
</tr>
</tbody>
</table>

### APPENDICES

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. PARENT CONSENT FORM</td>
<td>96</td>
</tr>
<tr>
<td>B. TEACHER CONSENT FORM</td>
<td>100</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demographic Information for Children in the Experimental and Control Group</td>
<td>58</td>
</tr>
<tr>
<td>2</td>
<td>Analysis of Variance for Early Achievement Composite of the YCAT</td>
<td>67</td>
</tr>
<tr>
<td>3</td>
<td>Mean Scores on the General Information, Reading, Mathematics, Writing, Spoken Language scales and Early Achievement Composite on the YCAT</td>
<td>68</td>
</tr>
<tr>
<td>4</td>
<td>Analysis of Variance for the General Information Subscale of the YCAT</td>
<td>69</td>
</tr>
<tr>
<td>5</td>
<td>Analysis of Variance for the Reading Subscale of the YCAT</td>
<td>70</td>
</tr>
<tr>
<td>6</td>
<td>Analysis of Variance for the Mathematics Subscale of the YCAT</td>
<td>71</td>
</tr>
<tr>
<td>7</td>
<td>Analysis of Variance for the Writing Subscale of the YCAT</td>
<td>72</td>
</tr>
<tr>
<td>8</td>
<td>Analysis of Variance for the Writing Spoken Language of the YCAT</td>
<td>72</td>
</tr>
<tr>
<td>9</td>
<td>Mean Scores on the Global Self-Concept Score on the PSPCSAYC</td>
<td>73</td>
</tr>
<tr>
<td>10</td>
<td>Analysis of Variance for Global Self-Concept Score on the PSPCSAYC</td>
<td>74</td>
</tr>
<tr>
<td>11</td>
<td>Mean Scores on the Total Scale on the STRS</td>
<td>74</td>
</tr>
<tr>
<td>12</td>
<td>Analysis of Variance for Total Score on STRS</td>
<td>75</td>
</tr>
<tr>
<td>13</td>
<td>Academic Achievement Levels at Pre &amp; Post Test on the YCAT</td>
<td>78</td>
</tr>
<tr>
<td>14</td>
<td>Self-Concept Levels at Pre &amp; Post Test on the PSPCSAYC</td>
<td>79</td>
</tr>
<tr>
<td>15</td>
<td>Student-Teacher Relationship Levels at Pre &amp; Post Test on the STRS</td>
<td>80</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Early Achievement Composite Scores from Pre-test to Post-test</td>
<td>67</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

According to the Surgeon General’s report addressing children’s mental health, over 4 million children suffer from mental illnesses that cause impairment in their functioning at home, at school, and with peers (U.S Dept. of Public Health and Human Services, 2000). This report further defines mental illness as all diagnosable mental disorders stating, “Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning” (p.2). According to No Child Left Behind legislation, all U.S. school children are expected to meet certain academic standards within their respective grade levels. However, children suffering from mental illness may be unable to attain these standards due to emotional interference with their academic learning. A child suffering from a mental illness or recent trauma may have difficulty processing academic information and may not be actively engaged in academic instruction (Elias, 2006).

The President’s New Freedom Commission on Mental Health (2003) reported that the public school system’s priority is to educate all attending students. The report also pointed out, children with mental illness are most likely to fail or drop out of school. Because children spend around seven hours of the day at school, it is imperative schools address mental health issues. If schools are expected to meet academic needs of all students, then they must also address the emotional needs of all students. In this way the interdependent relationship between the child’s emotional needs and his or her academic performance can be fully realized. Literature supports finding that
development of a child’s understanding of emotions can improve academic achievement (Zins, Wessberg, Wang, & Walberg, 2004). Due to a strong correlation between emotional development and academic success, development of a solid mental health program within the school is necessary to help promote academic achievement (New Freedom Commission on Mental Health, 2003).

The purpose of encouraging in-school programs to concentrate on mental health is to help students progress academically. Certain specific mental health components have been correlated with academic progress including self-concept and student-teacher relationship. Children who develop a higher self-concept have been found to have more fulfilling personal relationships, a lower incidence of problem behaviors, and an increase in their academic achievement (Elias et al.; 1997). Other authors suggested a developed self-concept is necessary for children to succeed academically (Romasz, Kantor, & Elias, 2004). Research has also found the quality of the student-teacher relationship affects children’s social, emotional and academic development (Greene, Abidin, & Kmetz, 1997; Hamre & Pianta, 2001; Ladd & Burgess, 2001; Pianta & Stuhlman, 2004).

Child centered play therapy (CCPT) is one possibility for providing a mental health program in public schools. Use of play in therapy allows school-age children to naturally express emotions and experiences (Moustakas, 1959; Landreth, 2002). Meta-analytic results provide current empirical evidence demonstrating effectiveness of play therapy with children, revealing that play therapy offers increased support for children’s emotional health (Bratton, Ray, Rhine, & Jones, 2005). Children who received child centered play therapy have demonstrated improved self-confidence, development of
positive interpersonal relationships, and an increased sense of autonomy (Brandt, 1999; Newcomer & Morrison, 1974; Post, 1999; Quayle, 1991; Ray, 2007; Shmukler & Naveh, 1985; Sokoloff, 1959). These studies revealed play therapy may help foster self-concept and/or adult-child relationships in school-age children. Landreth (2002) suggested that due to the unique relationship established in Child Centered Play Therapy, the child perceives the playroom and the therapist as safe; the therapist in the playroom will accept and reflect the child’s emotional expressions, thereby allowing the child to become more empowered and accepting of him or herself.

Statement of the Problem

No Child Left Behind legislation is a driving force in education to ensure the academic progress of all children. However, children with emotional challenges are at-risk for school failure. Previous research suggests use of play therapy for these children may be an effective way to help them cope with their emotions, while also helping foster higher self-esteem and improve student-teacher relationships. Both self-concept and student-teacher relationships have been found to correlate with academic success. However, mental health interventions have not been correlated to academic progress for children struggling with emotional needs.

Review of Literature

The following review of literature and research is divided into seven main areas: a) academic achievement and emotional health, b) academic achievement and self-concept, c) academic achievement and the student-teacher relationship d) child-
centered play therapy, e) play therapy and academic achievement, f) play therapy and self-concept, and g) play therapy and the student-teacher relationship.


dedicated to promoting the well-being of children and their families. Examples include: a) play therapy and self-esteem, b) play therapy and academic achievement, c) play therapy and social competence, d) play therapy and emotional health, e) play therapy and academic achievement, f) play therapy and self-concept, and g) play therapy and the student-teacher relationship.

**Academic Achievement and Emotional Health**

In the field of education, the objective for educators is the academic progress of all children. However, children with emotional challenges are at-risk for school failure. Some research in understanding the link between academic achievement and emotional health has recently been conducted. However, attempting to measure efficacy of academic achievement with emotional heath within the school system is a concept rarely explored. Contemporary studies and reports (Carlson, Sroufe, Collins, Jimerson, Weinfield, Hennighausen, et al.; 1990; de Lugt 2007; Elias 2004; Elias, Zins, Graczyk & Weissberg 2003; Greenberg, Weissberg, O'Brien, Zins, Fredericks, Resnik, et al.; 2003; Romasz, Kantor, & Elias 2004; Zins, Bloodworth, Weissberg, Walberg 2004; Zins & Elias 2006) note the importance of emotional learning for future academic success.

Carlson et al. (1999) utilized longitudinal data to discover if early social and emotional support in elementary school students could predict ease of adjustment to high school. Over 17 year period, researchers collected data on 173 children who were labeled at-risk due to poverty. The Peabody Individual Achievement Test was administered at the end of 1st, 2nd, and 3rd grades and the Wechsler Intelligence Scale for Children-Revised was also administered at the end of third grade. The child’s teacher completed the teacher version of the Child Behavior Checklist and ranked the child’s peer competence and emotional health during the 1st, 2nd, and 3rd grades.
Researchers then developed a rating of high school achievement for each child at the end of the 11\textsuperscript{th} grade school year. This rating scale included counselor records, history of attendance, grade point average, disciplinary referrals, and history of retention.

Carlson et al. (1999) found children’s emotional health, along with peer relations and externalizing behaviors, predicted later middle school adjustment. In fact, emotional health significantly predicted later adjustment. Carlson et al. (1999) stated, “The present study contributes to our understanding of this process by identifying social and emotional influences early in the child’s life that significantly influence later high school adjustment” (p.88).

In a review of current research, De Lugt (2007) investigated studies of academic achievement of students with emotional and behavioral disorders. De Lugt (2007) explored reading achievement with children with emotional or behavioral problems. She reviewed studies that investigated reading achievement of students with emotional and behavioral disorders. Results revealed reading achievement of students with emotional difficulties was significantly lower than their peers. She also determined that the discrepancy between peers of students with emotional difficulties compared with students who demonstrated less emotional problems only increased as they progressed in school. De Lugt (2007) concluded that a strong relationship between achievement and behavior exists, while she also found that poor academic achievement led to behavior problems.

Romasz, Kantor, & Elias (2004) provided evaluation of a social-emotional learning program. This program as part of a strategy to improve academic performance and reduce problem behaviors within a school setting was implemented using a social-
emotional learning curriculum. Romasz et al. (2004) defined social-emotional learning as follows:

Social and emotional learning refers to the ability to understand, manage, and express social and emotional aspects of one’s life in ways that enable the successful management of life tasks such as learning, forming relationships, solving everyday problems, and adapting to the complex demands of growth and development. It includes self-awareness, control of impulsivity, working cooperatively, and caring about oneself and others. (p.92)

Romasz et al. (2004) suggested social and emotional skills are needed before academic material can be attended to in the classroom. They reported, “It is imperative that schools begin to provide resources to meet the social and emotional needs of the students, in the same way that academic needs are provided for, in order to ensure that students possess the full set of skills required to live safe and productive lives” (Romasz et al. 2004, p.92).

Elias et al. (2003) investigated the current literature of educational innovations. Their work identified several assumptions being made as vital for academic success including the need to incorporate social and emotional learning as an essential part of academic curriculum. Elias et al. (2003) reported, “Children who are hurting cannot learn effectively, and their presence in schools without getting needed attention drains energy, focus, and potential from the learning environment” (p.304). Therefore the Collaborative for Academic, Social, and Emotional Learning organization was created to enhance children’s opportunities for social, emotional, and academic development in 2003.

Greenberg et al. (2003) indicated that school-based prevention is most beneficial when the curriculum concurrently enhances the students’ personal and social assets. Elias (2004) further described the importance of integrating social decision making
models into the academic work of the students by reporting by enriching academics with
cognitive, social, and emotional processes, students will be ready to succeed in life and
school.

Similar to Elias (2004), Zins et al. (2004) reported inclusion of social and
emotional learning has a critical role in improving academic performance and lifelong
learning. Zins et al. proposed that positive behavior is linked to enhanced intellectual
outcomes and that negative behaviors often occur with poor academic performance.
Upon synthesis of research related to social emotional learning and school
performance, they concluded that integrating teaching of both emotional and social
skills is needed in the classroom. Zins and Elias (2006) reported use of social and
emotional learning as having a positive effect on academic performance. They posited
that academic performance can be improved if students can identify their own emotions,
strengths, and gain confidence.

In an attempt to further highlight the relationship between emotional health and
academic achievement, several studies and a recent review of literature found a
connection between children with emotional and behavioral problems and poor
academic achievement (Carlson et al. 1999; & de Lught 2007). In an attempt to include
school curriculum that helps foster emotional growth, Romasz et al. (2004) described
the implementation of social-emotional school programs. Social-emotional programs
have been linked to having a positive effect on academic performance (Elias 2004, Zins
and Elias 2006; Zins et al. 2004). However, longitudinal and current research
specifically measuring benefits of social-emotional learning are not currently available.
Future research implementing this program could indicate that providing opportunities
for children to learn how to manage their emotions in school may help the development
of academic achievement.

*Academic Achievement and Self-Concept*

A main goal of education is for students to gain abilities and grasp new
information. However, some children with similar intellectual capabilities perform better
than their peers. One may suggest that the children’s internal sense of self, their
understanding of their feelings, beliefs and ideas of their world may impact their ability
to perform academically. Perhaps the key to academic success could be measured by
the child’s ability to understand his or her capabilities.

Early studies (Chapman, Cullen, Boersma, & Maguire 1981; Rogers, Smith, &
Coleman 1978; and Song & Hattie 1984) measured the relationship between academic
achievement and self-concept in an attempt to establish causation. In current years,
research has focused on whether student’s academic achievement or self-concept is an
influential factor. Several longitudinal studies with elementary school children have
emerged with mixed reviews. Recent studies, (Guay, Marsh, and Boivin 2003; Hemlke
& van Aken 1997; Marsh and Yeung 1997; & Skaalvik, & Hagtvet 1990) have
discovered a positive link between the child’s self-concept impacting academic
achievement.

*Early Academic Achievement and Self-Concept Research*

Rogers, Smith, & Coleman (1978) studied the relationships between academic
achievement and self-concept in relation to social comparison groups. Rogers et al.
(1978) wanted to see if children’s academic achievement and self-concepts would be
affected if they were placed with peers with similar scores. Participants included 159
underachieving elementary age children who were placed in classrooms specifically for children with severe academic deficits. Children completed the Metropolitan Achievement Test and the Piers-Harris Children’s Self-Concept Scale. Upon completion of the instruments, researchers then placed students in classrooms depending upon their reported level of academic achievement.

Rogers et al. (1978) found that the relationship between academic achievement and self concept was most strongly represented in the social comparison group. In other words, students who were labeled as high achievers based on their scores on the achievement instrument performed higher in academic achievement and self-concept within assigned classroom. Rogers et al. (1978) concluded, “Our results suggest that one basic way in which academic achievement influences self-concept is through the process of social comparison” (p. 56). The authors further explained that the student compares his or her level of achievement to the achievement levels of his or her peers.

Chapman, Cullen, Boersma, & Maguire (1981) researched the possible influences of school achievement on self-concept. Chapman et al. investigated general self concept, academic self-concept, academic locus of control, and self-expectations as possible variables that influenced academic achievement in grade school children. Levels of academic achievement were calculated by end of the year grades. Participants included 376 children from grades 3-6 who completed either the Otis-Lennon Form K IQ scores or the Canadian Lorge-Thorndike IQ’s intelligence instruments, the Piers-Harris Children’s Self-Concept Scale, the Student’s Perception of Ability Scale, and the Projected Academic Performance Scale.
Chapman et al. (1981) found academic self-concept and student’s self-expectations correlated with end of the year academic achievement. They reported, “Individuals who hold positive self-perceptions of ability and who expect to attain reasonably high levels of success will invest greater effort in school, and thereby increase their levels of performance, compared to those who hold more negative self-perceptions of ability” (p.188). Implications of the findings are important when addressing struggling students as early negative experiences may lower an individual’s perception of his or her abilities thereby lowering her or his self-expectations.

Song and Hattie (1984) investigated the relationship between home environment, self-concept, and academic achievement. Participants included 2,297 adolescent students between the ages of 14-15. Each participant completed two instruments; one measured the home environment and the other calculated the individual’s self-concept. The self-concept measurement contained several scales including the following: peer perception, classroom achievement, cognitive ability, presentation of self, and four specific subject self-concepts. Academic achievement was calculated by using grade point average for four subjects represented in the self-concept scale.

Song and Hattie (1984) found that the influence of academic self-concept was reported as being more valuable than presentation of self and social self-concept for the individuals studied. Song and Hattie (1984) reported “that presentation of self and social self-concepts have large impacts on academic self-concept” (p.1277). It appears that these students reported that feeling positive about their interactions with other students, and how they felt about themselves, directly impacted their perception of their
academic achievement. Song and Hattie concluded that both an individual’s perception of self and social self-concept have an impact of academic achievement in adolescents.

Contemporary Academic Achievement and Self-Concept Research

Skaalvik & Hagtvet (1990) researched the relationship between academic achievement, self-concept and self-esteem of elementary school children. The study consisted of 635 students from two separate cohorts. One cohort was made up of 271 students who were measured in their third and fourth grade academic years. The second, consisting of 364 students were measured in their sixth and seventh grade academic years. Participants completed a Global Self-Esteem scale, modeled after Harter’s 7-item self esteem scale, and a Self-concept of Ability Scale. Teachers also completed rating scales of the perceived academic achievement for each child.

Skaalvik & Hagtvet (1990) found that there may be developmental aspects to consider in the relationship between academic achievement and self-concept. For the younger cohort, academic achievement predicted self-concept of the child at the end of the study. However, with the older cohort, Skaalvik & Hagtvet (1990) found a relationship indicating that the self-concept of ability in children predicted academic achievement in the child upon conclusion of the study. Skaalvik & Hagtvet (1990) suggested, “In the early school years the student’s self-concept of ability has yet to be established. During this period the concept may undergo a process of shaping and reshaping dominated by the influence of academic experience” (p.304).

In a longitudinal study, Helmke and van Aken (1997) addressed this question: Do self-concept and academic achievement influence one another? This four year longitudinal study investigated development of children’s academic achievement during
elementary school, dependent upon the student’s characteristics and instruction quality in the subject of mathematics. Participants included 679 elementary school students from rural regions in and around Munich, Germany. Each year, participants completed a math test used as an indicator of mathematical competence. Students also completed a self evaluation of perceived math competence which served as the child’s self-concept of ability in mathematics.

Hemlke and van Aken (1997) discovered self-concept in elementary schools in regard to the subject of mathematics serves both as a cause and effect. Hemlke and van Aken (1997) reported a path described as achievement leads to increased self-concept. Students did not identify that previous self-concepts within the area led to later test performance. Hemlke and van Aken (1997) suggested that "Possibly, the motivational properties of self-concept are not yet fully developed in elementary school" (p.634). They further suggested that a way to improve an elementary school age child’s self-concept is to improve her or his achievement competence.

Marsh and Yeung (1997) conducted research measuring the relationship between academic self-concept and academic achievement. They specifically wanted to measure the impact of changes within a child’s academic self-concept related to academic achievement. Participants included 603 boys between the ages of seven and ten. For a period of three consecutive years, Marsh and Yeung (1997) administered the Academic Self Description Questionnaire, a multidimensional academic self-concept instrument, at six different intervals. Marsh and Yeung (1997) collected school grades for each child for both school semesters for the duration of the study. These grades,
along with teacher’s subjective ratings of student performances, were used to create an academic achievement score.

Marsh and Yueng (1997), consistent with Helmke and van Aken’s (1995) results, reported that student’s prior academic achievement affects the child’s academic self-concept. When analyzing the data, Marsh and Yueng (1997) reported that across the three school subjects of English, science, and mathematics, prior academic achievement led to an increase in academic self-concept. Marsh and Yueng (1997) concluded, “This supports the usefulness of academic self-concept not only as an important outcome variable in its own right but also as a mediating variable that facilitates the attainment of other desirable outcomes” (p.50).

Guay, Marsh, and Boivin (2003) intended to assess the current developmental trends between academic self-concept and academic achievement. They hypothesized that during the middle elementary school years, academic achievement would dominate over academic self-concept. Researchers gathered data from a sample of 385 elementary age students over a period of three years, with measurements occurring at the end of each academic year. At these intervals, students completed the Self-Perceptions Profile for Children developed by Harter (1985), and teachers completed a questionnaire evaluating the child’s academic achievement, specifically in the areas of writing, reading, and mathematics.

Guay, et al.’s (2003) results included as children continued with school, academic self-concept responses became more stable and strongly correlated with personal academic achievement. Guay et al. (2003) did not find support of their hypothesis, unlike earlier studies conducted by Helmke and van Aken (1995) and Marsh
and Yeung (1997). Guay et al. (2003) actually discovered students at this age were concerned more about how they felt they did in academics (academic self-concept) than how they actually performed (academic achievement). Their findings indicated that aiding a child’s perception of academic achievement at this age may be useful in improving their academic performance.

In summary, historical data found in the review of literature of academic achievement in relation to self-concept suggests that fostering academic achievement in elementary school age children can increase self-concept scores of children who have emotional problems as well as those who exhibit normal functioning. Early studies suggest that academic achievement and self-concept are interrelated (Chapman, Cullen, Boersma, & Maguire 1981; Rogers, Smith, & Coleman 1978; & Song and Hattie 1984). Rogers et al. (1978) suggested that social comparison groups could be a way to release the inner direction of the child, allowing freedom to learn, and obtain higher academic achievement for children with academic deficits. Chapman et al. (1981) further suggested the child’s expectation of abilities also plays a role in development academic achievement.

In an attempt to further comprehend the relationship between self-concept and academic achievement, several recent research studies offered longitudinal studies as a suitable means to investigate the relationship of the two factors with elementary school age children (Guay, Marsh, and Boivin 2003; Hemlke & van Aken 1997; Marsh and Yeung 1997; & Skaalvik, & Hagtvet 1990). Skaalvik & Hagtvet (1990) and Hemlke & van Aken (1997) both reported the possibility of a developmental shift that occurs in the elementary age child which initially supports the importance of academic
achievement in impacting the child’s self-concept. Guay et al. 2003 however, found contradictory evidence supporting the value of self-concept in the development of academic achievement. This finding could indicate that self-concept in children may foster competency in academic material.

**Academic Achievement and Student-Teacher Relationship**

A large amount of research in understanding academic achievement has been conducted over the past half century. However, attempting to measure efficacy of academic achievement within student-teacher relationship is a fairly new concept. Contemporary studies (Birch & Ladd 1998; Birch, & Ladd 1997; Burchinal, Peisner-Feinberg, Pianta, & Howes 2002; Hamre, & Pianta 2005; Hamre, & Pianta 2001; Lynch, & Cicchetti 1997; & Pianta, & Stuhlman 2004) note importance of early positive student-teacher relationships for future academic success.

Lynch and Cicchetti (1997) examined elementary and junior high school students’ relationships with adults and peers. Lynch and Cicchetti (1997) alleged as children grow they report more positive relationships with peers than with adults. This study examined relationships of 1,266 elementary and middle school children. Children completed a questionnaire examining relationships with caregivers, best friends, teachers, and classroom peers from two dimensions: emotional quality and proximity seeking.

For the purpose of this study, only findings related to student-teacher relationships are discussed. Lynch and Cicchetti (1997) found children who report close relationships to both teachers and classmates are more likely to be engaged in school. The authors recommended further research specifically on quality of student-teacher relationships.
relationships. Lynch and Cicchetti (1997) concluded, “It is our belief future studies of the quality of children’s relationships with others will add to our knowledge of the factors that shape children’s development and affect their competence in school” (p.95).

Birch and Ladd (1997) examined effects of the teacher-child relationship and children’s early school adjustment. Researchers investigated three different aspects of teacher-child relationships (closeness, dependency, and conflict) to determine if they influenced adjustment of kindergarten students. Participants included 206 kindergarten students and their teachers ($n=16$). Students completed the Metropolitan Readiness Test to measure visual and language skills, the Loneliness and Social Dissatisfaction Questionnaire for Young Children, and the School Liking and School Avoidance Scale. Teachers completed the Student-Teacher Relationship Scale and the Teacher Rating Scale of School Adjustment.

Birch and Ladd (1997) found that the degree of closeness in the student-teacher relationship appears to be a key contributor when viewing children’s early adjustment to school. This finding was also reported to be a statistically significant correlate of children’s academic performance. Birch and Ladd (1997) suggested, “Closeness in the teacher-child relationship affords children opportunity to openly express feelings and concerns, and therefore elicit appropriate help and guidance in their attempts to adjust to the school environment. A supportive teacher-child relationship may therefore enable children to become self-directive and responsible participants in the classroom” (p.76). Birch and Ladd (1997) also reported that implications of a supportive teacher-child relationship in a child’s early schooling may have a long term effect in the educational abilities of the child.
In this longitudinal study, Birch and Ladd (1998) examined the effect behaviors of young elementary school children can have on the teacher-child relationship. Participants included 199 kindergarten students and their teachers ($n=73$). The children’s kindergarten teachers completed assessments in the fall of their kindergarten year, and the child’s first grade teacher completed them at the end of the child’s 1st grade year. Teachers completed the Child Behavior Scale and the Student-Teacher Relationship Scale.

Birch and Ladd (1998) found that behavioral orientations of children in kindergarten are associated with later quality in the student-teacher relationship. In other words, children who struggled with behaving appropriately in the classroom in kindergarten would more likely have a strained student-teacher relationship in first grade. Conflict in kindergarten in the student-teacher relationship was linked with a child’s antisocial behavior over time.

Hamre and Pianta (2001) in a longitudinal study researched the impact early teacher-child relationships had on children’s outcomes in school. An additional goal proposed by the researchers was to find possible attributing factors between the association of social adjustment and behavioral and academic functioning. The study included a sample of 179 children from kindergarten through eighth grade who had completed an initial assessment battery at the conclusion of kindergarten and again during the spring of their eighth grade year. These assessments included the Stanford-Binet Intelligence Scale-Revised, Teacher-Child Rating Scale, and Student-Teacher Relationship Scale. Grade reports, student’s work habits, and disciplinary records were also collected from each student each year through eighth grade.
Hamre and Pianta (2001) discovered that early teacher-child relationships are indeed predictors of academic and behavioral outcomes in early elementary students. They found reports of the kindergarten teachers who rated students negatively further predicted the student’s future grades, standardized test scores, and work habits throughout school. Hamre and Pianta (2001) also discovered negative relationships between the teacher and child often contain conflict and overdependence, which is a significant predictor of academic and behavioral outcomes. However, Hamre and Pinata concluded, “The results suggest that those children who, despite significant behavior problems, were able to develop relationships with kindergarten teachers marked by low levels of negativity, were in turn more likely to avoid future behavioral difficulties than were their peers who had a high negativity ratings” (p.635).

Burchinal, Peisner-Feinberg, Pianta, & Howes (2002) examined the possible link of an at-risk student’s academic success in conjunction with his or her relationship with the teacher. Burchinal et al. (2002) collected data on 367 children at five different intervals that spanned a two year time period from end of preschool to second grade. The assessment instruments included measurements of the child’s academic skill by the use of the Peabody Picture Vocabulary Test-Revised, and the Woodcock-Johnson Test of Achievement-Revised and of relationship with teachers, which was measured by use of the Student-Teacher Relationship Scale.

Burchinal et al. (2002) found teachers’ perceptions of the closeness of relationship with an individual student served as a positive factor in lowering of at-risk factors associated with positive academic achievement. A close relationship between student and teacher was also found to be a predictor of better developed language and
reading skills with children labeled at-risk. Burchinal et al. (2002) concluded, “This study suggests that social and emotional processes involved in relationships between children and teachers, are an important aspect of classroom experiences related the children’s acquisition of academic skills” (p. 413).

DiLalla, Marcus, and Wright-Phillips (2004) examined longitudinal effects of preschool behavioral styles on early adolescent school performance and student-teacher relationships. Participants included 42 children who were initially in a play study in preschool at age 5. Their teachers, as part of the earlier study, completed the Student-Teacher Relationship Scale and the Teacher Report Form. As a follow up, the current teachers of these children, now 11-13 years old, completed the same instruments. DiLalla et al. (2004) found that although not clinically significant, students with conflictual and dependent relationships with teachers had lower scores in grades. However, students with close relationships with teachers did not have higher grades.

Pianta and Stuhlman (2004) narrowed the focus of teacher-child relationships to the first years of schools. Researchers specifically examined the relationship between closeness and conflict in teacher-child relationship and children’s social and academic skills. Observing 490 students, Pianta and Stuhlman examined the quality of the teacher-child relationship for students from preschool to first grade. Children and their teachers were observed in preschool, kindergarten, and first grade. Children completed instruments measuring academic skill and cognitive development, while teachers completed instruments measuring behavior, social competence, and their relationship with the identified child.
Pianta and Stuhlman (2004) found the conflict and closeness variable of the teacher-child relationship predicted the child’s academic performance with first grade students. In other words, first grade teachers who felt close and did not have frequent arguments with students rated achievement of the student as greater when compared to other students. This finding supports earlier research conducted by Burchinal et al. (2002). Pianta and Stuhlman (2004) did not find any other statistically significant indicators in predicting achievement. Pianta and Stuhlman (2004) stress however:

Despite children’s general tendencies toward certain relational styles with teachers inferred from the moderate stability across different teachers’ reports of their relationships with a given child across the preschool to first grade time period, each new relationship may represent an opportunity to introduce unique variance in the development of social and academic skills. (p.456)

In an attempt to continue to discover safeguards for future at risk children, Hamre and Pianta (2005), expanded upon the work of Burchinal et al. (2002) and examined impact of instructional and emotional support provided by first grade teachers with at-risk students. Nine hundred and ten first-grade students were identified as at-risk by their previous kindergarten teachers who indicated either a behavioral, social, academic, or attentive difficulty impeding the children’s education. Researchers then entered the classroom of each child and completed an observational instrument used to measure the quality of the teacher’s interaction with the child. From this observation instrument, the researchers identified children as belonging in a classroom with high, moderate, and low emotional support. Hamre and Pianta (2005) found that children at risk of school failure when offered both instructional and emotional support by their teachers were less likely to have academic problems at the end of first grade hence, closing the gap between the at-risk children to the low-risk children. The authors
highlight importance of these findings stating, “children at risk of school failure may fall further behind academically with each successive year in school” (p.961) implying, that by providing emotional support along with instructional support, teacher’s instructional style may offer a preventative measure for at risk students.

In an attempt to further explore academic achievement with school-age children, Attwood (2005) used a form of consultation to improve the relationship between student and teacher. In her study she observed three teachers who consulted with a therapist periodically in order to incorporate relationship enhancement through the use of training play based techniques. Each teacher identified one child and focused on improving the relationship with that child. Attwood found that by providing only consultations with the teachers the student-teacher relationship did not improve.

Hamre and Pianta (2005) discovered that the quality of the student-teacher relationship and child achievement provided by instructional as well as emotional support, minimized the risk of early school failure. Children identified as at-risk in the emotionally supportive classroom had similar intellectual scores as their peers not labeled at- risk, whereas children who were not within the emotionally supportive classroom scored at significantly lower levels of achievement than their peers not labeled at- risk. Hamre and Pianta (2004) further explored the relationships between the students and the teachers and discovered at-risk children, when placed with emotionally supportive teachers, did not score significantly different from their peers not labeled at- risk in teacher reported conflict. Hamre and Pianta (2004) concluded, “This finding underscores the important roles that teachers may play in interrupting cycles of
coercive interactions with students and teacher-child relationships as a particularly important asset for children with social or relational challenges” (p. 962).

In an attempt to further explore academic achievement with school-age children, several recent research studies have incorporated feedback of the child’s teacher. Several studies indicated student-teacher relationships help with development of social and academic skills (Birch & Ladd 1997; Lynch & Cicchetti 1997; Pianta & Stuhlman, 2004). A link between behaviors of children in early elementary school as a predictor of future student-teacher relationships has been established (Birch & Ladd 1998; Hamre and Pianta 2001). Because the child’s relationships with his or her teacher has been viewed as affecting the child’s emotional and academic development, research has been conducted by Burchinal et al. (2002) & Hamre and Pianta (2004) to promote the enhancement of academic success with at-risk students. These findings suggest positive student-teacher relationships for at-risk children can be an effective means to ensure academic success.

Child Centered Play Therapy

The interactions between children and adults can be complicated by the fact that they communicate in vastly different ways. Children have not developed the capacities to verbally communicate as effectively as adults, but they are expected to utilize adult forms of communication. Communication is a vital aspect of the counseling field. Children are at a developmental level in which they can best express themselves through play. Play naturally allows children the means to express their feelings, connect with others, describe their desires and experiences, and eventually lead to self-fulfillment (Schumann, 2004).
Child centered play therapy descended from Virginia Axline’s assimilation of Carl
Roger’s non-directive therapy (person-centered therapy), which he used with adults.
Axline, a pupil of Rogers, took the concepts of non-directive therapy and applied them
to her work with children. Axline (1947a) developed eight basic principles to use as
guidelines for non-directive play therapy. These principles include the establishment of
a caring relationship between the therapist and the child, full acceptance of the child for
who he or she is, creation of a free atmosphere in which the child feels capable of
expressing a range of emotions, recognition and reflection of the child’s feelings,
honoring the child’s ability to internally solve difficulties and providing him or her with
opportunities to establish responsibility, allowing the child to direct and lead play
sessions, understanding that therapeutic change is a gradual process and should not be
rushed, and finally, providing therapeutic boundaries only when necessary. Many
therapists have subsequently been able to successfully incorporate these principles
when working with children.

Axline (1947a), Moustakas (1953), and Landreth (2002) asserted the belief that
children have the innate capacity to develop self-actualization through self-direction
when provided an atmosphere that is fully accepting of the child. This assertion is the
main tenant of child-centered play therapy. Therefore, the child centered play therapist
must create an environment in which the child feels safe and secure. One way of
providing this is through the development of the therapeutic relationship. Following
Axline’s principles, this relationship should include the therapist’s ability to be genuine,
fully accepting of the child, understanding, and warm. The therapists display these
components through their reflections of the child’s feelings, projected understanding of
his/her struggles, and appropriate setting of limits. Additionally a play therapist can create a therapeutic environment by providing a fully supplied playroom containing items that the child is not only familiar with, but that also evoke freedom in his/her play.

Because play is a developmentally appropriate way for children to communicate, it is vital to the therapeutic process. Young children do not have the ability to think abstractly and therefore cannot adequately express their emotions with words (Landreth, 2002). Hence, it is natural that children can more fully express their thoughts and emotions through play. Play can be seen as the child’s language and toys as their words (Landreth, 2002).

As previously noted, empirical evidence demonstrating the effectiveness of play therapy in regard to emotional health of children has been revealed by meta-analysis. Bratton et al. (2005) found that children who received child centered play therapy developed higher self-confidence, improved relationships with others, and developed a better understanding of self. If play therapy can increase a child’s self-concept then it may be possible for the child to feel more confident and capable in the classroom, thus providing the child with the opportunity to achieve at her or his highest ability (Baggerly, 2004).

Play Therapy with Academic Achievement

An effort to enhance the child’s ability to perform academically has been emphasized since the development of counseling children. Play therapy as a treatment modality is no different. Early studies of play therapy attempted to measure academic improvement and successful treatment by utilizing IQ scores, reading measurements, and language development. Historical studies conducted in the field which attempted to
enrich a child’s ability to learn through play therapy is provided below. Early studies (Axline, 1949; Dulsky, 1942; Leland, Walker, & Taboada, 1959; Moulin, 1970; Mundy, 1957; and Shmukler & Naveh, 1985) attempted to measure the efficacy of play therapy on achievement by placing a high emphasis on changing the child’s IQ score over the course of treatment. Several studies (Newcomer & Morrison, 1974; Siegel, 1970) which reported on play therapy with children suffering from language and learning disabilities also demonstrated the use of this treatment modality in academic achievement. The literature also depicts other early experimenters (Axline, 1947b; Azar, 1979; Bills, 1950; Elliott, & Pumfrey, 1972; Seeman & Edwards, 1954; Winn, 1959; & Wishon, 1975) focusing on reading improvement as a measure of academic progress throughout the course of treatment.

*Early Play Therapy and IQ Research*

One of the first studies utilizing play therapy techniques to measure intelligence was reported by Dulsky (1942). In this groundbreaking case, Dulsky set the stage for future therapists to utilize IQ scores as a measurement for childhood emotional growth. In this individual case study-like experiment Dulsky attempted to see if there was a relationship between intelligence and emotion. He found that four of the fourteen children selected showed a large improvement in test scores of IQ. Dulsky postulated that intelligence is not only an isolated part of the child, but a product of the person’s health, education, culture, emotional availability, and personality. He believed if there has been a marked change in the individual’s emotional adjustment, it is therefore logical to assume that there might be a change in his or her intelligent behavior.
Axline (1949) conducted a similar study and like Dulsky believed in a holistic concept of the child. She reported that a child could express his or her capabilities once freed from emotional constraint. Axline utilized a case study-like approach by categorizing fifteen children who received play therapy into three groups. The groups consisted of children with low IQ scores and children with normal range scores. The first group consisted of children whose IQ remained at a low level, the second group comprised of children whose IQ improved, and the third group consisted of children with normal range intelligence whose IQ scores did not change. The purpose of her study was to determine whether or not providing therapy for children with mental deficiencies would increase their IQ scores. All children were given the Stanford Binet at pre and post treatment to measure changes in their intellectual functioning. She found that in all groups, providing play therapy did not lower a child’s IQ score and for one group significant increases were reported. Axline argued that children who are suffering emotionally may be limited in their educational opportunities as schools are using IQ scores for educational placement. Axline (1949) further concluded it was her hope “to achieve more adequate educational procedures for the individuals so that the elements of emotional tensions, frustrations, conflicts, and deficiencies would not anchor the individual forever in the spot but would free him to develop more fully the capacities that are his” (p. 327). Axline’s work highlights the effects emotional disturbances can have on a child’s perceived intellectual functioning.

Building on the work of Axline, Mundy (1957) conducted another early study utilizing play therapy and IQ scores. This study looked at IQ scores and the social functioning of low functioning children. Mundy discovered a statistically significant
difference of an average increase of seven points between the experimental group IQ scores compared to the control group. Mundy further reported that with the increase in IQ scores the child’s social adjustment scores also increased. Mundy noted that upon termination children from the experimental group appeared to be more spontaneous and displayed less anxiety.

In a similar study by Leland, Walker, & Taboada (1959), eight low intellectually functioning boys were placed in group play therapy. The researchers explored the effect of providing group play therapy with these children on increasing their social functioning or IQ. No significant social functioning scores were reported. However, the study demonstrated intellectual growth as measured by the Verbal Scale recorded on the WISC. Leland, Walker, & Taboada (1959) further reported, “Group play therapy did not create any major changes in the level of social maturation. However, the changes sufficiently indicated that the experience (group play therapy) did activate some of the intellectual potential which could not be tapped before the experience” (p. 850).

Moulin (1970) continued the work of previous studies of play therapy on intelligence by exploring client centered group play therapy, achievement, and language development. Using a $t$-test of pre and post data from a control group and an experimental group, Moulin found that the subjects receiving treatment made significantly greater gains in the assessed mean for non-verbal intelligence than the subjects not receiving treatment. This data revealed that providing play therapy was significant in improving communication skills of underachieving primary school children’s communication skills. Moulin (1970) offered, “If underachieving primary school children interact with other children and a counselor over a period of time using
client-centered group counseling not only will these children significantly increase their non-language functioning, but they will significantly increase various aspects of their meaningful language usage” (p.95).

Finally, Shumker & Naveh (1985) conducted a study utilizing IQ scores with 116 children. Shumker and Naveh placed the children into one of four groups: unstructured play, structured play, skill group, and a control group. Pre and post scores were collected for each child. The study revealed that children from the unstructured play group made significant increases in imaginative play behavior and other positive aspects of play including accurate emotions, concentration, social interactions, and cooperation (Shmukler & Naveh, 1985). They also reported that these children improved in verbal fluency, flexibility, and originality. Similar to Leland, Walker, & Taboada (1959), Shumker & Naveh also found that verbal IQ scores increased, particularly in comprehension and internal locus of control.

*Early Play Therapy and Learning and Language Disabilities Research*

In a landmark study, Siegel (1970) investigated the effectiveness of a variety of treatment experiences with children diagnosed with learning disabilities. She discovered that children who received play therapy improved more in achievement when compared to children who received academic tutoring, and they also significantly improved in parent attitude, meaning that the parent’s noticed improvement of functioning in the child. The perception of improved child achievement suggests that play therapy may provide a modality that can be used to enhance a child’s ability to perform in school. Siegel also discovered significant improvement of psychomotor functioning and intelligence, consistent with Shmukler & Naveh’s (1985) future findings.
Newcomer & Morrison (1974) similarly found increases in gross and fine motor functioning like Siegel (1970). In their study, Newcomer and Morrison investigated the effects of play therapy on the cognitive and social functioning of institutionalized mentally retarded children. Children participated in individual as well as group play therapy. The children who received individual and group play therapy demonstrated increased mean scores at significant levels for gross motor, fine motor, language, and personal-social interactions as compared to the control group. These increases in relational skills and language development for children with lower levels of intelligence were also consistent with Mundy’s (1957) findings. Newcomer and Morrison (1974) concluded, “Play therapy provided for these children was effective in increasing their developmental level” (p. 732).

*Early Play Therapy and Reading Improvement Research*

Another factor used to measure a child’s ability to perform academically is his/her ability to read. Axline (1947) described her experience with a group of thirty-seven second graders who were identified as poor readers. In addition to providing weekly individual play therapy, Axline aided the teacher in developing a therapeutic approach to teaching that was consistent with nondirective psychotherapy. The main objective was to help children develop in a relaxed, supportive, and free environment in the hopes that the children would gain a better understanding of themselves and their capabilities. Axline stressed the importance of limiting the pressure of failure in an atmosphere that was accepting.

Following participation in play therapy Axline found that four children had significantly improved IQ scores and all of the children’s reading ability increased.
without the use of traditional remedial reading instruction. Axline (1947) concluded, “This study indicates that a nondirective therapeutic approach might be helpful in solving certain reading problems. It indicates that it would be worthwhile to set up research projects to test this hypothesis further: that non-directive therapeutic procedures applied to children with reading problems are effective not only in bringing about a better personal adjustment, but also in building up a readiness to read” (p.6).

Bills (1950) expanded upon Axline’s work by conducting a research project which provided nondirective play therapy to poor readers. Bills followed Axline’s (1947) work to promote his belief that poor reading may result from inconsistencies in the attitudinal system of a child or from difficulty in resolving a conflict between a concept of self as a good reader (Bills, 1950). In his study with eight poor readers, Bills found the readers who received non-directive play therapy showed significant gains in their reading ability. Bills (1950) further suggested, “This study was concerned with the gain in reading ability which a child shows following a non-directive play therapy experience. It is possible that such an experience may cause changes in abilities other than reading ability. There is a need for an investigation of the effects of a non-directive play therapy experience on the abilities of children who are classified retarded in other subjects included in the school curriculum” (p. 148).

Play therapy’s possible positive effects on reading achievement were also found in a study conducted by Seeman & Edwards (1954). Seeman and Edwards placed 38 children identified as low in reading achievement with a teacher who had been trained to provide nondirective psychotherapy within her classroom. This teacher-therapist then met with the identified children in groups for half an hour each day. The experimental
group showed significant reading gains as compared to the control group. Seeman, and Edwards succinctly concluded, “The therapeutic experience at the school can yield gain in intellectual functioning without corresponding gain in measured adjustment” (p. 452-453). Seeman and Edwards later suggested, “Perhaps therapy here ameliorated conflict about school learning without a more generalizing effect” (p. 453).

Winn (1959) attempted to investigate the effectiveness of play therapy on personality change and the consequent effect on reading performance with twenty-six 3rd graders. She discovered students receiving play therapy showed a significantly greater improvement in personality, further explaining that positive personality change is relevant to reading improvement. Winn (1958) further concluded, “the individual child’s difficulties should first be understood in terms of any one combination of one or more of the following factors: a) reading skill, what particular skills are lacking? b) personality adjustment what elements of personality are lacking? Is the child lacking in self confidence, or does he or she feel inadequate in the eyes of teacher, parent, or peer? c) teacher misunderstanding of the child’s capacities; d) parent pressure to “make” the child learn to read” (p. 115). Winn’s attention to the need of self-confidence, and the student teacher relationship in regard to reading abilities will be further discussed in different sections of this study.

Elliott & Pumfrey (1972) attempted to replicate the previous study conducted by Bills (1950). The researchers explored the effect of non-directive play therapy with maladjusted boys on reading skills and social adjustment. Using a sample of eight boys, they found no statistical significant differences when comparing the children who received play therapy to the control group. Although the Elliott and Pumfrey study did
not find significant levels of reading improvement, they did find eleven of the sixteen boys had improved in social adjustment, but not at statistically significant levels. Elliott & Pumfrey (1972) later stated, “The more intelligent and emotional children in the experimental group tended to improve in social adjustment after therapy” (p. 160). This finding may suggest that the impact of play therapy may be present but not measured.

Wishon (1975) attempted to incorporate both IQ level and reading behaviors with 1st graders. For this study, thirty struggling 1st grade readers with average IQ scores attended sixteen weeks of play therapy in an attempt to find achievement in word recognition and personal-social development. Wishon discovered that although the experimental group displayed significant improvement in word recognition after receiving play therapy, the difference was not significantly different than the control group. The children provided with play therapy scored higher on the reading achievement assessment for word recognition, but it is unclear to what degree the treatment was a factor.

Azar (1979) measured and compared the changes which occurred in the child’s self-concept and in his or her reading abilities, as a result of participation in play therapy and a reading enrichment “club.” Azar studied forty elementary school participants, twenty in each treatment group. One group attended individual play therapy sessions while the other students received reading enrichment. Azar found that after three months of treatment the experimental group showed higher real self-concept and higher ideal self-concept. This growth highlights the effect play therapy can have on developing a child’s confidence by increasing his or her self-concept. This increased confidence in their academic abilities may have an impact on his or her academic
achievement. They also experienced greater gains in auditory responses, reading comprehension, word study skills, and listening comprehension. Azar (1979) concluded, “It appears that play therapy is the necessary vehicle to raise and effect change in a child’s self-concept” (p. 103).

Contemporary Studies of Play Therapy and Academic Achievement

In recent years, the focus of determining progress in play therapy has shifted to a more emotionally and/or behaviorally driven component. However, several recent studies on academic issues have emerged with mixed reviews. Early focus on play therapy and intelligence progressed to the more current concerns with academic achievement. Recent studies conducted by (Boehm-Morelli, 1999; Crow, 1990; Kaplewicz, 1999; & Lopez, 2000) measured reading achievement with play therapy in an attempt to link play therapy with academic achievement. Other current literature (Qualyle, 1991; & Shechtman, Gilat, Fos, & Flasher, 1996), utilizing play therapy has been noted in improving a child’s ability to perform academically.

Crow (1990) attempted to determine the therapeutic effectiveness of play therapy on low achievers in reading, self-concept, and locus of control. She hoped to offer administrators and educators alternative means to address reading remediation in the classroom. Crow did not find a significant difference in reading achievement between the children who attended play therapy and the control group. Crow suggested, “Even though numerical data did not indicate that the treatment had a positive effect on reading, anecdotal evidence suggests that behaviors were changing, which may facilitate improvement of reading ability over a period of time” (p. 92).
Although Crow’s finding in reading achievement was not significant she did have findings consistent with Azar (1979). The children who received play therapy had significantly higher scores in self-concept and locus of control as compared to the control group. Crow (1990) summarized her findings by stating, “Low achievers in reading tend to have low self-concepts which can be improved through play therapy” (p.62).

In a similar study, Boehm-Moreli (1999) attempted to document the efficacy of nondirective play therapy in improving the reading self-concept and reading achievement of remedial readers. Thirty-six elementary age students were divided into three groups: an experimental play therapy group, an adult playing with individual children group, and a control group that received no treatment. Sessions were conducted bi-weekly for four weeks. Boehm-Moreli found that all subjects improved in terms of reading self-concept and reading achievement. However, play therapy and having a playtime with an adult did not have a significant impact as the control group also increased their abilities.

When discussing the limitations of the study, Boehm-Morelli (1999) suggested that the limited number of sessions and time may have played a factor in her results stating, “It is possible that a longer time frame might be needed for the children to experience improvement in self-concept, and then, for the possible mediating processes to be ‘activated’ in order to affect achievement” (p.34). Boehm-Morelli utilized graduate students from a school psychology program who had 15 contact hours of play therapy training. It is possible that many of the therapists were introductory counselors and may not have been as proficient as advanced counselors.
Kaplewicz (1999) also conducted research on the effects of play therapy on reading achievement with remedial readers. Kaplewicz utilized the same design as Boehm-Morelli except that the children in the experimental group were provided with group play therapy instead of individual play therapy. Kaplewicz found that the therapeutic intervention was no different than the placebo or control group in improving reading and emotional symptoms. As with Boehm-Morelli (1999), Kaplewicz concluded sufficient time may not have elapsed to demonstrate an effect of a therapeutic intervention.

In an attempt to expand upon the work of Azar (1979) and Crow (1990), Lopez (2000) explored the therapeutic effectiveness of a play intervention with Hispanic children who scored low in reading achievement, self-concept and had behavioral problems. Fifteen Hispanic elementary school students were placed in the experimental group which received a play intervention by a school counselor or principal with some play therapy training twice per week for the duration of eight weeks. The control group received no treatment.

No statistical significance was found for reading achievement, self-concept, or behavior. Lopez later recommended for future studies utilizing licensed counselors who have completed play therapy training and obtained adequate supervision, may have a larger impact on future findings. Like Azar (1979) and Crow (1990), Lopez found that although not statistically significant for her study, providing a play intervention helped students to enhance their self-concepts as well as improve control of their internal behaviors.
Quayle (1991) replicated previous research to evaluate the effectiveness of child-centered play therapy as an intervention strategy with children considered at-risk for school adjustment problems. Quayle’s design was similar to Boehm-Morelli’s (1999) and Kaplewicz’s in that the participants were placed in one of three groups. For the experimental group children received child centered play therapy while one group received individual time with an adult, and the control group received no treatment.

Quayle found that when teachers rated the experimental children upon post-testing statistically significant findings were revealed in learning skills, assertive skills, task orientation, and peer social skills. The child-aides rated increases in self-confidence and initiative/participation. Quayle further reported that the control group moved in a negative direction on most measures over the course of treatment (Quayle 1991). He reports that providing play therapy could serve as a preventative measure for children labeled at-risk. Quayle concluded, “The promising results of the experimental group suggest future consideration as a possible treatment program for children with academic problems” (p. 70).

In a larger study, Shechtman, Gilat, Fos, & Flasher (1996) expanded upon Quayle’s previous study. The authors observed which brief group therapy with low achieving elementary school children would have the most positive change. Seventy three children were placed into one of three groups. The experimental group received non-structured therapeutic group with aspects of play therapy, another group received academic enhancement, and lastly, the control group received no treatment. Shechtman et al. found that the children in the play based therapeutic group experienced significantly increased academic performance compared to the other two
groups. The author’s noted the possible implications for gains in academic performance without specific focus on academic issues. Shechtman et al. (1996) reported, “In short it may be concluded that group therapy of an interactional type is a viable treatment for elementary school children and has a significantly positive impact on their academic, social, and emotional functioning” (p. 380). The authors also noted change in the performance of academic success is firmly rooted in the child’s ability to be intrinsically motivated.

To summarize the review of literature on play therapy with academic achievement, historical data suggests that participating in play therapy can increase the IQ scores of children with emotional, physical, cognitive, and learning problems. The early studies of Dulsky (1942), Axline (1949), Mundy (1957), and Shmuker & Naveh (1985) suggest that providing play therapy to children can help increase their IQ scores and thus their ability to learn in the classroom. Providing play therapy for children with learning disabilities was also significant in improving the academic abilities of children. Improvements in motor functioning, and learning difficulties were reported by Newcomer & Morrison (1974) and Siegel (1970).

In an attempt to further promote play therapy as an aid in education, many research studies offered play therapy as a suitable alternative form of reading enrichment. Some early studies, Axline (1947), Bills (1950), Seeman & Edwards (1954), and Winn (1959), suggest that providing play therapy could be a way to release the inner direction of the child and minimize performance anxiety effectively. Later studies found mixed results, as further experimental designs included a comparison control group, but significant findings were not reported in reading achievement (Crow
1990, Boehm-Morelli 1999, Kaplewicz 1999, & Lopez 2000). It is possible that solely relying on reading achievement scores as a means of interpreting academic achievement may not be accurate. However, other contemporary works such as Shechtman, Gilat, Fos, & Flasher (1996), and Quayle (1991) find utilizing play therapy can be linked to increasing academic achievement with school age children. Yet, the summary of literature on play therapy and academic achievement concludes that the effect of play therapy on academic achievement remains in question due to mixed results.

*Play Therapy with Self-Concept*

Because the nature of play therapy is to create a free atmosphere in which the child feels capable of expressing a range of emotions by honoring the child's ability to internally solve difficulties, researchers created several instruments that measured the child's internal understanding of him or herself; hence, self-concept. By measuring the child's feelings, beliefs, and ideas about one's interactions and competencies in cognitive and physical capabilities in addition to peer and maternal acceptance, researchers could better quantify the inner-direction of the child.

Several studies (Azar, 1979; Crow, 1990; & Winn, 1959) measuring play therapy’s effectiveness with reading enhancement which were mentioned earlier had significant findings in the areas of increased self-concept for participating children. Perhaps the key to academic success could be measured from the child’s ability to understand his or her capabilities. Children in the classroom, who are able to feel confident in their abilities while also being aware of personal limitations, may perform better. Early studies (Gould, 1980; House, 1970; Strom, 1976; & Wall, 1973) attempting
to measure the efficacy of play therapy and self-concept placing a high emphasis on conducting experiments within the elementary school.

In current years, the focus on determining an increase in self-concept in play therapy has shifted. Several recent studies with children suffering from specific traumas have emerged with mixed reviews. Recent studies (Baggerly, 2004; Harsfield, 1990; Scott, Burlingame, Starling, Porter, & Lilly, 2003; & Zion, 1999) have measured children’s’ self-concept with play therapy by attempting to link play therapy with increased self-esteem.

Early Play Therapy and Self-Concept Research

House (1970) conducted an early study attempting to discover the value of nondirective play therapy as a method of increasing a child’s self-concept. His research also looked at the sociometric status, which ranks a child’s inclusion into a peer group shows how included the child feels as a member of a group, as well as self-concept. House identified 36 second graders and assigned them to one of three groups. The experimental group received twenty half hour group play sessions for the duration of ten weeks. The active control group received specialized reading group enrichment, and the second control group received no treatment. House (1970) found that subjects exposed to nondirective play therapy displayed a significantly greater increase in their self-concept scores than the subjects in the control group and reading group. Children in all three groups developed significantly higher sociometric scores. House summarized that sociometric increases were due the occurrence of pretesting at the beginning of the school year. House (1970) concluded, “The fact that the experimental group members increased significantly in self-concept indicates that the interaction of
nondirective play permits a climate for change within the individual members. This change supports the premise that the individual has a strong capacity for growth toward mature behavior if given the freedom to express himself” (p. 41).

Wall (1973) measured the self-concept of children identified as emotionally handicapped by state and local school districts guidelines. Wall randomly placed 47 participants in either an experimental group that received 24 group therapeutic self-directive play sessions or a control group which received no treatment. Wall found that children in the experimental groups demonstrated a significant increase in their self-concept and a decrease in problem behavior after treatment compared to the control group. Wall further reported the level of motivation and goal achievement needs in the experimental group were significantly higher than the control group at post-testing. Wall further concluded that not only were these children developing a higher self-concept but they were also performing better in the classroom.

Wall reported that children in the experimental group demonstrated a decrease in problem behaviors, such as poor academics and resistance to instruction, compared to the control group. Wall (1973) concluded, "There was supportive evidence to conclude that therapeutic self-directive play was particularly pertinent to the areas of difficulty experienced by most children with learning disabilities" (p. 70).

Similar findings were also discovered by Strom (1976) who investigated the effect of intensive play media on the self-concept of second grade children. Strom defined play media as the development of the therapeutic relationship between child and counselor by the use of play items. Thirty-six children participated in the research and were placed into two groups; intensive group play media therapy, or free play.
Strom found that self-concepts of the experimental group significantly increased as compared to the control group. He also discovered that the free play group’s self-concept also increased throughout the duration of the study.

Gould (1980) measured the effect of short term group play therapy on the self-concept of elementary school students. In Gould’s design, he gathered data on self-concept for all of his participants the year previous to the study. In the following year 80 students were divided into four groups: group one received group play therapy once a week for 10 weeks, group two received talk therapy for 10 weeks, group three only met with the therapist for pre and post testing, and group four only completed post testing. Gould found that the children receiving group play and talk therapy both had significant increases in their perceived self-concepts, noting no significant difference between the groups. Gould (1980) reported when remarking about the significant increases in self concept of the children in treatment groups, “That such non-academic activities are appropriate for enhancing elementary pupils’ self concept is of major interest. One is continuously alerted to the search for means of addressing the ‘whole’ child, his affective as well as his cognitive needs” (p. 49-50).

Contemporary Studies in Play Therapy and Self-Concept

Hartsfield (1990), assigned 58 students to one of three groups; individual verbal counseling, play media, and no treatment. Children in the first two groups received 8 twenty minute sessions. Hartsfield found that students in both the experimental and the control groups appeared to demonstrate an improved self-concept. No statistical significance was found in between groups.
However, Harsfield (1990) explored the effect that treatment may have on teacher perception. She found teacher’s perceptions of students who participated in either verbal counseling of play media improved. Teachers of the participating experimental group children perceived problematic behavior to diminish as a result of the intervention. This finding will be further explored in the teacher-child relationship section of this dissertation.

Zion (1999) attempted to discover the effects of individual client centered play therapy in relation to sexually abused children’s moods, self-concepts, and social competencies. She identified 24 children who had been sexually abused and provided them with 12 weeks of child-centered play therapy. Zion found that eight of the children improved. Although no significant findings were reported, the author noted the children tended to feel more capable of performing and therefore treatment may have had a positive impact on self-esteem. Zion suggested that a major limitation of her study is that “it has been postulated children who have been sexually traumatized may require longer, and more intensive therapy services for one year. Perhaps the short nature (12 weeks) of therapy with children of the abused population was insufficient” (p.117) to measure change.

In a follow up to Zion (1999), Scott, Burlingame, Starling, Porter, and Paul (2003), utilized her early data and ran several single-factor analysis at pre, post, and follow up data collected three months after the initial study. Scott et al. found that these children had significantly fewer problems over time with feelings of competency. However, the authors did not find an overall significantly reliable change over time in the child’s self-concept. Scott et al (2003) concluded, “Overall, it appears that client
centered play therapy is effective for treating a subset of children who are victims of sexual and physical abuse. The RCI [reliable change index] indicated that improvement in mood, social competence, self-esteem, and self-concept for about one-third of the abused sample” (p. 20).

Brandt (1999) looked at the efficacy of play therapy as an intervention for children experiencing a variety of adjustment difficulties, specifically children’s self-concept. Utilizing a quasi-experimental design, 29 children between the ages of four to six identified with adjustment difficulties were placed into two groups. One group received ten play therapy sessions and the control group received no treatment. Brandt found no statistically significant improvement in self-concept. However, she reported, “parents’ comments and therapists’ observations supported the notion that most of these children demonstrated greater self-confidence, increased autonomy, and improved comfort in social situations and interpersonal relationships – all characteristic of an improved self-concept” (p.67).

Finally, Baggerly (2004) studied the effects of child centered group play therapy on the self-concept of children who were homeless. In her study, 42 children who resided in a homeless center completed nine to twelve group play therapy sessions. Baggerly found significant improvements in the self-concepts of the children measured by the Joseph Pre-School and Primary Self Concept Screening Test. She also found the Significance subscale, the extent to which children value themselves, and Competence subscale, the child’s perception of his/her ability to perform and meet the demands of others, to be significantly improved. Baggerly reported specifically that the improvement in competence should not be underestimated as it is a key component to
academic achievement as well as a predictor of positive mental health later in life (Baggerly, 2004).

In summary, the historical data found in the review of literature of play therapy in relation to self-concept, suggests play therapy can increase self-concept scores of children who have emotional problems as well as those who exhibit normal functioning. Early studies suggest that providing play therapy to children can help increase their level of self-concept and thus help them to behave and interact better in the classroom (Gould, 1980; House, 1970; Strom, 1976; & Wall, 1973). House (1970) suggested that providing play therapy could be a way to release the inner direction of the child and minimize performance anxiety effectively increasing the child's self-concept. Several of these studies also suggest the use of nonacademic services through which the child can fully express him/herself. These services could be a way of strengthening the child’s ability to function in the classroom (Gould, 1980; & House, 1970).

In an attempt to further promote play therapy as an aid with specific affected children, several recent research studies offered play therapy as a suitable means to increase one’s self-concept (Baggerly, 2004; & Scott, Burlingame, Starling, Porter, & Lilly, 2003). Both studies found an increase in the child self-concept especially in regard to the child’s perception of her/his ability to perform and meet the demands of others. This finding could indicate that provision of play therapy to children may foster competency in academic material and minimize anxiety in the classroom.

*Play Therapy and Student-Teacher Relationships*

A large amount of research in the field of play therapy has been conducted over the past half century. However, attempting to measure the efficacy of play therapy
within the student-teacher relationship is a fairly new concept. In an early study, Axline and Rogers (1945) provided a case example which examines the possibility of having a teacher act as the therapist for the child. The authors suggested warm emotional support may provide support of the child’s natural abilities to learn. They offer that through an accepting relationship of the child by the teacher, the child becomes consciously accepting of her/himself.

Schneider, Kerridge, and Katz (1992) explored the therapeutic intervention preference of children with teachers. The authors suggested because teachers are often asked to provide interventions to help alter a child’s poor behavior in the classroom, it may be necessary to utilize a modality that teachers thought would bring about the highest positive outcome. Fifty-three teachers were recruited for the study and asked to select a treatment modality they would prefer from two case examples provided by the researchers. Schneider et al. (1992) discovered that teachers highly preferred family therapy to other treatment modalities. The authors noted that the three highest modalities required no changes in the instruction of the teacher. Schneider et al. stated, “Teachers may be resistant to participating in psychological interventions they see as requiring extensive classroom time or changes in routine” (p. 301). This study indicates that researchers utilizing teachers as therapeutic agents may encounter significant resistance.

Ray (2007) explored the impact of child-centered play therapy and consultations on teacher-child relationship stress. Ray identified 93 student participants and 53 teacher participants from three elementary schools. Children were randomly assigned to one of three groups. One group received only play therapy. The second group received
play therapy and consultation. The final group received consultation only. Ray found that play therapy and consultation could be effective interventions in reducing the stress of teacher-student relationships. Each of the three groups was found to have statistically significant reductions in teacher-student stress in several subscales including the following: response to student characteristics, student ADHD behaviors, and teacher characteristics. However, no significant findings between groups were found, and the lack of control group makes it difficult to ascertain the actual effectiveness of child centered play therapy in this case.

In an attempt to further promote play therapy with school-age children; several recent research studies have incorporated the feedback of the child’s teacher. Because the child’s relationships with his or her teacher has been viewed as affecting the child’s emotional and academic development, research has been conducted to see if play therapy can be an effect means to enhance such a relationship (Ray 2007). Both studies did not obtain clinically significant findings when providing consultations in enhancing the student-teacher relationships with children in play therapy. This may be due to possible teacher resistance described by Schneider et al. (1992) as teachers may be concerned about children missing class time to attend play therapy.

Purpose of the Study

The purpose of this study is to investigate the impact of child centered play therapy (CCPT) on academic achievement, self-concept and teacher-child relationship stress. A further purpose for this study is to establish a link between play therapy and academic
success. By researching the possible effects of the previous variables it may be possible to create a firm basis for utilizing child centered play therapy within the school setting.

Currently little literature exists that supports the connection between the emotional needs of the child and academic success. Naturally one might think that for a child to succeed in school they must be emotionally available to comprehend new material. With direct evidence supporting the need of healthy emotional adjustment, school systems would be more likely to change curriculum and provide emotional support to all students. One possible measurable variable of a child’s emotional health is self-concept. Previous play therapy research indicates CCPT is an effective treatment modality in increasing the self-concept in children. This study intends to establish the importance of fostering positive self reflective emotions thus, freeing the child to be more available in the classroom.
CHAPTER 2
METHODS AND PROCEDURE

This chapter presents the methods and procedures utilized for this study. Included is definition of terms, research assumptions, participant selection, discussion of instrument descriptions, approach to data collection, description of the treatment, approach to statistical analysis, and review of limitations of the study.

Hypotheses

The purpose of this study is to investigate the efficacy of child centered play therapy (CCPT) on academic achievement, self-concept, and teacher-child relationship. The current study is based on the following hypotheses:

Hypothesis 1: First grade children identified as academically at-risk who participate in sixteen child centered play therapy sessions will score a statistically significant higher mean difference score on the Young Children’s Achievement Test between pretest and posttest as compared to children identified as academically at-risk on a wait-list control group.

Hypothesis 2: First grade children identified as academically at-risk who participate in sixteen child centered play therapy sessions will score a statistically significant higher mean difference score on The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children between pretest and posttest as compared to children identified as academically at-risk on a wait-list control group.
Hypothesis 3: First grade children identified as academically at-risk who participate in sixteen child centered play therapy sessions will score a statistically significant higher mean difference score on the Student-Teacher Relationship Scale between pretest and posttest as compared to children identified as academically at-risk on a wait-list control group.

Definition of Terms

*Academic achievement* is defined as understood knowledge that fosters the ability to succeed in school, specifically in the areas of general information, reading, mathematics, writing, and spoken language. Academic achievement will be operationally defined for the purpose of this study as the Overall Achievement Score on the Young Children’s Achievement Test (Hresko, Peak, Herron, & Bridges, 2000).

*Self-concept* is defined as the child’s mental understanding and evaluation of him or herself. This will include the child’s feelings, beliefs, and ideas about one’s interactions and competencies specifically in the areas of cognitive and physical capabilities and peer and maternal acceptance (Harter & Pike, 1884). Self-Concept was operationally defined for the purpose of this study as the combination of the previous areas on the PSPCSAYC, creating a Global Self Concept Score.

*Student-teacher relationship* is defined as the teacher’s perception of his or her relationship with an individual student, specifically in the areas of conflict, closeness, and dependency. Student-Teacher Relationship was operationally defined for the
purpose of this study as the Total Score on the Student-Teacher Relationship Scale (Pianta, 2001).

*Child centered play therapy (CCPT)* for the purpose of this study is defined according to Landreth as:

a dynamic interpersonal relationship between a child (or person of any age) and a therapist trained in play therapy procedures who provides selected play materials and facilitates the development of a safe relationship for the child (or person of any age) to fully express and explore self (feelings, thoughts, experiences, and behaviors) through play, the child’s natural medium of communication, for optimal growth and development. (Landreth, 2002, p.16)

*Child centered play therapy skills* for the purpose of this study is defined according to Ray (2004). Ray outlined each necessary skill and competency a therapist must have in order to provide effective play therapy. These competencies include verbal as well as non-verbal skills. The non-verbal skills include: a) maintaining a leaning forward, open stance, b) appearing to be interested, c) remaining comfortable, d) having a matching tone with the child’s affect, and e) having appropriate affect in responses. These non-verbal skills are important as they match the young child’s developmental needs. Children are less verbal and communicate through play, naturally making the focus of non-verbal skills in play therapy vital when attempting to develop a therapist-child relationship. The verbal skills needed include: a) frequent interactive responses, b) behavior tracking responses, c) responding to verbalizations with paraphrases, d) reflecting the child’s emotions, e) facilitating empowerment through returning responsibility, f) encouraging creativity, g) self-esteem boosting statements, and f) relational responses. The purpose of the verbal skills needed in play therapy is to demonstrate in a developmentally appropriate manner that the therapist understands
and accepts children for who they are. Limit setting procedures for this study will utilize Landreth’s (2002) A-C-T model which includes three steps in setting limits: acknowledging the feeling, communicating the limit and targeting alternatives.

At-risk students was defined by the Denton Independent School District At-Risk Identification Criteria as elementary students meeting one of the following categories: a) the student previously did not advance from one grade level to the next; b) the student did not perform satisfactorily on an assessment instrument; c) the student did not perform satisfactorily on a readiness test; d) the student was placed in an alternative education program; e) the student has been expelled; f) the student is currently on parole or probation; g) the student has limited English proficiency; h) the student is in custody or care of Department of Protective and Regulatory Services; i) the student is homeless; j) the student has previously dropped out of school; or k) the student is residing in a residential placement facility (Denton Independent School District School Board, 2005).

Instruments

Three types of instruments were utilized to provide a measurement of the efficacy of child-centered play therapy for each of the three major constructs of this study. The Young Children’s Achievement Test was utilized to view academic progress. The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children was utilized to measure the child’s self-concept. Finally, the Student-Teacher Relationship Scale was also employed to examine the efficacy CCPT may have on the relationship between the student and his or her teacher.

Young Children’s Achievement Test
The Young Children’s Achievement Test (YCAT) was developed in 2000 by Hresko, Peak, Herron, & Bridges. It is categorized as an examiner administered assessment for trained administrators of assessment instruments and requires 25 to 45 minutes to complete. The instrument was developed to measure the achievement levels of young children, 4-8 years old, with respect to skills needed to succeed in school over five domains. The YCAT is a comprehensive assessment that measures early academic achievement levels and can be used to monitor the student’s progress.

The YCAT assesses an overall achievement score in academic areas from the combination of five subtests. The results from the five subtests make up the child’s Early Achievement Composite. This composite scale reflects the child’s school related achievement across the major areas of academic tasks, Hresko, Peak, Herron, and Bridges (2000) further indicate the Early Achievement Composite is the best indicator of the child’s overall academic abilities. The five subtests are General Information, Reading, Mathematics, Writing, and Spoken Language. The General Information subscale focuses on a child’s understanding and overall comprehension of common knowledge. The Reading subscale focuses on the child’s ability to comprehend the alphabet and the use of reading comprehension. The Mathematics scale measures the child’s understanding of mathematical concepts. The Writing subtest measures the child’s knowledge of writing and ability to write. The Spoken Language subscale contains items that measure a child’s knowledge of spoken language. Due to the nature of the subscales, administration of the YCAT includes having children respond verbally to questions, point to pictures, and complete short written prompts.
High reliability has been established for the YCAT instrument. The internal consistency, or the degree to which the items correlate with one another, averaged above 0.85. The Test-retest reliability, meaning the consistency of ratings by the same examiner over a short time interval, was established at 0.98. Interrater reliability, the level of agreement among independent examiners rating of the same child, averaged at 0.98 (Hresko, Peak, Herron, & Bridges, 2000).

When measuring the validity, the ability of the instrument to measure what it is intended to investigate, one discovers that the YCAT is a reliable and valid measure of achievement. YCAT scales and composites correlate as high as .99 with corresponding scores on other instruments, such as the Comprehensive Scale of Student Abilities, the Kaufman Survey of Early Academic and Language Skills, the Metropolitan Readiness Tests, and the Gates-MacGinitie Reading Tests (Hresko, Peak, Herron, & Bridges, 2000). These results support the construct validity of those YCAT dimensions. Further validity studies have been conducted on the YCAT, establishing factorial and discriminant validity.

The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children

The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSAYC) was developed by Harter and Pike (1984). It is categorized as an examiner administered assessment consisting of 24 pictorial items for young children requiring approximately 20 minutes to complete. The instrument was developed to measure a child’s perceived competence and perceived social acceptance among four domains. The form contains pictures of behaviors and interactions that the child rates
on a four point scale, ranging from really good to really bad. The Harter is a developmentally appropriate instrument that assesses perceived competence and acceptance among young children. Additionally, the Harter can be used as a guide to monitor the child’s perception of self over time.

The Harter assesses the overall perception of the student’s self-concept by four separate subscales. The four subscales are: Cognitive Competence, Physical Competence, Peer Acceptance, and Maternal Acceptance. The Cognitive Competence subscale measures the child’s perception of competency in scholastic skills. The Physical Competence scale includes questions related to the child’s perception of skills involving physical movement. The Peer Acceptance subtest measures the perception of the child in regard to developing friendships and interactions with peers. Finally, the Maternal Acceptance subscale measures the degree of perceived pleasant activities that the child experiences with his or her mother. Although not indicated in the manual, previous research summed and averaged each subscale to create a Global Self-Concept Score that is utilized in data analysis. (Jerome, Fujiki, Brinton, & James 2002; Wright, Boschen, & Jutai 2005)

Reasonable reliability has been established for the Harter instrument. The internal consistency averaged above 0.73. The Test-retest reliability was established at 0.92. Interrater reliability was not measured (Harter & Pike, 1984). When measuring the validity for the Harter, the authors utilized systemic data by asking children completing the assessment to give reasons for their response. Due to the authors’ findings, they were able to report high convergent validity as a reliable and valid measure of self-concept. These results support the construct validity of those Harter dimensions (Harter & Pike,
Furthermore, reliability of the Global Self-Concept Score has been found to be in the mid .80s and is currently being used as a point of measure of a child’s self-concept (Jerome, Fujiki, Brinton, & James 2002; Wright, Boschen, & Jutai 2005).

**Student-Teacher Relationship Scale**

The Student-Teacher Relationship Scale (STRS), developed by Pianta (2001), is a self-administered test consisting of 28 items for teachers requiring approximately 10 minutes to complete. The instrument was developed to measure teachers’ perceptions of her/his relationships with young students aged 4-8 among three domains. The form contains descriptors of behaviors and interactions that the teacher of the participant will rate on a 5 point Likert scale, ranging from Definitely does not apply to Definitely applies. The STRS is a short assessment that accurately assesses student-teacher relationship and is often used as a preventative measure. Additionally, the STRS also can be used to monitor the student-teacher relationship over different intervals.

The STRS assess the overall perception of the teacher's relationship with his or her student from the combination of three subtests and measures the degree to which the teacher perceives his or her relationship with a particular student as positive and effective. The combination score is referred to as the *Total Scale*, an overall score, and is the best indicator of measurement of the Student-Teacher Relationship Scale (STRS). The three subtests are: Conflict, Closeness, and Dependency. The Conflict subscale measures the degree to which the teacher perceives his or her relationship with the particular student as negative and conflicted. The Closeness scale measures the degree that the teacher perceives warmth and affection within the relationship with
the student. The *Dependency* subtest measures the degree to which the teacher perceives a student being overly dependent in the relationship with their teacher.

Reasonable reliability has been established for the STRS instrument. The internal consistency averaged above 0.75. The Test-retest reliability was established at 0.87. Interrater reliability was not measured as students of this age often only have one teacher (Pianta, 2001). When measuring validity of the STRS, moderate to strong scores are reported. STRS scales and composites correlate as high as .70 with corresponding scores on other instruments, including the *Teacher-Child Rating Scale*, the *Child Behavior Scale*, and the *Iowa Test of Basic Skills* (Pianta, 2001). These results support the construct validity of those STRS dimensions. Further validity studies have been conducted on the STRS, including discriminant validity, where STRS accounts for a unique proportion of explained variance in social and academic outcomes not measured by other teacher report instruments.

**Selection of Subjects**

I first gained approval from the University of North Texas Internal Review Board prior to the recruitment of subjects for this study. The population consisted of first grade children identified as at-risk by the Denton Independent School District at four Title 1 elementary schools in Denton, Texas.

In order to participate in the study, children needed to meet the following criteria: a) the student must be in 1st grade; b) the student must be younger than 8 years old for the duration of the study; c) the student must be labeled as at-risk by school district; d) the student has parental or guardian consent; e) the student agrees to participate in the
study; f) the student is fluent in the English language; g) the student’s parent or guardian can consent to participation in the study; h) the student’s teacher agrees to participate in the study; and, i) the student is not receiving play therapy or counseling anywhere else during the duration of the study.

All elementary schools selected for this study were identified as Title I and located in Denton, Texas. Title I schools are public schools enrolling at least 40 percent of children from low SES families (U.S. Department of Education, 2006). Denton schools identify and track progress of students labeled as at-risk according to district criteria. The school counselors contacted the parents of each child who were labeled as at-risk and informed them of the study and attained informed consent. Upon gaining informed consent, the researcher then contacted teachers of the participating children to gain informed consent for their participation.

Qualified participants (n =43) were randomly assigned by school site to the experimental group (n =21) or the no treatment waitlist control group (n =22). In School 1, the parents of fourteen first grade students identified as academically at-risk provided consent for treatment. One of these students (placed in the experimental group) moved to school 3 and was provided services at her new school. Due to having different teachers, no teacher data was recorded for this child. In School 2, the parents of eight first grade students identified as academically at-risk consented to treatment. For School 3, ten students made up the participants. In School 4, the parents of eleven first grade students identified as academically at-risk provided consent for treatment. Two of these students, both from the control group, dropped out of the study. One student in foster care, was placed in another foster home, the other was placed in an alternative
Collection of Data

Upon receiving parental informed consent, all children were administered the Young Children's Achievement Test (YCAT) and the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter). The teachers of all children were asked to complete the Student-Teacher Relationship Scale (STRS). Participating children were then randomly assigned to one of the two groups ($n=21$ or $n=22$). The experimental group consisted of children who received 16 individual child-centered play therapy sessions. Children receiving play therapy participated in two 30-
minute sessions per week for a period of 8 weeks on-site in equipped school play rooms. All play therapy sessions followed a child centered protocol defined by Ray (2004) and were facilitated by doctoral level counseling students trained in play therapy or a masters level practitioner trained in play therapy at the University of North Texas Counseling Program. The control group consisted of children who were placed on a waiting list and received no treatment intervention. At the end of eight weeks, all children were administered the YCAT and Harter and teachers were administered the STRS as posttest measures. Upon completion of post-testing, children in the control group also received play therapy.

Initially, this researcher distributed consent forms, which included a full explanation of the purpose, procedure, and foreseen risks of the study, to the parent or guardian of all 1st grade students who met the participant criteria. Upon receiving the completed parental consent forms, the subjects were assigned code numbers to participants. Teachers of the participants were then given a consent form to complete.

Participants were administered the Young Children’s Achievement Test (YCAT) and the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter). Both of these instruments were proctored by a doctoral level counseling student trained in administering child assessments at the University of North Texas Counseling Program during the school day at each identified school. Teachers were asked to complete the Student-Teacher Relationship Scale (STRS) for each identified child. Substitute teachers were provided to teachers to offer them an adequate undistracted environment in which to complete the instrument. These administered instruments served as the pretest battery for all subjects prior to the start
of the play therapy sessions. Children who have all instruments completed were randomly assigned to the experimental or control group.

After testing was completed, each subject in the experimental group received two thirty-minute individual child centered play therapy sessions per week for the period of eight weeks. These sessions were held at the individual student’s school in a fully equipped play room. The subjects in the control group did not receive treatment during this time. Upon completion of the play therapy sessions, the students were readministered the Young Children’s Achievement Test (YCAT) and the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter). Teachers also completed the Student-Teacher Relationship Scale (STRS) at this time. These completed assessment instruments served as the posttest battery for the subjects.

All information collected was kept confidential. Names of the children and teachers were excluded from any documentation or reports of the study. The information collected at pretest and posttest was recorded by the use of a code number for each subject. These numbers were only available to this researcher to serve as a master list. Upon the conclusion of the study all names of participants and their teachers were destroyed.

Experimental Group Procedures

Children placed in the experimental interaction group completed 16 half hour child centered play therapy (CCPT) sessions based upon the procedures and principles previously defined by Landreth (2002). Children entered a room in which play materials were provided to allow the child to express him or herself. Following Landreth’s
recommendations, the following toys were available to the child to provide him or her with a wide range for expression:

<table>
<thead>
<tr>
<th>Toy Category</th>
<th>Toy Item 1</th>
<th>Toy Item 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>Puppets</td>
<td>Bean bag chair</td>
</tr>
<tr>
<td>Scoops/shovel/bucket</td>
<td>Puppet theater</td>
<td>Plastic domestic animals</td>
</tr>
<tr>
<td>Dramatic play clothes</td>
<td>Vehicles/planes</td>
<td>Plastic zoo animals</td>
</tr>
<tr>
<td>Masks and hats</td>
<td>Toy Guns</td>
<td>Medical kit</td>
</tr>
<tr>
<td>Plastic dinosaurs</td>
<td>Baby dolls/clothes</td>
<td>Bandages</td>
</tr>
<tr>
<td>Knife/sword</td>
<td>Pacifier</td>
<td>Baby bottle</td>
</tr>
<tr>
<td>Rope</td>
<td>Cash register</td>
<td>Dart Gun</td>
</tr>
<tr>
<td>Play kitchen/food items</td>
<td>Handcuffs/keys</td>
<td>Pillow/blanket</td>
</tr>
<tr>
<td>Pots/pans/dishes/utensils</td>
<td>Blocks</td>
<td>Paints/easel</td>
</tr>
<tr>
<td>Dollhouse/bendable family</td>
<td>Toy soldiers</td>
<td>Bowling pins/ball</td>
</tr>
<tr>
<td>Musical instruments</td>
<td>Bop bag/ Bobo</td>
<td>Toy car/truck</td>
</tr>
<tr>
<td>Cell phone/dial phone</td>
<td>Camera/binoculars</td>
<td>Play Dough</td>
</tr>
<tr>
<td>Transparent tape</td>
<td>Vehicles/planes</td>
<td>glue/scissors/paper</td>
</tr>
</tbody>
</table>

All therapists were required to conduct treatment utilizing CCPT principles including both nonverbal and verbal skills outlined by Ray (2009): a) maintaining a leaning forward, open stance, b) appearing to be interested, c) remaining comfortable, d) having a matching tone with the child’s affect, e) having appropriate affect in responses f) frequent interactive responses, g) behavior tracking responses, h) responding to verbalizations with paraphrases, i) reflecting the child’s emotions, j) facilitating empowerment through returning responsibility, k) encouraging creativity, l) self-esteem boosting statements, and m) relational responses. These skills are used to
convey the therapist understands the child’s world, and send the message of, “I am here, I hear you, I understand, and I care” (Landreth, 2002, p. 205-206). All therapists had completed at least 42 hours in graduate level counseling program including an introduction to play therapy, an advanced play therapy course, and one clinical course in play therapy. All therapists received one hour of weekly play therapy supervision during the course of the study to ensure that each therapist was following CCPT protocol. At that time the play therapists with their supervisors present were required to review their videotaped play therapy sessions. The play therapist’s supervisor ensured that the play therapist was following CCPT protocol through the use of the *Play Therapy Skills Checklist* (Ray, 2009). Furthermore, a randomized check was conducted by the researcher and research assistants trained in CCPT to ensure that the play therapy sessions were conducted utilizing CCPT.

**Statistical Analysis**

Following the completion of the study, the researcher and the research team scored the pretest and posttest data by using hand scoring on the Young Children Achievement Test, The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children, and the Student-Teacher Relationship Scale according to their prospective manuals. In order to determine if child centered play therapy treatment and the control group were statistically equal, a two factor repeated measures split-plot analysis of variance (SPANOVA) (Time X Treatment Group) was performed on each dependent variable (achievement, self-concept, and student-teacher relationship) to determine if the experimental group who received 16 sessions of child centered play
therapy performed differently from the control group across time, which was a particular interest for this study.

The two levels of group are defined as the experiential group (CCPT group) and the non-treatment group (wait-list control group). The two levels of time are pretest and posttest for each dependent variable. Significant differences between the means across time were tested at the .05 alpha level. An effect size was computed for each analysis using the eta-squared statistic ($\eta^2$) to assess the practical significance of findings.
CHAPTER 3
RESULTS AND DISCUSSION

This chapter presents the discussion results, and limitations of this study. Implications for practice and research are also explored. Results of data analysis are presented in the order in which the hypotheses were tested.

Results

After examining data for assumptions, a two factor (Time x Treatment Group) repeated measures split plot analysis of variance (SPANOVA) was performed to examine the interaction effects of treatment type (experimental, control) and time (pre-test, post-test) on each dependent variable. Dependent measures for the Young Children’s Achievement Test (YCAT) included the Early Achievement Composite along with an exploratory analysis of each subscale: General Information, Reading, Mathematics, Writing, and Spoken Language (Hresko, Peak, Herron, & Bridges, 2000). Dependent variable for the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSDYC) included the Global Self-Concept Score (Harter & Pike, 1984). Dependent measure for the Student-Teacher Relationship Scale (STRS) included the Total Scale Score (Pianta, 2001).

The YCAT, PSPCSDYC, and STRS were administered prior to treatment and at the end of treatment. An increase in scores on the YCAT, PSPCSDYC, and STRS scales indicated improvement in the targeted measures. Wilks’ Lambda was used to interpret results. Partial eta squared effect sizes were calculated to assess treatment effect and recognize the magnitude of difference attributed to treatment between the two groups and practical significance (Kazdin, 1999). Cohen’s guidelines (1988) were
used to interpret $\eta^2$ effect size: .01 = small, .06 = medium, and .14 = large. Only interpretations for moderate to large effect sizes are reported. Results for clinical significance are also reported.

Hypothesis 1

First grade children identified as academically at-risk who participate in sixteen child centered play therapy sessions will score statistically significant higher mean score on the Young Children’s Achievement Test between pretest and posttest as compared to children identified as at-risk on a wait-list control group.

*Early Achievement Composite Total Scale of the YCAT*

In order to conduct a split plot ANOVA to identify an interaction effect between groups over time on the YCAT, data assumptions for normality of distribution and homogeneity of variance were analyzed and met. Table 2 presents pretest and posttest means and standard deviations for the experimental group ($n=21$) and control group ($n=20$) on the General Information, Reading, Mathematics, Writing, Spoken Language scales and Early Achievement Composite of the YCAT. Table 2 presents the results of the split plot ANOVA for Early Achievement Composite.

Results of a 2 factor repeated measures analysis of variance indicated that the dependent variable, Early Achievement Composite, revealed a statistically significant interaction effect of time (pretest, posttest) x treatment group (experimental, control); [Wilks’ Lambda = .56, $F(1, 39) = 5.23, p = .03$, (partial $\eta^2 = .12$)], statistically significant main effect for time [$F(1, 39) =30.14, p<.01$ (partial $\eta^2=.44$)]; and no statistically significant main effect for group [$F(1, 39) =10, p=.75$ (partial $\eta^2< .01$)]. These results
indicate that when grouped together children who attended child centered play therapy and the control group obtained statistically significant higher scores on the Early Achievement Composite Subscale of the YCAT from pretest to posttest. Furthermore, results from the ANOVA interaction effect and further analysis of means indicate that the children who attended child centered play therapy obtained statistically significantly higher score on the Early Achievement Composite from pretest to posttest, when compared to the control group from pretest to posttest. On the basis of these results Hypothesis 1 was retained. The effect size of .44 for change over time indicates a high effect size, and the effect size of .12 for interaction indicates a moderate effect size according to Cohen’s (1988) guidelines.

Because main effects and interaction effect were significant, a paired samples t-test was calculated for each treatment condition to explore group performance. Results of a paired samples t-test indicated that the Early Achievement Composite for the treatment group revealed a statistically significant difference from pretest to posttest, t(20) = -5.07, p< .01, (η² =.56). Results of a paired samples t-test demonstrated that the Early Achievement Composite for the control group also revealed a statistically significant difference from pretest to posttest, t(19) = -2.53, p= .02, (η² =.25). While both groups, treatment and control, demonstrated large effect sizes, results indicated that the treatment group had an effect size that was twice as large as the control group. Because I found significant results for the Early Achievement Composite, I calculated a post-hoc exploratory analysis for each subscale of the YCAT using SPANOVA procedures.
Figure 1. Early achievement composite scores from pre-test to post-test.

Table 2
Summary of Split-Plot Analysis of Variance for Early Achievement Composite of the YCAT According to Group Assignment

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>603998.72</td>
<td>603998.72</td>
<td>1777.54</td>
<td>&lt;.01</td>
<td>.98</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>34.62</td>
<td>34.62</td>
<td>.1</td>
<td>.75</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Error 1</td>
<td>39</td>
<td>339.75</td>
<td>339.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>541.88</td>
<td>541.88</td>
<td>30.14</td>
<td>&lt;.01*</td>
<td>.44</td>
</tr>
<tr>
<td>Time X Group</td>
<td>1</td>
<td>94.08</td>
<td>94.08</td>
<td>5.23</td>
<td>.03*</td>
<td>.12</td>
</tr>
<tr>
<td>Error 2</td>
<td>39</td>
<td>701.43</td>
<td>17.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>653.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3
Mean Scores on the General Information, Reading, Mathematics, Writing, Spoken Language scales and Early Achievement Composite on the Young Children’s Achievement Test (YCAT)

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group n= 21</th>
<th>Control Group n = 20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>General Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>89.95</td>
<td>92.48</td>
</tr>
<tr>
<td>SD</td>
<td>10.56</td>
<td>8.20</td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>85.71</td>
<td>95.33</td>
</tr>
<tr>
<td>SD</td>
<td>12.50</td>
<td>10.95</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>89.76</td>
<td>94.76</td>
</tr>
<tr>
<td>SD</td>
<td>10.44</td>
<td>11.22</td>
</tr>
<tr>
<td>Writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>88.52</td>
<td>92.24</td>
</tr>
<tr>
<td>SD</td>
<td>11.31</td>
<td>11.73</td>
</tr>
<tr>
<td>Spoken Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>84.76</td>
<td>90.05</td>
</tr>
<tr>
<td>SD</td>
<td>17.74</td>
<td>15.37</td>
</tr>
<tr>
<td>Early Achievement Composite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>82.86</td>
<td>90.14</td>
</tr>
<tr>
<td>SD</td>
<td>13.71</td>
<td>12.50</td>
</tr>
</tbody>
</table>

*Note: An increased in mean scores indicates an improvement in achievement.*

*General Information Subscale of the YCAT*

Results of the split plot ANOVA on the YCAT are provided for each subscale in Table 4. Results for the first subscale General Information revealed no statistically significant interaction effect [Wilks’ Lambda=.95\(F(1, 39) = 2.04, \ p=.16\) (partial \(\eta^2 = .05\)); no statistically significant main effect for time [Wilks’ Lambda=.99,\(F(1, 39) = .6, \ p=.44\) (partial \(\eta^2 = .02\)); and no statistically significant main effect for group [\(F(1,39) = .18, \ p=.68\) (partial \(\eta^2 = .01\)).
Table 4
Summary of Split-Plot Analysis of Variance for the General Information Subscale of the YCAT According to Group Assignment

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1</td>
<td>672234.4</td>
<td>672234.4</td>
<td>&lt;.01</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>34.06</td>
<td>34.06</td>
<td>.18</td>
<td>.68</td>
<td>.01</td>
</tr>
<tr>
<td>Error 1</td>
<td>39</td>
<td>1047.49</td>
<td>26.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>16.17</td>
<td>16.17</td>
<td>.6</td>
<td>.44</td>
<td>.02</td>
</tr>
<tr>
<td>Time X Group</td>
<td>1</td>
<td>54.9</td>
<td>54.9</td>
<td>2.04</td>
<td>.16</td>
<td>.05</td>
</tr>
<tr>
<td>Error 2</td>
<td>39</td>
<td>1047.49</td>
<td>26.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>1118.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reading Subscale of the YCAT

Results of the split plot ANOVA (see Table 5) indicated that the dependent variable, Reading, revealed no statistically significant interaction effect [Wilks’ Lambda=.96, F(1, 39) =1.5, p=.23 (partial η²=.04); a statistically significant main effect for time [F(1,39) =31.05, p<.01 (partial η²=.44); and no statistically significant main effect for group [F(1, 39) =.98, p=.33 (partial η²=.02). The effect size of .44 for change over time indicates a large effect size according to Cohen’s (1988) guidelines. These results indicate that when grouped together children who attended child centered play therapy and the control group obtained statistically significant higher scores on the Reading subscale of the YCAT from pretest to posttest.
Table 5
Summary of Split-Plot Analysis of Variance for the Reading Subscale of the YCAT
According to Group Assignment

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Between subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>647304.81</td>
<td>647304.81</td>
<td>2835.24</td>
<td>&lt;.01</td>
<td>.99</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>222.95</td>
<td>222.95</td>
<td>.98</td>
<td>.33</td>
<td>.02</td>
</tr>
<tr>
<td>Error 1</td>
<td>39</td>
<td>8903.95</td>
<td>228.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>1273.64</td>
<td>1273.64</td>
<td>31.05</td>
<td>&lt;.01*</td>
<td>.44</td>
</tr>
<tr>
<td>Time X Group</td>
<td>1</td>
<td>61.64</td>
<td>61.64</td>
<td>1.5</td>
<td>.23</td>
<td>.04</td>
</tr>
<tr>
<td>Error 2</td>
<td>39</td>
<td>1599.75</td>
<td>41.02</td>
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</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>3261.14</td>
<td></td>
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</tr>
</tbody>
</table>

Mathematics Subscale of the YCAT

Results of the split plot ANOVA (see Table 6) indicated that the dependent variable, Mathematics, revealed no statistically significant interaction effect \[\text{Wilks’ Lambda} = .96, F(1, 39) = 1.7, p = .20\] (partial η² = .04); a statistically significant main effect for time \[F(1, 39) = 5.38, p = .03\] (partial η² = .12); and no statistically significant main effect for group \[F(1, 39) = 1.26, p = .27\] (partial η² = .03). The effect size of .12 for change over time indicates a moderate effect size according to Cohen’s (1988) guidelines.

These results indicate that when grouped together children who attended child centered play therapy and the control group obtained statistically significant higher scores on the Mathematics subscale of the YCAT from pretest to posttest.
Table 6

Summary of Split-Plot Analysis of Variance for the Mathematics Subscale of the YCAT According to Group Assignment

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>partial $\eta^2$</th>
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</thead>
<tbody>
<tr>
<td><strong>Between subjects</strong></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>670547.77</td>
<td>670547.77</td>
<td>&lt;.01</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>267.28</td>
<td>267.28</td>
<td>1.26</td>
<td>.27</td>
<td>.04</td>
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<td>Error 1</td>
<td>39</td>
<td>8243.72</td>
<td>211.38</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Within subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>209.8</td>
<td>209.8</td>
<td>5.38</td>
<td>.03*</td>
<td>.12</td>
</tr>
<tr>
<td>Time X Group</td>
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<td>66.38</td>
<td>66.38</td>
<td>1.7</td>
<td>.2</td>
<td>.04</td>
</tr>
<tr>
<td>Error 2</td>
<td>39</td>
<td>1519.4</td>
<td>38.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>1795.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Writing Subscale of the YCAT

Results of the split plot ANOVA (see Table 7) indicated that the dependent variable, Writing, revealed no statistically significant interaction effect [Wilks' Lambda $=.81, F(1, 39) =.06, p=.81$ (partial $\eta^2< .01$); a statistically significant main effect for time $[F(1, 39) =5.92, p=.02$ (partial $\eta^2= .13$); and no statistically significant main effect for group $[F(1, 39) =1.61, p=.69$ (partial $\eta^2< .01$). The effect size of .13 for change over time indicates a high moderate effect size according to Cohen’s (1988) guidelines. These results indicate that when grouped together children who attended child centered play therapy and the control group obtained statistically significant higher scores on the Writing subscale of the YCAT from pretest to posttest.
Table 7
Summary of Split-Plot Analysis of Variance for the Writing Subscale of the YCAT According to Group Assignment

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>678309.6</td>
<td>678309.6</td>
<td>3743.23</td>
<td>&lt;.01</td>
<td>.99</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>29.21</td>
<td>29.21</td>
<td>.16</td>
<td>.69</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Error 1</td>
<td>39</td>
<td>7067.18</td>
<td>181.21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>349.82</td>
<td>349.82</td>
<td>5.92</td>
<td>.02*</td>
<td>.13</td>
</tr>
<tr>
<td>Time X Group</td>
<td>1</td>
<td>3.58</td>
<td>3.58</td>
<td>.06</td>
<td>.81</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Error 2</td>
<td>39</td>
<td>2306.62</td>
<td>59.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>2660.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Spoken Language Subscale of the YCAT**

Results of the split plot ANOVA (see Table 8) indicated that the dependent variable, Spoken Language, revealed no statistically significant interaction effect [Wilks' Lambda = .95, $F(1, 39) = 1.96$, $p = .17$ (partial $\eta^2 = .05$)]; no statistically significant main effect for time [$F(1, 39) = 3.33$, $p = .08$ (partial $\eta^2 = .08$)]; and no statistically significant main effect for group [$F(1, 39) = .13$, $p = .73$ (partial $\eta^2 < .01$)]. The effect size of .08 for change over time indicates a moderate effect size according to Cohen’s (1988) guidelines.

Table 8
Summary of Split-Plot Analysis of Variance for the Spoken Language Subscale of the YCAT According to Group Assignment

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>639360.98</td>
<td>639360.98</td>
<td>1144.66</td>
<td>&lt;.01</td>
<td>.97</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>69.76</td>
<td>69.75</td>
<td>.13</td>
<td>.73</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Error 1</td>
<td>39</td>
<td>2147.24</td>
<td>558.57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>183.51</td>
<td>183.51</td>
<td>3.33</td>
<td>.08</td>
<td>.08</td>
</tr>
<tr>
<td>Time X Group</td>
<td>1</td>
<td>107.71</td>
<td>107.71</td>
<td>1.96</td>
<td>.17</td>
<td>.05</td>
</tr>
<tr>
<td>Error 2</td>
<td>39</td>
<td>2147.24</td>
<td>55.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>2438.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 2

First grade children identified as academically at-risk who participate in sixteen child centered play therapy sessions will score a statistically significant higher mean score on the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children for Global Self-Concept Score between pretest and posttest as compared to children identified as at-risk on a wait-list control group. Table 9 presents the pretest and posttest means and standard deviations for the experimental (n=21) and control group (n=20) on the Total scales of the PSCSAYC.

Table 9
Mean Scores on the Global Self-Concept Score on the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSAYC)

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group n= 21</th>
<th>Control Group n= 20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Global Self-Concept Score</td>
<td>3.33</td>
<td>3.29</td>
</tr>
<tr>
<td>Mean</td>
<td>.57</td>
<td>.57</td>
</tr>
</tbody>
</table>

Note: An increase in mean scores indicates an improvement in perception.

Global Self-Concept Score of the (PSPCSAYC)

In order to conduct a split plot ANOVA to identify significant differences between groups over time on the PSPCSAYC, data assumptions for normality of distribution and homogeneity of variance were analyzed and met. Results of the split plot ANOVA on the PSPCSAYC for the Global Self-Concept Score can be found in Table 10. Results of the split plot ANOVA indicated that the dependent variable, Global Self-Concept, revealed no statistically significant interaction effect [Wilks' Lambda=.99, $F(1, 39) =1.21$, $p=.28$ (partial $\eta^2=.03$); no statistically significant main effect for time [$F(1,39) =.27$, $p=.62$ (partial $\eta^2=.01$); and no statistically significant main effect for group [$F(1, 39) =.54$, $p=.61$ (partial $\eta^2=.01$). Because no statistically significant differences were found, no
further analysis was conducted. On the basis of the results, Hypothesis 2 was not retained.

Table 10  
*Summary of Split-Plot Analysis of Variance for Global Self-Concept on the PSPCSAYC According to Group Assignment*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>877.2</td>
<td>877.2</td>
<td>1622.68</td>
<td>&lt;.01</td>
<td>.98</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>.15</td>
<td>.15</td>
<td>.27</td>
<td>.61</td>
<td>.01</td>
</tr>
<tr>
<td>Error 1</td>
<td>39</td>
<td>21.08</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>.02</td>
<td>.02</td>
<td>.26</td>
<td>.62</td>
<td>.01</td>
</tr>
<tr>
<td>Time X Group</td>
<td>1</td>
<td>.11</td>
<td>.11</td>
<td>1.21</td>
<td>.28</td>
<td>.03</td>
</tr>
<tr>
<td>Error 2</td>
<td>39</td>
<td>3.68</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>41</td>
<td>3.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 3

First grade children identified as academically at-risk who participate in sixteen Child-Centered Play Therapy sessions will score a statistically significant higher mean score on the Total Score of the Student Teacher Relationship Scale between pretest and posttest as compared to children identified as at-risk on a wait-list control group. Table 11 presents the pretest and posttest means and standard deviations for the experimental (n=20) and control group (n=20) on the Total scales of the STRS.

Table 11  
*Mean Scores on the Total Scale on the Student-Teacher Relationship Scale (STRS)*

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group n= 20</th>
<th>Control Group n = 20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Total Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>103.50</td>
<td>106.52</td>
</tr>
<tr>
<td>SD</td>
<td>16.15</td>
<td>14.29</td>
</tr>
</tbody>
</table>

An increased in mean scores indicates an improvement in relationship for the Total subscale.
**Total Score of the STRS**

In order to conduct a split plot ANOVA to identify significant differences between groups over time on the STRS, data assumptions for normality of distribution and homogeneity of variance were analyzed and met. Results of the split plot ANOVA can be found in Table 12. The dependent variable, Total Score, revealed no statistically significant interaction effect of time (pretest, posttest) x treatment group (experimental, control); [Wilks’ Lambda = .97, F(1, 39) = 1.02, \( p = .32 \), (partial \( \eta^2 = .03 \))]; no statistically significant main effect for time \( [F(1, 39) = 3.85, p = .06 \) (partial \( \eta^2 = .09 \)]; and no statistically significant main effect for group \( [F(1, 39) < .01, p = .97 \) (partial \( \eta^2 < .01 \)). The effect size of .09 for change over time indicates a moderate effect size according to Cohen’s (1988) guidelines. These results indicate that the children who attended child centered play therapy were not statistically different than in the Total Score on the STRS from pretest to posttest, when compared to the control group. On the basis of these results Hypothesis 3 was not retained.

Table 12

**Summary of Split-Plot Analysis of Variance for Total Score According to Group Assignment**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>partial ( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>875711.25</td>
<td>8875711.25</td>
<td>1481.88</td>
<td>&lt;.01</td>
<td>.98</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>&lt;.01</td>
<td>.97</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Error 1</td>
<td>38</td>
<td>22455.95</td>
<td>590.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>510.05</td>
<td>510.05</td>
<td>3.85</td>
<td>.06</td>
<td>.09</td>
</tr>
<tr>
<td>Time X Group</td>
<td>1</td>
<td>135.20</td>
<td>135.20</td>
<td>1.02</td>
<td>.32</td>
<td>.03</td>
</tr>
<tr>
<td>Error 2</td>
<td>38</td>
<td>5028.75</td>
<td>132.37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>5674</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Clinical Significance

Clinical significance according to Kazdin (2003) is the real life benefit that treatment offers the client. To further explore the impact child centered play therapy had on the improvement of academic achievement with at-risk first graders, their individual pre and post scores for the dependent variable was examined. Specifically, clinical significance was determined by detecting the number of experimental children (n=21) who moved from being considered at risk for academic failure at pretest to a normal range of functioning following treatment.

Academic Achievement Outcomes

To determine clinical significance, children’s Early Achievement Composite scores (EAC) from the Young Children’s Achievement Test (YCAT) were examined to evaluate improvement of child’s academic achievement from pre to post test. EAC scores below 90 are considered to be “at risk for academic failure” (Hresko, Peak, Herron, & Bridges, 2000). EAC scores between 90-110 are considered in the normal range. Scores between 80-89 are considered below average and at-risk of academic failure. Scores between 70-79 are considered to be poor, while scores between 35-69 are considered to be very poor; both poor and very poor scores are indicative of academic failure.

A total of fourteen of the twenty control group children were identified as at-risk for academic failure at pre-test. Of two students who presented in the very poor range (scores 35-69), one moved to the poor range, and one remained in the very poor range. Of five children who presented in the poor range (70-79), one moved to the below average range, two children remained at the poor range, and two fell to the very poor
range. Of seven students who presented in the below average range (80-89), four moved to the normal range, two children remained in the below average range, and one fell to the poor range.

For the treatment groups a total of fourteen of the twenty children were identified as at-risk for academic failure at pre-test. Of five students who presented in the very poor range (scores 35-69), three moved to the poor range, one improved to the below average range, and one remained in the very poor range, but showed a 10 point increase. Of three children who presented in the poor range (70-79), one moved to the below average range, another moved to the normal range, and one child remained at the poor range. Of six students who presented in the below average range (80-89), four moved to the normal range, two children remained in the below average range, but one showed a 9 point increase, the other a 1 point increase. No child from the treatment group scores decreased to a more severe level of potential academic failure.

In summary, 36% of the fourteen experimental group children (n=5) moved from at risk of academic failure to one of normal functioning following their participation in CCPT, compared to 29% of the fourteen in the control group (n=4). Of the nine remaining children in the experimental group, four showed marked improvement (over 10 point increases), and three showed moderate improvement (5 point increases). Whereas for the nine remaining control group children, none showed marked improvement (over 10 point increases), and one showed moderate improvement (5 point increases). Furthermore, no children from the experimental group showed moderate decline (5 or more point decrease), compared to one child in the control
These results demonstrate the clinical significance of CCPT on improving academic achievement with first grade at-risk children.

Table 13

<table>
<thead>
<tr>
<th>Academic Achievement Levels at Pre &amp; Post Test on the Young Children’s Achievement Test (YCAT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group n= 21</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Pretest</td>
</tr>
<tr>
<td>Normal Range</td>
</tr>
<tr>
<td>Below Average</td>
</tr>
<tr>
<td>Poor</td>
</tr>
<tr>
<td>Very Poor</td>
</tr>
</tbody>
</table>

Note: All scores are based upon the child’s Early Achievement Composite score.

Self-Concept Outcomes

To determine clinical significance, children’s Global Self-Concept scores (GSC) from the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSAYC) were examined to evaluate improvement of child’s self concept from pre to post test. GSC scores below 2 are considered to be “low self-concept”, while scores between 3-4 are considered to be “high self-concept”. Scores in between 2-3 are considered to be at the normal range (Hater & Pike 1984).

For the control group (n=20) a total of fourteen identified as having a high self concept, five were in the normal range, and one was at the low range at pre-test. At post-test fifteen children identified as having a high self concept, four were in the normal range, and one was at the low range. Similar findings were also found for the experimental group. At pre-test fifteen of the experimental group children (n=21) identified as having a high self concept, and the remaining six were in the normal range. No change was observed at post-test as all children remained in the same range.
Table 14
Self-Concept Levels at Pre & Post Test on the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSAYC).

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group n= 21</th>
<th>Control Group n = 20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Global Self-Concept Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Range</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Normal Range</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Low Range</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: All scores are based upon the child’s Global Self-Concept score.

Student-Teacher Relationship Outcomes

To determine clinical significance, children’s Total Scale scores from the Student-Teacher Relationship Scale (STRS) were examined to evaluate improvement of student-teacher relationship from pre to post test. Total Scale score percentiles below 25 indicate significant low levels of a positive relationship (Pianta 2001).

For the control group (n=20) a total of nine children were identified as having a significantly low level of a positive relationship as perceived by their teacher at pre-test. At post-test eight of the nine children continued to have a significantly low level of a positive relationship with their teacher. Similar findings were also found for the experimental group. At pre-test twelve children from the experimental group (n=20) were identified as having a significantly low level of a positive relationship as perceived by their teacher at pre-test. However, at post-test eight of the children from the experimental group were identified as having a significantly low level of a positive relationship as perceived by their teacher.

In summary, 33% of the twelve experimental group children (n=4) moved from a significantly low level of a positive relationship with their teacher to one of normal functioning following their participation in CCPT, compared to 11% of the nine in the
control group \((n=1)\). These results demonstrate the clinical significance CCPT may have on improving student-teacher relationships with first grade at-risk children.

Table 15
*Student-Teacher Relationship Levels at Pre & Post Test on the Student-Teacher Relationship Scale (STRS).*

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group n= 20</th>
<th>Control Group n = 20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Positive Relationship Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal Range (Male)</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Normal Range (Female)</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Low Range (Male)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Low Range (Female)</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Table indicates number of children in relationships level at pretest and posttest. All scores are based upon the child’s Total Scale score.

Discussion

This study investigated the effectiveness of CCPT on at-risk first grade students’ academic achievement, self-concept, and student/teacher relationships. Specifically, this study examined the effect of CCPT treatment on increasing the child’s Early Achievement Composite as measured by the YCAT, the Global Self-Concept Scale of the PSPCSDYC, and the Total Scale of the STRS. Treatment outcomes for children’s early achievement composite and global self-concept score for the PSPCSDYC were measured by child performance and self report. The Total Scale outcomes on the STRS were measured through the teacher’s report of their relationship with the identified child. A total of 41 identified students completed the study. Of the three hypotheses, one was retained at the .05 level of significance, indicating an improvement in academic achievement with the experimental group when compared to a wait list control group. Partial eta squared effect sizes were calculated to assess and recognize the magnitude
of difference between the two groups and practical significance (Kazdin, 1999). Cohen’s guidelines (1988) were used to interpret $\eta^2$ effect size for each dependent variable. Effect sizes indicated very large improvement on academic achievement for children participants in play therapy over children in a control group. Analysis of clinical significance also revealed favorable effect of play therapy on academic achievement and the student-teacher relationship. No differences were found for self-concept.

Academic Achievement

Results of this study help to highlight the benefit of CCPT with students at risk of academic failure. As previously reported, the YCAT assesses the early academic achievement levels of young children by the use of five domains, General Information, Reading, Mathematics, Writing, and Spoken Language. From these domains, an overall achievement score identified as the Early Achievement Composite, the best indicator of the child’s overall academic abilities, can be computed (Hresko, Peak, Herron, and Bridges 2000).

Results of Hypothesis 1 analysis indicated that from pre-test to post-test, students who participated in the CCPT treatment group scored statistically significantly higher ($p<.05$) on the Early Achievement Composite of the YCAT when compared to students who were placed on a waitlist no treatment control group. In analyzing post hoc group effect, the treatment effect size for the CCPT intervention was twice as large as the control for the Early Achievement Composite, indicating the practical significance of the study’s findings. Based on the mean scores from pretest to posttest on the Early Achievement Composite, the experimental group had a 7.28 point increase in their mean score compared to a 3 point increase for the control group. Helpful clinical
significance of findings for CCPT treatment indicate that 36% of the children improved from at risk of academic failure to one of normal functioning following their participation of CCPT. These results provide a foundation for future controlled studies measuring the impact CCPT may have on academic achievement. Although it is noted that both groups improved over time, children participating in play therapy demonstrated statistically significant improvement over children in the control group.

The findings related to overall academic achievement are similar to Quayle (1991) and Shechtman et al. (1996). Quayle (1991) specifically noted improved self-confidence in children who received CCPT, which as reported by the student’s teachers led to significant improvements in learning skills, and participation. Shechtman et al. (1996) further noted increased academic performance in children may be rooted to the child’s ability to be intrinsically motivated. Because CCPT is based upon the creation of a free atmosphere in which the child feels capable of expressing himself, with a therapist honoring the child’s ability to internally solve difficulties, it may be likely that the experimental children began developing the ability to self direct and accept responsibility as a result of attending CCPT sessions. Thus the students may have begun seeking positive solutions to academic problems (Carmichael, 2006).

Further analysis the YCAT data, several subtests are also worth noting. The General Information subscale did not reveal any significant findings. However, based on the mean scores from pretest to posttest on the General Information subscale, the experimental group had a 2.43 point increase in their mean score compared to control group who had a .75 point decrease. This subtest measures the overall comprehension of common knowledge. This suggests that children who attend CCPT may develop a
better sense of common knowledge than other students. This may be due to the scale measuring information directly related to educational training. Many items in this subscale are directly related to correctly naming and organizing information typically taught during this time period. Due to nondirective, fully accepting nature of CCPT, a child may begin exploring newly found knowledge but not receive further instruction, therefore allowing the child some freedom to process information without pressure of fully understanding the information.

For the Reading subscale, a statistically significant effect for time (p<.01) was revealed, this indicated that children in both the experimental and control group obtained significantly higher scores at the end of treatment. Treatment effect for time was large for the Reading subscale. Based on the mean scores from pretest to posttest on the Reading subscale, the experimental group had a 9.62 point increase in their mean score when compared to the control group who had a 6.15 point increase. These results may help to further clarify the impact CCPT may have on the reading levels in elementary age children. Results from this study were similar to Crow 1990, Boehm-Morelli 1999, Kaplewicz 1999, and Lopez 2000 where no statistically significant findings were found in reading achievement when compared to a comparison control group. Perhaps the emphasis of instruction directly related to development of reading skills at this time may play a role in reading achievement. However, significant findings for time of this study also indicates use of CCPT, although not statistically significant, may serve as an aid in development of reading abilities. It appears findings of earlier studies (Axline, 1947; Bills, 1950; Seeman & Edwards, 1954; and Winn, 1959) are supported by this present study and may continue to suggest a connection between reading
enrichment and CCPT. Perhaps, as suggested in early foundational studies, CCPT releases the inner direction of the child and minimizes performance anxiety for the elementary school reader.

The Mathematics subscale, similar to the Reading subscale, had a statistically significant effect for time (p<.05), indicating both children from the experimental and the control group obtained significantly higher scores from pretest to posttest. The treatment effect for time according to Cohen’s (1998) guidelines approached the threshold of larger level for the Mathematics subscale. Based on the mean scores from pretest to posttest on the Mathematics subscale, the experimental group had a 5 point increase in their mean score while the control group had a 1.4 point increase. These results may help to further clarify impact CCPT may have on mathematics in elementary age children. No known previous research has been performed on impact CCPT may have on mathematics. This is an area in child academic achievement future studies may explore.

The Writing subscale, similar to the Mathematics and Reading subscales, revealed a statistically significant effect for time (p<.05), indicating both children from the experimental and the control group obtained a significantly higher score from pretest to posttest. Treatment effect for time according to Cohen’s guidelines was at the moderate level for the Writing subscale, the experimental group had a 3.72 point increase in mean score while the control group had a 4.55 increase. It is unclear if CCPT has an impact directly on development of writing skills, this may be because children attending play therapy are never required to utilize writing skills. However,
many children in play therapy often engage in mastery play as writing utensils and paper are provided for use.

Spoken Language subscale, like the General Knowledge subscale, did not reveal any significant findings. However, based on mean scores from pretest to posttest on the Spoken Language subscale, the experimental group had a 5.29 point increase in their mean score when compared to control group who had a .7 point increase. This subtest measures overall knowledge of spoken language, in particular knowledge of receptive and expressive vocabulary (Hresko, Peak, Herron, & Bridges 2000). This finding may suggest that children who attend CCPT develop a better sense of spoken language knowledge than other students. Danger and Landreth (2005) found similar findings when investigating the impact of child centered group play therapy. They found, although not statistically significant, child centered play therapy had a large practical significance in improving the receptive and expressive language. Danger and Landreth (2005) further noted use of a child centered approach allowed the child to freely express him or herself, which appears to impact speech difficulties.

In summary, it appears there was a cumulative effect of scores for each individual subtest in every academic area for children receiving CCPT. The treatment group performed better on every subscale of academic achievement leading to an overall statistically significant increase on the Achievement Composite Score over the control group. It is possible children attending CCPT were more open to learning overall. This effect may be due to the child-centered play therapist’s facilitation of a warm, caring, accepting relationship. This permissive environment gave the child freedom to develop internal coping strategies and responsibility for his or her actions at
his or her own pace. From this relationship the child’s innate capacity to perform well academically is released.

As early as Axline (1947a), implications for education utilizing basic principles of CCPT have been made. She suggested children cannot be productive students, while in the midst of emotional turmoil. Several of the eight basic principles developed by Axline are further outlined to explore their possible impact on lifting emotional barriers so children become more available to learn. Principles such as accepting the child for who he or she is at the current moment and recognizing the child’s feelings may contribute to learning. By displaying this acceptance, children are free of expectations placed upon them. This allows children to develop a better sense of their current abilities in safety, without the anxiety of performance, unlike the classroom. This non-evaluative environment gives the child freedom to express his or her feelings without judgment. Axline (1947a) reports:

It is the permissiveness to be themselves, the understanding, the acceptance, the recognition of feelings, the clarification of what they think and feel that helps children retain their self-respect; and the possibility of growth and change are forthcoming as they all develop insight. (p. 140)

Furthermore, perhaps providing this warm, caring, safe environment is a precondition for children to become eager to learn.

Self-Concept

As previously reported, the PSPCSAYC assesses the child’s perceived level of self concept by the use of four subscales, Cognitive Competence, Physical Competence, Peer Acceptance, and Maternal Acceptance. From these subscales an overall score total score was calculated, identified as the Global Self-Concept Score, “a valid estimation of the child’s self-perceptions” (Jerome et al. 2002, p. 704).
Results of Hypothesis 2 analysis indicated that from pre-test to post-test, students who participated in the CCPT treatment group did not score statistically significantly higher (p<.05) on the Global Self-Concept Score of the PSPCSAYC when compared to students who were placed on a waitlist control group and did not receive CCPT. Upon further analyzing data for clinical significance, a majority of children both in the control and experimental group reported having high initial and post levels of self-concept. Because scores were high at pretest, a statistical ceiling effect may have been created that did not allow for an accurate measure of change.

Another explanation is the difficulty involved in assessing self-concept at a young age. Jerome et al. (2002) reported young children age 5-7 when using the PSPCSAYC “tend to think about themselves in absolutes and are usually unrealistically positive in their self-evaluations” (p.701). Harter (1999) further adds children at this age are still developing a sense of their own abilities and have difficulties comparing their abilities to others in an accurate way. This may explain why many of the children in this study reported high levels of self-concept, as all children in the study were under the age of 8. Furthermore, the length of the study, eight weeks, may not have be sufficient to see a shift in self-concept as appear to be fairly static.

Findings of this study may support Skaalvik & Hagtvet (1990) who found academic achievement to predict self-concept for young children. It appears there may be developmental aspects to consider in relationship between academic achievement and self-concept for young children. It is possible that young children who are academically at-risk are subjected to negative experiences during the education process, which then influences their self-concept. Post (1999) found CCPT to have a
preventative effect for self-concept and an assumption of responsibility for their academic work with at-risk students. Post (1999) further suggests, “These findings indicate that an intervention, such as play therapy, may be needed to prevent at-risk children from developing lower self-esteem and from reducing their sense of responsibility for their academic success and failures” (.p1).

In contrast to my findings, contemporary research of CCPT conducted by Baggerly (2004) found significant improvements in self-concepts of children receiving play therapy. This may be because the nature of play therapy is to create a free atmosphere in which the child feels capable of expressing a range of emotions by honoring the child’s ability to internally solve difficulties; hence developing, self-concept.

Several findings also indicate academic achievement may come before self-esteem, leading to an improved self concept. Similar to findings in this study, historical research suggests fostering academic achievement in elementary school age children can increase the self-concept scores of children (Hemlke & van Aken 1997; Marsh & Yueng 1997; Skaalvik & Hagtvet 1990). Results of this study may provide further support for previous studies in that the improvement to academic achievement may further lead to an improved self-concept over time. Marsh and Yueng (1997) suggested improving the child’s achievement ability may lead to a higher self-concept with elementary age children. Perhaps CCPT offered academically at-risk children freedom to perform at a heightened ability, resulting in further academic achievement. After successful academic experiences, it is theorized that children will develop positive self-concepts. Due to these findings, further academic achievement longitudinal controlled studies measuring impact CCPT may have on self-concept, perhaps using an
instrument that is more sensitive to young children’s view of self is highly recommended.

Student-Teacher Relationships

As previously reported, the STRS assesses teacher’s perception of his or her relationships with individual students by use of three domains, Conflict, Closeness, and Dependency. From these domains an overall score identified as the Total Scale, the best indicator of student-teacher relationship, can be computed (Pianta 2001).

Results of Hypothesis 3 analysis indicated from pre-test to post-test, students who participated in the CCPT treatment group did not score statistically significantly higher (p<.05) on the Total Scale of the STRS when compared to students who were placed on a waitlist control group and did not receive CCPT.

Upon further analyzing data for clinical significance, teachers of 53% of children in the study (n=21) reported having a significantly low level of positive relationship with students at pre-test. These findings are surprising as the students referred for the study were referred as being academically at-risk, not for emotional or behavioral difficulties often found in significantly low levels of a positive relationship reported by the teachers on the STRS. Typically 25% of children are reported by their teachers as having significantly low levels of a positive relationship (Pianta 2001).

Of the twenty one students identified as having significantly lower levels of a positive teacher relationship, 66% were male (n=14). One must wonder what impact these initial perceived negative relationships and gender may have had on the study, as demographically the experimental group contained sixteen male participants compared to ten in the control group. Fagot (1994) found that boys tend to have more behavioral
and academic problems than girls which, in turn, negatively affects student-teacher relationships. Crosnoe, Kirkpatrick-Johnson, and Eder (2004) further report a gender effect in the bond between teachers and students expressing that minority male students may be less likely to bond with teachers. Pianta (2004) found teachers reported higher Total Scale Scores for girls than boys, indicating teachers perceived more positive relationships with girls on the STRS. With that in mind however, 33% of the twelve experimental group children \( (n=4) \) moved from a significantly low level of a positive relationship with their teacher to one of normal functioning following their participation in CCPT, compared to 11% of the nine in the control group \( (n=1) \). Surprisingly by the end of treatment 5 male students in the experimental group moved from low positive relationships to one of normal functioning, indicating CCPT effectiveness in diminishing effects of possible gender bias.

Several previous studies have indicated that student-teacher relationships help with the development of social and academic skills (Birch & Ladd 1997; Lynch & Cicchetti 1997; Pianta & Stuhlman, 2004). The child’s relationships with his or her teacher have been viewed as affecting the child’s emotional and academic development to promote the enhancement of academic success with at-risk students, suggesting student-teacher relationships for at-risk children can be an effective means to ensure academic success (Burchinal et al. 2002; Hamre and Pianta 2004). The possibility of providing at-risk children CCPT as an intervention to enhance teacher-student relationships is a fairly new phenomenon, Ray (2007) found CCPT and consultation could be effective interventions in reducing the stress of teacher-student relationships.
Further longitudinal controlled studies measuring impact of CCPT with academically at-risk children may have on student-teacher relationships is highly recommended.

Limitations

While the results of this study offer valuable information regarding effectiveness of CCPT with academically at-risk 1st graders, there are limitations to this study that should be considered when interpreting results. Participants in the study represented a limited range in age and were selected from a small sample residing near Dallas, Texas. Use of a limited range of grade level and a population from a specific geographic location limits possible generalizations of the anticipated results to other areas. Number of participants (43) further limits possible generalization of future findings. A larger scale replication study is suggested as a way of increasing generalizibility.

The real world setting of the study authenticates its application in the school setting; however it also adds several limitations. Due to conducting the study in several schools and limited playroom availability, there was difficulty following a true random assignment, as participants were randomly assigned by school. However, demographic characteristics appeared to be equally represented in both the experimental and control groups. The schools where the training took place offer a reading program to all students who performed below average on a reading benchmark. Therefore, many of the students in the study were also receiving additional reading enhancement services.

An additional limitation of this study is the use of a non-treatment control group. Changes found between the control group and the experimental group could be due to the use of an intervention, rather than if the findings were specifically due to CCPT. The use of a treatment comparison group would provide support for the present findings. A
larger replication study including a treatment comparison group is suggested as a way of increasing the assurance that findings were directly related to CCPT. In addition to these limitations, length of treatment for this study may have limited the effect the treatment had with the experimental group as it is likely that the length of time (eight weeks) of treatment may not be adequate to allow for significant changes in the areas of self-concept, and student-teacher relationships.

Recommendations for Further Research

Based upon the limitations and findings of this study and previous studies, several recommendations for future research are suggested:

1. The present study is confined to reporting the effects of CCPT over an eight week period. A follow-up study to investigate the long term impact of CCPT on academic achievement, student-teacher relationships, and especially self-concept.

2. The present study focused on 1st grade children labeled academically at-risk of school failure. It is recommended to investigate possible effects of CCPT on academic achievement, student-teacher relationships, and self-concept with differing ages with the elementary school system. It is suggested to target a younger population to continue to investigate the possible preventative intervention between CCPT and academic achievement.

3. The present study focused on children who were labeled academically at-risk of school failure. It is recommended to investigate possible effects of CCPT on academic achievement, student-teacher relationships and self-concept with
children who have and have not been identified with behavioral and or emotional
difficulties.
4. The present study had a relatively small sample size of 41 participants.
Replicating the study with a larger sample size could allow for greater
generalizibility.
5. The present study excluded children from bilingual education due to
instrument limitations. Future research investigating the impact CCPT has on
academic achievement, self-concept, and student-teacher relationships with
these children could be done utilizing different instruments.
6. Lastly, the present study did not include a treatment comparison group.
Future research investigating the impact CCPT has in comparison to other
treatment interventions such as curriculum guidance in relation to academic
achievement, self-concept, and student-teacher relationships.

Implications and Conclusions

Due to of No Child Left Behind legislation, all U.S. school children are expected
to meet certain academic standards within their respective grade levels. However, many
children suffering from mental illness have difficulty attaining these standards due to
emotional interference with their academic learning. Furthermore, the President’s New
Freedom Commission on Mental Health (2003) reported that public school system’s
priority is to educate all attending students. The report also concludes children with
mental illness are the students most likely to fail or drop out of school. At-risk students,
along with students struggling to perform well in school, continue to fall through the
cracks, making it important to continue targeting interventions that can assist and
prevent academic failure. Due to a strong correlation between emotional development and academic success, development of a solid mental health program within the school is necessary to help promote academic achievement (New Freedom Commission on Mental Health, 2003). Thus, it is vital to identify and utilize effective mental health services that benefit the emotional needs of school age children along with improving academic development.

Findings in the study indicate CCPT can significantly increase academic achievement for 1st grade children identified as academically at-risk. Children identified as academically at-risk may experience anxiety over academic performance that can have a negative effect on academic achievement, self-concept, and student-teacher relationships. Findings in this study are worth noting, as the results indicate that CCPT can significantly increase academic achievement while possibly strengthening student-teacher relationships and impacting the future self-concept of young children.

Although significant findings were not found in increasing the self-concept of young children for this study, there appears to be a possible link between becoming academically successful leading to a future positive self-concept. Previous play therapy studies have found statistical significance in CCPT enhancing a child self-concept (Baggerly, 2004; Post, 1999). Perhaps the developmental age, ceiling effect and time restrictions limited a noticeable difference between groups from pretest to posttest.

It still remains unclear if CCPT has an impact on student-teacher relationships. Clinical significance findings suggest that some students in the experimental group developed better relationships with their teachers from pretest to posttest. Because early student-teacher relationships have an impact on the later academic achievement
of at-risk students (Burchinal et al. 2002; Hamre and Pianta 2004), it is vital to continue investigating the influence of CCPT on these relationships.

In summary, CCPT has potential as an effective intervention to positively impact academic achievement with academically at-risk 1st graders, whereas, impact on self-concept and student teacher relationships still remains unclear. Based on an exhaustive review of literature, the present study represents the largest controlled CCPT study to date analyzing its effects on academic achievement. Because of the importance for counselors in the school setting to promote academics as well as emotional support to students, this study contributes empirical data that supports the use of CCPT within the school system.
APPENDIX A

PARENT INFORMED CONSENT
Title of Study: The Impact of Play Therapy on Child Academic Achievement, Self-Concept, and Student-Teacher Relationship
Principal Investigator: Dee Ray, Ph.D., LPC, NCC, RPT-S
University of North Texas (UNT), Department of Counseling and Higher Education.

Purpose of the Study:
You are being asked to allow your child to participate in a research study which involves determining if play therapy is effective in helping children improve the way they act and feel at school. The study will also look at whether play therapy for children helps increase their academic achievement and self-concept.

Study Procedures:
Your child will be asked to participate in play therapy. Play therapy is a counseling intervention designed for children to express themselves in the age appropriate way of playing with toys. Elementary-age children have difficulty working through problems with words, so play therapy assists the process by providing a play environment from which they can work through those issues that hold back their academic progress. Your child decides what materials to play with and what to discuss in play therapy. Your child will not be asked pushy questions or forced to play.

For this study, your child will be placed in one of two groups:
Group 1: Children will begin play therapy immediately and will receive two 30-minute sessions of play therapy each week for 8 weeks.
OR
Group 2: Children will be placed on a wait list to receive 30 minute sessions of play therapy per week following the initial 8 weeks of the study. Children in this group will begin play therapy in January and will receive at least 8 sessions of play therapy.

Your permission also allows your child’s homeroom teacher to fill out the Student-Teacher Relationship Scale (STRS), which asks the teacher to report on the academic relationship between your child and his/her teacher. Your child will be asked to complete the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSA), which asks your child to pick from a series of pictures their experience of their abilities and the Young Children’s Achievement Test, which asks the child a series of questions in the areas of math, reading, writing, and general knowledge. Both your child and teacher will be asked to complete these instruments before and after the 8 week period. Each administration will take approximately 45 minutes.

When your child is scheduled for play therapy, the play therapist will work with your school counselor and your child’s teacher to schedule a time that will best fit your child’s academic schedule. Your child will participate in play therapy in the playroom designated at your child’s school. Your child’s play therapist is a doctoral student at the University of North Texas in the Counseling Program, meaning that each play therapist has completed a master’s degree in counseling and is supervised by Dr. Dee Ray, UNT Associate Professor, for play therapy in the schools.

Your permission also allows us to re-contact you regarding your participation in a follow-up study based on your child’s scores on the study instruments to request further information.
Foreseeable Risks:
There are no significant personal risks foreseen as likely from involvement in this study. Your child’s participation is completely voluntary. You may withdraw your child at any time during the course of the study. However, possible risks may include one or more of the following:

1. Anything that is said or done during play therapy is considered confidential, meaning that the therapist will not reveal anything that happens in the session to another school official or adult. However, if your child discloses child abuse, neglect, exploitation or intent to harm another person, the therapist is required by law to report it to the appropriate authority.

2. When your child participates in play therapy, he or she will be pulled from another school activity upon the approval of the teachers. It is possible that your child might miss an academic or extracurricular experience. However, because your child’s principal and teacher have agreed to their participation in this study, your child will not be placed at academic risk.

3. Because play therapy is a counseling method, your child will be expressing emotions that could be strong for him or her. The therapist will help your child talk through these emotions and will stop therapy if any harmful effects upon your child are noted. Harmful effects would include inability to maintain self-control or being in a distraught state of mind.

Benefits to the Subjects or Others:
In light of previous research, we expect the project to benefit children by possibly improving self-esteem, behavioral difficulties, emotional difficulties, social interaction and skills, and academic progress. We further hope that this project may improve the relationships between teachers and students in order to improve academic success. The results of this study may provide school counselors across the nation with knowledge that helps them improve child behavior and teacher-child relationships so that children are happier and more successful in public school. Although positive changes are expected, individual benefit cannot be guaranteed.

Procedures for Maintaining Confidentiality of Research Records:
All information will be kept confidential in a locked cabinet in the clinic of the Counseling Program at the University of North Texas. Names of parents and children will not be disclosed in any publication or discussion of this material. Information obtained from the instruments will be recorded with a code number. Only the research team will have a list of the participants’ names. The play sessions will be video-recorded. The research team will observe the video-recordings to ensure the quality of the study. At the end of this study, the video-recordings may possibly be shown in professional presentations for educational purposes. Identity information such as name, place of living, and other specific information will not be revealed when videotapes are shown in educational settings. However, you may choose to withdraw your consent at any time and the video recordings of your child will not be used.

Questions about the Study
If you have any questions about the study, you may contact Dr. Dee Ray at (940) 565-2066 or Dee.ray@unt.edu.

Review for the Protection of Participants:
This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 for any questions regarding the rights of research subjects.
Research Participants’ Rights:
Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- You understand the study and the possible benefits and potential risks and/or discomforts of the study.
- You understand that you do not have to allow your child to take part in this study, and your refusal to allow your child to participate or your decision to withdraw him/her from the study will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your child’s participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as the parent/guardian of a research participant and you voluntarily consent to your child’s participation in this study.
- You understand that you will receive a copy of this form.

Printed Name of Parent or Guardian

______________________________
Signature of Parent or Guardian Date

For the Principal Investigator or Designee:
I certify that I have reviewed the contents of this form with the parent or guardian signing above. I have explained the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the parent or guardian understood the explanation.

______________________________
Signature of Principal Investigator or Designee Date
University of North Texas Institutional Review Board
Teacher Informed Consent Form

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose and benefits of the study and how it will be conducted.

Title of Study: The Impact of Play Therapy on Child Academic Achievement, Self-Concept, and Student-Teacher Relationship

Principal Investigator: Dee Ray, Ph.D., LPC, NCC, RPT-S
University of North Texas (UNT), Department of Counseling and Higher Education.

Purpose of the Study:
You are being asked to participate in a research study which involves determining if play therapy helps increase the academic achievement, relationships, and self-concepts of 1st grade at-risk students.

Study Procedures:
Children labeled as at-risk by the Denton Independent School District who are in the 1st grade will be identified as potential participants. Identified children, whose parents give permission, will participate in one of two groups. They will be randomly assigned to participate in a play therapy session two times per week for 8 weeks or be placed on a wait list to receive play therapy following the initial 8 weeks of the study. You will not be informed regarding which group the child has been assigned.

Play therapy is a counseling intervention designed for children to express themselves in the developmentally appropriate way of playing with toys. Some elementary-age children have difficulty working through problems with words, so play therapy facilitates the process by providing a play environment from which they can work through those issues that impede their academic progress.

Your participation in this study requires that you complete the Student-Teacher Relationship Scale (STRS), a short questionnaire which asks you to report on the academic relationship between you and your student. You will be asked to complete this instrument at 2 different points over the fall semester; the first at the beginning of the 8 week period, the second at the end of an 8 week period. The instrument will take approximately 5 minutes to complete at each administration.

There are no significant personal risks directly involved in this study. Your participation is completely voluntary. You may withdraw at any time during the course of the study.

Any instrument completed by the teacher is considered confidential, meaning that the researchers will not reveal anything that is said or written during the administration process. However, if the teacher or parent discloses child abuse, neglect, exploitation or intent to harm another person, the therapist is required by law to report to the appropriate authority.
Benefits to the Subjects or Others:
In light of previous research, we expect the project to benefit you by possibly increasing your job satisfaction through the improvement of the student’s relational and academic abilities. The results of this study may provide school counselors across the nation with knowledge that helps them improve child behavior and teacher child relationships so that teachers and children are happier and more successful in public school. Although benefits are expected, individual benefit cannot be guaranteed.

Compensation for Participants:
You will receive a $5.00 gift certificate to Target upon the completion of the final instrument at the 8-week administration (STRS) for each child from your classroom.

Procedures for Maintaining Confidentiality of Research Records:
All information will be kept confidential in a locked cabinet in the clinic of the Counseling Program at the University of North Texas. Names of teachers, parents and children will not be disclosed in any publication or discussion of this material. Information obtained from the instruments will be recorded with a code number. Only the research team will have a list of the participant’s names.

Questions about the Study
If you have any questions about the study, you may contact Dr. Dee Ray at (940) 565-2066 or Dee.ray@unt.edu

Review for the Protection of Participants:
This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.
Research Participants’ Rights:
Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- You have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You have been told you will receive a copy of this form.

__________________________
Printed Name of Participant

__________________________  _____________________
Signature of Participant          Date

For the Principal Investigator or Designee:
I certify that I have reviewed the contents of this form with the subject signing above. I have provided the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the participant understood the explanation.

__________________________  _____________________
Signature of Principal Investigator or Designee          Date
REFERENCES


