

ABSTRACT

Title of Document: SCAFFOLDING CHILDREN'S COGNITIVE
GROWTH USING THE STORIES GROUP
INTERACTION

Samantha Sedlik Buell, Doctor of Philosophy,
2013

Directed By: Professor Hedwig Teglasi, Counseling, Higher
Education, and Special Education

A 15-session story-guided group intervention (STORIES) was implemented during a school lunch hour for six fourth grade students (N=6) referred for social-emotional and academic needs. Two transcript coding systems, the Group Leader Intervention System (GLIS) and Child Verbalization Codes (CVC) were used to assess both leader interventions and child cognition within the group through the coding of session transcripts. Patterns of reciprocal group dynamics were studied with a focus on various leader scaffolding techniques aimed at improving child cognitive understanding and functioning within the group setting. These patterns were examined across group phases (eating lunch and working with books), various group activities, and time. Results indicate that several leader interventions were related to higher child cognitive levels. Higher child scores followed verbalizations where the leader modeled responses, provided structure, and asked specific questions. The

leader's behavior also varied following child verbalizations at different levels in terms of type and tone of intervention. Mean child cognitive responses indicated low levels of understanding and difficulty processing emotions or expressing empathy. Performance varied greatly by participant in terms of both frequency and quality of participation. Improvements in cognition were not seen over time, but certain activities were linked with better performance. Across group components, the use of more highly scaffolded questions by the leader reduced lower level responses from child participants. The highest level child cognitive responses were rare for this group and were linked with more open-ended questions from the group leader. Results are discussed in terms of the relevance for school-based group interventions, the practicality of implementing interventions during lunchtime, and the use of scaffolding techniques in work with children of varying ability levels.

SCAFFOLDING CHILDREN'S COGNITIVE GROWTH USING THE STORIES
GROUP INTERACTION.

By

Samantha Sedlik Buell

Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2013

Advisory Committee:

Professor Hedwig Teglasi, Chair

Assistant Professor William Strein

Professor Dennis Kivlighan

Professor Robert Marcus

Dr. Lee Rothman, Prince Georges County Public Schools

© Copyright by
Samantha Sedlik Buell
2013

Dedication

A special thank you to my loving husband, Alexander Buell, who provided endless support during this process. Thanks to my parents, Richie and Ellen Sedlik, and in-laws, Fred and Jill Buell. I've appreciated all of your encouragement. Finally, thank you to Baby Violet Buell—you gave me the extra motivation to finish this endeavor.

Acknowledgements

I would like to thank my advisor, Hedy Teglasi, for working with me on this project and helping to build and refine my skills as a researcher and school psychologist over the past several years. From piloting the “Shy Girls Group” to completing this paper, her help and guidance has been invaluable. I hope that we can continue to work together to support the social-emotional functioning of children in schools through interventions like STORIES.

Thanks to Prince Georges County Public Schools for allowing us to conduct groups within several elementary schools. And, thank you Dr. Lee Rothman, for facilitating the relationship between University of Maryland and PGCPS.

Table of Contents

Dedication	i
Acknowledgements.....	ii
Table of Contents	iii
List of Tables	iv
Chapter 1: Introduction	2
Chapter 2: Review of the Literature.....	8
Chapter 3: Methods.....	79
Chapter 4: Results and Explanations	115
Chapter 5: Discussion and Future Directions	172
Appendices.....	207
References	226

List of Tables

Table 1: Narrative Interventions with Children	50
Table 2: Support for GLIS Categories	69
Table 3: BASC Scale Items	90
Table 4: Basic Demographics	91
Table 5: Teacher Social Emotional Ratings.....	92
Table 6: Teacher BASC Composite Scale Ratings.....	93
Table 7: Coder Reliability.....	113
Table 8: Frequencies of GLIS Categories in Data Set.....	118
Table 9: Chi Squares of GLIS Categories by Phase	119
Table 10: Structure by Phase	121
Table 11: Chi Squares of GLIS Categories by Activity	124
Table 12: Chi Squares- Cohesion by Activity	126
Table 13: Chi Squares- Modeling by Activity.....	128
Table 14: Chi Squares- Information by Activity	129
Table 15: Chi Squares- Exploration by Activity.....	130
Table 16: Exploration Subcategories by Activity.....	130
Table 17: Chi Squares- Feedback by Activity	131
Table 18: Feedback Subcategories by Activity	132
Table 19: Structure Subcategories by Activity	132
Table 20: Chi Square of GLIS Categories by Book	134
Table 21: Frequencies of Thought Units within Book.....	134
Table 22: Chi Squares- Cohesion by Book.....	135
Table 23: Chi Squares- Modeling by Book	136
Table 24: Chi Squares- Information by Book.....	137
Table 25: Chi Squares- Exploration by Book.....	138
Table 26: Chi Squares- Feedback by Book.....	139
Table 27: Chi Squares of Scaffolding Level by Phase	141
Table 28: Chi Squares of Scaffolding Level by Book	142
Table 29: Chi Squares of Scaffolding Level by Activity	143
Table 30: Emotional Content and Empathy within Group	145
Table 31: Chi Squares of Empathy and Emotional Content by Phase.....	146
Table 32: Chi Squares of Empathy and Emotional Content by Book	147
Table 33: Chi Squares of Empathy and Emotional Content by Activity	148
Table 34: ANOVA of Book and Mean Child Response	150
Table 35: ANOVA of Activity and Mean Child Response	152
Table 36: Child Speaking Turns Distribution within Group	153
Table 37: CVC Level by Child Participant.....	155
Table 38: Correlations between Leader Turns and CVC Level.....	156
Table 39: Correlations between Scaffolding Level and CVC	159
Table 40: T-Tests of GLIS Variables on CVC Level: Low/Med and High.....	161
Table 41: T-Tests of GLIS Variables on CVC Level: Low and Medium/High	163

Table 42: T-Tests of Scaffolding Level on CVC Level: Med and High	164
Table 43: T-Tests of Scaffolding Level on CVC Level: Low and Medium/High....	165
Table 44: Proportions of GLIS Variables on CVC Level: Med and High	166
Table 45: Proportions of GLIS Variables on CVC Level: Low and Medium/High.	168
Table 46: ANOVA of Valence of Feedback.....	170
Table 47: Frequency of CVC Level 2 by Book	171
Table 48: Frequency of CVC Level 2 by Session.....	171

Chapter 1: Introduction

The current study details the course of a narrative-based intervention, STORIES (Structure, Themes, Open Communication, Reflection, Individuality, Experiential Learning, Social Problem Solving), for a group of fourth grade students with intensive academic and social emotional needs. This program has been successfully implemented for students with emotional and behavioral deficits (Teglasi & Rothman, 2001; Rahill & Teglasi, 2003). While the program is designed primarily as a social-emotional intervention, components of the intervention are expected to directly influence academic performance. These include direct instruction of story structure, common themes and morals, and story related vocabulary. It was hypothesized that this program would be beneficial for students with complicated needs since it addresses academic skills while working on building social and emotional competence. Additionally, the lack of specific scripts allows the group leader to make adjustments depending on the needs of the group. This project details the course of the STORIES intervention and highlights individual performance of the leader and participants along with reciprocal group dynamics within the small group setting.

Successfully mastering developmental tasks and appropriately adapting and generalizing skills across contexts and settings characterizes competence (Masten & Curtis, 2000). Academic competence generally refers to grade expected performance on reading, writing, and math tasks. Social competence entails applying and integrating social-emotional knowledge, and developing regulatory abilities, empathy, perspective taking skills, and social skills (Denham, Blair, DeMulder, Levitas,

Sawyer, Auerbach-Major, & Queenan, 2003). Since both academic and social competencies are crucial for school success (Herman, Lambert, Reinke, & Ialongo, 2008), effective school-based interventions that lead to improvements in these areas are in high demand.

The project includes a detailed case study of six students with intensive academic and social needs who lacked competencies in multiple domains. Whereas these children were referred to the group intervention by their teacher for shyness or social withdrawal, the pre-test data indicated that these children also had academic and communication deficits. Several of the children were rated as having both internalizing and externalizing difficulties. Pre-test data and group performance indicate that for the selected children shyness or withdrawal and acting out behaviors in the classroom setting were related to difficulty understanding grade level class work. The lack of match between their cognitive and academic abilities and the assigned work caused them to withdraw in the academic setting.

When there is a lack of match between child skill and academic work teachers often need to provide supports, including accommodations and modifications to promote student learning and understanding. The literature on academic interventions often refers to this teacher practice as “scaffolding” which is typically defined as “a range of interactional supports that are structured by adults to maximize the learning of at-risk children” (Maliky, Juliebo, Norman, & Pool, 1997). Research suggests that a range of teacher scaffolding techniques can effectively promote student performance both in the short and long term. The most common scaffolding techniques include prompting, coaching (comments to give perspective and

structure), modeling, telling (giving meaning or background information), and discussing strategies (May, et. al, 2011, Malicky et. al, 1997; Kim & White, 2008).

Pre-test data for the selected group indicated that they were at high risk for a series of negative social and academic outcomes. Children exhibiting internalizing behaviors, such as shyness or social withdrawal, or externalizing behaviors, such as acting out or aggressive behaviors, are more likely to experience peer rejection (Hymel, Rubin, Rowden, & LeMare, 1990). Each of these behavior types increases risk for a different set of problematic outcomes. Young children who exhibit externalizing behavior are at increased risk for aggression and delinquency as they grow up (Haapasalo & Tremblay, 1994; Hymel et al., 1990). Peer victimization and later social isolation are potential negative outcomes for children who present with internalizing issues in early school years (Gardner & Lemerise, 2007; Hanish & Guerra, 2000). These adjustment issues are intensified when internalizing and externalizing problems co-occur (Ingoldsby, Kohl, McMahon, & Lengua, 2006). And, these problems do co-occur (Epkins, & Meyers, 1994; McConaughy & Skiba, 1993). McConaughy and Skiba (1993) noted that most studies found about a 50% co-occurrence of internalizing and externalizing symptoms. Additionally, Epkins & Meyers (1994) found that depression and anger often present simultaneously.

This study adds to the limited research on the use of the lunch hour to provide group counseling in schools. Service providers in school often face restrictions when providing teir-2 interventions for social-emotional concerns, as schools face increasing pressure to demonstrate success on academic tests (Davis, Kruczek, & McIntosh, 2006; Severson, Walker, Hope-Doolittle, Kratochwill, & Gresham, 2007).

While school counselors and school psychologists are often limited to the lunch hour to provide prereferral interventions, there have been no prior studies looking at the efficacy of interventions delivered within this constraint. In this study, the leader was given additional time after the scheduled lunch to work with the participants allowing for the group to be divided into two phases: “pre-book” (while the children were eating lunch and having discussion) and “book” (where materials were distributed and used to guide the discussion).

The project looks at leader behavior, child performance, and group reciprocal group dynamics over the course of a fifteen week intervention. Both leader interventions and child responses were studied using two coding systems. A primary interest was on group leader scaffolding techniques. While “scaffolding” has only been studied as a teacher practice, the same concepts and definition were applied to leader supports within the context of this counseling intervention. The current study delivers an in-depth investigation of a story-guided group counseling intervention process through the analysis of leader interventions and child responses. The study utilized two coding protocols, The Group Leader Intervention System (GLIS) and the Child Verbalization Codes (CVC), to capture leader and child verbalizations and the dynamic between these players. These detailed rating systems provide insight into the group process and the cognitive and behavioral performance of the participants over the course of a narrative-based intervention, the STORIES program. The Group Leader Intervention System (Nuijens, Teglasi, Simcox, Kivlighan, and Rothman, 2006) was updated and modified to better capture leader scaffolds and supports provided to enhance group performance. A new GLIS category looking at specific

leader supports within queries (Exploration Interventions) was created and called “scaffolding”. This study examined the patterns and dynamics between the group leader and the group participants. It was hypothesized that a variety of leader scaffolds, including modeling of responses and structuring questions, would improve child understanding of group content and their engagement in the group process.

In this study, the group leader and child verbal responses were compared across different group activities, across books read, and over time to assess child performance and group dynamics within these group contexts. And, as mentioned above, leader interventions and child responses were compared during the lunch portion of the group and the portion of the group after the lunch trays were removed in order to examine group functioning in the two contexts.

A single group of six (n=6) fourth grade students was selected for this analysis based on the unique characteristics with which they presented, including both emotional symptoms and academic/learning difficulties at the onset of group. This STORIES implementation was designed to support children presenting with internalizing issues in the classroom and this group, while meeting this referral criterion, also presented a range of social-emotional issues including externalizing behavior, and high rates of teacher rated learning problems and weak adaptive skills. Researchers also found at pretest very low cognitive skills, as indicated by teacher ratings that placed the children in the clinically significant range for learning problems on the BASC-2. The referring teacher also rated the group members as having very weak adaptive skills and a host of other social-emotional issues at pre-test. Therefore, an important part of this study is the exploration of leader adaptations

that were necessary to conduct a successful group with this highly complicated population, along with the responses of the children in relation to these leader behaviors and interventions.

This study speaks to the group process in the STORIES intervention with elementary school students who present with complex academic and social-emotional needs. Of central interest in the study are the group leader adaptations and modifications (scaffolds) that were needed to keep students engaged and the quality of child responses. Specifically, it was suspected that increased leader scaffolds and support would improve child cognition. It was also expected that children would perform better during more structured group discussion and activities.

Chapter 2: Review of the Literature

The review of the literature begins with an introduction of the STORIES program (Teglasi & Rothman, 2001), a storytelling intervention that uses the peer group process and the story form to enhance the complexity and organization of children's social reasoning. It then reviews the program's active ingredients and potential benefits for students who struggle with both social-emotional functioning and academics in the school setting, citing the findings of the two published and one unpublished studies conducted to date. Following this, studies focused on the importance of building both academic and social-emotional competencies in school are reviewed to highlight the significance of the STORIES program's potential benefits. The literature review then enters into an in-depth discussion of the studies that provide the theoretical and empirical foundation for the STORIES program. First, it examines the research conducted on the benefits of narrative interventions, and the adaptation of these to work with children in general and children with learning disability specifically. Second, the review addresses the evidence for the efficacy of group-aided academic and social-emotional interventions, with focus on the influence of group dynamics and group processes as active ingredients or mechanisms for change. Following this, the literature review provides additional support for the updated coding systems that this study uses to examine group leader behaviors and group member changes in cognition and behavior. This chapter concludes with a summary of this study's research questions.

The STORIES Program

Structure, Themes, Open Communication, Reflection, Individuality, Experiential Learning, Social Problem Solving (STORIES) is a small group counseling intervention that employs guided reading of age and grade appropriate books. A core component of this intervention is adult facilitated readings and discussions of the books in which characters experience common social and emotional problems (Teglasi & Rothman, 2001). The STORIES program has three primary goals: 1) Enhancing children's social reasoning and sensitivity to social situations through facilitated group discussions; 2) Promoting dispositions to reflect on social situations by highlighting cause and effect relationships and encouraging children to make connections between story themes and topics and their real life situations; and 3) Improving children's abilities to generate solutions flexibly and understand and demonstrate appropriate behavior in social situations through both modeling and group discussion. While these goals focus primary on social-emotional growth and understanding, the discussions also highlight story structure, context cues, new vocabulary, and reading comprehension. Therefore this program can align with school curricula and academic goals. Additionally, the direct teaching of cognitive social-emotional skills in STORIES would be expected to link to academic success. In studies where students received cognitive social-emotional training, the students who received intervention, scored higher on teacher ratings of attention and concentration, problem-solving, and prosocial skills. They also scored lower on teacher ratings of aggressive behavior and received higher grades than comparison students (Linacres et al, 2005).

The STORIES program features two components of social relationships that

promote constructive changes in schemas, or the structures that represent the way the child sees the world. These are the corrective experience of new patterns of interactions, and an alliance that enables exploration and discovery within the group context (Shirk & Russell, 1996). Corrective opportunities to disconfirm problematic assumptions and help students understand the perspectives of others can be promoted through story-guided group discussion. The increased understanding that develops can help change expectations about others' responses and actions and thereby improve respect and comprehension. Children can reappraise and revise social-emotional schemas about the self and others when provided with a secure group climate. The concepts are then reinforced through hands-on group activities that are directly related to stories and lessons.

Two studies have explored the utility of STORIES in reducing the severity of externalizing behaviors in elementary school children (Rahill & Teglasi, 2003; Teglasi & Rothman, 2001). A pilot study of STORIES with shy and withdrawn female students (Teglasi, Rothman, Sedlik, & Sweeny, 2006) indicated that STORIES could be easily adapted to work with different populations while still maintaining the general program structure.

The first study of STORIES by Teglasi and Rothman (2001) used participants from two fourth and fifth grade classes in two different elementary schools. All of the students in each class received an intervention and a wait-list control group experimental design was selected to determine the effects of the intervention. Groups were carefully arranged to maximize success. Each group contained four to six children. Within these groups were one or two children specifically identified as

aggressive based on pre-test teacher ratings. A total of fifty-nine children participated (N=59), with the majority of these students identified as African-American. The same trained group leader led all groups with assistance from various co-leaders. Sessions were all planned ahead of time and used a structured, but not scripted format.

As expected, the children identified as most aggressive had higher Externalizing scores (on the Teacher BASC-2) at both pre- and post- intervention. The whole group's scores on externalizing scales decreased from pre to post-test, but analysis showed this was only true for the children not identified as aggressive. However, the children thought to be most aggressive at pre-test (n=18) had externalizing post test scores that were lower than externalizing pretest scores of wait-list children, who had not yet received treatment. It is likely for this most aggressive group that the program changed their trajectory of becoming more aggressive overtime.

With respect to the impact of the program on student verbalizations, all but one child was rated as having a moderate or good treatment response. The 5-point classification system used to code verbalizations by children given spontaneously or in response to a leader question or prompt was scored from 1 (uncooperative, negative, or disrespectful) to 5 (interpretive or integrative). After coding child responses, their overall treatment response was determined by reviewing the frequency of various codes and the variation of responses over time; treatment response was coded as 1 (poor), 2 (moderate), or 3 (good). This study supported that participation in STORIES could lead to improvements in child cognition over the course of the intervention.

In a later study, Rahill and Teglasi (2003) found evidence for the efficacy of the STORIES program in reducing aggression. They compared STORIES to a manualized and structured group treatment (SkillStreaming; McGinnis & Goldstein, 1997)). The participants were all students in a special center for children with known Emotional Disabilities (ED). All of the students in grades two through six participated in the study and were assigned to one of three types of group intervention treatments: STORIES, SkillStreaming, or a non-specific counseling group.

Seven STORIES groups were created with thirty-five students receiving this treatment (n= 35; 31 males, 4 females). There were five SkillStreaming groups with twenty-eight students total, (n= 28; 24 males, 4 females). The remaining students in the center received a non-specific counseling group. On average, 5 children participated in each group. Several integrity checks were built into the study and all sessions were recorded. Group leaders filled out behavior rating at the end of each group. The study found some significant group differences in both process and outcome variables. Two different measures of cognitive processing, transcription coding and the group leader ratings, indicated higher levels of cognition for STORIES participants compared to those who received SkillStreaming. Behaviors did not change significantly across sessions, but the groups changed differentially over sessions in a way that seemed to favor STORIES over SkillStreaming. On outcome variables, only the BASC Behavioral Symptom Index (BSI) BASC reached significance indicating more favorable scores for STORIES.

In 2006, a pilot study looked at the use of STORIES with children referred for internalizing issues. Six (N=6) female fourth grade students participated in the

STORIES program. A modified version of the rating scale used in the previous studies looked at cognitive level of child verbalizations across sessions. The results were presented at SAMHSA and provided support that STORIES could be modified for work with students with a variety of presenting problems (Teglasi, Rothman, Sedlik, & Sweeny, 2006).

Building Academic and Social-Emotional Competencies in School

Academic skills and competencies, rather than social skills and development, are often the primary focus of school systems and are measured by grades and standardized test scores (Davis, Kruczek, & McIntosh, 2006; Sevenson, Walker, Hope-Doolittle, Kratochwill, & Gresham, 2007). However, strengths and weaknesses in these areas are strongly linked, and, deficits in social competence tend to go hand-in-hand with academic problems (Bohlin, Hagekull, & Rydell, 2000; Izard et al., 2001; O'Neil, Welsh, Parke, Wang, & Strand, 1997; Shields et al., 2001; Waters, Wippman, & Sroufe, 1979). Additionally, poor academic skills may place children at significant risk for developing negative emotional outcomes. For example, depressive symptoms can develop as a result of the internalization of negative perceptions of teachers and peers and a lack of feeling control in the school setting (Herman et al, 2008).

The timely and successful acquisition of social competence has implications for both academic and social development. Children who have lower social-emotional competence are less likely to perform well academically. In fact, research has indicated that social-emotional competence often uniquely predicts academic success, even when considering other key factors, such as early academic competence (Bohlin,

Hagekull, & Rydell, 2000; Izard et al., 2001; O'Neil, Welsh, Parke, Wang, & Strand, 1997; Shields et al., 2001; Waters, Wippman, & Sroufe, 1979).

Despite this strong link between academic and social competence, and the co-morbidity of various types of social-emotional problems, school interventions tend to target weaknesses one at a time. For example, many interventions are designed for specific reading problems, anger management, or bullying behavior. These interventions that focus on improvements in targeted areas may not address the children who present complex concerns. Although the STORIES program is designed primarily as a social-emotional intervention, components of the intervention are expected to directly influence academic performance. These include direct instruction of story structure, common themes and morals, and story related vocabulary. It was hypothesized that this program would be beneficial for students with complicated needs since it addresses academic skills while working on building social and emotional competence.

Narrative Interventions

Emotional disclosure

As discussed, one of the core components of the STORIES program in improving social-emotional (and perhaps academic) competence is its use of narrative to explore emotionally challenging situations. This builds on the many links between emotional expression through narratives or storytelling and positive health outcomes in the literature (Smyth, 1998; Fratarolli, 2004; Pennebaker and Beall, 1986; Pennebaker, 1997). When adults express their thoughts and feelings after experiencing stressful life events, they often show signs of better physiological and psychological health.

Researchers have used written methods (Pennebaker and Beall, 1986; Pennebaker, 1997; Smyth, 1998) and oral/verbal methods (Fratarolli, 2004) to get participants to disclose stories about stressful or traumatic events; and for the most part, individuals who release this information in a structured manner tend to be better off than those who write or talk about nonspecific events or those who do no activity at all. Some researchers speculate that the benefits of discussing these stressful events are due to catharsis (see Freud, 1922); others believe the mechanism to be that because the inhibition of thoughts, feelings and behaviors requires psychological work, the letting go of these inhibitions reduces the chance of acquiring stress related symptoms (Pennebaker & Beall, 1986). Another possibility is that the story structure puts order on events that otherwise have no clear beginning, middle, and end, and this structure helps make stressful events seem less overpowering. Adding this structure and boundaries to negative and stressful events may lead to health benefits for individuals who talk or write about them in an organized manner (Graybeal, Sexton, & Pennebaker, 2002).

Pennebaker and Beall (1986) developed a writing paradigm, which has been used in several studies of written narrative and health that have shown participant improvement on both subjective and objective measures of well-being (Pennebaker, 1997; Smyth, 1998). These researchers were interested in examining the effects of disclosing traumatic events. Their writing paradigm was meant to avoid social feedback, because they believed that the social feedback that may occur from talking to another person directly could influence the results. Participants (N=46, undergraduates) were randomly assigned to several conditions, and for four

consecutive nights the subjects wrote about a trivial pre-assigned topic (the control condition), or a traumatic event that they had experienced (the experimental condition). The participants were told that they would be required to write essays over four consecutive nights, and that they would be writing about pre-assigned topics or one or more traumatic events they had experienced. The experimental group was assigned to one of three perspectives: trauma-emotion, trauma-fact, or trauma-combination. Trauma-emotion subjects were instructed to write about their feelings concerning their experiences without discussing the precipitating event, which follows in line with the catharsis perspective. The second group, investigating a strict cognitive approach, was asked to write about traumatic events without discussing their feelings (the trauma-fact subjects). The third group, the trauma-combination subjects wrote about both the traumatic events and their feelings. Vital health measurements and self-reports were collected at each session and health center records and mail-back surveys were collected several months after the experiment in order to determine long-term health consequences. Additionally, participants were asked to rate their experiences. As expected, the trauma groups all reported that their essays were very personal and that they had not previously disclosed all of the content to friends or family.

The results of the Pennebaker and Beall (1986) study, the earliest experiment of this type, may have raised more questions than it answered due to variables such as the college-aged sample and the lack of control about students' experience of personal traumas. Additionally, the length of the writing assignment and the timing of the follow-up, were all potential factors in the results of this study. However, there

were several interesting findings. The researchers found the most significant long-term positive health effects to be for the group that wrote about traumatic events and emotions associated with it, despite evidence that these events increase blood pressure and physiological arousal directly after the experience. Participants in the trauma-emotion and trauma-combination groups reported thinking about what they had written much more than the trauma-fact or neutral groups. Self-reports of wellness and reduced health center visits for all participants, with the greatest benefit for the trauma-emotion participants, after the experiment indicated that disclosure of stressful events can be a healthy task. Because the trauma-emotion and combination groups experienced more arousal and negative mood right after the tasks, the authors speculated that the mechanism leading to health effects is not likely simple catharsis.

Pennebaker and many other researchers continued to use variations of this writing paradigm to try to decipher the ideal circumstances and the causal mechanisms involved in this task. In 1998, Smyth conducted a meta-analytic review of the research on written emotional expression and related outcomes looking at published studies on this topic. The most common outcomes studied were psychological well-being, physical health, and general functioning. At the time of the review, the author noted 19 studies on this topic. Thirteen of these studies were included in the review and included mostly college-age participants. The studies generally used variations of Pennebaker and Beall's (1986) task. Results demonstrated that written emotional expression, in general, produces significant health benefits in healthy participants. The author utilized effect size (d) to show the strength of effects in these studies. Findings supported this methodology as a way to improve mental and physical health

outcomes. The effect size reported for the written narrative intervention was $d = .47$, which represents a 23% improvement in the experimental group over the control group. The effect sizes reported were similar to or larger than those produced by other psychological, behavioral, or educational treatments. The studies on writing tasks supported the notion that emotional expression is vital for mental and physical health. The effects seemed to be larger for male participants and for college student participants. Analyses of the content of student compared to nonstudent essays were similar, and the author speculated that these differences were due to age (non-students were older on average). It is possible that at older ages the sense of self is more stable and does not change as much in response to the intervention. Also, the results noted greater effects when participants are asked to write about current or recent traumas, as compared to any traumatic event. And, these results were more significant when participants wrote about ongoing circumstances. Overall, the analysis supported the idea that emotional expression has many positive health benefits, whereas inhibition of emotions can have detrimental effects. However, this study noted variables that influence results that should be considered when using emotional writing as an intervention.

In order to further investigate the conditions and mechanisms that lead to the health improvements through narrative interventions, Graybeal, Sexton, and Pennebaker (2002) looked more closely at individuals' characteristics. The authors hypothesized that individual participants who were better storytellers prior to intervention would have more significant outcomes. This hypothesis was based on previous studies, such as Pennebaker (1997) that showed that certain patterns and

word usage were linked to better outcomes. The authors believed that that both the cognitive organization and the cathartic release of inhibited emotions play a role in the mental health benefits linked to storytelling tasks. They hypothesized that individuals who used more causal and insightful words in their stories would have better outcomes.

Fifty-two (n=52) undergraduates participated in this study, with even numbers of males and females. Health center illness records, self-reports, health related behaviors, and personality measures were collected and administered before the experiment. The participants were randomly assigned to a writing topic, either emotional or non-emotional. For three days, the participants were asked to write for 20 minutes on their topic. Four judges rated story quality on a 7 point scale and the judges also rated the stories on 10 content questions. Computers also rated the essays looking for certain words and structures. Participants were called back five weeks after the initial writing task and the emotional group was asked to write about a non-emotional topic, and vice versa. The self-reported information and rating scales were collected prior to the study, before the second writing session, and several weeks after the study. At the end of the school year the initial pre-test health data were collected again to look at health differences from pre to post-test.

Results of this study indicate that the situation determines the ability to make a good story more than other factors and that personality traits alone are poor predictors of story making ability. The ability to make good stories was not consistent across topics, and story-making skills did not correlate with personality dimensions, nor did it predict the health outcomes of participants. No factors from

the Costa and McCrae (1992) NEO-PI R were correlated with the results across all conditions; the only significant correlations were between agreeableness and good emotional intelligence in the emotional condition.

However, when applying this information to a STORIES group with children, it is important to consider that despite these findings in a college sample, the ability to structure and organize one's thoughts may be a strong indicator of response to this type of intervention. While personality factors were not predictive of results in most cases, it seems as though setting up proper group conditions would be linked with successful results as situational factors seem to influence storytelling skills. For the group in the current study, it was expected that the provision of structure and interventions aimed at promoting group cohesion would be key factors in predicting response to the intervention.

Fratarolli (2006) conducted a meta-analysis on the benefits of emotional disclosure using methods similar to the Smyth (1998) meta-analysis on the benefits of emotional disclosure. She found that health behaviors changed most after the disclosure of a stressful or traumatic event. Her research found both a positive and significant benefit of writing or talking about negative life events, which is likely related to multiple underlying mechanisms. Additionally, a wide variety of subjects and topics can lead to a health related response.

In this review, the researcher included a wider range of studies including unpublished manuscripts from 1986 (when the original Pennebaker and Beall study was conducted) through 2004. After an extensive search, 146 studies were included in the meta-analysis, the majority of which were using college students as the primary

participants. Several other specific groups were included such as cancer patients, rape survivors, and other groups with a common traumatic experience. There were only a few studies included that involved children under the age of 18, and most of these experiments had the children write about upsetting experiences and not specific traumas.

All of these studies included a neutral control group. Only studies that supported the statistics needed to calculate effect size were included in the meta-analysis. Overall, the findings were similar to the previous meta-analysis on this topic, which showed there is a significant benefit to both writing and talking about negative life events. However, some of the moderating variables found in this study were different. Frattaroli found there were larger effects for males, participants with pre-existing health problems, participants who disclosed at home or in a more private setting, and had at least three self-disclosure sessions. The author also compared the effects of writing (20 minutes over 3 days) to the effects of psychotherapy by looking at results of meta-analyses on that topic. She noted that although the effect size was smaller for the writing task, that this is a more cost and time effective intervention.

Again, Frattaroli found that participants who write about a trauma, the feelings associated with that event, and deeply process what occurred have the most benefit. The findings of this group of studies confirmed that emotional disclosure has health benefits but, the effect size was smaller than in previous studies. It is likely that this was due to of the inclusion of many unpublished studies.

While research seems to indicate that either writing or talking about events can lead to positive outcomes, such as less distress and depressive symptoms (Smyth,

1998; Frattaroli, 2004), it is important to note that these benefits come from doing so in a structured manner – as is also the case in STORIES. Merely thinking about negative events is not expected to yield desirable outcomes due to the lack of structured processing and the tendency to ruminate on negative thoughts. This hypothesis was supported in several experiments. Lyubomirsky, Sousa, and Dickerhoof (2006) conducted three experiments on writing, talking, and thinking about life events and wellbeing. Prior to this research, no major studies made such a comparison. The researchers hypothesized that not only would thinking about events be less efficacious than writing or talking, but could possibly be detrimental to the individual. The three experiments (N=96, 111, and 112, respectively) recruited undergraduate students, predominantly psychology majors. Across the groups, the average age was 19 and participants were matched across groups by gender.

The first experiment hypothesized that processing traumatic events through writing or talking would result in beneficial outcomes. Participants were randomly assigned to the three conditions and were asked to generate traumatic events. They were randomly divided into groups and had to write, talk, or think about a negative/traumatic event for 15 minutes each day for 3 consecutive days. The second experiment utilized similar procedures, but asked participants to generate a pleasant event. They wanted to look at analyzing as compared to replaying the event during the writing, talking or thinking conditions. The researchers believed that in this case, thinking about something positive, as compared to doing a more structured analysis task would lead to more satisfaction. The third experiment had participants break down their happiest day through writing or thinking (analysis condition); while other

participants were asked to simply replay the events (replay condition).

In general, results tended to support the hypotheses of the researchers. Per the first, writing and talking into a tape recorder about negative life events produced higher reports of well being compared to the group who just thought about the event. Four weeks after the experiment, students who wrote or talked reported an increased life satisfaction, social functioning, and had fewer health symptoms. As for hypotheses about positive events, the opposite was true for thinking as compared to writing or talking. In the second two experiments those participants who thought about happiest events reported the most satisfaction as compared to those who wrote or talked. And, as expected, the participants asked to analyze positive events (vs. replaying) reported less satisfaction at follow-up. It is likely that positive memories of events are inherently organized and narrative based. Therefore the analytic writing task that asked to break down these events may be counter-productive. However, adding structure to unpleasant memories would give a better sense of control and therefore lead to positive health outcomes.

In the STORIES program, while children in the group are invited to talk about their own positive and negative life events, the primary focus is on the analyses of problematic events that occur to characters in the books. It is likely that this structuring helps these problems seem more manageable and lead to the kind of mental health benefits seen in the Lyubomirsky, Sousa, and Dickerhoof (2006) study.

Emotional Processing

The STORIES program often encourages students to talk about the traumas or problems of others, so students are often discussing problems that they may not have

experienced firsthand. Researchers have found that writing about either real or imaginary traumas produce equal beneficial effects. Greenberg, Wortman, and Stone (1996) believed that the perception of control over emotional responses is linked to the positive psychosocial adjustment to stressful situation. They believed that enhanced self-efficacy for tolerating and regulating distress is part of why the emotional expression paradigms lead to health benefits. The authors did not believe the emotional expression needed to be linked to one's own traumatic experience in order to lead to positive health outcomes. They conducted a controlled experiment in which participants were randomly assigned to one of three conditions: a real-trauma group (writing about actual past traumas), an imaginary-trauma group (wrote emotional reactions to imaginary traumas they had not themselves experienced), and a control group (writing about a trivial, non-emotional event). Female college students (N=97) were assigned to the three conditions and completed the writing tasks. Two raters classified each essay with a 10-category scheme. Health effects were seen for participants after a sole 30-minute writing experience. Writing about a trauma that had not been encountered prior to the experiment produced positive health effects, similar to the trauma group. The authors believed that the health effects experienced by the imaginary-trauma group were linked to enhancement of affective regulation and constructing more resilient possible selves. They believe that participants may acquire specific skills and strategies associated with affective awareness, tolerance, and modulation by participating in this type of exercise. This study provides support that STORIES, where children read about and discuss problems encountered by story characters, can lead to increased emotional regulation

and coping skills.

Bibliotherapy

The STORIES program has many similarities to bibliotherapy in that it delivers intervention through the therapeutic use of books (Shechtman & Nir-Shfir, 2008). This technique has been used to help individuals, including children, cope with loss (Berns, 2003), overcome anxiety (Rapee, Abott, & Lyneham, 2006), and reduce aggression levels (Shechtman & Ben-David, 1999). Affective bibliotherapy, specifically, focuses on expressing and exploring emotions and developing insight; and because it is a somewhat indirect treatment method it can reach individuals who may be denying or repressing feelings (Shechtman & Nir-Shfir, 2008). The therapist plays a key role in this process, pointing out connections between the content of the literature and the clients' experience. The therapist helps the client process information and gain insight (Gladding, 2005 in Shechtman & Nir-Shfir, 2008). Literature and stories are logical vehicles to teach lessons and explore feelings because they mirror conflicts and complexities of common experiences and are a natural part of school curriculum and the learning process (Bruner, 1986; van den Broek, 1997)

Shechtman and Nir-Shfir (2008) conducted a small study that compared affective group bibliotherapy (GB) to affective group therapy (GT). Both conditions focused on expression of feelings, group support, and cognitive and affective exploration. The design was quasi-experimental, with the same group of adults compared across two treatments, GB and GT.

The researchers expected to see reduced anxiety and increased cooperation in

the therapy process as a result of the GB. They also expected the GB patients would report higher satisfaction overall, and a better impression of the sessions and have higher productivity levels. Twenty-five (N=25) inpatients were included in the study. The fifteen females and ten males were all suffering from anxiety and depression, as the primary reason for hospitalization. Ages ranged from 20-70, with an average age of 47 (M=47). The project started with a larger sample, but only the 25 finished all 6 sessions due to termination of hospitalization. Each participant completed three sessions of each type of treatment. The researchers used the Client Behavior System (CBS; Hill & O'Brien, 1999), an observational instrument to measure functioning and group process. Additionally, the Session Evaluation Questionnaire (SEQ; Stiles et al, 1995) was used to measure the clients' assessment of therapy sessions. In the GB condition stories were selected to match previous group content and frame the group discussion. The basic format included the therapist reading stories and then having the group react through guided instruction. Group members were encouraged to express feelings and share personal stories or reactions. The GT condition used a similar format without the use of framing the sessions with the stories. The sessions were transcribed by independent observers and analyzed by trained raters, with high interrater agreement for both groups. Results showed that the GB group made more literature references in the discussion, whereas the GT condition yielded more self-references. The findings indicated more productive client work in GB group, indicating that the structure and stories improved group functioning in terms of affective exploration and emotional expression. This supported the idea that the literature helped group members explore their own feelings in a safe way. The

bibliotherapy group also showed less resistance, as evidenced though fewer short and simple responses than the GT group. The patients did not report any differences in their perceptions of the group process. The researchers suggested that the SEQ may not have been a sensitive enough measure to detect differences, and that the high attrition rate may have influenced the results. Overall, the study supports the notion that the use of literature can help clients deal with difficult emotions and can be a highly successful and effective way to structure group therapy.

Narrative interventions for children

The STORIES program aims to improve children's abilities to make sense of social situation and tell coherent stories. Oral narration is a universal activity that is necessary for both academic success and the development of social skills. Research suggests that children with LD tend to need explicit training and instruction to learn these skills (Nathanson, Crank, Saywitz, & Ruegg, 2007). Moreover, the development of narrative competence is directly tied to the development of literacy skills (Fang, 2001).

Efficacy of intervention

Several studies have used the Pennebaker paradigm described above and found that writing about traumatic events in an organized manner can be a powerful tool for positive mental health and other desirable outcomes. However, very few studies have attempted to adapt the paradigm for work with children and young adults. Several studies (Reynolds, Brewin, & Saxton, 2000; Soliday, Garofalo, & Rogers, 2004; Fivush et al., 2007) have produced variable findings on the risks and benefits of using emotional writing tasks with children.

Reynolds, Brewin, and Saxton (2000) adapted the Pennebaker paradigm to determine if writing about negative emotional events would have positive health and psychological benefits for children. The authors hypothesized that the emotional condition participants would experience a greater benefit. However, this study failed to find a significant difference between the outcomes for the different conditions. The researchers did find differences in the content of the writing and the cognitive strategies used by the participants in the emotional and non-emotional conditions. Also, they found that children enjoyed the tasks and that there was a reduction of physical symptoms and anxiety for the whole sample, which included children who participated in both emotional and non-emotional writing tasks. However, again, this study did not find the expected between group differences.

The authors decided to try the technique in small groups, rather than individual administration, which was the method in adult studies, because they believed this was a more cost-effective and school friendly option. (Please see the Table 1 below and the next section for a discussion of group interventions.) Children were randomly assigned to an emotional writing group, a non-emotional writing group, and a non-writing control. Overall, 192 (N=192) children from London area schools ages 8-13 participated in the experiment. They were divided into 12 groups and the two writing conditions were asked either to write about their thoughts and emotions about some stressful or sad life experiences or just general day to day events. Using a diary format, children were asked to write for 15-20 minutes each day for four days. *The Diary of Anne Frank* was used as an example for students. All three groups were asked to relate their writing to Anne Frank. In the emotional

writing group children were asked to “write your deepest thoughts and emotions about things that you have found stressful and sad, like Anne Frank.” The non-emotional writing group was told that diaries are meant to contain detailed accounts of events and that they should write accounts of how they spend their time. The non-writing group talked about Anne Frank’s diary and things children find stressful today.

The researchers predicted most positive outcomes on rating scales for the emotional writing group due to the processing of the negative content in the writing samples. The participants completed rating scales at pre-test, directly after the experiment, and at a two-month follow up. Researchers compared groups by experimental condition, urban or suburban location, and primary or secondary school level. As expected, researchers found that the children in the emotional condition used more cognitive strategies, such as insight and causation, and used more emotional expression statements than the non-emotional group. Bullying and teasing were common themes for both boys and girls. In comparison, the non-emotional group wrote about how they spent their time, but many ended up writing about similar topics as the emotional condition group. Researchers did not find any specific effect of emotional disclosure, even when accounting for the group of students in the non-emotional condition that ended up writing about emotional events. There was a reduction in some of the symptoms measured, which indicates there may still be some benefit of writing about events for this age group. The most noteworthy effects were a reduction in symptom levels, such as reduced physical symptoms and anxiety, across the whole sample. Children were asked after the study what they liked or disliked

about the intervention. Most children responded that they felt there was a benefit to writing about their thoughts, feelings, and problems. While, the direct link of emotional writing to health outcomes was not captured in this experiment, the researchers believed with some modifications an effect may have been found. Researchers believe that the questionnaires and the chance to talk about feelings along with the writing activity may have benefited children in both conditions.

Clearer support for the efficacy of narrative intervention with children and adolescents was found through the work of Soliday, Garafolo, and Rogers (2004). These researchers also looked at how writing about emotional topics was linked to psychological well-being for adolescents and found a link between emotional disclosure and positive disposition and a decrease in psychological stress. Unlike the previous study, only middle school students participated in a writing task with either emotional or neutral, as age may play a role in a child's ability to benefit from this type of task. The experiment took place during the school day for three days, and none of the selected students declined participation.

The 120 (N=120) eighth grade students were selected from four classrooms in a suburban middle school; after baseline data collection 106 (N=106) were included in the study based on complete data. All students completed pre and post-test rating scales that looked at a number of mental health variables including somatization, distress, positive affect, and positive disposition. Students were randomly assigned to the emotional or non-emotional writing conditions. Students in the emotional condition were asked to write about their "deepest thoughts and feelings about an extremely important emotional event that has affected you and your life." The neutral

group was asked to write about their weekend plans. These instructions and length of time devoted to writing were similar to the studies that used college or adults samples. Written essay content was coded through a computer program that looked at a number of content variables and word count of essays. After the experiment, ratings of psychological distress decreased and factors indicating a positive disposition increased for those students in the group writing about the emotional topics as compared to those writing about neutral topics at two follow-up time points. The authors believed the mechanism responsible for the effects is disclosure and processing of the negative events. Another result was that positive disposition scores also increased for the experimental group. The authors did not find expected drop in somatization or health visits, possibly because the initial numbers were quite low to begin with. The authors concluded that expressive writing about stressful events shows promise as a cost-efficient intervention that can help address the emotional concerns of young adolescents, and as demonstrated by this study participating in small groups can be effective (Soliday, Garafolo, & Rogers, 2004).

Adaptation of narrative interventions to children

A study by Fivush and colleagues (2007) supported the idea that, while work with children is different than with healthy adult and college samples, narrative work can be effective with children under the right conditions. These researchers used a similar method as Reynolds, Brewin, and Saxton (2000); however, they changed their scheme for coding children's written narratives to be more in line with developmental theory. Fivush and colleagues believed that the LIWC program for coding narratives might be unsuited to children's stories because they use fewer of the words and units

that the program looks for. Instead, the researchers developed a coding scheme that looked more at children's explanations and emotional expressions to measure their cognitive processing. Raters divided up the narratives into prepositional phrases containing a subject and predicate. Each unit was then coded into one of the following categories: fact, positive evaluation, negative evaluation of other, problem/relationship, problems/situation, problem/punishment/discipline, problem/aggression, emotion, explanation, or coping.

In this study, 112 students from a British primary school (ages 9-11) and secondary school (ages 12-13) were randomly assigned into emotional or non-emotional writing conditions. Again, the writing condition simulated a diary format and children were taken in small groups of four to receive instructions and complete the writing session. The groups were relatively even by age, ethnicity, and gender and 56 (n=56) children were in each condition. As in previous studies, the children were asked to write for 15-20 minutes on developmentally appropriate topics of either an emotional or non-emotional nature. A battery of assessments was given prior to the three days of writing and again two months after the experiment. For reliability of the new coding system, two raters independently coded child responses for the emotional and non-emotional conditions for 25% of the narratives with 81% agreement. Remaining narratives were coded by either one of the trained coders (Fivush et al, 2007).

As expected, children in the emotional condition wrote about more problems, emotions, and coping. From baseline to post-test, children who wrote more about coping in their stories had fewer somatic symptoms of complaints after the writing

activity. However, an unexpected finding that differed from adult research was that some children who included more explanations, more interpersonal problems, and more negative evaluations of others showed an increase in anxiety and depression symptoms at follow-up compared to their base-line ratings. The authors concluded that due to developmental level and underdeveloped narrative and emotion regulations skills, expressive writing may not benefit, and may in some cases be detrimental, to this age group, at least in the short-term. By contrast, it is logical that healthy adults and college students would benefit more from these procedures given developmental level. Fivush and colleagues (2007) speculated that adults may be able to use the task to create meaning and manage their emotions through the writing task, whereas children may have more trouble creating cohesive narratives and drawing meaning. Because the children who wrote more about coping experienced more positive outcomes, it is believed that processing negative events, as compared to simply “venting” is key to benefiting from these types of tasks, especially for children.

Indeed, children may need more structure and support to find meaning and understanding about negative events in the narratives in order to have a sense of empowerment and control. Guided storytelling, where children are encouraged to take alternate perspectives and to generate coping strategies as part of the narratives, may be most developmentally appropriate and beneficial. In the Fivush et. al (2007), the students who wrote about coping had the most positive results. Children may benefit more from a program like STORIES, where group leaders can guide children to make sense of narratives, which would lead to a greater feeling of control instead

of anxiety, and support children's coping at their developmental level. In STORIES, group leaders read stories aloud to students, and guide discussions about feelings related to the books and personal experiences. It is expected that this guidance may lead to more positive outcomes. In fact, children who have difficulty generating coping strategies independently and have trouble connecting cause and effect may be in greater need of an intervention like STORIES because it directly teaches these skills through guided discussion.

Some researchers have indicated that children's narrative abilities may be better assessed through oral techniques rather than through writing (Wilde & Sage, 2007) and that oral narratives may be good interventions for children who are struggling in school (Westerveld, Gillon, & Moran, 2008; Westerveld & Gillon, 2008). Wilde and Sage (2007) were concerned about variability in children's ability to communicate competently and produce spoken narratives as they enter school, as research has indicated that these early skills are indicative of later success. The researchers aimed to help young children develop these skills through an intervention called the Communication Opportunity Group Scheme (COGS). This program is a structured way of teaching schemes to children. Its basis is the second author's research showing that children who had trouble understanding the gist of a narrative and expressing ideas coherently also struggled with literacy and school underachievement.

Blankman, Teglassi, & Lawser (2002) also showed this link; they found storytelling ability was correlated with both listening and reading comprehension. The researchers studied the correlations between listening comprehension, reading

abilities, and narrative storytelling abilities for two groups of 2nd and 3rd graders. The two groups were created based on scores on a standardized measure of listening comprehension; a below-average and an above-average group were created, and students with average scores were not used in the study. The Thematic Apperception Test (TAT), a measure that asks children to generate complete stories based on picture cards, was selected because it does not provide a high level of structure and therefore allows insight into children's schemas. Additionally, as opposed to a story re-telling task, this activity does not rely heavily on memory. The study provided support that schema-guided thought may be a mediator for both literacy and social-emotional adjustment, and therefore the assessment and intervention of distorted or disorganized schemas might be an ideal way to address both areas. The authors suggested that story-based programs might enhance both social competence and literacy for struggling students.

These story-based programs should also be flexible in nature, to account for children's varying skill level. In fact, Fang (2001) found that children's development of narrative abilities is non-uniform, feature-specific, unstable, and complex. He was specifically interested in communicative competence in children and this is related to narrative skills and development. In this study, 21 (n=21) second graders from a single classroom were interviewed four times over the course of a school year. The researcher was interested in "schooled narrative", or structured storybook-type storytelling. During the four sessions, children worked individually with an examiner and were asked to produce a story. The researcher acted only as a scribe and wrote down the children's story in book form. The stories were then coded for length,

understanding of autonomy, conventionality, and grammar. Results indicated that children of this age have more understanding of conventionality than grammar or autonomy. Additionally, the findings indicated that development of narrative skills is both non-uniform and complex, with great variability in skill across children. It was suggested that children would benefit from explicit instruction in story structure. This structure is a major component of the STORIES program, which teaches children about context, feelings, perceptions, and steps of problem solving.

Narrative intervention for children with learning disabilities and/or academic struggles: need for academic and/or social skills intervention

In the current study, five of the six participants were rating by their teacher as having significant learning problems. The challenge that struggling students with LD confront in school is two-fold: in addition to academic difficulties, these students often face deficits in their social skills development. Swanson and Malone (1992) conducted a meta-analysis comparing children with LD to their typically developing peers on measures of social acceptance or social skills. This research examined 117 studies from 1974-1990. Findings clearly demonstrated that for children in the primary grades, peer rankings could identify students with LD from their peers. The results also indicated that children with LD are less liked and more likely to be rejected than children with normal academic achievement. The students with learning disabilities were also more likely to be rated as having negative social-emotional traits such as being aggressive, immature, and have difficulty attending in social situations. The study suggested that social skills improve as students get older, but the gap in this area persists for students with LD compared to their peers. This research

provides evidence for the need for social-emotional supports and treatments for students with LD, in addition to academic interventions. It was hypothesized that children with known learning difficulties would benefit from the STORIES, since it teaches them how to interpret and produce narratives. It was expected that changes in cognition would lead to both mental health and academic benefits for participants.

The need for this type of intervention for students with LD is supported further by the Smith & Nagle (1995) study. In this research study, 116 students (N=116) were selected. Fifty-nine (n=59) students were identified as having specific learning disabilities and 57 (n=57) were average performing students in the third and fourth grade. The study utilized teacher and self-report rating scales to look at several areas of perception and functioning. The Self-Perception Profile for Learning Disabled Students (SPP-LD; Renick & Harter, 1988) was selected because this tool is specifically designed for use with this type of population. The rating scale gathers information about self-perceptions in the following domains: Global Self-Worth, General Intellectual Ability, Reading Competence, Writing Competence, Spelling Competence, Math Competence, Social Acceptance, Athletic Competence, Physical Appearance, and Behavioral Conduct. Overall, the students with LD self-rated as having lower self-efficacy in the classroom. They also perceived themselves as less competent than did the controls in the areas of intelligence, academic skills, behavior, and social acceptance.

In a meta-analysis of 152 studies, Kavale and Forness (1996) provided strong evidence for the need for social skills interventions for students with learning difficulties. The researchers examined the nature and magnitude of social skills

deficits among students with learning disabilities by reviewing 136 published journal articles and 16 dissertations. The overall combined sample included 6,353 subjects of which 72% were male. The average age across the studies was 10.75 years. The findings indicated that the majority (about 75% of students) with LD could be differentiated from their nondisabled peers through measures of social competence. Furthermore, the observed differences were consistent across evaluators (teachers, peer, and self-report). Differences were found across most major dimensions of social skills. Peers rated LD students as less popular, not as competent in communication, and not as cooperative. Teacher ratings were consistent with peer ratings, and there was a trend that the children with the lowest academic achievements were rated as the least competent socially. In general, students with LD are especially vulnerable to social impairment and these social skills deficits put this group at risk for continued academic difficulty.

Children with specialized learning needs may be in need of extra supports for social-emotional functioning. Students with learning disabilities (LD) can often be distinguished from their non-learning disabled peers through social skills ratings; and, teacher, peer, and self-ratings can readily identify differences in social skills across a number of dimensions (Kavale & Forness, 1996). Children with LD tend to rate themselves as less efficacious, competent, and socially accepted than their non-disabled peers (Smith & Nagle, 1995). Children with learning disabilities, Attention Deficit/Hyperactivity Disorder (ADHD), or lower than average cognitive abilities (sometimes called “slow learners”) are especially weak in the social competence skills sometimes called communicative competence (Wilde & Sage, 2007). Children

with these conditions tend to have trouble listening, attending, and using cognitive strategies, and, are in turn less skilled when asked to produce an oral narrative (Westerveld, Gillon, & Moran, 2008; Lorch et al, 1999). Oral narration is a universal activity that is necessary for both academic success and the development of social skills; children with LD tend to need explicit training and instruction to learn these skills (Nathanson, Crank, Saywitz, & Ruegg, 2007). Moreover, as mentioned earlier, the development of narrative competence is directly tied to the development of literacy skills (Fang, 2001; Teglasi, Blankman, & Lawser, 2002).

Narrative intervention for children with learning disabilities and/or academic struggles: adaptation of delivery

As discussed, students with LD have known academic weaknesses that are often comorbid with difficulty with social understanding; and social competence and programs have attempted to address these issues in the school setting. One such intervention was created and studied by Williams, Brown Silverstein, and deCani (1994). The program was designed to help students understand the concept of a theme, identify themes in stories, and apply these themes to real life. The program featured a series of steps and structure and was called the Theme Scheme. The goal of program was to teach students, including those with learning disabilities, how to identify themes from simple stories and apply what they learn to real life (Williams et al, 1994). The structured program emphasized the holistic nature of the comprehension process, while highlighting the importance of integrating text meaning with concepts and experiences that are personally relevant. The program has been shown to be successful in teaching theme comprehension to both typically

developing students and those with learning disabilities (Williams, 1998; Williams et al, 1994).

In another academic intervention study, Block, Whitely, Reed, and Cleveland (2009) were interested in seeing if schema based approaches could improve literacy scores for weak readers. For 660 (N=660) elementary school students in grades 2-6, different instructional techniques were built into the school day to investigate if these instructional approaches had ties to literacy and test scores. Researchers wanted to see if an additional 20 minutes of theory based instruction could improve literacy and what learning environments increase on-task performance and literal and inferential comprehension. Six methods were tried with various groups of students and were added for twenty minutes in to the typical seventy minutes/day of language and reading instruction. These techniques were 1) workbook practice, 2) individualized schema-based learning, 3) conceptual learning, 4) transactional learning, 5) traditional instruction, and 6) situated practice. Finding indicated that twenty minutes extra per day is not enough to meaningfully improve test scores.

However, of the six conditions, transactional learning, schema-based learning, and conceptual learning produced the most benefit for weak readers and yielded better scores than other three treatments. This provides support that STORIES, which aims to help students transform schemas to help them interpret and navigate social situations and which is delivered in a longer time format, could be effective when working with a group of students with known academic weaknesses.

Thompson and Littrell (1998) conducted additional research on group work with LD students. In their small study, twelve (N=12), 16-18 year-olds with

diagnosed learning disabilities participated in four group counseling sessions with a goal oriented approach. The brief counseling helped with the identification of goals and used a four-step problem-solving model. The students self-rated their progress in goal achievement after the group on a Likert-type scale. All but one of the students reported reaching the goals set during counseling at follow-up. Although this study was just exploratory, it noted that the psychological needs of students with learning disabilities are not always addressed. In schools, there may not always be the time or resources for extensive counseling. This article suggests that brief counseling could be effective for working with this population. However, just measuring success on self-reported goal achievement does not provide much information about the overall impact of the group on objective measures of achievement.

It is believed that children with learning disabilities do not lack the capacity to deliver a cohesive narrative, but they lack the strategies needed to organize and deliver narratives (Bloome, Katz, & Champion, 2003). Bloom, Katz, and Champion (2003) worked with pre-school and early elementary aged children in a low-income area to study the narrative process for at-risk children. They worked with over 100 children on a storytelling project in an attempt to improve their storytelling abilities. The authors read stories and then had children tell stories and create books. In this study, the researchers audio taped and transcribed the children's oral narratives. It was found that both culture and social relationships play a critical role in storytelling. The authors noted that narratives are often used to assess what children know and do in the school setting and that more focus should be paid to the function and performance piece of storytelling in addition to recall for tests.

Westerveld, Gillon, and Moran (2007) conducted a two-year longitudinal study that investigated the oral narrative abilities in 14 children (n=14) with mixed reading disability and compared their skills to age-matched peers with typical development. The children were all six or seven years old at the beginning of the study and assessments were administered individually to the children on three occasions over a 2-year period. The researchers measured oral narrative comprehension by reading fictional stories and then asking questions related to the content. The results of this study suggested the children with mixed reading disabilities had specific deficits in oral narrative comprehension. At all time points, the group with LD demonstrated inferior oral narrative production and oral narrative comprehension compared to their peers with average reading skills. The results suggested that not only do students with LD have trouble understanding narrative; they also have significant difficulty producing their own. These findings provide support that children with learning difficulties may need specific instruction and support to understand and produce their own narratives in order to receive therapeutic benefit.

The results of the Westerveld, Gillon, and Moran (2008) study suggested a need to intervene with LD students and provide interventions to improve their skills related to narrative production and understanding. Two of the authors, Westerveld and Gillon (2008), then selected ten children (n=10) who had shown persistent deficits in reading, oral narrative production, and oral narrative understanding during the previously described longitudinal study and delivered an intervention. They found with intervention these struggling students improved in several skill areas.

They used a pre-test, post-test design with a waitlist control. Five (n=5) students were assigned to each group and each group received a biweekly small group intervention. The goal of the group was to enhance story structure knowledge (similar to STORIES). Twelve hours of intervention were completed in groups led by the school's speech-language pathologist. Findings indicated significant improvement in ability to answer comprehension questions orally, specifically related to lessons, as a result of the intervention. Oral narrative language samples were audio recorded and transcribed. The number and quality of utterances, verbal fluency, and grammar were measured. Additionally, story re-tellings were transcribed and coded on a rubric. Despite the small sample size, the effect sizes were large for responses related to specific stories. However, there was little change in the children's own story production and the results of the intervention did not seem to transfer to reading comprehension. The authors suggested that children might need to learn word recognition skills along with story structure knowledge in order for both oral and reading comprehension to improve for this type of group.

Williams (1993) wanted to investigate the skill sets and deficits for adolescents with diagnosed learning disabilities. She looked at groups of 13 year-olds and 10 year-olds with known LD. The participants were asked to read along with a taped story. An examiner then interviewed the students individually. Verbatim transcripts of sessions were scored for idea units. Researchers looked for theme awareness, theme abstractness, and idiosyncratic responses. Overall, LD students gave significantly more idiosyncratic responses than non-LD students. The older group outperformed the younger group, and the improvement in many skills was

related to age more than disability status. Children with LD have much more trouble with gist tasks, but they may learn compensatory skills as they age. Researchers speculate that they may still have trouble with drawing meaning from stories and understanding the gist, but they may mask their lack of understanding with more sophisticated language. Overall, even compared to younger children, students with LD may have trouble getting to the point of their responses. Therefore, students with LD may need more adult structure and support to develop storytelling skills.

Wolman, van den Broek, and Lorch (1997) were also interested in the narrative-related skills of students with LD, but their study failed to unearth significant differences in these students from the general population. They looked at remembering and causal connections for students with LD, Mild Mental Retardation (MMR), and a normally developing control group. The three groups were comprised of 4th, 5th, and 6th grade students with a total of 86 participants (n=86). Researchers read stories to children individually and then asked recall and inference questions. The researchers manipulated different versions of the stories to have more and less clear causal structure. A delay/forgetting component was also incorporated into the research design and the children were asked about the stories again several days later. The researchers measured the number of causal connections that the children took from the stories at the different time points. In general, performance at the delayed time was highly correlated with what was initially remembered for all groups. Surprisingly, reading ability did not correlate with performance, but the stories with clearer causal links led to more parts remembered. In general there were more similarities among the three groups than between groups on both causal chain status

and on content memory. The children with MMR forgot more story content, and the authors hypothesize that the children with lower IQ may lack the use of strategies to aid memory. It seems important to teach strategies to aid recall and comprehension when working with lower IQ groups. Additionally, the researchers had predicted the LD student to be outperformed by the typically developing readers. It is possible that there may be more differences between these groups, but that the lower than grade level text may have masked the differences. It is likely that children with LD may struggle more with memory and understanding of texts matching their grade level. The findings of this study suggest that these findings may be more significant as students get older and are presented with more difficult material.

Nathanson, Crank, Saywitz, and Ruegg (2007) wanted to improve the recall and story-telling abilities of children with learning disabilities. They noted that a method called Narrative Elaboration Training (NET) had been highly successful in improving narrative organization and recall of facts for children called to testify in court. However, based on the work of Bloome, Katz, and Champion (2003) they hypothesized that children with known learning disabilities would struggle greatly with both their storytelling organization and recall of events. They believed that NET could improve skills for this population. Thirty-nine children (n=39) who were previously identified with LD by their school district were selected for the study. About two-thirds of the children were male, which is consistent with male to female special education statistics. The children had a mean age of 10.4 and school-based testing indicated a mean IQ in the average range, with each child presenting with significant academic deficits in at least one area. Many of these children were

struggling in multiple academic areas, but the majority had problems with reading. A post-test only, control group design was selected to control for practice effects. Children were randomly assigned to two groups: NET or the control condition, Motivating Instruction. Each group received the same 30-minute lesson that was videotaped so that both the instruction and responses could be coded. Two weeks after the identical lessons the children were either given (NET) or the control condition. NET training included modeling, verbal rehearsal, graduated practice, and corrective feedback. After this, a different examiner interviewed the children, claiming to have no knowledge about the original lesson, to look at recall and storytelling. Children who received the NET training recalled 49% more items of information from the lesson. They did not report more errors in information with the increased information. Overall, children with LD may benefit from explicit cognitive organizing strategies to improve both their storytelling abilities and recall of information. STORIES uses guided reading with reinforcing structured activities during the course of the intervention.

Williams and her research team (2002) wanted to investigate whether students with severe LD could demonstrate far transfer on higher order comprehension skills after targeted instruction in story comprehension. They modified the theme identification program by building transfer into the instruction. New activities were incorporated that were intended to make the program more engaging. The modified Theme Scheme program was compared to traditional classroom comprehension instruction. Whole classes of low-income 2nd and 3rd graders were used in the study. All students received the intervention, and, those with consent completed pre and post

testing. Teachers, who were trained in the specific instructional programs, led the class activities for 40 minutes a week for 14 sessions. The program was found to be effective for students at all achievement levels. Students with learning disabilities and those who had been referred for special-education evaluations also seemed to improve as a direct result of the program. The theme identification program did lead to a higher rate of generalization; the students were able to identify themes that they had already learned in other stories. Unfortunately, participants were not able to generalize what they learned to help them detect new themes not taught in the program. Older children were able to abstract the knowledge to novel stories (Wilder & Williams, 2001) and the authors speculate that this is likely an artifact of the less developed abstract thinking skills of younger children.

Lorch and colleagues (1999) investigated the recall of story events and the understanding of causal structure in students with diagnosed attention deficit/hyperactivity disorder (ADHD). Children of both genders were included in the study, although there were slightly more boys, which matches the rates of this disorder. The children in the study were ages 7 through 11. The researchers used audio taped folktales that were broken down into thought units/idea units. Children's retelling of the stories was transcribed and researchers counted the number of thought units that were remembered. Additionally, the researchers compared the results for the students with ADHD and the control group by IQ (high and low) and ADHD (with and without). The results supported the hypothesis that students with ADHD may have fewer resources to devote to remembering stories, and therefore, remember fewer details than non-disabled peers. The results were moderated somewhat by

gender and intelligence, with ADHD having a more significant impact for boys and children with lower IQ on remembering few details. An interesting finding was that boys with ADHD, regardless of level of intelligence, showed sensitivity to causal structure. However, their overall recall and the level of causal connections were less than non-disabled peers and similar to children with lower IQ scores. The symptoms associated with ADHD in boys seem to influence both the amount and the allocation of resources to the story comprehension task and affect the recall and retelling of stories. In the current study, at least one student had a diagnosis and school plan for ADHD. Other students were rated as having attention problems on the teacher BASC-2 scales.

Narrative intervention for children with learning disabilities and/or academic struggles: concluding comments

Overall, it is clear that difficulty organizing and producing oral narratives has both academic and social emotional implications. Children with learning difficulties often have more trouble with these skills than their peers with average academic performance. Deficits in narrative skills have implications for social relationship with peers and teachers and understanding causal links has implications in understanding literature and real life situations. Based on this information, it seems that narrative interventions may be appropriate and beneficial for students who are struggling both academically and socially. Based on the research it seems that interventions that explicitly teach story-structure, cause and effect reasoning, memory strategies, and strategies to get the gist of a story or lesson would be most beneficial for students with learning difficulty. The STORIES program incorporates all of these aspects into

discussion and activities.

In the present study, STORIES was adapted to match the skill set of the participants and to promote engagement. These modifications seem similar to the changes in Theme Scheme intended to promote generalization and transfer. As was the case in this study, it was expected that the children in STORIES would learn themes directly taught to them, but struggle to generalize their skills to themes they had not been taught. It was believed, based on their age and cognitive abilities, that generalization of knowledge would be difficult for this group. In the current study the child verbalizations were measured by an updated scheme (mentioned below and explained in Chapter 3). Children responses scored at the highest level (6) would indicate transfer and generalization of learned material. The low frequency of these higher level cognitive responses in these students indicates a lack of generalization and integration of the content.

Table 1
Narrative Interventions with Children

Authors	Program	Targeted Population	Nature of Program	Nature of Outcomes
(Williams, Brown, Silverstein & deCani, 1994)	Theme Scheme	Students with LD	Connecting text to personal experiences	Improvement of comprehension for LD
(Williams, Lan, Hall, Lord, Gu gga, Bak, Jacobs, & deCani, 2002)	Theme Scheme with modifications	2nd- and 3rd-graders with severe LD	Teaching direct instruction theme understanding	Promoted transfer and generalization; did not generalize to themes not taught
(Reynolds, Brewin, & Saxton, 2000)	Variation of Pennebaker paradigm	Children ages 8-13	using a diary format to write about emotional experiences or daily activities	Reduction and physical symptoms and anxiety for whole sample
(Bloom, Katz, & Champion, 2003)	Storytelling with creation of child books	Low-income preschool and early elementary	Model storytelling and have children create books	Storytelling abilities were related to social competence
(Sohlay, Garafolo, & Rogers, 2004)	Variation of Pennebaker paradigm	Middle school students	Writing about emotional or neutral topics	Reduction in physical symptoms and increase in well-being for those in emotional condition
(Nathanson, Crank, Saywitz, & Ruegg, 2007)	Narrative Education Training NET	10-year-olds with LD	Teaches skills for organizing stories and promotes recall	NET led to increase in information recall without an increase in errors
(Fivush, Marin, Crawford, Reynolds, & Brewin, 2007)	Variation of Pennebaker paradigm with modifications	Children ages 9-13	Writing about emotional or neutral topics	Children who wrote more about coping mechanisms had better outcomes
(Black, Whieley, Reed, Cleveland, 2009)	Scheme-based instruction	Weak readers grades 2-6	20 minutes of skill instruction	Gains in literacy

Group-aided academic and social emotional intervention in schools

Importance and context

As is the case with many school mental health services, STORIES is delivered in a group format during the school day. Schools are indeed logical settings to address social competence because, as discussed earlier, social-emotional and

academic competencies are positively and highly correlated (Bohlin, Hagekull, & Rydell, 2000; Izard et al., 2001; O'Neil, Welsh, Parke, Wang, & Strand, 1997; Shields et al., 2001; Waters, Wippman, & Sroufe, 1979). However, competing demands and limited resources in schools often hamper the delivery of services that address and promote social-emotional competencies (Davis, Kruczek, & McIntosh, 2006). Thus, the group format is often used in schools as a means of delivering mental health services to children to allow for the treatment of more children with fewer resources. School mental health professionals often do not have the time to deliver one-on-one interventions, thereby rendering small-group delivery a viable and logical format (Davis, et al., 2006; Foster et al., 2005; Prout & Prout, 1998). In addition, when conducted properly, the groups can become a safe setting where children can learn and practice appropriate and generalizable social skills.

Various types of groups can serve different purposes in the school setting. The most common types of school groups are counseling and psycho-educational groups. Approximately 55% of all group interventions in schools are counseling groups (Shechtman, 2002). Psycho-educational groups tend to provide information through structured programming, whereas the goal of counseling groups is to change participants' behavior through guided interactions and utilization the group dynamic as a critical element of the intervention (Corey & Corey, 2006). The STORIES program uses children's literature as a vehicle to deliver lessons and teach social skills and promote discussions and sharing. These activities are intended to promote problem-solving skills, improve accuracy of perceptions of social situations, and have children match feelings to context. It therefore has elements of both counseling and

psycho-educational programming. Ideally, the direct instruction of certain lessons along with the supportive environment and opportunity for positive social interaction will lead to the generalization of skills to situations outside of the group.

Evidence of efficacy – general child population

Research suggests that children who participate in counseling group experiences can make gains in social and emotional knowledge, which is linked with their academic performance (Prout & Prout, 1998; Shechtman & Pastor, 2005). Additionally, small group interventions may be a particularly effective treatment modality, especially at the elementary school level (Prout & Prout, 1998).

Shechtman and colleagues (1994) examined verbal response mode systems in group therapy with children and found positive impact of the group process. In this study 101 children (N=101) were referred to their school's counseling center because they demonstrated a particular difficulty in emotional, social, behavioral, and/or academic functioning. The children's ages ranged from 9–12 years, and 43 boys and 58 girls were selected. These children were assigned to one of ten counseling groups at an elementary school in Israel, in a lower-middle socioeconomic neighborhood. The groups were arranged by age and all but two groups were mixed gender. The groups met for sixteen 45-minute sessions. One experienced leader ran all ten groups. There were sixteen trainees who served as co-leaders for the group counseling sessions. The treatment results showed significant improvement in interpersonal relationships after group treatment.

These results are in line with the findings of a meta-analysis conducted by Hoag and Burlingame (1997) that showed that group treatment can enable youth to

develop social competencies. The researchers examined 56 outcome studies that were published between 1974- 1997. This meta-analysis examined the effects of group treatment with children and adolescents ages 4 through 18. Various types of group treatments were assessed and these included preventative programs, psychotherapy, counseling, guidance, and training groups. The results indicated that group treatment was significantly more effective for children than wait-list or placebo control groups, with an effect size of .61. This supports that the average child or adolescent treated by group treatment is better off than the majority of children in control groups.

While the studies above have indicated that group interventions can have a positive academic and social-emotional impact on children, it is important to determine if this modality is comparable in efficacy to individualized treatments. Shechtman and Ben-David (1999) compared the outcomes and processes of group and individual therapies as interventions for externalizing behaviors. The authors hypothesized that there would be differences in processes, but not outcomes, and, that both treatment modalities would lead to lower scores on aggression than for control groups. The participants were 101 (N=101) students from 1st-9th grade, attending school in Israel. More than half of the students were in grades 4-6 and the sample was approximately 90% male. Classroom teachers, who rated entire classes on levels of verbal and physical aggression, referred students. The students with the highest scores were selected. Fifteen (n=15) students received individual counseling and 71 (n=71) were divided into 15 groups by age. An additional 26 non-aggressive students were included to help form heterogeneous groups with peer role models. Therapists

received 56 hours of training on the program that was based on bibliotherapy and used poems, short stories, films, and pictures to guide discussion. Outcomes were measured by rating scales, teacher and self-reports. The process was measured by two coding systems. All sessions were recorded and transcribed. Treated children, compared to wait-list controls, showed lower levels of aggression as measured by rating scales at post-test. Through coding the transcripts, it was found that children's awareness of their own aggression increased over time, as did their attempts to modify their behavior. (See later in this chapter for a discussion of transcription coding). An interesting finding was that children in the group modality expressed fewer undesirable responses and less resentment about the change process. The authors speculate that the group format made them more likely to follow-group norms and withhold many negative responses.

As discussed earlier, the STORIES program employs schemas to help promote understanding of social situations and allow for generalization to real-life contexts. The success of schema-aided group intervention is supported by a study by Paone, Packman, Maddox, and Rothman (2008). This study examined whether a group treatment aimed at improving schemas related to moral reasoning would benefit "at-risk" ninth grade students ages 13-16. The authors described "at-risk" as academic or behavioral performance that may lead to grade retention or dropping out of school. The authors noted the importance of working with the "whole child" and not simply focusing on academic performance as the sole measure of school functioning and success. They hypothesized those adolescents with better moral reasoning skills would more accurately interpret situations and make better choices.

The authors wanted to compare Group Activity Therapy (GAT), which uses structured activities to provide a safe environment for exploration, learning, and self-expression to group talk therapy, the more common format in schools. GAT focuses more on play rather than straight talking.

In this study, the researchers specifically designed the study to meet the needs of at-risk high school students. Activities focused on using moral reasoning and empathy when problem solving. The participants were sixty-one (N=61) high school students in the 9th grade. Their ages ranged from 13-16 years, and they were all deemed to be “at-risk” students in an urban public school. Twenty-seven (n=27) students were assigned to the GAT condition, and thirty-four (n=34) were assigned to the talk therapy condition. The study used a pre-test/post-test design that compared the two conditions. Moral reasoning was measured with the defining issues Test-2 (DIT-2, Rest et al., 1999), which is a paper pencil measure that looks at five scenarios and is based on Kohlberg’s theory of moral development. The groups met for ten sessions for 50 minutes each week. Findings indicated that the GAT is a developmentally appropriate way to work with adolescents to change schemas related to moral reasoning. Researchers suggest that the more structured groups compared to simply talking may improve outcomes for at-risk students. These groups provide structure that allows for the children to connect with peers and establish a better association with the group and see strengths in others. In this study, the GAT group showed significant improvement in their moral reasoning skills compared to the talk therapy groups as measured by the DIT-2 at post-test.

Evidence of efficacy for students with disabilities (LD and ADHD)

The group format may be an ideal way to address the communicative competencies of students with learning or attention difficulties. Williams and colleagues (2002) found that programs designed to teach students to identify story themes led to greater understanding of stories and generalization of strategies, even for students with significant learning difficulties. Students with LD are able to form bonds and participate in the group process, and they have shown increased scores in both competency and academic achievement after participating in counseling groups (Leichtentritt & Shechtman, 2010). Since children with learning difficulties often have social-emotional problems, research supports that these students can benefit from a group process experience, a structured group counseling program that addresses oral narration skills should have both social and academic benefits for the students with the greatest needs.

Indeed, Mishna and Muskat (2004) showed that group counseling can be an effective treatment for students with learning disabilities. In this study, special and general education teachers identified middle school-aged students that previously been diagnosed as LD who they believed were “at-risk” for social-emotional problems. Four groups were created with 21 students (N=21) total; trained staff members and social workers conducted these groups. The researchers used a combination of qualitative and quantitative methods to look at progress and outcomes. Teachers completed the Child Behavior Checklist (CBCL) at pre- and post-test. Group members also completed self-report rating scales and their parents completed rating scales. Additionally, there were interviews with participants about the groups and the process. Findings indicated that participation led to a better

understanding of learning abilities and disabilities by the group members. Their ability to express their needs to others improved. Parents and school staff reported a better understanding of the children's needs after the group process. Furthermore, parents reported less externalizing behavior after the group on the CBCL and less problematic behavior overall. The study supports the use of the use of open-ended/free responses as some teachers noted changes that were not seen on CBCL. These changes included behaviors such as a being more responsive or calmer. This study provides support for combining qualitative and quantitative methods to look at change, as not all potential changes are evident in rating scales. In general, the authors believe students with learning disabilities can benefit most from group approaches because they can have a setting to practice new behaviors and gain support.

Utay and Lampe (1995) also used group counseling to work with students with learning disabilities who were experiencing social-emotional difficulty. In a private school serving students with diagnosed learning disabilities, sixty-six (N=66) students in grades 3-6 that were not receiving other group counseling interventions were selected to participate in a group counseling intervention. All of the students had average to above average IQ (85-130) and were predominately mid-SES. Forty boys and twenty-six girls were randomly assigned to either treatment condition, a social skills group that used games to teach skills, or a placebo control. The groups met for eight weeks, for about 50 minutes each week. Teachers completed behavior-rating scales at pre and post-test. The group worked on communication needs, social skills, and making friends. Teachers rated social skills and behavior as better at post-

test for the treatment group. Both treatment and control groups improved in several subscales including reduced anxiety for mistakes, self-reinforcement, and accurate causal attributions at post-test, and the authors hypothesized that the new skills learned in the social skills game group were generalized to interactions with peers. It is possible that the students with new skills became good role models.

In a more recent study, Leichtentritt and Shechtman (2010) believed that students with LD would benefit most from group treatments that focused on building their strengths, rather than attempting to address only skill deficits. They alleged an expressive-supportive modality where they could express feelings, share experiences, and be supported by peers would lead to cognitive changes, increased insight about behavior, and motivation to improve behavior and skills. The study aimed to compare the social and academic outcomes for students struggling with social skills and social-emotional issues. The population included students with and without learning disabilities. In this study, all of the participants were referred to group counseling through standard school procedures, which included referral by their teachers or other concerned school staff members. The 266 (N=266), children and adolescents were divided into three age groups (10-12yrs, 13-15yrs, and 16-18yrs). The students attended forty schools in Israel. All of the students had notable social or emotional issues, 123 of them were previously diagnosed with LD and 143 were non-learning disabled (NLD). The majority of the referred students were female. A different female therapist conducted a supportive-expressive group of three to ten children at each of the selected schools. The counselors each established the group at their school after completing a university course. Each counselor transcribed three of their

sessions, which were analyzed by researchers for adherence to the program and group processes. Each group met for a total of 13 sessions, for 45 minutes weekly. Pre-group rating scales showed that the LD and NLD groups were similar at pre-test on a number of social, emotional, and behavioral difficulties. Findings indicated that regardless of disability status, all participants made improvements from pre to post-treatment on all outcome variables including academic achievement and social competence as measured by ratings on the Child Behavior Checklist, and an adolescent questionnaire that was widely used in Israel. Nonetheless, as expected, NLD students performed better at both time points on academic measures. Anxiety and aggression levels, in a pre to post-test comparison, decreased for both groups. Overall, the authors concluded that this treatment modality can be highly beneficial for an LD population.

Characteristics of high-functioning groups: success linked to group success

In general, therapy is more successful when participants have a feeling of motivation to change. Carey and colleagues (2007) identified this as one of the key qualitative factors determining successful therapy for adults. However, in interventions in schools, such as STORIES, children are typically referred by teachers, parents, or other adults. Thus, they may lack the awareness of their problems and the corresponding and important motivation to change them.

Analysis showed that six general themes emerged related to change: 1) Motivation and readiness; 2) Perceived aspects of self; 3) Tools and strategies; 4) Learning; 5) Interaction with therapist; and 6) the Relief from talking that the clients felt from talking about problems in a safe environment. These six areas were

identified as being directly related to change. Additionally, the researchers noted that some changes occur suddenly, while others are more gradual.

Group cohesion, or the mutual sense of purpose and emotional connection among group members, must develop in order to make the group a secure environment wherein members can feel safe, self-disclose, and gain insight.

There are many factors that play a role in the success and failure of interventions with children. Since the main focus of the current study is on group leader behaviors and interactions with a specific population, the literature review will focus on these areas and, to a lesser extent on group composition rather than the outcomes of the STORIES program. (It is the researchers' belief, however, that the STORIES intervention is a robust intervention for this population based on the supporting empirical and theoretical evidence discussed earlier).

Leader behaviors

When examining the group processes, Leichtentritt and Shechtman (1998) found that the therapist's techniques and responses seem highly important in promoting a therapeutic group environment. The three therapist factors that stand out in promoting a successful group process are structuring activities, questioning, and modeling self-disclosure. Analysis of the transcripts showed that this leader assumed a very active role in the group process and employed a wide variety of therapeutic responses. These were most commonly asking questions, self-disclosing, providing feedback, and offering "encouragers." This study showed that self-disclosure by both boys and girls was the most frequent child behavior in groups among elementary-aged children, often occurring spontaneously, and it occurred at least once in 90% of

the group sessions. Additionally, feedback by group the child group members and questions posed to other group members occurred in 50% and 30% of group sessions, respectively.

Holmes and Kivlighan (2000) demonstrated that the other group members are a major source of the change that occurs during group interventions, the leader also plays a critical role. The leader sets the tone for the group and helps create the climate for change to occur. Leichtentritt and Shechtman (1998) found that both the therapist's techniques and the skills they use can promote group success, with structuring activities, questioning, and modeling self-disclosure being important factors in groups with elementary school-aged children. Additionally, when group members value group leader behaviors there is often a more significant response to the treatment (Pan & Lin, 2004). The connection with the group leader may be even more valuable in work with children, who are not choosing to enter into a therapeutic relationship and are referred by other sources. Additionally, children likely need more support than adults in terms of drawing meaning from a group experience. For the present study, it was expected that the group leader would use many techniques intended to improve the understanding and engagement of the elementary school aged participants. Child responses from Session 15 were used to indicate how much children valued the group experience.

In a study examining group leader behaviors and the subsequent perceptions of participants, Pan and Lin (2004) studied the group counseling process for a group of volunteer college students (n=32). Different experienced leaders who were given a manual for treatment guidance conducted four groups. Group members completed the

Therapeutic Factors Scale (TFS), which looks at 55 items to rate behaviors from 1 (not helpful at all) to 7 (extremely helpful). They also completed the Group Experience Scale (GES) in which they rated their experiences using 23 Likert type questions to measure motivation, group process, group atmosphere, and feeling about activities. Perceptions about counselor competency, trustworthiness, and leadership were also measured through a rating scale. Groups met for eight weeks for 150 minutes each week and members were encouraged to share experiences and they were also taught specific communication and social skills. This study was limited due to the lack of a control group and small sample size. Additionally, the results may not be generalizable outside of the college population. However, findings showed that cohesiveness and instillation of hope by the group leader were perceived as the most important therapeutic factors. This supports the findings of Kivlighan and Holmes (2000) where the formation and maintenance of relationships was key for the group process. Additionally, views of the group leader behaviors and the experiences of the group members were highly correlated. The authors believe that this would generalize to school setting and that successful group leaders would demonstrate competency, trustworthiness, awareness, and sensitivity to members' motivations, feelings, and experiences. Leader behaviors that intend to promote group cohesion were coded in this study.

Group composition

Group composition is clearly an important element in the development of cohesion in the group setting, but there is disagreement among scholars about what makeup is best. With respect to child characteristics and skills that promote group

cohesion or lead to conflict, some researchers believe a heterogeneous group is best. Another school of thought is that child characteristics should be matched on many variables. It seems as though some issues may be best addressed through homogenous group composition because they are unique in their origin and presentation (Corey & Corey, 2006; Shechtman & Ifragan, 2009). By contrast, for groups where participants are diverse in their skills and competencies, bonding may result through opportunities to share and learn from the experiences of others (Shechtman, 2002). In either case group leaders should develop selection and exclusion criteria and carefully screen prospective participants to maximize the chances of a successful small group experience (Corey & Corey, 2006, Yalom & Leszcz, 2005). Studies have also found that groups, especially for adolescents, can be adversely affected by certain group compositions. Too many aggressive or externalizing group members can have unintended iatrogenic effects (Rhule, 2005).

Coding of verbalizations

Coding of verbalizations within transcripts of groups is a way to measure aspects of group processes that may not be captured in self reports or pre-test/post-test measures of group functioning. The current project utilized two systems to capture patterns between leader behavior and child cognition within the group setting.

General

Noble and Proff (1961), in an original article that made suggestions for coding verbalizations, outlined many of the key ingredients that are necessary to detect change. The authors believe there needs to be a quantification of psychotherapeutic interaction in counseling groups. They outlined that the coding must be designed

specifically to study the group interaction. Additionally, it should not be representative of a particular theoretical position, and therefore it will be more objective. Coding should categorize both verbal and nonverbal behavior, examine counselor behavior, and have relatively naïve observers. The article described twelve client categories, six counselor categories, and six nonverbal categories to observe within a counseling situation. The client categories were: Accepts self, accepts others, agrees with others, reports plans, gives opinion, gives information, asks for information, asks for opinion, asks for suggestion, disagrees with other, rejects others, and rejects self. The counselor categories included: simple acceptance, agrees with client, reflects and clarifies feeling, asks client for information, asks client for opinion, asks client to discuss plans, gives client information, gives client opinion/interpretation, gives client suggestion, takes responsibility for client, disagrees with client, and rejects client. The nonverbal behaviors observed were: accepts self, accepts others, agrees with others, disagrees with other, rejects self, and rejects others. The authors conducted a study that used rating sheets during sessions to measure the identified categories. Additionally, two teams of observers were used to rate the experience. In general, the inter-rater reliability was high for ratings of the client (.92 sig .05), fairly high for counseling ratings (.78, .73 sig .05) and moderate for nonverbal behaviors (.60, .64 sig .05). The groups met for 16 sessions and the observers watched the sessions on a TV screen. Overall, the authors stressed the importance of finding efficient and effective methods for looking at process change in counseling groups. This study outlined one of the early attempts to complete such a task.

Child responses

As previously discussed, Fivush and colleagues (2007) speculated that coding systems developed to assess adult narratives might not be suited to coding children's narratives because of differences in metacognitive awareness and a less developed vocabulary of words that describe well being. Coding schemes need to be matched to specific interventions and populations in order to detect change.

Using the data from the Leichtenritt and Shechtman (2010) study described above that compared the outcomes for students with and without learning disabilities (LD) after group treatment these authors explored the processes leading to outcomes in group treatments. Shechtman and Leichtenritt (2010) also used the Hill Client Behavior Response System (see Hill & O'Brien, 1999) to explore process variables and outcomes when conducting group counseling with children and adolescents. The scale was initially created to measure client behavior in individual psychotherapy. It is comprised of eight verbal responses, including resistance, agreement, appropriate request, recounting, cognitive exploration, affective exploration, insight, and therapeutic change. The last four of these factors have indicated more effective therapeutic work (Hill, 2001). The scale had previously been used to analyze transcripts with high interrater agreement. For this study, the scale with the four negative and four positive group behaviors was transformed into a questionnaire completed by the counselor about each child. The authors predicted that these process variables would be associated with outcomes. Process measures were completed three times during the groups and scores on various dimensions were averaged. Forty groups were conducted (see methods described above). Following the

group treatments students with LD made significant gains in academic achievement and social competence and decreased in anxiety and aggression. The results provided strong evidence that client bonding and therapist helping skills lead to positive behavior in-group and constructive group work. This, in turn, affects outcomes. The researchers recommend that working on relationships is key for successful groups. They noted that the therapist's use of encouragement, interpretation, and self-disclosure is important for successful groups. They also noted that challenging young children may be detrimental to group work and a feeling of comfort in the group setting. These findings and others that support the updated coding system (GLIS) are presented in Table 2 below.

Hickling and Wellman (2001) coded verbatim child responses to examine causal reasoning and its development for young children. The researchers used recordings to code verbatim comments made by children from ages 2.5 to 5 years old. The researchers followed the children longitudinally and coded over 5000 explanations gathered from children's statements. They coded for causal statements and questions. In general, the researchers determined that there was not a lot of change during this period of development and they concluded that children likely develop their causal theories and understanding quite early. Based on these findings, we may not expect a great deal of change in causal understanding over the course of a 15-week group. However, it is possible that the direct instruction of themes, cause and effect, and morals that are part of STORIES may become incorporated into children's schemes that were developed earlier in their life experience.

Schectman and Leichtentritt (1998) used written transcripts of sessions and

coded them based on Hills (1986) Hill Verbal Response Modes System. The researchers also looked at leads to self-disclosure. This study focused primarily on process research in child group therapy. Transcripts were divided into responses in each session. These responses were then coded individually regardless of the speaker, but were noted as leader, co-leader, girl participant, or boy participant, as the researchers were interested in gender differences. The same coding system was used for all responses given by the adults and children.

With respect to the series of studies described above on emotional disclosure, Pennebaker and his colleagues used methodology that required time intensive analysis. Through these methods they were able to detect changes and relationships that other methods may not be able to detect. Although more difficult to analyze than survey questions, free response narratives can give more insight into how a person sees the world (Pennebaker, 2007). The current study also used analysis individuals' verbalizations to give a clear picture of a group process with a specific population.

Through coding transcripts of individual and group counseling sessions, Shechtman and Ben-David (1999) found that children's awareness of their own aggression increased over time, as did their attempts to modify their behavior.

Nuijens, Teglassi, Simcox, Kivlighan, and Rothman (2006) also conducted a study that used transcripts to code group leader behaviors. These researchers used group transcripts from the Teglassi and Rothman (2001) study of STORIES to develop a coding system to look at leader behavior in-group work with children. The researchers wanted to create a system to measure and analyze the verbal behaviors of the group leader within the context of a group counseling intervention. They noted

that most research in this area looked at adult therapy, and work with children may involve very different skills and behaviors. This new coding scheme was called the Group Leader Intervention System (GLIS); it was developed through a content analysis of actual STORIES sessions. Categories and subcategories were pulled from the transcripts and then edited, until multiple raters coded reliably. The analysis revealed several global variables: structure, group cohesion, modeling, information, exploration, and feedback. The authors also looked at the intervention as directed towards the group, an individual, or both (prompted toward one group member, but intended for all). The other categories were mutually exclusive. Additionally, in a post hoc exploration, the researchers also coded for affect in the leader interventions. The rationale was that one of the program's goals was to systematically link affect and cognition.

After establishing reliability, the researchers used the coding categories to compare groups over the course of the intervention, early, middle and late sessions. They also compared groups that were coded as being high or low in participants' level of cognitive responsiveness, this level of cognition was decided prior to coding with the GLIS, based on the examination of child verbalizations.

The GLIS showed distinct differences between the groups deemed high or low in cognitive responsiveness. The researchers found that the leader adjusted her responses to the varying needs of the groups. The rating system also was able to document differences in interventions in early, middle, and late group sessions.

Table 2
Support for GLIS Categories

Authors	Support for Categories
(Hill and O'Brien, 1999)	Coding System that measured resistance, agreement, appropriate requests, recounting, cognitive exploration, affective exploration, insight and therapeutic change
(Holmes & Kivlighan, 2000)	Relationship-Climate and Other vs. Self focus were critical factors for change in group counseling
(Pan & Lin, 2004)	Cohesiveness and installation of hope are important skills for group leaders
(Nuijens, Tegasi, Simcox, Kivlighan, & Rothman, 2006)	Created original GLIS through content analysis of transcripts. The six main categories were mutually exclusive: structure, group cohesion, modeling, information, exploration, and feedback.
(Carey et. al, 2007)	Analysis of interviews about therapeutic change yielded six themes: 1) Motivation and readiness; 2) Perceived aspects of self; 3) Tools and strategies; 4) Learning; 5) Interaction with therapist; and 6) the Relief from talking
(Shechtman & Toren, 2009)	Support and meaning attribution were the most influential group leader behaviors; bonding with group members also influences outcomes
(Shechtman & Leichtenritt, 2010)	Used a variation of the Hill Client Behavior Response System (Hill & O'Brien, 1999)-Found that therapists use of encouragement, interpretation, and self-disclosure were key. Challenging in work with children may be detrimental

The current study utilized a modified version of the GLIS in a single STORIES group that included participants with low cognitive levels, weak adaptive skills, and academic struggles. These participants demonstrated low levels of cognitive responses during the sessions. A major focus of this study is the question of how the group leader adjusts her interventions to this group by using the GLIS; and how child cognitive level varies over different parts of the group process. Group patterns surrounding high and low cognitive responses was compared and the use of various types of leader scaffolds and supports was studied over the course of the intervention, during the use of the three books, and across structured activities. Session 1 and Session 15 were examined independently, as these sessions had slightly different formats and content. In order for mechanisms of the STORIES program

(literature as a vehicle to understanding problems, modeling in the group process, peer interactions) to operate, it is necessary for the children to understand the narrative structures. The use of the GLIS to code the verbalizations assists in determining the active ingredients that made this group function. Since the use of scaffolding was a central part of this study, a new category was added to the GLIS to help measure the leader's ability to adjust to the cognitive level of the group. The study looked at the amount of scaffolding used by the leader to help students stay engaged, understand the material, and participate in the process.

Additionally, the different factors within the group were analysed to determine their relationship to the leader interventions and child cognition. First, the sessions were divided into two phases: "pre-book" (students are eating lunch and engaging in discussion) and "book" (active reading or activity without lunches and guided discussion). Groups were also divided by activity: review of reading, general discussion, active reading, structured activity, and other (first/last session). Finally, the group was examined chronologically by looking at the first session, the three books in order, and the last session.

There is very limited research on lunch-time interventions and this study adds to the literature base on the utility of lunch-time groups. Lunch groups for social skills or social-emotional interventions are common practice in schools because many schools prohibit interventions that take away from academic instructional time. To navigate these restrictions, school psychologists, counselors, and social worker often use lunch time to run social skills groups. Perusse, Goodnough, and Lee (2009) suggest that school psychologists will have more success overcoming resistance and

barriers if they honor and understand the context of the school, and understand the demands placed on teachers and administrators. Lunch groups or “Lunch Bunches” are common formats in the school that do not interfere with regular school programming, and allow the psychologist or counselor access to students in need. There has been little research on the efficacy of these lunch groups; however, use of this format is logical and sometimes the only available option. Josephson (2006) conducted a single-subject design study and found that her “VIP Lunch Bunch” was a successful modality to teach social and coping skills to five (n=5) at-risk students with internalizing issues. This intervention demonstrated how a group could function within the school’s constraints. Additionally, Elledge, Cavell, Ogent, and Newgent (2010) demonstrated that students who participated in a school-based lunchtime mentoring program experienced reductions in peer victimization compared to matched controls. Although more research is needed, it seems as though lunchtime can be a practical and effective time for interventions with at-risk students.

For the purpose of this study, STORIES was modified slightly from previous administrations (Teglasi & Rothman, 2001; Rahill & Teglasi, 2003; Teglasi, Rothman, Sedlik, & Sweeny, 2006) to fit the lunch context. During the first portion, called “pre-book” the participants transitioned from the cafeteria and engaged in discussion about life events, group events, or group story review. However, during this time they had competing demands (listening, talking, eating). The second portion of group called “book” functioned more like traditional STORIES interventions in that lunch trays were removed and the guided activities or discussions took place without the added demand of eating. While there were some hypothesized

differences between the two time points, the presence of meaningful discussion and interventions during the first part of group may add to the literature supporting this context for school-based group interventions.

Additionally, Child Verbalizations were coded by a system called the CVC (Child Verbalization Codes). This system is a modified version of the system used in the three previously described studies (Teglasi & Rothman, 2001; Rahill & Teglasi, 2003; Teglasi, Rothman, Sedlik, & Sweeny, 2006). This coding system measured the cognitive level of child responses on a 6-point scale. The modified version of this scale also differentiated between different types of lower level responses. The updated scale separated wrong responses from those that were highly disorganized. This scale will be described in detail in chapter three.

Current Project

An 8-week pilot in 2006 with 5 shy/withdrawn fifth grade students indicated that STORIES may be beneficial for students presenting with internalizing issues in schools. This pilot group was composed of 5 ($N=5$) African-American female students. Most participants showed noteworthy gains in cognition as rated by group leaders in post-session ratings and codes of the verbatim transcriptions of the actual STORIES sessions. These codes were obtained from transcripts and rated independently of leader observations during the sessions and therefore were a more objective measure of change. This pilot group had a favorable dynamic and provided some evidence that STORIES would be beneficial for students with internalizing issues (Teglasi, Rothman, Sedlik, & Sweeney, 2006).

In the current study, the STORIES program was offered to children presenting

with internalizing issues as manifested by shyness or withdrawal in the classroom setting. Teachers were highly involved in the selection process and served as the primary referral agents. One of the eight groups that received the intervention during the two-year project was selected as the focus of the present study. Although the six children in this selected group did meet the selection criteria, this particular group differed from the other seven groups from the two year study in that these students were withdrawn in the classroom in part because they did not understand the instruction in the class. The children's limitations in listening comprehension and information processing gave rise to questions about the types of group leader modifications and about the impact of these modifications on children's verbal responses. A basic question concerned the modifications introduced by the group leader in structuring the sessions, presenting the information and in scaffolding children's engagement. As noted in the literature, children's cognitive abilities and learning abilities matter in terms of their responsiveness to intervention and acquisition of skills. The structure of *STORIES*, with guided discussions, activities that teach problem-solving strategies and provide opportunities for modeling and prosocial group interactions should be therapeutic for this type of population. However, it was not clear whether the program, even with modifications, can foster increased understanding and lead to generalization of the skills taught. The current study portrays the types of leader modifications and the children's cognitive responses over fifteen weeks.

The study adds to the limited research on interventions with students struggling in both emotional and academic domains. It shows the types of cognitive

changes that may occur through participating in this type of group process. Additionally, the study examined group leader interventions and how the verbalizations of the leader and participants interrelate. Finally, since the group took place during lunch and recess time, the specific skills and discussions that occur during the social/lunch portion of the group were compared to the parts of the group which focused on the discussion and analysis of the selected books and activities.

Research Questions

Overall, this study had a dual focus: a) to investigate how children who are having significant difficulty with learning, functional communication, and with engaging in the classroom (withdrawn) responded in a story-guided group intervention; and b) to investigate how the Group Leader adapted the procedures of the program with particular emphasis on the use of scaffolding to support the group members' participation and learning. The coding of alternating leader and child speaking turns allowed for the reciprocal dynamic between these players to be analyzed. The use of a variety of scaffolding methods is a common practice for classroom teachers, and these techniques are evidence based. It was expected that within a counseling environment the leader will also have to use scaffolding techniques in order to foster engagement, understanding, and learning in the group setting. For teachers, scaffolding can include guiding a discussion, providing constructive feedback, offering clues, encouraging students of different levels to learn from each other, and assisting students with problem-solving. It was expected that in a group counseling situation that similar strategies would be used. The intent of scaffolding is to facilitate engagement and increase emotional and cognitive

understanding. On the other hand, since scaffolding is likely to increase as needed, the actual use of scaffolding needs to be investigated in light of the CVC scores that go before as well as the CVC score that follows the scaffold to look at the patterns between the leader and group members. The coding of alternating speaking turns allowed for the study of behaviors that came before and after specific types of interventions or responses.

The study provides a detailed examination of leader behaviors, focusing on scaffolding, and child responses and performance within a group counseling context. The Group Leader Intervention System (GLIS) was used to investigate the group leader's use of scaffolding within exploration statements (asking questions), providing feedback, modeling, and promoting group cohesion. Exploration questions require a student or group response; each exploration verbalization was coded using a new four point scale to assess the level of scaffolding that was attempted (low, medium, high, or very high). Almost all child responses required feedback and this feedback is also a way of scaffolding for increased understanding or clearer verbal explanations from group members. Feedback was coded as one of four subcategories: simple acknowledgement, paraphrasing or restating, reframing, or elaboration. Leader modeling was also a way to support student responses. Modeling included self-disclosure and demonstrations of prosocial interactions. Finally in the coding of Cohesion, two subcategories were included: team building defined as creating an atmosphere or building traditions that foster group members' identification as a team and a new category called "emotional engagement, building excitement/motivation or support for group activities and relationships." Group Cohesion-Team Building

included coming up with the group name, establishing common rules, and other similar activities and the Group Cohesion-Emotional engagement included fostering investment in relationships among group members; demonstrating the importance of each individual and the value of their contribution to the group; expressing that the group is a safe place to share.

Analyses explored cognitive level of child responses with emotional and non-emotional content and allowed for an analysis of the use of emotional content during various activities and parts of the group process. All responses were also coded for the presence or absence of empathy. Leader and child use of emotional content and empathy were assessed over phase, activity, and time (as measured by use of books over the course of the intervention).

The GLIS and CVC, respectively, are tools to examine the leader's intervention strategies and cognitive level of child verbal statements during the group sessions. The use of these tools to look at group processes across time, phase of group (pre-book/book), and activities was a central component. Moreover, the examination of the leader and child verbalizations using these scales, along with analyses of how these verbalizations form patterns within the group, were central to this study. This look at the interplay between the leader and participants has not been studied in this manner.

Research Questions

1. What are the types and frequencies of group leader interventions as measured by the Group Leader Intervention System (GLIS) during different parts of the group process?

- a. How do leader behaviors compare across the two phases of group—“pre-book” (while children are eating lunch and engaging in discussion) and “book” (once books are used in the intervention and lunch trays are removed)?
 - b. How do leader interventions compare during different types of activities: general discussions, book related discussions, guided reading, structured activities, and other (first/last session)?
 - c. How do leader interventions compare when examining the group across time by looking at the interventions by looking at books (first session, Book 1, Book, 2, Book 3, and the termination session)?
 - d. When the leader asks questions to explore a topic, how does the level of scaffolding vary across these different group components?
 - e. How does the leader’s use of emotional content and empathy vary across the different group components?
2. How does child cognitive level of responding as measured by the CVC compare during different parts of the group?
 - a. How do child cognitive responses vary during pre-book and book time with respect to group patterns, individual performance, and proportion of speaking turns?
 - b. How do child cognitive responses vary over different group activities?
 - c. How do child responses vary over time by looking at books?

3. What are the levels of participation across group members? And, what are the distributions of cognitive levels for the different members across different group components?
4. What are the various patterns between the group leader and children during the group process?
 - a. How do the proportions of leader interventions within turns related to child cognitive level?
 - b. What types of leader interventions are followed by higher level child responses?
 - c. Do certain types of leader interventions prevent lower level responses?
 - d. How does the leader respond following different levels of child verbalizations?
 - e. How does child cognitive level of responding vary following various levels of leader scaffolds (low to very high)?
 - e. How does the tone or valence of leader feedback correspond to child cognitive level?

Chapter 3: Methods

The present study investigated the group process of a 15-session STORIES group intervention with children presenting multiple problems that diminish their school performance and social-emotional adjustment. Using updated coding schemes (GLIS and CVC), the study specifically examined leader interventions and child verbalizations over the course of the STORIES group intervention that was administered during the school lunch/recess hour. The types and frequencies of leader interventions when working with this population were analyzed using a modified version of the Group Leader Intervention System (GLIS) (Nuijens, Teglassi, Simcox, Kivlighan, & Rothman, 2006). Child cognitive level was measured across the same categories using the 6 point rating scale (CVC, described below).

Group leader interventions and child cognitive levels were compared over sessions, activities, and various books. Sessions consisted of the “Pre-Book” portion which includes discussion while eating lunch and the “Book” portion, which includes all activities, readings, and discussions that take place once children have cleared their lunch trays. Activities were coded as: General Discussion, Review of Books, Active or Guided Readings, Structured Activities, and Other (which included the introductory and termination sessions).

Of particular interest in this study were the adjustments of the group leader to the low level of cognitive understanding of the students and how the students responded to them. Previous studies have looked at leader behaviors and child cognition as separate entities. This study examined the sequences between leader and child verbal responses to describe how each influences the other. Speaking turns, or

uninterrupted statements by the leader or children, were aggregated so that leader responses that preceded or followed child verbalizations could be analyzed on the one hand. Child responses that preceded and followed leader verbalizations could be on the other. These sequential analyses help paint a picture of the dynamic between group members and the leader (as detailed in Chapter 4). Grouping the data into consecutive and alternating speaking turns between the leader and child allowed for the analysis of the proportion of different GLIS interventions within leader speaking turns that preceded or followed child verbalizations; the leader often made multiple verbalizations incorporating a variety of interventions within a single turn. Individual responses were studied across the intervention and during various activities; however, the primary focus was on group averages and the dynamics of the group.

Selection Procedures for Participants

The present study utilized archival data collected from a 2007-2008 implementation of the STORIES program. The six students who participated in the 15-session STORIES intervention under investigation were part of a larger cohort of forty-five (N=45) students from five elementary schools in a semi-urban school district that participated in the program over two school years. A single fourth grade teacher referred the selected students during the second year of the study. This teacher participated by referring participants during both implementation years and was familiar with the STORIES intervention.

Prior to student selection, the school described the program to the teachers and explained that it would not take away from academic instructional time, as the groups would be meeting during the lunch hour for about 15 sessions. The teachers were told

that the groups would be reading books, learning about problem solving, and working on social skills. No strict exclusion criteria were established for participants.

Teachers were asked to refer children who presented as shy and withdrawn in the classroom and were not already receiving other supports and services in the school setting. Participation was dependent on parental consent for their child to attend sessions during the student's lunch hour. The teacher, parents, and students involved in the project all completed consent and assent forms approved by the University of Maryland Institutional Review Board (IRB). These gave a brief explanation of the research and made clear that their role and participation was voluntary. Children had the opportunity to ask questions before signing their assent form. Once these forms were returned, graduate students entered schools to work with students prior to starting the group. The graduate students met with each child individually. The basics of the group were explained to the child and questions were encouraged. Researchers read the child assent form to the children, which outlined that the group was voluntary and was about learning to solve problems. The assent form also mentioned confidentiality, with the exception of reported abuse.

Procedures for data collection

Data were collected during the 2007-2008 school-year by a team of doctoral-level graduate students under the supervision of a licensed psychologist working in the schools and a professor at the university. Training of this team included a review of measures, instructions on administration, and weekly feedback and review.

As discussed earlier, once children signed the assent form, researchers obtained pretest data, working individually with each child for about one hour, during

which the TAT, ChIA, MASC-10, and CDI were administered. These same procedures and measures were repeated during post-test data collection, which took place after each group terminated. Post-test data collection was conducted by one of the team members who did not serve as group leader or co-leader for that group. In other words, an unfamiliar adult in all cases conducted the testing. The post-test data collection was more pertinent to the larger study; these data were not analyzed as part of this current project.

Pre-test Measures

Several measures of social-emotional functioning and storytelling abilities were administered at pre- and post-test. Trained doctoral students administered tests to students individually. All self-report measures were read aloud to the students to account for variation in reading level. Researchers defined words for students as needed. These measures are described below.

Teacher reported student behavior.

Behavior Assessment Scale for Children, Second Edition (BASC-2; Reynolds & Kamphaus, 2004), Teacher Rating Scale (TRS-C) is a broad spectrum rating scale of child behavior, social-emotional, and adaptive functioning. It is completed by the classroom teachers and is designed for rating skills and behavior for children ages six through eleven. The completion time for this measure is approximately 10 to 15 minutes. The 148-item form contains descriptions of behaviors that the teacher rates on the following 4-point Likert-type scale: never, sometimes, often, and almost always. Teachers are asked to respond to items such as “cries easily” and “hits other children.” The BASC-2, TRS-C is composed of the following subscales: adaptability,

aggression, anxiety, attention problems, atypicality, conduct problems, depression, hyperactivity, leadership, learning problems, social skills, somatization, study skills, and withdrawal. Also, there are five composite score areas: externalizing problems, internalizing problems, school problems, adaptive skills, and behavioral symptoms index. The BASC-2, TRS was normed with a sample of 4,650 children (ages 2 - 21) from 375 testing sites; the population was consistent with the US Census. Internal consistencies for the normed sample averaged 0.80 for all age levels. Internal consistencies for the composite scales were found to have a coefficient alpha of 0.90 and above. The median value of the test-retest correlation was found to be 0.90 for the BASC, TRS-C and ranged from 0.84 to 0.93 for the composite scales.

Student self-report measures

The Children's Depression Inventory, Short Form (CDI-S; Kovacs, 1999) is a 10-item screening measure of depressive symptoms in children. Children are asked to pick the item that best describes their recent feelings from three items such as "I am sad once in a while," "I am sad many times," and "I am sad all the time." Each test item consists of three choices scored 0, 1, or 2; which correspond to the absence of the symptom, a mild symptom, or a strong symptom. The student is asked to report how well the statement describes him/her for the past two weeks and is reminded that there is no right or wrong answer. Responses to the items produce a depression index in the form of a *T*-score ($M = 50$; $SD = 10$), with higher scores indicating more depressive symptoms. Scores ranging from 60-69 represent the student may be "at-risk" for depressive symptoms and scores above 70 typically indicate a significant level of self-reported depression. According to the test manual (Kovacs, 1999), the

CDI-S is strongly related to the full inventory ($r = 0.89$). It also demonstrates acceptable internal consistency ($\alpha = 0.80$).

The Multidimensional Anxiety Scale for Children - 10 Item (MASC-10; March, 1997) is an abbreviated version of the MASC, a rating scale for anxiety in children. The MASC assesses manifestations of anxiety including physical symptoms, harm avoidance, social anxiety, and separation/panic. The MASC-10 also asks about these areas in one to two selected questions from the long form, but only yields an overall anxiety index T-score ($M = 50$; $SD = 10$), with higher scores indicating more anxiety. The MASC-10 strongly correlates with the MASC Total Score ($r = 0.90$). Test-retest reliability is also high ($r = 0.83$). This measure was designed for children between the ages of eight and nineteen. Children are given instructions and two examples. They are then asked to respond on a 4-point Likert-type scale: never true about me, rarely true about me, sometimes true about me, and often true about me. Children respond to test items such as “I get dizzy or faint feelings,” “I feel restless and on edge,” and “I feel shy.”

The Thematic Apperception Test (TAT) (Morgan & Murray as cited in Teglasi, 2001) investigates children’s abilities to organize their thoughts and tell a complete story with a beginning, middle, and an end. Children are also asked to comment on the characters’ thoughts and feelings in the pictures. Eight cards from the TAT were selected (1, 2, 3BM, 4, 5GF, 7, 8BM, 13); children were asked to tell a story about each picture using standard instructions for administration, encouragement and follow-up. These cards were selected because they are more commonly used in research and are age-appropriate for a fourth grade sample.

Student responses were transcribed verbatim and codes were used to depict prompts given by the examiners during administration. Use of the TAT at pre-test gave the research team a qualitative depiction of the children's cognitive level, organizational skills, and ability to perform on a less structured task. This information was important in structuring the group to match student needs. The TAT was used as an index of cognitive level in a story-telling context and made the researchers aware that modifications to the program would be necessary for this particular group.

Participants

Six (N=6) students participated in the intervention. Five (n=5) students were male, and one student (n=1) was female. An additional female student joined the group beginning with the ninth session. This student was invited to join in order to provide additional support for the one female group member. This member had expressed discomfort with being the only girl in the group and the additional female student prevented potential attrition. Parental permission was obtained for participation and tape recording for the additional group member, but not for research purposes since she missed the majority of the group sessions. Therefore, responses from this participant were not coded for this study. The addition of this additional member may have had some effect of group functioning and dynamics for the later sessions; however, the research team believed that the benefits of adding this member outweighed the potential risks to the research study. This addition prevented the attrition of one of the original group members and likely increased her comfort and participation within the group.

The ethnic makeup of the group was roughly proportionate with the school's

general population. Four students were African-American, one student was Hispanic, and one student identified as biracial. The students were nine years old at the start of the group, with the exception of one participant who had been retained one year.

Participants in Comparison to Those in Typical STORIES Interventions

The full sample of the larger project from which this study's group was selected has already been explored to look at teacher referral practices; over two years forty-five students ($N=45$) were referred to 8 groups ($n=5-6$) and the sample was fairly evenly split by gender with slightly more males selected (males=25; females=20). Sedlik (2009) found that the majority of the teacher-referred sample matched the researcher's referral criteria for shy/withdrawn (internalizing behavior) being present in the school setting based on pre-test teacher report or child self-report ratings. The students ($n=6$) selected for the group analyzed in this study fit the referral criteria in that they were shy and withdrawn in the classroom and many self-rated as experiencing anxiety. When compared to the larger sample, this group consisted of students who experienced difficulty with grade level academics in their classroom and these cognitive and academic difficulties may have been primary to internalizing issues. The teacher rated all of these students as having school or learning problems and weak adaptive skills at pre-test. Additionally, these students told eight stories using the Thematic Apperception Test (TAT) at pre-test. Their stories were simple, failed to demonstrate reasoning or problem-solving skills, and were often perceptually inaccurate. Their cognitive and problem-solving skills were noticeably weaker than the larger sample.

Weak adaptive skills, including impaired functional communication, and

academic difficulty were not expected characteristics of the larger referred population. The current group of students also had more academic and social-emotional needs and weaker adaptive and communication skills than students who participated in previous implementations of the STORIES program (Teglasi & Rothman, 2001; Rahill & Teglasi, 2003). Nonetheless, members of this group were in clear need of intervention, and STORIES was available to them, even if more intensive intervention may have been more appropriate or necessary for some of them due to the complexity of their needs. As it was, the pace, level of materials, and degree to which the leader provided scaffolding, or explanatory detail, in response to group queries had to be modified for the intervention. This sort of adaptation is in line with what has been found for group interventions in general. Nuijens and colleagues (2006) found that group leaders often modify their own behavior to match the level of the group and student needs. In that study, transcripts of the same leader working with multiple groups indicated that the patterns of leader strategies vary when working with students with higher compared to lower cognitive abilities.

Summary of Participant Characteristics

The modifications and scaffolds made by the group leader to deal with the significant needs of the group members were of central interest during this investigation. A description of student characteristics is offered to demonstrate the unique needs to which the STORIES intervention had to be adapted.

As stated previously, the six students selected in this group were often quiet or withdrawn in the classroom, and therefore met referral criteria for participation in 2007. However, it became evident during the group sessions that these behaviors

(shyness and withdrawal) were primarily related to learning difficulties and a lack of understanding of grade level material in the classroom, rather than driven by shyness, anxiety or depression. The six students selected were in the class's group for struggling readers. Five of the six students were identified by their teacher as having significant academic difficulty with grade level material by ratings on the Behavior Assessment Scale for Children, Second Edition (BASC-2). The items that make up the Learning Problems Scale on the BASC-2 are presented on Table 3 below. Interestingly, the one student rated as having average learning was coded as Emotionally Disabled (ED) and was receiving special education services. In this case, it is believed that emotional regulation was the primary hindrance to success in the classroom.

Additionally, the teacher BASC-2 ratings indicated highly impaired functional communication skills for all six participants. Functional communication is one of the subscales of the Adaptive Skills Index. One rating was in the "at-risk" range and the other five students were rated as having clinically significant impairment, in the 1st to 3rd percentile compared to same aged peers (see Table 3 below). Furthermore, these children were assessed as performing at the Basic level on the Maryland State Assessment (MSA), a test of reading and math achievement given to all students after third grade that meets the testing requirements of the No Child Left behind Act (<http://www.marylandpublicschools.org/MSDE/testing/msa/>, 2010). Basic level on this test indicates skills that are approximately two years below grade level for reading and comprehension skills when working with grade-appropriate literature and informational passages.

Despite the directions given to the teachers to exclude children already receiving services, some of the children in this group were previously identified as having an educationally handicapping condition. As mentioned above, Child B was the only one group member with an Individualized Education Plan (IEP), to receive services as a student with an Emotional Disability (ED), at the start of the sessions. However, the school team had previously identified another child as having a Specific Learning Disability (SLD) and his family had refused formal special education services (Child D). Yet another participant receiving Section 504 services for Attention Deficit/Hyperactivity Disorder (ADHD) (Child A). A fourth was being assessed towards the end of the group intervention for suspected ED (Child F).

Table 3

*Behavior Assessment Scale for Children, Second Edition -
Teacher Rating Scale for Childre 6-11 (BASC-2, TRS-C)*

Functional Communication Scale	
#	Item
3	Responds appropriately when asked a question.
22	Communicates clearly.
31	Is able to describe feelings accurately.
50	Has trouble getting information when needed.
59	Is unclear when presenting ideas.
78	Tracks down information when needed.
87	Has difficulty explaining rules of games to others.
106	Is clear when telling about personal experiences.
115	Provides own telephone number when asked.
134	Provides home address when asked.
Learning Problems Scale	
#	Item
20	Does not complete tests.
48	Has poor handwriting or printing.
76	Has reading problems.
82	Has trouble keeping up in class.
104	Has spelling problems.
110	Gets failing school grades.
132	Complains that lessons go too fast.
138	Has problems with mathematics.

Note: All items are marked "Never," "Sometimes," "Often," or "Almost Always" by the rater

Table 4

Basic demographics for sample.

	N	Sex	Mean Age	ESOL	Ethnicity
Group	6	5M, 1F	9yr 8mth	1 previous	
Child A		M	10yr, 0mth	no	African American
Child B		M	9yr 9mth	no	Bi-Racial
Child C		M	9yr 5mth	released	Hispanic
Child D		M	9yr 7mth	no	African American
Child E		M	9yr 7mth	no	African American
Child F		F	9yr 9mth	no	African American

Table 5

Teacher Ratings for social-emotional concerns at pre-test (BASC-2)

Scale	Child A	Child B	Child C	Child D	Child E	Child F
Anxiety	69*	65*	86**	73**	55	96**
Depression	58	58	69*	55	66*	98**
Attention Problems	73**	59	68*	61*	64*	75**
Learning Problems	83**	50	78**	74**	78**	85**
Withdrawal	57	55	71**	66*	63*	71*
Social Skills	45	45	38*	38*	43	33*
Functional Communication	21**	37*	21**	21**	29**	19**

Note. "At-Risk" is indicated by a * and represents a score of 60-69 for Clinical Scales and 31-40 for Adjustment Scales. "Clinically Significant" is indicated by ** and indicates a score at or above 70 for Clinical Scales and below 31 for the Adjustment Scales. Anxiety, Depression, Attention Problems, Learning Problems, and Withdrawal are Clinical Scales. Social Skills and Functional Communication are part of the Adjustment Scales.

Table 6

Teacher ratings for BASC-2 composite scores.

Scale	Child A	Child B	Child C	Child D	Child E	Child F
Internalizing	60*	71**	44	45	71**	91**
Externalizing	57	58	76**	60*	56	64*
School Problems	80**	55	75**	69*	73**	83**
Behavioral Symptoms	66*	64*	64**	59	69*	83**
Adaptive Skills	33*	42	30**	30**	32*	25**

Note. "At-Risk" is indicated by a * and represents a score of 60-69 for Clinical Scales and 31-40 for Adjustment Scales. "Clinically Significant" is indicated by ** and indicates a score at or above 70 for Clinical Scales and below 31 for the Adjustment Scale.

Please find a brief description of each group participant listed below:

Child A -- Ten-year-old African-American male with a Section 504 plan for Attention Deficit/Hyperactivity Disorder (ADHD). The student had been retained once during elementary school and was one year older than his peers. Self-reported depression was average (T=53) and self-reported anxiety was slightly elevated (T=63). The teacher report also indicated "At-Risk" levels of anxiety. Teacher BASC-2 indicated significantly elevated scores for School Problems at pre-test. Records indicated Basic performance on the Math MSA and a reading score at the low end of the proficient range.

Child B – Nine-year-old male who identified as bi-racial, with a diagnosis of Emotional Disturbance (ED) from a previous school. The student was new to the school at the start of the 2007-2008 school-year, and was evaluated by the school psychologist, who determined that this coding was appropriate. Assessment results indicated disorganized thought patterns and limited coping skills. On the BASC-2 the

teacher noted conduct problems in the significant range and impaired skills in functional communication. He had fewer noted school problems (learning and attention) at pre-test compared to the five other students. However, this student had known emotional problems that impacted his learning.

Child C-- Nine-year-old Hispanic male, no Special Education diagnosis. However, he was viewed as “at-risk” by his teacher and school psychologist due to poor academic scores. The group leader and co-leader noted concerns about organization of thoughts after the first couple of intervention sessions; the school’s psychologist planned on following up with this student. Despite difficulty with understanding, this student was well liked by peers. His teacher rated him as having significantly elevated internalizing and learning problems at pre-test. The teacher also rated him as having weak adaptive skills. The student did not rate himself as high on anxiety or depression. Grade 4 MSA scores from his records were Basic in both reading and math. A state administered IQ measure, the Otis-Lennon, indicated verbal and nonverbal skills in the 5th percentile compared to the normative sample. (This testing was not available for other students.)

Child D -- 9-year-old African-American male, who was tested by the school and given a diagnosis of Specific Learning Disability (SLD). His parents refused formal special education services, and he was not receiving any additional support. His parents gave consent to participate in the STORIES group because it was not tied to special education services. He rated himself as high on anxiety (T=71), and this was consistent with the teacher BASC-2 scores (Anxiety, T=72). The teacher also noted significant learning problems (T=74) and low adaptive skills. His functional

communication score (T=21) was in the 1st percentile. His MSA scores for both reading and math were in the low basic range. His reading was in the 2nd percentile compared to the normative sample.

Child E -- Nine-year-old African American male with no special education label, but a history of poor academic achievement. The teacher rated this student as having conduct problems, learning problems, and problems with functional communication at significant levels. MSA and other record review data are unavailable because the student left the district at the end of the year.

Child F -- 9-year-old African-American female, in the process of undergoing an assessment by the school psychologist in the spring of 2008 due to emotional and academic concerns. The student moved away at the end of the 2008-year, after completing 15 sessions of the STORIES program, and current special education status is unknown. The teacher ratings of this student indicate severe depression and anxiety at pre-test. Additionally, the teacher noted elevated scores in learning problems and low adaptive skills.

Procedures for the intervention

As discussed in Chapter 2, the STORIES program was developed to use the peer group process and the story form to enhance the complexity and organization of children's social reasoning (Teglasi & Rothman, 2001). The program utilizes guided reading of children's books to highlight important morals, understand emotions, and teach steps for solving problems. The group experience allows children to have the opportunity to practice new skills in a safe and structured environment. In this type of intervention, individual students are not singled out and have the opportunity to

benefit from the modeling provided by the leader and interactions with other group members. The activities and major lessons associated with this intervention make it adaptable to different populations of children. Additionally, because the program does not follow a script, situations that arise in group organically are used to teach lessons and promote the group process dynamically.

At the same time, STORIES sessions are highly structured, engaging children in a specific group discussion process using age and grade appropriate readings as the basis for the group discussion and activities (Teglasi & Rothman, 2001). In this intervention, elementary school students meet weekly with group leader and at least one co-leader who read stories aloud as children read along silently. The leaders facilitate discussion about the story and the problems encountered by the characters. The materials are carefully selected to ensure that the children can relate to the characters in the story, the emotions they experience, and the types of challenges they must overcome. In all of the stories the characters end up solving problems, often after several failed attempts. Group leaders highlight story themes and ask the children to make connections to their own lives. This process aims to improve social functioning and child cognition through experiential learning and the influence of the peer group (Teglasi & Rothman, 2001).

The author of this project led all fifteen group sessions. Her advisor, Dr. Teglasi, supervised the process. Supervision included listening to audio recording of the session, processing group events, and planning adaptations and lessons for the upcoming sessions. Regular meetings were held to discuss progress and plan future sessions.

The author of this paper had led and co-led several groups in 2006 and 2007. Two school psychology interns, other doctoral students, and the elementary school's counselor served as a co-leader for the sessions, ensuring there were two adults present at each one. Although not optimal, the co-leader varied depending on availability. A licensed psychologist and a University supervisor also supervised the graduate students, while the participating interns were supervised by their school supervisor. All project team members met regularly to discuss progress of groups and plan future sessions during weekly meetings with Dr. Teglassi and Dr. Rothman, the creators of the program.

A group of a lower cognitive level may need more specific examples to understand an idea (Nuijens, et al., 2006), and as mentioned earlier, changes had to be made to accommodate the unique needs of the group in this study. The group leader followed the same general plan as other STORIES groups in the larger project; however, the speed and complexity of discussion varied in several ways to match the cognitive level and behavior of the members of the group. First, the group members had a limited vocabulary, especially with words related to emotional expression, and group leader responded by including an activity that used a "feeling words" chart to help the members identify and label emotions (their own, others' and those of story characters). The group created a poster to improve "feeling words" vocabulary, and the leader conducted a "feeling thermometer" activity to help the students more precisely express their feelings about the books, the overall group, and their roles as group members. Second, while the group still read the same books as other group, the pace was slower as the leader gave more prompts and background knowledge on

certain topics, and leaders and co-leaders often had to model appropriate storytelling and responses for the students. Third, additional activities were built into the group to support learning, allow for practice and increase background knowledge. For example, the leader led the students in an activity where they had to decide if something was an *action* or a *reaction*. Finally, since the group also had difficulty defining and discussing intentions, more direct instruction was given in this area.

Program implementation

The group met weekly for 15 sessions. As with all of the groups in the larger study, the first session of the group in question focused on the group process of STORIES, using activities to build cohesion and set the framework and ground rules; this is common practice in many group-counseling programs (Yalom, 1995). During the first session, the group members participated in an icebreaker activity, heard an explanation of the aims of the group, and were asked to work together to select a group name and to generate the rules that members will follow. Group leaders always introduced and explained the concept of confidentiality and its limitations. The group members then worked on an art project, which displayed their (democratically) chosen name and a large poster with the rules they had generated with guidance from the leader. This activity served as a vehicle to teach reciprocity and cooperation because the children all worked on an individual piece that is knitted together into a cohesive whole. The group name artwork and the rules were displayed at all subsequent sessions to reinforce this lesson and remind the group of the rules they had created.

All groups who participated in the project covered and discussed the same

basic concepts and lessons in weeks that followed. These included steps required in problem solving, as well as themes and morals of stories. Children were taught to examine the context of each story's problem; the characters' internal feelings, intentions, plans and actions; the consequences the characters experienced; and the moral of each story. All groups also participated in hands-on activities related to the books discussed. Activities were varied throughout the group process. These included taking the perspective of different characters, such as "What would you do or what would you say in this situation?" discussions. They also encompassed the extension of concepts with specific activities, including the making of predictions, discussing "What if?" situations, and vocabulary building activities. At the completion of each book, children worked on "storyboard activities," in which they drew pictures on a poster to depict the characters' external circumstances, internal feelings, plans and intentions, actions, consequences, and the story's overall moral. The selected books for the group were *Big Al* (Clements, 1997) and several "Little Bill" books by Bill Cosby, including, *The Meanest Thing to Say* and *The Day I saw my Father Cry* (Cosby, 1997; Cosby, 2000).

All groups closed with a final session consisting of a party and review of the group process. Children were asked to recall themes from stories and important ideas (moral of the story) or lessons they learned. Group leaders thanked the students for their hard work and participation with treats during this last group meeting. For the selected group, a review of the group process and activities and a discussion of likes and dislikes also took place. All students received a certificate of completion and were congratulated for what they each excelled in. Their feedback was tape recorded

and is reported. This session was coded separately in terms of timing and activity, as it is qualitatively different. There was no clear divide between lunch and post-lunch in the final session as the group was set up to be a party/celebration and specific feedback was elicited. Descriptions of child feedback from Session 15 can be found in Appendix D.

Transcription Coding

Verbatim transcripts of the sessions are available from 13 of the 15 group sessions. These transcripts included the group leader and child verbal responses. Transcripts were reviewed by the group leader for accuracy and appropriate identification of child speakers. Sessions Four and Nine are not available due to malfunction of the digital tape recorder during those sessions. As mentioned above, the modified coding system was used to code leader verbalizations (GLIS; Nuijens et al., 2006). Child verbalizations were coded with the updated child scale (CVC; Teglassi & Rothman, 2001).

In order to score transcripts using the GLIS and CVC, the transcripts in this study were first broken down into thought units. Nuijens and colleagues (2006) defined thought units as “verbalizations by the interventionist that together make a cohesive idea.” Thought units were indicated in the text by a backslash, and numbered consecutively throughout each session. It was expected that there would be multiple units in each speaking turn. Turns were also coded numerically and included all interventions prior to changing speaker. Proportions of intervention types within each turn were also calculated. Additionally, thoughts that were interrupted and then continued were flagged and scored as only one unit. Thought units were marked on

transcripts by the author, and then checked by her advisor for agreement and accuracy. Reliability for thought units was very high (99%) with only two or three units per transcripts flagged for errors in thought units. Thought units were checked by a second rater for sessions 4, 7, and 8. Disagreements included cases where separating a thought unit into two units would facilitate coding. Corrections were included in the final data set.

Transcript Session Categories

Thought units and turns are each associated with a Session (the specific day during which the group intervention was delivered). To facilitate analysis of group leader interactions and child verbalizations, these Sessions were then further broken into the categories Phase, Book, and Activity as described below.

Phase: Pre-book Time versus Book Time

In this group, the program was offered during the combined lunch and recess hour to fit into the school context and not remove the children from instruction. Planning for the groups included the transition from the cafeteria to the group and discussion while children ate their meal. The entire session included the delivery of the STORIES program and related components, however, the children had the added distraction of transitioning and eating during the first portion.

As mentioned above, there is little research on lunchtime counseling interventions. These “lunch bunches” are common practice in schools. It is hypothesized that the eating while discussing may make it more difficult focus on the goals of the program. In order to compare Group Leader Interventions and Child Verbalizations during the two parts of group, all transcripts were marked at the point

when children clear their lunch trays to begin reading or engaging in activities. The first half of the group was called “Pre-Book” and the second half was called “Book.” During both portions of the group, the leader engages the students in discussion and invites participation. Both group phases (Pre-Book and Book) were expected to promote cohesion, model social skills, and encourage thinking about problem-solving and story related lessons and morals.

Book

Three books were read with the participants over the course of the intervention. These represented not only the different books, but sequential stages in the group process. Sessions were coded as Session 1, Book 1, Book 2, Book 3, and termination session (Session 15). The first book encompassed the earlier sessions, and so forth. Session components for each book were similar and included making predictions, guided reading, and discussion, and group activities. These various activities were also coded, as described below.

Activity

Activities within the group were also coded. Group activities fit within five categories: General Discussion, Review of Material, Guided Reading, Structured Activities, and Other. General Discussion included topics that were not directly tied to the book that were introduced by the leader or participants. Review included discussions of prior book content without the books being present. Guided Reading included the times when the books were on the tables and discussion was based on current book content. The structured activities included creating Story Boards about the books and other reinforcing activities. The Other category included the first and

last session.

Group Leader Intervention Codes (GLIS)

A major component of this current study was to examine group dynamics when conducting a group-counseling program with students who have significant learning/academic and behavioral problems. The leader's interventions were coded using a modified version of The Group Leader Intervention System (GLIS; Nuijens et al., 2006) (See Appendix A). The GLIS was developed specifically to code verbal interventions and responsiveness in groups with children, where the group leader remains the same. The system was developed by conducting a content analysis using transcripts from the Teglassi and Rothman (2001) study. Categories and subcategories were refined over time until transcripts could be coded reliably by different raters. The unmodified GLIS contains six global categories: structure, group cohesion, modeling, information, exploration, and feedback. Each of these global categories also had subcategories. In the previous study of this measure, Nuijens and colleagues established inter-rater reliability by have three independent raters code certain transcripts using the new measure. Percent agreement across categories was determined as a kappa statistic, which is thought to be a more robust measure than simple percent agreement. The kappa statistic takes into account the agreement that may have occurred by chance (Cohen, 1960). The results of the interrater analysis were $\text{Kappa} = 0.746$ with $p < 0.001$. The kappa calculation takes into account the relative observed agreement among raters ($\text{Pr}(a)$), and the hypothetical probability of chance agreement ($\text{Pr}(e)$) using the following equation:

$$\kappa = \frac{\text{Pr}(a) - \text{Pr}(e)}{1 - \text{Pr}(e)},$$

As a general rule, kappa values of 0.60 to 0.79 are substantial, and above 0.80 are considered outstanding (Landis & Koch, 1977). An acceptable κ was found for nine of the eleven proposed GLIS sub-categories. The two less reliable categories were discontinued.

Modifications and Use of GLIS in Current Study

The Group Leader Intervention System (GLIS) was modified for the purpose of this study. The revisions were made based on some of the findings of the Nuijens et. al., (2006) study and were also by the need to assess the increased level of scaffolding provided by the group leader. As mentioned, scaffolding is a key feature of this study. The modified version (See Appendix A) maintained the six Global Categories: Structure, Modeling, Group Cohesion, Information, Exploration, and Feedback. The subcategories were updated to better capture leader supports and scaffolds. In the case of Structure (a Global Category), fewer subcategories were coded since they were not central to the research questions. However, new subcategories were added based on the nature of this study (These are described in detail below). Furthermore, a new scale was added to the GLIS called Scaffolding. Scaffolds were used to enable the students to understand the concepts and keep them engaged in the activities. Scaffolding is defined as the level of support the leader provided prior to seeking responses from the group members. This was a four item ordinal scale that applied to all exploration questions (see examples in Appendix A).

The general use of this system was similar to previous studies. The same global categories were used. Another adjustment was that all verbalizations were coded for the presence or absence of emotional content and empathy. The

modifications made to several of the subcategories are described below:

Structure

Structure was still operationally defined as strategies to manage the flow of the sessions. Four new subcategories were created for the purpose of this study. The original three GLIS subcategories (Long-term, Routine Management, and Behavioral Management) were all coded as general structure. A new subcategory, Positive Structure, included interventions that pointed out the prosocial behaviors of group members to reinforce or promote that behavior. Negative structure included pointing out negative or less acceptable behaviors to allow for correction. Additionally, due to the unique characteristics of a lunch time group a category called Lunch Structure was created. This category captured interventions aimed at moving the group process along that related specifically to the lunch aspect of the group. This new category included instances where the leader was distributing napkins, responding to spills, or asking about food. These verbalizations would not take place in a group that does not take place during the lunch hour.

Group Cohesion

Group Cohesion did not change from the original GLIS. It captured efforts to engage members in the group and foster a sense of group identity or belonging. The two subcategories were Team building and Emotional Engagement.

Modeling

The Global Category and subcategories of Modeling also remained the same. These interventions were demonstrations of how to perform an action or express an idea. The two subcategories were Self-Disclosure and Interactions with others.

Information

Information interventions included providing known facts, rationales, clarifications, or explanations related to new or previously covered readings or topics. The subcategories of this global intervention were changed to include: New Information provided spontaneously, Review of Information, and Direct Responses to student questions. Review of information was a new category added for this study. Content in this category is offered frequently to aid student recall and is different than information spontaneously offered as part of a discussion.

The last subcategory, in which information was provided in direct response to a group member's question, was coded only for child statements that were explicit queries. Otherwise, the response was coded as Feedback.

Exploration with Scaffolding

Exploration interventions included questions that invited the group members to think about an idea, event, or feeling. The three subcategories remained the same: Exploration of Reading, Exploration of Group Event, or Exploration of Group Experiences. The major

change to this category was the new scale called “Scaffolding.” This was required for all exploration questions. This category was added to the GLIS to capture the amount of support the leader had to provide to keep the participants engaged and attempt to improve their comprehension of the topics covered in the group. Scaffolding was rated on a four point scale: low, medium, high, and very high. Very high scaffolds represented interventions that promoted engagement rather than requiring cognitive contributions to group. These included instances where the group leader asked the students to repeat information that was just provided or simply to agree. A rule was created that a child verbalization following a very high (level 4) scaffold could earn a maximum CVC score of 4 (simple, on-target). It was judged that since the correct answer was provided in the scaffold the child was not demonstrating higher level cognition on their subsequent responses. While a very high scaffold precludes a subsequent CVC score of 5 or 6, these types of leader supports were not typically provided unless there had been indication of low level understanding. Therefore, it is unlikely that the addition of this coding rule obscured potential high level child responses.

Feedback

Feedback was not changed from the original GLIS. These interventions were responses to group members’ thoughts, ideas, feelings, and behavior. The four subcategories were: Simple,

Paraphrase or Restatement, Reframing, or Elaboration. All Feedback was coded for Valence as Positive, Negative, or Neutral.

Emotional Content

In the validation study of the GLIS (Nuijens et. al., 2006) post-hoc analyses of emotional content and empathetic statements were conducted; these features were classified “affective responses.” These occurred in 9% of all interventions in the previous study and occurred across categories, with most occurring during Feedback. For this study, emotional content was coded for all interventions and included all leader interventions that contained explicit feeling words. While many more verbalizations may have implied emotional content, a rule was created by the researchers to only include concrete examples that contained an explicit feeling word. This rule improved coding reliability for this category.

Empathy

The presence of empathy was applied to all categories above. These included any attempt to support the feelings of others and show understanding. Soothing, normalizing, or pointing out the feelings of others were coded under this category.

Child Verbalization Codes (CVC)

The coding of child verbalizations was part of the analyses in both previous STORIES projects. In these applications of the CVC, a 5-point classification was developed and applied by the researchers to code individual student responses that

were offered spontaneously or in response to leader questions. Responses were coded from 1 (negative, uncooperative, or disrespectful) to 5, (interpretive or integrative). These higher-level responses expected children to show insight into the psychological world of the characters in the stories, themselves, or group members (Teglasi & Rothman, 2001; Rahill & Teglasi, 2003). For children, one speaking “turn” (as defined earlier) was considered a thought unit. However, if the child was interrupted and then continued with the same story or answer, the response was still to be coded as one thought unit. Transcripts were marked for these continued responses.

An acceptable level of inter-rater reliability was found in these studies. Teglasi and Rothman (2001) scored sets of responses using this scale. Reliability was calculated by looking at percent agreement, which was 89.3. This was found by dividing agreement of responses (within one point) over the total number of responses. Rahill and Teglasi (2003) used the same scale and found inter-rater agreement on students' cognitive and behavioral codes to be over 90%. In this latter case, the criterion was an exact match (using the 0-3 scale).

Modification and Use of CVC in Current Study

For the current study, a modified coding scheme from previous STORIES projects was used to assess children’s cognitive understanding over the course of the 15 sessions. (The updated version of the CVC can be found in Appendix B.) First, as opposed to a 5-point scale, it used a 6-point scale similar to the one modified for a 2006 pilot study (Teglasi, Rothman, Sedlik, & Sweeny, 2006). The same levels were used for this study. However, due to the unique behaviors of this group subcategories were created for the second level. The creation of subcategories was necessitated by

having at least one person in the group whose responses were not all only off-task or incorrect, but were a series of run on tangential associations. In the current study, levels were: 1= negative, uncooperative or disrespectful; 2=off task, with 2A indicated highly disorganized responses and 2B for interruptions, off-topic or clearly incorrect responses, 3=tangential or loosely connected, 4=on target, responsive (answers factual questions), 5=spontaneous, accurate contribution, 6=interpretive or integrative (See Appendix B for details). Finally, this study established a consistent methodology for dealing with interruptions and recording issues: if a child began a response and was interrupted or was not clear on the tape a default score of 4 was applied to that speaking turn.

Inter-rater Reliability of GLIS and CVC

Inter-rater reliability for scores on all GLIS categories was established by having a second rater code three transcripts (Session Four, Seven, and Eight). Reliability for GLIS scoring is portrayed in Table 7 below. Session Seven was scored in its entirety by two raters. There were 540 thought units (N=540) within the Session, as agreed upon by the two raters. The data from both raters was entered in tandem with a 1 indicating the category and subcategory selected and a 0 indicating categories and subcategories that were not selected.

Cohen's kappa (Cohen, 1960) was calculated to assess agreement between the two raters. All κ values for GLIS and CVC codings indicated a high level of inter-rater agreement (>0.80), save for categories with low frequency of occurrence in these sessions.

Percent agreement is also reported as an additional indicator of agreement. Kappas and percentage agreement appear to vary significantly for some categories because in the Kappa calculations for all categories (save Scaffolding, Valence, CVC, and Type II) each instance in which raters both assigned a thought unit as not belonging to that category counted as agreements. This was done even if such thought units were assigned to different categories: for instance, when one rater coded a thought unit as Exploration and the other coded it as Feedback, this counted as an agreement for other categories (e.g., Information) because both agreed that it was not those categories (e.g., not Information). Please see Table 7 for a summary of these measures.

Furthermore, for the subcategory Type 2 of Level 2 within the CVC, the κ value represents agreement when there was already agreement on the scale (i.e., Level 2); it does not encompass situations in which raters disagreed on the scale rating in order to not conflate this situation with disagreement on category with disagreement on subcategory.

For the items that represented scales, the ICC (intraclass correlation) was also calculated to address correspondence and agreement between the raters and is displayed on Table 7. This statistic looks at the between subject variance over the total variance and is useful in determining inter-rater reliability when a number of subjects are being rated. The average measures index was selected; this ICC is an index for the reliability of different raters (two or more) averaged together. The Average measures ICC is always higher than the Single measures ICC (McGraw & Wong, 1996).

Cronbach's alpha or the average measures ICC for the four scales were all above 0.8, which is considered to be high agreement.

Table 7
Coder Reliability

Category	N ^a	% Agreement	Kappa of Agreement ^b	Cronbach's Alpha
Structure	104	92.2%	0.947	
General	90	94.4%	0.967	
Positive	5	40.0%	0.698	
Negative	5	100.0%	1.000	
Lunch	4	75.0%	0.874	
Group Cohesion	5	100.0%	1.000	
Team Building	2	100.0%	1.000	
Engagement	3	100.0%	1.000	
Modeling	13	91.7%	0.957	
Self-Disclosure	7	85.7%	0.928	
Interaction	6	66.7%	0.832	
Information	33	81.8%	0.904	
New	16	81.3%	0.904	
Review	6	50.0%	0.748	
Direct Response	11	100.0%	1.000	
Exploration	82	96.3%	0.979	
Reading	23	100.0%	1.000	
Group Experience	26	92.3%	0.960	
Outside Experience	33	97.0%	0.984	
Feedback	107	94.4%	0.965	
Simple	38	86.8%	0.930	
Paraphrase	32	93.8%	0.967	
Reframing	16	75.0%	0.872	
Elaboration	25	88.0%	0.937	
Empathy	13	69.2%	0.843	
Emotional Content	27	85.2%	0.922	
Scaffolding	81	81.5%	0.746	0.881
Valence	100	93.0%	0.602	0.869
CVC	209	84.69%	0.784	0.942
Type II	46	91.3%	0.725	0.843

Note. All statistics were significant

^aN counts each instance in which either rater selected the category or subcategory, save for Scaffolding and Valence. These were only evaluated for agreement in the cases which the raters had both agreed on the associated main category.

^bKappas and % agreement appear to vary significantly for some categories because in the Kappa calculations for all categories (save Scaffolding, Valence, CVC, and Type II) each instance in which raters both assigned a thought unit as not belonging to that category counted as agreements.

Summary

This research study examined the group process during a course of the STORIES program for one group leader and six students. This group was teacher referred for internalizing behaviors, but presented with both social-emotional and academic needs. The project serves as an intensive “case study” showing the patterns of responses of the child participants and of the group leader. In this study, analyses examined the updated leader codes and the child verbal cognitive levels across sessions, books, phases (Pre-Book and Book), and the various activities. Additionally, the proportions of leader interventions within speaking turns allowed for the examination of the patterns that emerged between the leader and participants. Analyses looked at what happened before and after various leader interventions and child responses of various cognitive levels. Additionally, the patterns surrounding the higher and lower child responses were also examined.

Chapter 4

Data were analyzed using IBM® SPSS® Statistics Version 20 (IBM, 2011). Two distinct data sets were created. In the first set, data from the transcripts were entered chronologically by thought unit. As described in Chapter 3, these were either leader verbalizations yielding a cohesive idea or single speaking turn for a child participant. Each unit was coded for session number, phase (pre-book or book), activity (general discussion, review of books, guided reading, structured activity, and other), and current book (no book, book 1, book 2, book 3, and final session) utilized within the session. Current book was used as a proxy for time to examine variables over the course of the intervention. Each data point was coded for speaker and leader verbalizations and for the direction of the leader intervention (to whom the intervention addressed). All leader verbalizations were coded using the updated Group Leader Interventions Systems (“GLIS”) (See Appendix A); units were coded for category, subcategory, and presence of emotional content and empathy. The child verbalizations were coded using the CVC scale (ranging from 1 to 6) and coded for the presence of emotional content or empathy. This general data set was used to answer questions about group functioning over the various phases, books, and activities. Specifically, frequency data and chi square analyses examined differences in the use of GLIS interventions over these group components to determine if there were significant departures in the leader’s use of any interventions compared to what would be expected. The CVC data allowed for analyses of the children’s cognitive level as a whole and by individual group members within and across various group components.

A second data set was created to study the reciprocal interactions between the leader and group members within the group process. In this data set, the data were organized and aggregated by speaking turn, with speaking turns alternating between the leader and child speakers. A speaking turn consisted of a group of uninterrupted verbalizations (thought units) by one speaker. There were 5,158 speaking turns in total (alternating leader and child) as compared to the 7,816 thought units in the total data set. The organization of the data in this manner allowed for the study of the reciprocal dynamic between the group leader and group members. Data were structured in a way that distinguished the leader interventions before and after the child verbalizations. Leader speaking turns often included a series of thought units, but the majority of child turns included just one thought unit. The average number of leader interventions (GLIS) within a leader turn was 2.08 ($M=2.08$, $SD=1.68$). There were 2,380 leader turns with interventions within a turn ranging from 1 to 26 consecutive units. The sum of each of the subcategories within turns was calculated, and the sum of empathy and emotional content within turns was also calculated. For ordinal variables, such as scaffolding level the mean level of scaffolding within a turn was calculated.

Proportions of GLIS interventions within speaking turns were used in assessing the reciprocal dynamic in successive responses of the leader and participants. In order to calculate proportions, the sum of the global GLIS categories was found by combining the counts of the subcategories. Using SPSS, the number of GLIS interventions within each global category divided by the total number of interventions in the turn yielded the proportions of each type of intervention within all

speaking turns. For example, if structure accounted for two out of four interventions within a turn, the proportion would be .50. The aggregated data set, with alternating leader and child turns, was used to answer research questions about the types and frequencies of leader interventions that preceded and followed child responses at various cognitive levels.

In addition to looking at cognitive levels within turns, the child data were broken down further to examine the leader interventions that preceded or followed high (CVC=5-6) or low (CVC=1-2) child verbalizations. Since the modal child response was a level 4 (simple, on-target), analyses focused on higher and lower level responses within the group.

Descriptive Statistics

A total of 7,816 thought units were coded from the thirteen available sessions. The majority of these units, 4,956, were leader interventions (GLIS) and 2,861 units were child verbalizations (CVC). The breakdown of frequencies and proportions of GLIS categories are presented in Table 8 below. There were 500 units total that included emotional content; 350 were GLIS or Leader verbalizations and 150 were CVC or Child Verbalizations. The majority of empathic statements came from the leader; 96 of the 102 units coded as “empathy” were leader verbalizations.

Table 8
Frequencies of GLIS Categories in Data Set

Category (Global- and Sub-)	Frequency	Proportion within Global Category	Proportion of Total Thought Units
Total	4,956	N/A	100.0%
Structure	1,374	100.0%	27.7%
General	1,060	77.1%	21.4%
Positive	68	4.9%	1.4%
Negative	89	6.5%	1.8%
Lunch	157	11.4%	3.2%
Group Cohesion	176	100.0%	3.6%
Team Building	82	46.6%	1.7%
Emotional Engagement	94	53.4%	1.9%
Modeling	253	100.0%	5.1%
Self-Disclosure	111	43.9%	2.2%
Interaction	142	56.1%	2.9%
Information	409	100.0%	8.3%
New	136	33.3%	2.7%
Review	147	35.9%	3.0%
Direct Response	126	30.8%	2.5%
Exploration	1,271	100.0%	25.6%
Reading	483	38.0%	9.7%
Group Event	418	32.9%	8.4%
Group Member Experience	370	29.1%	7.5%
Feedback	1,473	100.0%	29.7%
Simple	382	25.9%	7.7%
Paraphrase	534	36.3%	10.8%
Reframe	305	20.7%	6.2%
Elaboration	252	17.1%	5.1%
Scaffolding	1,271	100.0%	25.6%
Low	91	7.2%	1.8%
Medium	163	12.8%	3.3%
High	547	43.0%	11.0%
Very High	470	37.0%	9.5%
Valence	1,473	100.0%	29.7%
Neutral	1,312	89.1%	26.5%
Negative	18	1.2%	0.4%
Positive	143	9.7%	2.9%
Emotional content	500	N/A	10.1%
Empathy	102	N/A	2.1%

Pre-Book v. Book Group Phases

A focus of this project was to examine the types and frequencies of group leader interventions as measured by the GLIS during different parts of the group process. It was predicted that there would be some differences between these two phases based on the distraction of eating lunch during the pre-book or first phase. The number of verbalizations across the two phases was relatively even; 51% of verbalizations occurred in the Pre-Book Phase and 49% occurred in the Book Phase. Since there is limited research on lunch-time interventions it was unclear how leader behaviors would differ during the two phases.

Frequencies and Chi Square analyses of the global GLIS categories by pre-book and book group phases are reported in Table 9 below. Of the global GLIS categories, only Structure and Modeling interventions differed significantly across the pre-book and book phases at the $p > .05$ level. The general category of Exploration did not differ by phase; however, the three subcategories of Exploration were significantly different by phase indicating variation in the content of leader queries, but not frequencies across the two phases.

Table 9
Frequencies and Chi Squares of GLIS Categories by Phase

Category	Phase 1 (Pre-book)		Phase 2 (Book)		Total	χ^2	df	p	Phi
	n	%	n	%					
Structure	662	48	712	52	1,374	12.89	1	<.001	.04
Group Cohesion	88	50	88	50	176	0.48	1	.49	.01
Modeling	152	60	101	40	253	5.91	1	.02	-.03
Information	198	48	211	52	409	3.00	1	.08	.02
Exploration	642	51	629	49	1,271	2.58	1	.11	.02
Feedback	788	53	685	47	1,473	0.62	1	.43	-.01
Total	2,530	51	2,426	49	4,956				

Structure

When examining the 4,956 Group Leader Interventions, 1,374 units were coded as structure (27.72%). This occurrence of structure differed significantly by phase compared to what was expected, $\chi^2(1, N = 1,374) = 12.89, p < .001$. The presence of structure interventions occurred slightly less frequently during the pre-book phase (48.2%) than during the book phase (51.85%) of group. Since structure interventions are used to move the group process along and maintain group order, it is logical that the group leader monitored turn-taking and the group process slightly more during the second half of the group sessions.

Table 10 below indicates the differences in frequencies between the subtypes of Structure over the two phases (pre-book and book). As expected, Lunch Related Structure interventions occurred much more frequently during the pre-book phases where the students were actively eating their meals (over 80%) compared to during the Book Phase. There were still some instances of this type of structure during the second phase to deal with residual food related issues or questions that occurred after lunch trays were removed. Positive and negative structure occurred relatively evenly across phases. General structure occurred more during the Book Phase; 57.7% of general structure interventions occurred during the second part of group. This was the most common type of structure across phases and it included interventions such as turn-taking and cuing group members where to look or what to do.

Table 10
Types of Structure by Phase

Structure Type	Phase 1 (Pre-Book)	% Total	Phase 2 (Book)	% Total	Total
General Structure	459	43.3%	601	56.7%	1,060
% Total	69.3%		84.4%		
Positive Structure	30	44.1%	38	55.9%	68
% Total	4.5%		5.3%		
Negative Structure	46	51.7%	43	48.3%	89
% Total	6.9%		6.0%		
Lunch-Related Structure	127	80.9%	30	19.1%	157
% Total	19.2%		4.2%		
Total	662		712		1,374

Modeling

Modeling Interventions (including modeling an interaction and modeling self-disclosure) accounted for 5.19% of all GLIS interventions (253 cases). Self-Disclosure occurred 111 times and modeling an interaction occurred 142 times. In this case, more modeling occurred during pre-book (60.1%) compared to during Book or Phase 2 (39.9%). This occurrence of Modeling interventions differed significantly by pre-book and book phases, $\chi^2 (1, N = 253) = 5.91, p=.02$. This indicates that there was more use of the overall modeling category (self-disclosure and modeling interactions) during the phase of group where students ate lunch. Although this value was significant, the low phi value indicates a weak relationship between phase and use of modeling.

In terms of the subgroups within modeling, modeling a self-disclosure occurred more during pre-book (lunch). Two-thirds (66.7%) of this type of modeling occurred during lunch time. The leader often disclosed personal stories during this portion of group as a way to demonstrate appropriate sharing and give the students examples of how to tell about personal experiences. Modeling an interaction

occurred more evenly across the two sessions, with 54.9% occurring during the first phase (pre-book). The leader modeled appropriate ways to interact with others (for example, sharing) during both phases. As mentioned in the literature review, appropriate modeling and self-disclosing are often considered to be positive ingredients in a group counseling environment (Leichtentritt & Shechtman, 1998; Pan & Lin, 2004).

Exploration Subcategories: Reading, Group Events, Group Member Experiences

The global category of Exploration, which indicates leader queries, was not significantly different by phase. This indicates that similar rates of this intervention occurred across pre-book and book phases. However, based on the assumption that the content of these questions and related discussion were different over the two phases, individual chi square analyses were run for the three subcategories of exploration: Exploration of Reading, Exploration of Group Events, and Exploration of Group Member Experiences. All three of these subcategories were significantly different by phase. First, Exploration of Reading differed by phase compared to what was expected, $\chi^2(1, N = 418) = 18.663, p < .001$. Significantly more questions about the reading content occurred during the second or book phase (n=275, 56.9%) compared to pre-book (n=208, 43.1%). This was expected because materials were not distributed until after lunch trays were removed from the group table. The group reviewed book material and made predictions about upcoming book events during the pre-book phase, which accounts for the more than 40% of book related questions that occurred in the first phase.

Second, Exploration of Group Events differed by phase compared to what was

expected, $\chi^2 (1, N = 418) = 16.016, p <.001$. Significantly more questions about group events or experiences occurred during the second, or book phase, and these occurred in the same proportions as Exploration of the reading. In the book phase there were 238 instances of this type of exploration (56.9%) compared to 180 in the pre-book phase (43.1%).

Third, Exploration of Group Member Experiences differed by phase compared to what was expected, $\chi^2 (1, N = 370) = 40.261, p <.001$. However, in this case significantly more questions about group member experiences occurred during the pre-book, or lunch phase, (68.6%) compared to the book phase (31.4%). Overall, all three types of exploration occurred across the two phases; however, there were more questions and discussion related to group member experiences during the first part of group and more discussion about group events and the reading during the second part of group.

The relationships between these GLIS variables and Phase (Pre-book/Book) are presented on Table 9 above. The remaining GLIS variables, which did not yield significant differences by phase (pre-book or book), are also presented. The strength of the relationships is represented by Phi, which takes sample size into account using the following formula:

$$\Phi = \sqrt{\frac{\chi^2}{n}}$$

In general, Phi values are an appropriate measure of effect size for 2x2 chi square analyses. Phi values of .1 indicate a weak relationship or small effect size, values of .3 are considered moderate, and .5 would indicate a large effect (Cramer, 1999; Volker, 2006). While the relationship between phase and the GLIS variables

Structure and Modeling were significant, the strength of this relationship was weak.

GLIS Variables and Activities: general discussion, discussion/review of stories, guided reading, structured activities, and other (first/last session)

Chi Square analyses were used to determine how leader interventions compared during the five different types of activities within the group intervention: general discussion, discussion/review of stories, guided reading, structured activities, and other (first/last session). These analyses explored the use of the global GLIS categories by the type of group activity. Cramer’s V is the appropriate measure for strength of relationship when the matrix is larger than 2x2. Gravetter and Wallnau (2004) provide guidelines for interpreting Cramer’s V while taking into account the degrees of freedom in the analysis. The chi square analyses and Cramer’s V values are presented on Table 11 below.

Table 11
Frequencies and Chi Squares of GLIS Categories by Activity

Category	Activity 1		Activity 2		Activity 3		Activity 4		Activity 5		Total	χ^2	df	p	Cramer's V
	n	%	n	%	n	%	n	%	n	%					
Structure	379	28	255	19	305	22	246	18	189	14	1,374	7.71	4	.10	.31
Group Cohesion	68	39	11	6	14	8	20	11	63	36	176	105.37	4	<.001	.12
Modeling	88	35	37	15	30	12	48	19	50	20	253	29.29	4	<.001	.06
Information	82	20	82	20	79	19	94	23	72	18	409	28.72	4	<.001	.06
Exploration	284	22	310	24	326	26	196	15	155	12	1,271	39.75	4	<.001	.07
Feedback	372	25	350	24	353	24	195	13	203	14	1,473	24.26	4	<.001	.06
Total	1,273	26	1,045	21	1,107	22	799	16	732	15	4,956				

Note . Activities were respectively: General Discussion, Discussion Related to Books, Guided Reading, Structured Activities, and Other (Introductory and Termination Sessions).

Follow up analyses included 2x2 chi squares of each potential permutation of GLIS variable and activity. This allowed for an understanding of the relations between each GLIS category and the five activities providing depiction of how the

five group activities differed from one another within the GLIS global categories. There was some variability in the total number of verbalizations within each category. Activity 1 (general discussion) made up 26% of the leader verbalizations within the group, Activity 2 (review of book or book discussion) accounted for 21% of the leader verbalizations, Activity 3 (guided reading) made up 22% of the leader verbalizations, Activity 4 (Structured Activities) made up 16%, and the opening and termination activities made up 15% of the verbalizations. Due to some of these differences in proportions of leader verbalizations within the different activities, some of the follow-up Chi Square analyses comparing groups were significant even when the number of instances in each GLIS category was similar. Chi square analyses were run individually for each potential combination of two activities by each GLIS category. When examining activity, all GLIS categories with the exception of Structure differed significantly across the various group activities compared to the expected, at the $p < .001$ level. Structure occurred similarly across all activities. Using the guidelines provided by Gravetter and Wallnau (2004), the strength of the relationships between the individual GLIS global categories and activity was small for Modeling, Information, Exploration, and Feedback. The relationship between group cohesion and activity was medium or moderate based on the Cramer's V values.

Group Cohesion within Activities

The percentage of Group Cohesion interventions, including team building and emotional engagement, differed significantly by activity, $\chi^2(4, N = 176) = 105.37, p < .001$. The relationship for this overall analysis is considered to be moderate based

on the Cramer's V value of .12. Follow up chi square analyses displayed on Table 12. These analyses represent individual 2x2 chi squares of each activity pairing by group cohesion indicated that the most group cohesion interventions occurred in the "other category" which included the first and last sessions. This was significantly higher than general discussion, book related discussion, guided reading and structured activities. Structured activities had significantly more cohesion than the discussions or reading. It was during this time where the group members were able to work together on projects to reinforce their learning; while the students were working the leader was able to comment on their work as a group and a team. Discussions related to the book and guided reading did not differ. Finally, general discussion had more cohesion than discussions related to book or guided reading.

Table 12
Chi Squares of Group Cohesion by Activity

Activity	1	2	3	4	5
1	X	$\chi^2=26.970$ p<.001	$\chi^2=25.120$ p<.001	$\chi^2=7.228$ p=.007	$\chi^2=13.010$ p<.001
2		X	$\chi^2=0.177$ p=0.674	$\chi^2= 5.595$ p=.018	$\chi^2=62.745$ p<.001
3			X	$\chi^2=4.100$ p=.043	$\chi^2=61.629$ p<.001
4				X	$\chi^2=29.050$ p<.001
5					X

Note. "1" is "Activity 1: General Discussion" (n=68); "2" is "Activity 2: Related to Book/Reading" (n=11); "3" is "Activity 3: Guided Reading" (n=14); "4" is "Activity 4: Structured Activities" (n=20); "5" is "Activity 5: First/Last" (n=63). The previous frequencies indicate the occurrences of Group Cohesion by each Activity

Modeling within activities

The occurrence of modeling interventions also varied significant by activity, $\chi^2(4, N = 253) = 29.29, p < .001$ indicating that the leader's use of this type of intervention changed depending on group activity. Individual chi square follow-up analyses are presented on Table 13 below. Follow up analyses indicated that modeling interventions occurred most frequently in activity 1 (general discussion) compared to discussion about books or guided reading. As mentioned above, the leader would often self-disclose stories during general discussion to model appropriate storytelling. Activity 1 did not differ significantly from structured activities or first/last session. Activity 4 (Structured activities) had more use of modeling than activities 2 and 3, but was no different from 5. And Activity 5 also had more modeling than Activity 2 or 3. Overall, less modeling occurred during review of the books or guided reading. During these times the leader was less likely to disclose or model an interaction.

Table 13
Chi Squares of Modeling by Activity

Activity	1	2	3	4	5
1	X	$\chi^2=8.810$ p=.003	$\chi^2=17.530$ p<.001	$\chi^2=0.066$ p=.797	$\chi^2=0.476$ p=.490
2		X	$\chi^2=1.350$ p=.245	$\chi^2=5.934$ p=.015	$\chi^2=10.679$ p=.001
3			X	$\chi^2=12.830$ p<.001	$\chi^2=19.441$ p<.001
4				X	$\chi^2=.695$ p=.404
5					X

Note. "1" is "Activity 1: General Discussion" (n=88); "2" is "Activity 2: Related to Book/Reading" (n=37); "3" is "Activity 3: Guided Reading" (n=30); "4" is "Activity 4: Structured Activities" (n=48); "5" is "Activity 5: First/Last" (n=50). The previous frequencies indicate the occurrences of Modeling by each Activity

Information within activities

Information provided by the leader to give new information, review information, or answer direct questions occurred at different rates across activities, $\chi^2(4, N = 409) = 28.72, p < .001$. Based on follow-up analyses more information was provided during the first/last sessions than in general discussion, discussion of books, or guided reading. In the first session information was provided about group functioning. Additionally, in the termination session information was provided by the leader in response to questions. Other activities did not differ significantly from one another. These results are presented on Table 14 below.

Table 14
Chi Squares of Information by Activity

Activity	1	2	3	4	5
1	X	$\chi^2=1.500$ p=.221	$\chi^2=0.658$ p=.417	$\chi^2=0.835$ p=.361	$\chi^2=5.733$ p=.017
2		X	$\chi^2=3.630$ p=.057	$\chi^2=3.792$ p=.052	$\chi^2=10.754$ p=.001
3			X	$\chi^2=.026$ p=.871	$\chi^2=2.443$ p=.118
4				X	$\chi^2=1.660$ p=.198
5					X

Note. "1" is "Activity 1: General Discussion" (n=33); "2" is "Activity 2: Related to Book/Reading" (n=17); "3" is "Activity 3: Guided Reading" (n=32); "4" is "Activity 4: Structured Activities" (n=24); "5" is "Activity 5: First/Last" (n=30). The previous frequencies indicate the occurrences of Information by each Activity

Exploration within activities

Chi square analyses of exploration by activity also indicated significant differences, $\chi^2(4, N = 1,271) = 39.75, p < .001$. Exploration was most likely to occur during guided reading (Activity 3) and discussion of books (Activity 2). These two activities were not different from each other in the leader's use of exploration, but they had more exploration than general discussion, structured activities, and first/last sessions. Fewer exploration questions occurred during structured activities where the children were working on projects that reinforced their learning. These results are presented on Table 15 below. The breakdown of the subtypes of exploration also varied by activity; frequencies and proportions are presented on Table 16 below. As expected, Exploration of the reading occurred most frequently during activity 2 and 3. Explorations of group member experiences occurred at a high frequency during

general discussion (44.86%). Explorations of group events occurred evenly and most frequently during activities 1, 4, and 5.

Table 15
Chi Squares of Exploration by Activity

Activity	1	2	3	4	5
1	X	$\chi^2=27.080$ p<.001	$\chi^2=24.640$ p<.001	$\chi^2=4.896$ p=.027	$\chi^2=0.730$ p=.393
2		X	$\chi^2=0.095$ p=.758	$\chi^2=5.848$ p=.016	$\chi^2=12.141$ p<.001
3			X	$\chi^2=4.71$ p=.030	$\chi^2=10.626$ p=.001
4				X	$\chi^2=1.253$ p=.263
5					X

Note. "1" is "Activity 1: General Discussion" (n=284); "2" is "Activity 2: Related to Book/Reading" (n=310); "3" is "Activity 3: Guided Reading" (n=326); "4" is "Activity 4: Structured Activities" (n=196); "5" is "Activity 5: First/Last" (n=155). The previous frequencies indicate the occurrences of Exploration by each Activity

Table 16
Frequencies and Proportions of Exploration Subcategories by Activity

	Activity 1	%	Activity 2	%	Activity 3	%	Activity 4	%	Activity 5	%	Total
Exploration of Reading	5	1.0%	211	43.7%	204	42.2%	46	9.5%	17	3.5%	483
%	1.8%		68.1%		62.6%		23.5%		11.0%		
Exploration of Group Events	113	27.0%	26	6.2%	54	12.9%	113	27.0%	112	26.8%	418
%	39.8%		8.4%		16.6%		57.7%		72.3%		
Exploration of Group Member Experiences	166	44.9%	73	19.7%	68	18.4%	37	10.0%	26	7.0%	370
%	58.5%		23.5%		20.9%		18.9%		16.8%		
Total	284		310		326		196		155		1,271

Feedback within activities

Feedback was the most frequently occurring GLIS code overall. Feedback levels differed by activity in a similar pattern to exploration, $\chi^2(4, N = 1,473) =$

24.26, $p < .001$. Follow-up indicated that the most feedback interventions occurred during the activities related to review/discussion the book and guided reading.

Activity 2 (review/discussion of book) had more exploration than activities 1, 4 or 5, but was not different from Activity 3 (guided reading). Activity 3 had more exploration than 1 and 4, but was not significantly different from 5. These results are displayed in Table 17 below. Frequencies and proportions of the subtypes of Feedback by activity categories are displayed in Table 18 below.

Table 17
Chi Squares of Feedback by Activity

Activity	1	2	3	4	5
1	X	$\chi^2=13.050$ $p<.001$	$\chi^2=7.037$ $p=.008$	$\chi^2=1.107$ $p=.293$	$\chi^2=1.000$ $p=.317$
2		X	$\chi^2=0.906$ $p=.341$	$\chi^2=16.639$ $p<.001$	$\chi^2=4.258$ $p=.039$
3			X	$\chi^2=10.68,$ $p=.001$	$\chi^2=1.556$ $p=.212$
4				X	$\chi^2=3.237$ $p=.072$
5					X

Note. "1" is "Activity 1: General Discussion" (n=372); "2" is "Activity 2: Related to Book/Reading" (n=350); "3" is "Activity 3: Guided Reading" (n=353); "4" is "Activity 4: Structured Activities" (n=195); "5" is "Activity 5: First/Last" (n=203). The previous frequencies indicate the occurrences of Feedback by each Activity

Table 18
Frequencies and Proportions of Feedback Subcategories and Activity

	Activity 1	%	Activity 2	%	Activity 3	%	Activity 4	%	Activity 5	%	Total
Simple	119	31.2%	81	21.2%	77	20.2%	53	13.9%	52	13.6%	382
%	32.0%		23.1%		21.8%		27.2%		25.6%		
Paraphrase	118	22.1%	134	25.1%	141	26.4%	68	12.7%	73	13.7%	534
%	31.7%		38.3%		39.9%		34.9%		36.0%		
Reframe	80	26.2%	67	22.0%	76	24.9%	40	13.1%	42	13.8%	305
%	21.5%		19.1%		21.5%		20.5%		20.7%		
Elaborate	55	21.8%	68	27.0%	59	23.4%	34	13.5%	36	14.3%	252
%	14.8%		19.4%		16.7%		17.4%		17.7%		
Total	372		350		353		195		203		1,473

Structure within activities

The breakdown of the frequencies by subcategories is also presented on table 19 below. Overall, Structure interventions were not significantly different by activity; the other five global categories yielded significant differences these are all presented on Table 11 above.

Table 19
Frequencies and Proportions of Structure Subcategories and Activity

	Activity 1	%	Activity 2	%	Activity 3	%	Activity 4	%	Activity 5	%	Total
General	257	24.2%	202	19.1%	270	25.5%	204	19.2%	127	12.0%	1,060
	67.8%		79.2%		88.5%		82.9%		67.2%		
Positive	23	33.8%	10	14.7%	9	13.2%	12	17.6%	14	20.6%	68
	6.1%		3.9%		3.0%		4.9%		7.4%		
Negative	43	48.3%	11	12.4%	20	22.5%	11	12.4%	4	4.5%	89
	11.3%		4.3%		6.6%		4.5%		2.1%		
Lunch-Related	56	35.7%	32	20.4%	6	3.8%	19	12.1%	44	28.0%	157
	14.8%		12.5%		2.0%		7.7%		23.3%		
Total	379		255		305		246		189		1,374

GLIS categories by book

The next set of analyses explored comparisons of the leader interventions across time by looking at the interventions across the three books, a proxy for across time. “No book” was the first session, and then the children were introduced to three books. The final session reviewed all of the books and included termination

activities. Chi Square analyses of the six global categories by book indicated that Group Cohesion, Modeling, Information, Exploration, and Feedback all differed by Book at the $p > .05$ level. Cramer's V scores indicate small relationships for each of these categories. The strength of the relationship for Group Cohesion is between small and medium when degrees of freedom are considered (Gravetter & Wallnau, 2004). Results of these analyses are presented on Table 20.

Additionally, follow-up 2x2 Chi Square analyses for each potential pairing of book categories by each global category are presented for each significant GLIS category below. As with the activity analyses, each potential combination of Book subcategories were run as individual 2x2 chi square analyses. In this case, the total number of verbalizations within each book category varied more than by Phase or Activity. Therefore, Chi Square analyses need to be interpreted considering the varying base-rates of speaking turns within these different subcategories of Book. There were many more units in *The Day I Saw My Father Cry* and *Big Al* than the other categories. These frequencies and percentages are presented on the Table 21 below, and represent total verbalizations including the leader and child speakers. Frequencies for just the leader interventions are found on Table 20.

Table 20
Frequencies and Chi Squares of GLIS Categories by Book

Category	No Book		Book 1		Book 2		Book 3		Review Session		Total	χ^2	df	p	Cramer's V
	n	%	n	%	n	%	n	%	n	%					
Structure	106	8	435	32	227	17	523	38	83	6	1,374	5.21	4	.27	.03
Group Cohesion	38	22	42	24	23	13	48	27	25	14	176	72.20	4	<.001	.10
Modeling	27	11	93	37	35	14	75	30	23	9	253	13.82	4	.01	.04
Information	29	7	121	30	82	20	133	33	44	11	409	16.89	4	<.005	.05
Exploration	91	7	375	30	245	19	493	39	67	5	1,271	10.07	4	.04	.04
Feedback	136	9	467	32	277	19	525	36	68	5	1,473	13.14	4	.01	.04
Total	427	9	1,533	31	889	18	1,797	36	310	6	4,956				

Note. Books 1, 2, and 3 were respectively: *The Day I Saw My Father Cry*, *The Meanest Thing to Say*, and *Big Al*.

Table 21
Frequencies of Thought Units within Book

	Frequency	% total
No Book	608	7.8%
Father Cry	2,485	31.8%
Meanest Thing	1,429	18.3%
Big Al	2,804	35.9%
Session 15	490	6.3%
Total	7,816	100.0%

Cohesion interventions by book

Group Cohesion occurred at different rates across time (book), $\chi^2(4, N = 176) = 72.20, p < .001$. The Cramer's V score of .10 indicated that this was the strongest relationship of the GLIS categories by book; however, this score indicates a small to medium relationship given the four degrees of freedom in this analysis (Gravetter & Wallnau, 2004). The other categories, although significant, have weak relationships. Group cohesion occurred less frequently overall than the other GLIS categories within the entire intervention.

Follow up analyses of group cohesion across book that included 2x2 chi

squares of the GLIS category by five time points indicated that group cohesion occurred most frequently during the “no book” part of group. This included the time before any books are introduced and the group is being set up. Team building and establishing group norms is most important at this time. More cohesion occurred in “no book” than during any of the three books used within the intervention. This introductory session was not significantly different in terms of the leader’s use of cohesion from the last session. The last session also had more cohesion than any individual book. During this closing session the leader talked about the positive aspects of the group and reminded them that they were a good team throughout the process.

Table 22
Chi Squares of Cohesion by Book

Book	1	2	3	4	5
1	X	$\chi^2=40.310$ p<.001	$\chi^2=31.618$ p<.001	$\chi^2=41.882$ p<.001	$\chi^2=0.661$ p=.461
2		X	$\chi^2=.036$ p=.849	$\chi^2=.004$ p=.951	$\chi^2=21.644$ p<.001
3			X	$\chi^2=.060$ p=.806	$\chi^2=18.250$ p<.001
4				X	$\chi^2=22.123$ p<.001
5					X

Note. "1" is "No Book" (n=38); "2" is "Book 1: The Day I Saw My Father Cry" (n=42); "3" is "Book 2: The Meanest Thing to Say" (n=23); "4" is "Book 3: Big Al" (n=48); "5" is "Last/Review" (n=25). The previous frequencies indicate the occurrences of Cohesion by each Book

Modeling interventions by book

Modeling was also significant, $\chi^2(4, N = 253) = 13.82, p = .01$. Based on the follow up tests of individual 2x2 chi squares of modeling by pairs of book categories, higher rates of modeling occurred during “no book” and the termination session. “No book” did not differ significantly from the first book or the last session in terms of rates of modeling interventions. There were also no differences between book 2 and book 3. For the pairings where differences were found the relations were relatively weak. Again, the number of thought units within categories should be considered when interpreting the table below (Table 23).

Table 23
Chi Squares of Modeling by Book

Book	1	2	3	4	5
1	X	$\chi^2=.639$ p=.424	$\chi^2=5.732$ p=.017	$\chi^2=5.374$ p=.020	$\chi^2=.040$ p=.842
2		X	$\chi^2=4.796$ p=.029	$\chi^2=4.883$ p=.027	$\chi^2=.989$ p=.320
3			X	$\chi^2=.190$ p=.663	$\chi^2=6.272$ p=.012
4				X	$\chi^2=5.891$ p=.015
5					X

Note. "1" is "No Book" (n=27); "2" is "Book 1: The Day I Saw My Father Cry" (n=93); "3" is "Book 2: The Meanest Thing to Say" (n=35); "4" is "Book 3: Big Al" (n=75); "5" is "Last/Review" (n=23). The previous frequencies indicate the occurrences of Modeling by each Book

Information interventions by book

The chi square analysis of information by book was also significant, $\chi^2(4, N = 409) = 16.89, p < .005$ indicating that the leader’s use of providing information as an

intervention varied over time. Based on the follow up 2x2 chi square tests presented on Table 24 below, higher rates of information occurred in the last session compared to during *The Day I Saw My Father Cry* and *Big Al*. The first and last session did not differ. Session 1 has had more use of information compared to during Big Al (Book 3). In the last session, the leader spent time reviewed what had been learned in the group.

Table 24
Chi Square of Information by Book

Book	1	2	3	4	5
1	X	$\chi^2=2.552$ p=.110	$\chi^2=.045$ p=.830	$\chi^2=5.556$ p=.018	$\chi^2=.600$ p=.427
2		X	$\chi^2=3.10$ p=.078	$\chi^2=.984$ p=.321	$\chi^2=6.922$, p=.009
3			X	$\chi^2=.7.309$ p=.007	$\chi^2=1.340$ p=.247
4				X	$\chi^2=11.758$ p=.001
5					X

Note. "1" is "No Book" (n=15); "2" is "Book 1: *The Day I Saw My Father Cry*" (n=38); "3" is "Book 2: *The Meanest Thing to Say*" (n=33); "4" is "Book 3: *Big Al*" (n=34); "5" is "Last/Review" (n=16). The previous frequencies indicate the occurrences of Information by each Book

Exploration interventions by book

The leader's use of Exploration as an intervention varied by book and the chi square analysis indicated significant results, $\chi^2(4, N = 1,271) = 10.07, p = .04$. Based on the follow up tests of pairings of 2x2 chi square analyses of exploration by types of book, there were no differences between "no book" and any of the other categories in terms of proportion of exploration. Slightly higher rates of exploration occurred in

Big Al (17.5%) compared to The Day I Saw My Father Cry (15.1%). This relationship is fairly weak. Additionally, there was more exploration during *Big Al* (17.58%) than the last session (13.67%). The group spent the most time discussing *Big Al*, but the proportions of exploration questions still varied. It is believed that during this third book the leader tried to push the children to answer more questions and make more inferences.

Table 25
Chi Square of Exploration by Book

Book	1	2	3	4	5
1	X	$\chi^2=0.006$ p=.939	$\chi^2=1.469$ p=.226	$\chi^2=2.408$ p=.121	$\chi^2=0.369$ p=.544
2		X	$\chi^2=2.872$ p=.090	$\chi^2=5.961$ p=.015	$\chi^2=0.650$ p=.420
3			X	$\chi^2=0.126$ p=.723	$\chi^2=3.230$ p=.072
4				X	$\chi^2=4.516$ p=.034
5					X

Note. "1" is "No Book" (n=91); "2" is "Book 1: The Day I Saw My Father Cry" (n=375); "3" is "Book 2: The Meanest Thing to Say" (n=245); "4" is "Book 3: Big Al" (n=493); "5" is "Last/Review" (n=67). The previous frequencies indicate the occurrences of Exploration by each Book

Feedback interventions by book

Finally, the Chi Square overall analysis for feedback interventions was also significant, $\chi^2(4, N = 1,473) = 13.14 p = .01$, which indicated that the leader's use of feedback varied over time within the intervention. Based on the follow up tests, higher rates of feedback occurred during all sessions in relation to the last session. There was more feedback proportionally in the first session compared to the first

book and *Big Al*. These follow-up 2x2 chi square analyses are presented on Table 26 below.

Table 26
Chi Square of Feedback by Book

Book	1	2	3	4	5
1	X	$\chi^2=3.979$ p=.046	$\chi^2=2.350$ p=.125	$\chi^2=4.250$ p=.039	$\chi^2=12.931$ p<.001
2		X	$\chi^2=0.206$ p=.650	$\chi^2=0.004$ p=.948	$\chi^2=6.704$ p=.010
3			X	$\chi^2=0.269$ p=.604	$\chi^2=7.503$ p=.006
4				X	$\chi^2=6.635$ p=.010
5					X

Note. "1" is "No Book" (n=136); "2" is "Book 1: The Day I Saw My Father Cry" (n=467); "3" is "Book 2: The Meanest Thing to Say" (n=277); "4" is "Book 3: Big Al" (n=525); "5" is "Last/Review" (n=68). The previous frequencies indicate the occurrences of Feedback by each Book

Scaffolding across the group components

A major focus of this project was the leader's use of scaffolding within the sessions. Scaffolding was defined as support within exploration intervention to try to enhance child responses or promote correct responses. Whereas several of the GLIS categories are intended to provide support for child responses, the scaffolding scale (1-4) measures how much support was given within an exploration question and basically represents how much of the answer to a question posed was provided within the wording of the question itself. In other words, scaffolding level was rated by examining the wording of the exploration question and considering the amount of support given in the discussion preceding the leader's question. The next set of

analyses looked at how the level of scaffolding varied across these different group components (phase, activity, and book) when the leader asked an exploration question about the books, group experiences, or personal experiences.

Phase: Scaffolding within Pre-book and Book Phases

Chi Square analyses of the four point scale by pre-book and book phases indicated that the use of scaffolding differed slightly by phase, $\chi^2(3, N = 1,271) = 8.88, p = .03$. Although this analysis is significant the relationship is small to medium as indicated by the Cramer's V score of .08 and three degrees of freedom (Gravetter & Wallnau, 2004). Chi squares (2x2) of each scaffolding level by phase indicated that only High Scaffolds (Level 3) differed significantly across the phases, $\chi^2(1, N = 1,271) = 6.969, p = .01$. Low and high scaffolds indicated differences that approached significance. Medium scaffolds occurred evenly across phases. For these analyses phi is the appropriate measure for strength of the relationship and the relationship between phase and medium level scaffolds is small. Frequencies and chi square analyses of the levels of scaffolding by phase can be seen on Table 27.

Overall, scaffolding at the highest and lowest levels occurred frequently across both phases (pre-book and book). However, results indicate that the leader used more open-ended (lowest scaffold) questions during the pre-book phase while the participants were eating lunch. At the same time, more of the highest scaffolds (level 4) occurred at this phase. This combination of frequent low scaffolds and frequent highest scaffolds within the same phase may seem counterintuitive, however, it is explained by the fact that interspersed with the low scaffold questions that were open ended and also required original ideas, were many very simple questions about

the children’s own experiences where there was little room for error on the child’s part. The highly scaffolded questions were often used to keep all group members engaged. Level 3 (high scaffolds) occurred much more frequently during Phase 2 (book) and indicate that the leader provided support during this time to facilitate discussion without giving away or reaching for the most simple answers from the participants. As displayed on Table 27 below, high and very high scaffolds occurred at much higher rates over both phases. In general, the leader rarely asked open-ended questions without providing support (low scaffolds). These types of questions made up 7.16% of all leader scaffolds within questions. Medium scaffolds, where the leader provided only some support to assist the participants in answering the questions, were also rare overall (12.82%). This indicates that the general pattern of group discussion within this intervention involved the leader providing most of the critical information required for the participants to respond correctly prior to or within each Exploration intervention.

Table 27
Frequencies and Chi Squares of GLIS Scaffolding Level by Phase

Scaffolding Level	Phase 1 (Pre-book)		Phase 2 (Book)		Total	χ^2	df	p	Phi/Cramers
	n	%	n	%					
Low	54	59	37	41	91	3.057	1	0.08	.05
Medium	82	50	81	50	163	0.003	1	.96	.00
High	253	46	294	54	547	6.969	1	.01	.07
Very High	253	54	217	46	470	3.29	1	.07	.05
Total	642	51	629	49	1,271	8.88	3	0.03	0.08

Scaffolding levels by Book: No Book, Book 1, Book 2, Book 3, and Review Session

Chi Square analyses of the Scaffolding scale by Book indicated that the use of

scaffolding differed by book (over time), $\chi^2(12, N = 1,271) = 33.47, p <.005$. The relationship is medium as indicated by the Cramer's V score of .09 based on four degrees of freedom. Table 28 below reports frequencies of scaffolding levels by book.

Chi Square analyses of each level of scaffolding (low, medium, high, and very high) by book indicated that only low scaffolding differed significantly by book, $\chi^2(4, N = 1,271) = 20.857, p <.001$. Cramer's V of .13 indicates a medium relationship based on the four degrees of freedom. Analyses indicated that there were more Low Scaffolds during *The Meanest Thing to Say* (n=28) compared to the expected count (n=17.5). During this book, the leader asked more open-ended questions that required original answers from the group members. There were slightly fewer low scaffolds during the other two books compared to expected values. The last session (review) had 11 low scaffolds compared to the expected 4.8. The other three levels of scaffolding did not differ significantly by book.

Table 28
Frequencies and Chi Squares of GLIS Scaffolding Level by Book

Scaffolding Level	No Book		Book 1		Book 2		Book 3		Review Session		Total	χ^2	df	p	Cramer's V
	n	%	n	%	n	%	n	%	n	%					
Low	4	4	17	19	28	31	31	34	11	12	91	20.86	4	<.001	.13
Medium	5	3	56	34	38	23	56	34	8	5	163	8.44	4	.08	.08
High	38	7	166	30	102	19	217	40	24	4	547	2.11	4	.72	.04
Very High	44	9	136	29	77	16	189	40	24	5	470	8.80	4	.066	.08
Total	91	7	375	30	245	19	493	39	67	5	1,271	33.47	12	<.005	0.09

Note. Books 1, 2, and 3 were respectively: *The Day I Saw My Father Cry*, *The Meanest Thing to Say*, and *Big Al*.

Scaffolding levels by Activity

Chi Square analyses revealed that Scaffolding level varied by activity and this

relationship was somewhat stronger than by phase or book, $\chi^2(12, N = 1,271) = 67.62, p < .001$. The relationship is medium as indicated by the Cramer's V score of .13 with twelve degrees of freedom. Frequencies of the levels of scaffolding by activity can be seen on Table 29.

Both medium and very high scaffolds differed significantly by activity. Medium scaffolds, $\chi^2(4 N = 1,271) = 41.573, p < .001$, had a medium strength of association with Cramer's V at .18. A higher proportion of these medium scaffolds (questions with some support, but required detail and accurate responses from the participant) occurred most often during guided reading. During this time the leader would ask questions about what was just read or ask the students to make predictions based on pictures or previous experiences of the characters in the story. Very High scaffolds, $\chi^2(4 N = 1,271) = 35.870, p < .001$, had a medium relationship with Cramer's V at .17, these questions that often just required simple agreement or "yes/no" responses to basic questions occurred most often during the general discussions.

Table 29
Frequencies and Chi Squares of GLIS Scaffolding Level by Activity

Scaffolding Level	Activity 1		Activity 2		Activity 3		Activity 4		Activity 5		Total	χ^2	df	p	Cramer's V
	n	%	n	%	n	%	n	%	n	%					
Low	24	26	21	23	24	26	7	8	15	16	91	6.076	4	.19	.01
Medium	10	6	58	36	58	36	24	15	13	8	163	41.57	4	<.001	.18
High	109	20	144	26	141	26	91	17	62	11	547	5.50	4	.24	.02
Very High	141	30	87	19	103	22	74	16	65	14	470	35.87	4	<.001	.17
Total	284	22	310	24	326	26	196	15	155	12	1,271	67.62	12	<.001	0.13

Note. Activities were respectively: General Discussion, Discussion Related to Books, Guided Reading, Structured Activities, and Other (Introductory and Termination Sessions).

Emotional content and empathy

The use of empathy and emotional content was flagged for leader and child responses over the course of the sessions. The next set of analyses looked at how the use of emotional content and empathy varied across the different group components (phase, book, and activity). The majority of these instances were leader verbalizations, especially in cases of demonstrating empathy. The leader provided 96 out of the 102 cases coded for empathy (94.12%). Child A contributed 3 empathetic responses and Child B, E, and F each contributed one. The leader provided 70% of verbalizations containing emotional content (350/500). The individual group members' contributions of statements containing emotional content varied: Child A (3.4%), Child B (6.4%), Child C (9.2%), Child D (1.4%), Child E (3.4%), and Child F (5.6%). However, since each child's rate of verbal participation differed, the proportion of their use of emotional content compared to their total turns is also displayed below ("Percentage of speaker's turns with emotional content"). Emotional content was more consistent across participants when considering total turns or contributions from different group members. Specifically, students who spoke more often within the group had higher base frequency counts of emotional content, but emotional responses did not make up a higher proportion of their total turns. In fact, Child B, who had the most speaking turns within the intervention, had the lowest percentage of turns with emotional content. In general, the proportions of emotional content were more evenly distributed when looking at the number of turns with emotional content compared to each child's total turns in group. The use of empathy and emotional content (both group and self proportions) are portrayed on Table 30

below.

Table 30

Use of Emotional Content and Empathy within the Group

Speaker	Frequency of EC	Frequency of Empathy	Percentage of Total EC Contributions	Percentage of Speaker's Turns Containing EC
A	17	3	3.40%	6.54%
B	32	1	6.40%	3.83%
C	46	0	9.20%	6.57%
D	7	0	1.40%	7.61%
E	17	1	3.40%	4.51%
F	28	1	5.60%	7.25%
ALL	3	0	0.60%	1.42%
Leader	350	96	70.00%	7.06%
Total	500	102	100.00%	6.40%

Note . "EC" stands for "Emotional Content."

Empathy and Emotional Content by phase

Chi Square analyses indicated that empathy did not differ significantly by phase (pre-book or book) and, as mentioned above, instances of empathy occurred at low rates overall. Due to the low base rate of these categories from the child participants the data used for these analyses include total counts of empathy and emotional content (combined leader and child responses). For both emotional content and empathy, only explicit statements were marked for these categories within the data set to improve rater agreement. Emotional content differed slightly by pre-book and book phases as indicated by the chi square analyses on Table 31, $\chi^2(1, N = 500) = 4.48, p < .03$. The very low *phi* score (.02) indicates this was a very weak relationship, and accordingly 48% of emotional content occurred in phase 1 (pre-

book) compared to 52% in phase 2 (book). This indicates that the use of emotional content and empathy were similar across pre-book, where students ate lunch, and book phase, when lunch was put away.

Table 31
Frequencies and Chi Squares of Empathy and Emotional Content by Phase

	Phase 1 (Pre-book)		Phase 2 (Book)		Total	χ^2	df	p	Phi
	n	%	n	%					
Emotional Content	240	48	260	52	500	4.48	1	.03	.02
Empathy	49	48	53	52	102	0.85	1	0.36	.01
Total	289	48	313	52	602				

Empathy and Emotional Content by activity

Chi square analyses looking at emotional content within the group (leader and child) indicate that the use of emotional content within discussions differed by activity, $\chi^2(4, N = 500) = 100.2, p < .001$; this relationship, however was not true for use of empathy. The relationship is moderate as indicated by the Cramer's V score of .11 with four degrees of freedom (Gravetter & Wallnau, 2004). Leader and child responses were grouped together in these analyses due to the low frequencies of child verbalizations with emotional content or empathy. The greatest use of emotional content (34%) occurred during guided reading of the stories; this represented 172 observed instances of emotional content within this activity compared to the 110 expected count of Emotional Content. The frequency of emotional content was much lower during general discussion compared to what was expected. In this group, the children had trouble using emotional vocabulary when talking about their personal

experiences. During the guided reading the leader would often ask the children to talk about the character’s feeling and then make connections to their own experiences. It was expected that that this group component would be linked to more emotional content since one of the principles of STORIES is to use literature to get participants to explore and understand their feelings (Teglasi and Rothman, 2001). Frequencies of the levels of emotional content and empathy by activity can be seen on Table 32.

Table 32
Frequencies and Chi Squares of Emotional Content and Empathy by Activity

Scaffolding Level	Activity 1		Activity 2		Activity 3		Activity 4		Activity 5		Total	χ^2	df	p	Cramer's V
	n	%	n	%	n	%	n	%	n	%					
Emotional Content	77	15	143	29	172	34	70	14	38	8	500	100.2	4	<.001	.11
Empathy	36	35	19	19	19	19	14	14	14	14	102	3.15	4	.53	.02
Total	113	19	162	27	191	32	84	14	52	9	602				

Note . Activities were respectively: General Discussion, Discussion Related to Books, Guided Reading, Structured Activities, and Other (Introductory and Termination Sessions).

Empathy and Emotional Content by book

Chi Square analyses indicated that both emotional content and empathy varied by book, the proxy for time in this study. This relationship was weak as Cramer’s V scores were below .10 even though the p value was significant. Emotional content level varied by book, $\chi^2(4, N = 500) 43.89, p <.001$; empathy also differed significantly, Chi Square analyses revealed that empathy varied by book, $\chi^2(4, N = 102) = 17.24, p <.005$. Analyses indicated that there were fewer cases of emotional content during the “no book” session compared to the expected amount. The first two books both had more use of emotional content than expected, but *Big Al* (book 3) had

slightly less than would be expected. It is unclear why the third book would have a lower rate of emotional content. It is suspected that the children found it easier to talk about feelings during the first two books that had human characters compared to the last book, which was about a fish. Additionally, the other two books, which had slightly more complex themes, may have had more and deeper emotional material than *Big Al*. The content of the first two books, the death of a friend and bullying, may have also evoked more feeling vocabulary. The highest rate of empathy occurred during *The Day I saw my Father Cry*. Again, it is believed that the content of this book, rather than its timing within the group process may have had more impact on the use of empathetic statements. Chi squares for empathy and emotional content by book are presented on Table 33 below.

Table 33
Frequencies and Chi Squares of Empathy and Emotional Content by Book

Scaffolding Level	No Book		Book 1		Book 2		Book 3		Review		Total	χ^2	df	p	Cramer's V
	n	%	n	%	n	%	n	%	n	%					
Emotional Content	11	2	189	38	122	24	150	30	28	6	500	43.89	4	<.001	.08
Empathy	5	5	45	44	24	24	19	19	9	9	102	17.24	4	<.005	.05
Total	16	3	234	39	146	24	169	28	37	6	602				

Note. Books 1, 2, and 3 were respectively: *The Day I Saw My Father Cry*, *The Meanest Thing to Say*, and *Big Al*.

Child Responses (CVC)

The next set of analyses examined how child cognitive scores for the group as a whole as measured by the CVC compared during different parts of the group.

Individual child responses are reported later in this chapter. One way ANOVAs were conducted to look at the effects of the group components on mean child cognitive ratings within turns. Analyses were run for phase (pre-book/book), activity, and Book

(time).

Phase

When examining group phase, the mean child response on the CVC scale during pre-book was 3.50 (M=3.50, SD=.87) and 3.56 during book phase (M=3.56, SD=.87). Both of these scores indicate an average between the tangential and simple levels. There was no significant main effect for phase on child cognitive level, $F(1, 2776) = 2.46, p = .117$. In other words, phase (pre-book/book) did not influence the mean level of the responses for the group taken as a whole. It was expected that responses would have been higher in the book phase since the participants were not distracted by the lunch-time aspect of group; however, this was not the case.

Book

One way ANOVA of Book (no book, book 1, book 2, book 3, and review/final session) did indicate a significant main effect for book on child cognitive level, $F(4, 2773) = 13.37, p < .01$. Mean cognitive levels during each segment are presented on Table 34 below. During the first session (no book) scores ranged from 1 to 5 on the CVC with a mean of 3.67 (SD=.75). During the last session scores ranged from 2 to 6 with the highest mean of 3.89 (SD=.68). Post-hoc analyses using Fisher's LSD indicated that the last session's scores were significantly higher ($p > .001$) than the three books, but not the first session. The first session was significantly higher than books 2 and 3 ($p > .05$), but was not significantly different than book 1 or the last session. Book 2 had the lowest cognitive scores as a whole; the scores were significantly lower than Book 1 and the first and last sessions ($p > .05$). Eta squared (η^2) was calculated by dividing the Sum of Squares between groups by

the Sum of Squares Total. This value, $\eta^2=.019$, indicates that 1.9% of the variance in mean child cognitive level can be explained by the variable “book”, which represented the use of different books over time within the group.

Table 34
Anova of Book and Mean Child Response

Variable	Mean Child			<i>F</i>	η^2
	Verbalization	SD	<i>n</i>		
Book	3.53	0.87	2,778		
No book	3.67	0.75	180		
Book 1	3.57	0.80	912		
Book 2	3.40	0.99	521		
Book 3	3.47	0.89	999		
Review	3.89	0.68	166		
Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	η^2
Book	39.51	4.00	9.88	13.37	0.02
Error	2,049.19	2,773			

Note . $R^2=.019$, adj $R^2=.017$. Books were respectively: *The Day I Saw My Father Cry* , *The Meanest Thing to Say* , and *Big Al* .

* $p < 0.001$

Activity

Another one way ANOVA was conducted to determine how mean child cognitive responses varied over the different group activities (general discussion, discussion of stories, without the books, guided reading, structured group activities, and other/first/last sessions). There was significant main effect for activity on child cognitive level, $F(4, 2773) = 10.39, p < .01$. Mean cognitive levels during each segment are presented on Table 35 below. Post-hoc analyses using Fisher’s LSD indicate that child cognition is significantly higher during activity 5 (introductory and

termination sessions) than during all other activities. Activity 4 (structured activities) was linked with higher mean child cognitive scores than activities 1, 2, and 3. Activity 3 (guided reading) was linked with lower mean cognitive scores than activities 4 and 5; differences between activities 1, 2, and 3 (general discussion, book related discussion, and guided reading) were not significant. Overall, the highest mean cognitive scores were found during the introductory and termination sessions. The lowest overall were found during guided reading. Exploration questions during guided reading include questions with specific correct or incorrect answers that have not previously been reviewed. This demand to get a “correct” answer is likely linked with the lower scores during this group activity. It is more difficult for a rater to determine if a child’s story was incorrect or a lie during general discussion. For example, if a child reported that a certain event happened to them in class or over a weekend the leader could not know for sure if this was a fabrication. When a child said something happened in a book that did not occur the leader and coder of transcripts were able to tell that the response was incorrect.

Table 35
Anova of Type of Activity and Mean Child Response

Variable	<i>Mean Child</i>			<i>n</i>
	<i>Verbalization</i>	<i>SD</i>		
Activity	3.53	0.87		2,778
1	3.48	0.83		851
2	3.49	0.91		554
3	3.44	0.96		607
4	3.61	0.82		421
5	3.77	0.73		345

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	η^2
Activity	30.83	4.00	7.71	10.39	0.015
Error	2,057.87	2,773			

Note . Activities were respectively: General Discussion, Discussion Related to Books, Guided Reading, Structured Activities, and Other (Introductory and Termination Sessions).

* $p < .001$.

Child Participation and individual group performance

The analyses above examine mean child cognition scores across various group components. However, for this group it is important to look at the roles of individual children within the group because child participation varied greatly by participant (N=6). Table 36 below portrays the total turns that each child took across the intervention. Since Child C and Child F were each absent on one occasion (all other participants attended every session), average turns per session tended to account for this small variation in sessions attended. Additionally, the percentage the total child turns that each child accounted for is also presented on the table.

Table 36

Children Speaking Turns Distribution within Group

Child	Sessions	Total Turns	Percentage of Group ^a	Average Turns/Session ^a
A	13	260	9.90%	20.00
B	13	836	31.54%	64.31
C	12	700	26.50%	58.33
D	13	92	3.47%	7.1
E	13	377	14.22%	29
F	12	386	14.55%	32.17
ALL	13	210		

^aResponses in the ALL category were not counted in percentage of group or average turns calculations

Child B and Child C together accounted for over half of the child speaking turns within the group. They also accounted for the majority of Level 2 responses on the CVC scale. These responses are either interruptions or incorrect responses (Type 2) or highly disorganized responses (Type 1). Level 2, Type 1 responses are considered to have a more negative impact on the group because they usually require clarification because of the high level of disorganization. This takes time away from the group process and prevents other children from sharing. Child C alone contributed 76 out of the 97 disorganized responses over the course of the group. Additionally, he did not contribute any empathetic responses. At the end of this group, the group leader referred this student to the school psychologist and IEP team because this performance in group indicated the need for more intervention. The high rates of speaking along with the high frequency of low level responding by these two participants influenced the overall group cognition group component. These students

also had trouble inhibiting responses and also earned many Level 2 scores for interruptions. The implications of this type of behavior will be addressed in the discussion section.

Another issue within this group is the low level of participation by some students, specifically Child D. This child never volunteered responses and would respond hesitantly when asked questions by the leader. Due to the limited number of responses it is harder to gauge his understanding of the group content; however, it is suspected that this student refrained from participating due to difficulty mastering the content of the group. This student mentioned in Session 15 that he did not like to be called on in group. Overall, both the quality and frequency of child participation are issues to consider within a group intervention.

Group members A, E, and F all contributed relatively evenly. It is suspected that the high rates of interruptions and disorganized verbalizations by Child B and Child C may have at times prevented these other members from participating. Within this group higher rates of participation did not indicate a higher level of understanding or better behavior. Table 37 below displays frequencies of all of the children's CVC scores within the group. Child A and Child F had the most Level 6 responses, which demonstrate a higher level of understanding of the content. These responses represent applying what was learned in group and making connections to other group content or personal experiences. These two students did not contribute the most or least responses overall. As seen on Table 37 below, an overwhelming number of responses in this group were coded as 4. This is because the children were kept engaged by answering "yes/no" questions or often provided simple statements

that did not indicate more than a basic understanding of the group material. Child responses following highly scaffolded queries were also capped at a CVC level 4.

Table 37
Frequencies of CVC level by Child Participant

Speaker	Child CVC Level							Total	
	Level 1	Level 2		Level 3	Level 4	Level 5	Level 6		
		Total Level 2	Disorganized	Incorrect/ Interruption					
CHILD A	0	19	0	19	59	150	28	4	260
CHILD B	16	151	15	136	211	416	41	1	836
CHILD C	2	208	76	132	178	289	23	0	700
CHILD D	0	9	1	8	19	62	2	0	92
CHILDE	4	35	1	34	79	229	29	1	377
CHILD F	1	18	4	14	62	243	54	8	386
GROUP	0	0	0	0	7	203	0	0	210
Total	23	440	97	343	615	1,592	177	14	2,861

Note. Level 1 indicates disruptive responses, Level 2 indicates wrong/disorganized responses, Level 3 indicates tangential responses, Level 4 indicates simple responses, Level 5 indicates on-target responses, and Level 6 indicates integrative responses.

Relation between leader and child verbalizations

In order to understand the relationships between the leader interventions and child verbalizations, correlations were run between the proportions of GLIS categories within speaking turns and child cognitive level (CVC). As mentioned in the methods section, the entire group was coded for consecutive speaking turns alternating between leader and child turns. Proportions of GLIS categories within leader turns were calculated by looking at the occurrence of interventions divided by the total number of interventions within a turn. Since it was expected that these relationships would vary depending on whether leader interventions were preceding or following a child verbalization, the correlations were run using the data that was manipulated to take into account the order of the speaking turns; for one part of the

data the leader turns came before the child verbalizations and in the second part the leader turns came after child speaking turns. These correlations between the proportions of GLIS interventions within speaking turns and CVC scores are presented on Table 38 below.

Table 38

Correlations between Leader Turns and Child Cognitive Level ("CVC")

	<i>n</i>	Pearson Correlation for CVC following Leader	Pearson Correlation for CVC before Leader
Proportion of Structure in Turn	5,158	0.356*	0.358*
Proportion of Group Cohesion in Turn	5,158	0.126*	0.131*
Proportion of Modeling in Turn	5,158	0.154*	0.143*
Proportion of Information in Turn	5,158	0.198*	0.206*
Proportion of Exploration in Turn	5,158	0.410*	0.377*
Proportion of Feedback in Turn	5,158	0.434*	0.465*
Simple Feedback	352	0.079	0.061
Paraphrasing or Restatement	522	-0.028	-0.022
Reframing	300	0.020	-0.029
Elaboration	243	0.007	0.005

* $p < .001$.

There were significant correlations between each GLIS main category and CVC responses following and preceding leader interventions. In each case the relationship was positive, indicating the greater proportion of the type of intervention the higher the CVC level. Overall, more speaking (GLIS intervention) by the leader, indicating multiple GLIS interventions within turns, was correlated with higher CVC responses in turns both preceding and following the leader interventions.

Proportion of feedback in turns and CVC level

A strong relationship was between the proportion of leader feedback in a turn and child cognitive responses. This relationship was significant and positive for leader turns following a child response ($r = .47, p < .01$) and for leader turns

preceding a child turn ($r = .43, p < .01$). More feedback in a leader turn was associated with higher level child responses, for feedback that occurred both before and after child responses. The leader often had multiple exchanges with the same child and successive turns including feedback likely shaped child responses until more accurate child verbalizations were attained. R-squared was .22, implying that 22% of variance for CVC level in a turn is associated with the variance in proportion of feedback. Follow-up analyses looked at the subcategories of feedback and CVC level. These values were not significant at the $p = .05$ level, indicating that the specific type of feedback did not vary with CVC level. The leader used a variety of types of feedback to address child verbalizations. This correlation for the overall feedback category was significant, but the relationships for types of feedback and CVC level did not show a significant relationship.

Proportion of structure in turns and CVC level

The proportion of structure in leader turns both preceding and following child turns and child CVC level also had a moderate relationship ($r = .36, p < .01$), which indicates over 12% of the variance in CVC level can be explained by the proportion of structure in the leader turns. This relationship was the same for leader interventions both preceding and following child turns. In most cases, structure included turn taking and attempts to keep the group moving. As mentioned above, this intervention occurred more evenly throughout the group overall compared to other GLIS categories. It is not surprising that the use of structure was similar before and after child turns.

Proportion of exploration within turns and CVC level

The proportion of exploration in leader turns also had a significant relationship with CVC level. As expected, this relationship was strong in leader turns that preceded child responses ($r = .41, p < .01$). Exploration following child responses was also significant ($r = .377, p < .01$). As mentioned above, the leader often had multiple exchanges with the children in attempts to make a point and therefore these queries could occur before and after child verbalizations. It was not uncommon for the leader to follow a child's response with a query. The leader would often ask a series of exploration questions (with various scaffolds and supports) to promote child understanding. The relationship between exploration in leader turns following child verbalization and CVC level was $r = .38, p < .01$. Relationships between the other GLIS categories and CVC level were also significant, but the relationships were not as strong.

Mean scaffolding within turns

A major focus of this study was the leader's use of scaffolded questions when seeking child responses. It was hypothesized that higher scaffolds would be correlated with higher CVC levels. However, there was no significant relationship between mean scaffolding level in a turn and CVC level (either before or after the leader's turn). These correlations are displayed on Table 39 below.

Table 39

Correlations between Scaffolding Level in Turns and Child Cognitive Level ("CVC")

	Child Cognitive Level following Leader Turn	Child Cognitive Level before Leader Turn
Mean Scaffolding Level		
Pearson Correlation	0.024	-0.024
Sig (2-tailed)	0.433	0.432
N	1,041	1,041

Note. Pearson Correlations were not statistically significant.

There are several reasons that the hypothesis that more scaffolding would be positively related to CVC level did not prove true. First, very high scaffolds (level 4) prevented the following child response from reaching 5 or 6 since the leader basically gave the answer away. Also, high and very high scaffolds were more likely to be used when the children (either verbally or nonverbally) were demonstrating a lack of understanding and therefore the leader may have provided increased support to respond to low responses. Finally, the high rate of mid-level responses (CVC-4) may have masked the effects of leader interventions on turns.

The relationship between mean scaffolding level within turns and CVC level overall was not significant. However, the leader's use of scaffolding did play a role in preventing low responses (CVC=1,2) and promoting higher level responses (CVC=5,6). This will be discussed in the next section.

The relationship between GLIS interventions and high or low CVC levels

Since modal child responses in this group were a level 4 (simple, on target) and many responses were level 3 (tangential) an important exploration was to understand which leader interventions were linked with higher rates of good

responses (CVC level 5 or 6) or reduced rates of low level or disruptive responses (CVC level 1 or 2). Using the data set that was aggregated by speaking turn, several independent sample t-tests were run to explore leader interventions that may promote high level child responses and prevent the lower level responses within the group session. Data were grouped in two ways. First, CVC levels were grouped into high (5-6) and low/medium (1-4) groups. This was to pull out the relationships between leader interventions and more desirable child responses. Next, the same data were grouped into low (1-2) and medium to high (3-6) groups. Grouping in this manner allowed for the exploration of GLIS interventions that may have prevented the types of responses that have a negative impact on group functioning, specifically disruptive and disorganized child responses.

Promoting higher level child cognitive responses (CVC 5-6)- Leader interventions preceding child responses

As mentioned above, the frequencies of higher level cognitive responses (CVC= 5, 6) were rare in this data set. Only about 7% of child responses were higher level contributions (level 5, on-target without very high scaffolding or level 6, interpretive and integrative). In order to examine what GLIS variables preceded these higher child cognitive responses, independent sample t-tests were run using the proportions of the GLIS variables within leader speaking turns as test variables. These were grouped by the child cognition levels within turns; scores ranging from 1-4 were grouped into low/medium cognitive group and CVC scores of 5 and 6 within turns were marked as high cognitive. Equal variances were not assumed in these analyses. As with the correlations above, the same analyses were run with GLIS

variables being compared to CVC scores that occurred before and after leader turns. These analyses were run twice, first using the columns that were manipulated to have leader responses that preceded a child verbalization to look at leader attempts to promote higher level responding and reduce low level understanding and interruptions. Analyses then looked at leader responses following child verbalization to see how the leader attempted to reinforce desirable responses or redirect or clarify lower level child verbalizations. Results of the independent samples t-test for GLIS variables on Child Cognitive Level (CVC) where the leader responses followed the child speaking turns is presented on Table 40 below.

Table 40
Independent Samples t-Test for Proportion of GLIS Variables on Child Cognitive Level (Child Following Leader) - Lower/Medium and High CVC groups

Variables	Lower/Medium (1-4)		Higher (5-6)		<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>	95% Confidence Interval	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
Proportion Structure	0.186	0.316	0.264	0.302	-3.357	213.887	0.001	0.248	-0.123	-0.032
Proportion Cohesion	0.016	0.088	0.03	0.127	-1.455	196.659	0.147	0.154	-0.033	0.005
Proportion Modeling	0.036	0.151	0.038	0.125	-0.138	224.194	0.89	0.013	-0.02	0.018
Proportion Information	0.061	0.197	0.039	0.129	2.2	250.195	0.029	0.114	0.002	0.043
Proportion Exploration	0.232	0.353	0.193	0.268	1.893	232.17	0.06	0.112	-0.002	0.081
Proportion Feedback	0.316	0.393	0.34	0.355	-0.876	217.66	0.382	0.061	-0.077	0.029

Note. "Lower/Medium" included turns with CVC scores of 1-4. "Higher" included turns with CVC scores of 5 or 6. Equal variances were not assumed. For "Lower/Medium," *n* = 2,590, and for "Higher," *n* = 185.

Promoting higher responses (5-6) – Types of leader interventions preceding child responses

Structure before child responses

In this case, Structure interventions occurred more frequently before higher level CVC responses (26.36%) compared to before low/medium responses (18.62%), $t(214) = -3.357, P = .001$. The effect size was medium, $d = .248$ indicating that the mean value for CVC score was higher following more turns with more Structure.

Since SPSS does not provide this value, Cohen's d was computed from the value of the t -test of the differences between group means. In general, .2 is considered a small effect, .5 is medium, and .8 is large. The d of .149 indicates that information prior to a child response has a small effect on improving CVC level. The formula used to calculate d was:

Cohen's d (effect size):
$$d = \frac{\bar{x}_1 - \bar{x}_2}{s}$$

This was then adjusted to account for the fact that the populations were not the same size:

$$g = \sqrt{\frac{n_1 + n_2 - 2}{n_1 + n_2}} d$$

Information before child responses

Information interventions occurred more frequently before the lower/medium level CVC responses (6.12%) compared to before higher responses (3.88%), $t(250) = 2.2, P = .029$. Cohen's d was used as a measure of effect size of the treatment (GLIS on CVC). Even though finding was statistically significant the effect size was fairly small, $d = .114$ indicating small differences in mean CVC scores. These results and the non-significant findings are presented on the Table 40 above.

Preventing Low CVC responses (1-2)- Leader interventions preceding lower level child responses

In the next set of analyses, the data were grouped to separate out the lower level child responses. T-tests compared the proportion of GLIS variables within turns for lower/medium (CVC=1-4) and higher (CVC=5-6) for when leader turns were

following child verbalization. These results are displayed on Table 41 below. CVC data were grouped into Low (1-2) and Medium/Higher Responses (3-6) to determine if and leader interventions (GLIS) help prevent disruptive or low level responses within the group. Again, independent samples t-tests looked at lower (1-2) and higher (3-6) child CVC scores when child verbalizations were following leader GLIS interventions. In this case, significant differences between the two groups were found for cohesion, exploration, and feedback interventions.

Table 41
Independent Samples t-Test for Proportion of GLIS Variables on Child Cognitive Level (Child Following Leader) - Lower and Medium/Higher CVC Groups

Variables	Lower		Medium/Higher		<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>	95% Confidence Interval	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
Proportion Structure	0.184	0.329	0.193	0.314	-0.540	594.450	0.590	0.028	-0.043	0.024
Proportion Cohesion	0.010	0.063	0.019	0.095	-2.346	852.480	0.019	0.099	-0.016	-0.001
Proportion Modeling	0.036	0.164	0.036	0.145	-0.100	572.248	0.921	0.000	-0.030	0.009
Proportion Information	0.051	0.183	0.061	0.194	-1.101	632.899	0.271	0.052	-0.092	-0.021
Proportion Exploration	0.182	0.337	0.239	0.349	-3.225	624.417	0.001	0.164	0.021	0.101
Proportion Feedback	0.369	0.426	0.307	0.383	2.797	575.284	0.005	0.159	0.018	0.104

Note. "Lower" included turns with CVC scores of 1-2. "Medium/Higher" included turns with CVC scores of 3-6. Equal variances were not assumed. For "Lower," *n*=437, and for "Medium/Higher," *n*=2,334.

Exploration before CVC responses

Table 41 above displays proportions of each GLIS category when grouped into lower and medium/higher response groups. More exploration interventions occurred before the higher responses (23.9%) compared to (18.2%) for the lower score group, *t* (624)=-3.225, *p*=.001. The effect size for exploration was small, *d*=0.164. This indicates that child responses that were not following specific questions were lower in general.

Feedback before CVC responses

More feedback interventions (36.9%) occurred before lower responses

compared to the higher ones (30.7%), $t(575)=2.797$, $p=.005$. Again, the effect size was small, $d=.159$. Feedback is typically expected to follow a child response, so the lower responses following feedback may represent interruptions and off-topic responses by the group members.

Cohesion before CVC responses

Higher proportions of cohesion interventions occurred before the higher CVC scores (1.9%) compared to lower scores (1.0%); while significant, $t(852)=-2.346$, $p=.019$, the effect size was very small ($d=.099$). These results along with nonsignificant findings are presented on Table 41 above.

Scaffolds preceding higher responses

As mentioned above, when looking at group mean CVC scores scaffolding level did not seem to have a significant effect. The high rates of mid-level responses likely masked the effects of leader scaffolds. However, when CVC scores were grouped by levels the leader’s use of scaffolding prior to child responding had a significant impact. First, when child responses were grouped into Lower/Medium (1-4) and High (5-6) responses, the mean scaffolding level of exploration questions seemed to be significantly lower prior to high responses. These results are presented on Table 42 below.

Table 42

Independent Samples t-Test of Mean Scaffolding Level in Turn on Child Cognitive Level (Child Following Leader) - Lower/Medium and High CVC groups

Variables	Lower/Medium		Higher		<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>	95% Confidence Interval	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
Mean Scaffolding	3.179	0.808	2.444	0.917	6.942	89.547	<.001	0.901	0.524	0.945

Note. "Lower/Medium" included turns with CVC scores of 1-4. "Higher" included turns with CVC scores of 5 or 6. Equal variances were not assumed. For "Lower/Medium," $n=958$, and for "Higher," $n=80$. Scaffolding scale ranged from 1-4.

The mean scaffolding level before the low/medium responses was 3.179 and it

was a 2.444 prior to the high responses, $t(89)=6.942$, $p>.001$. This had a very large effect, $d=0.901$. This indicates that lower scaffolds were more often followed by a CVC score of 5-6. The low scaffolds gave the children who were able to make inferences the opportunity to demonstrate their ideas. In some cases, more scaffolding was needed to keep students on-topic and this will be discussed when looking at the group of lower responses (1-2).

Scaffolds to prevent lower level responses (CVC 1-2)

Next the child responses were grouped into Low (1-2) and Medium/High (3-6) responses. Again, the mean scaffolding level of exploration questions seemed to be different between these two groups. The mean scaffolding level before the low responses was 2.89 and it was a 3.14 prior to the medium/high responses, $t(142)=-2.951$, $p=.004$. This indicated that children gave lower responses following more open ended or less scaffolded questions. As mentioned above, in many cases open-ended questions promoted good responses. However, with certain content and for specific students the support from the leader was needed to obtain an acceptable or high response. Child responses were better overall following high and very high scaffolds. This had a medium effect size, $d=0.310$. This indicates that while lower scaffolds may have allowed for higher scores as presented above, in many cases higher scaffolds were needed to prevent scores of 1-2. This is presented on Table 43 below:

Table 43

Independent Samples t-Test of Mean Scaffolding Level in Turn on Child Cognitive Level (Child Following Leader) - Lower and Medium/Higher CVC groups

Variables	Lower		Medium/Higher		<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>	95% Confidence Interval	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
Mean Scaffolding	2.888	0.909	3.148	0.830	-2.951	141.644	0.004	0.310	-0.436	-0.086

Note. Lower" included turns with CVC scores of 1 to 2. "Higher" included turns with CVC scores of 3-6. Equal variances were not assumed. For "Lower," $n=117$, and for "Medium/Higher," $n=922$. Scaffolding scale ranged from 1-4.

Leader Interventions following Child Responses (Low/Medium and High CVC)

The next set of analyses looked at the leader interventions following child responses grouped by level. The data were grouped as above; however, in these analyses the aggregated data set where leader turns followed child turns was used in the analyses. These analyses were intended to determine how the leader adjusted her interventions following child responses within the group. In Table 44, independent samples t-test examined the Proportion of GLIS variables within turns and child cognition split into two groups: low/medium (CVC=1-4) and higher (CVC=5-6) to determine if the use of certain leader interventions followed child responses at different levels responses. These results are presented on Table 44 below.

Table 44
Independent Samples t-Test for Proportion of GLIS Variables on Child Cognitive Level (Leader Following Child) - Lower/Medium and Higher CVC groups

Variables	Lower/Medium (1-4)		Higher (5-6)		<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>	95% Confidence Interval	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
Proportion Structure	0.194	0.321	0.169	0.245	1.295	231.500	0.197	0.079	-0.013	0.062
Proportion Cohesion	0.017	0.091	0.019	0.100	-0.255	206.160	0.799	0.022	-0.017	0.013
Proportion Modeling	0.038	0.151	0.016	0.077	3.453	299.199	0.001*	0.149	0.009	0.035
Proportion Information	0.060	0.196	0.050	0.138	0.932	240.154	0.352	0.052	-0.011	0.032
Proportion Exploration	0.231	0.352	0.190	0.274	1.900	229.816	0.059	0.118	-0.002	0.082
Proportion Feedback	0.305	0.390	0.502	0.357	-7.166	216.565	<.001*	0.508	-0.250	-0.142

Note. "Lower/Medium" included turns with CVC scores of 1-4. "Higher" included turns with CVC scores of 5 or 6. Equal variances were not assumed. For "Lower/Medium," *n* = 2,589, and for "Higher," *n* = 185.

Modeling following child responses

The proportion of modeling within turns was significantly different for these lower and higher responses. Less modeling occurred in leader turns following higher level responses, $t(299) = 3.453, P = .001$. The analyses indicated that the proportion of modeling following high responses (1.56%) was significantly different that the proportion of modeling following a low or medium level response (3.76%). This indicates that following lower responses the leader may have used modeling

(disclosing or modeling an interaction) as a way to show the children how to share a story or perform a task.

Feedback following child responses

Additionally, the proportion of feedback within turns of the leader following child responses was significantly different for the lower/medium (1-4) and higher (5-6) responses. And, for this analyses the effect size was medium, $d=.508$. A greater proportion of feedback occurred in leader turns following higher level responses, $t(217) = -7.166, P < .001$. The analyses indicated that the proportion of feedback following high responses (50.2%) was significantly higher than the proportion of feedback following a low or medium level response (30.5%). The leader may have had to use other interventions such as modeling or providing information after a lower level response to try to shape child responding.

Leader following child low level responses Low and Medium/High CVC

As with the analyses above, t-tests looked at leader interventions following child responses, which were now grouped as low (1-2) or medium/high (3-6). In this case, the leader's use of information and cohesion interventions differed following the two groups of responses.

Information following CVC

When leader responses (GLIS) following child verbalizations were analyzed, the proportion of information in leader turns following lower (1-2) responses was significantly greater (3.44%) compared to following medium/higher CVC scores (3-6) (0.65%), $t(872)=-3.98, p < .001$. The effect size was very high, $d=1.449$. This indicates the leader provided information as a strategy to try to correct or provide

more support following the lower level responses.

Cohesion following CVC

The leader’s use of cohesion in leader turns following lower (1-2) responses was slightly less (1.1%) compared to following medium/higher CVC scores (3-6) (1.9%), $t(742)=-2.045, p=.041$. The effect size was very small, $d=.087$.

These results and the other results for leader following child verbalizations comparisons of low compared to medium/high CVC scores are presented on Table 45 below.

Table 45
Independent Samples *t*-Test for Proportion of GLIS Variables on Child Cognitive Level (Leader Following Child) - Lower and Medium/Higher CVC Groups

Variables	Lower		Medium/Higher		<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>	95% Confidence Interval	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
Proportion Structure	0.195	0.337	0.192	0.313	0.130	584.895	0.896	0.009	-0.032	0.036
Proportion Cohesion	0.011	0.073	0.019	0.095	-2.045	742.496	0.041	0.087	-0.016	0.000
Proportion Modeling	0.038	0.162	0.036	0.144	0.257	573.195	0.798	0.014	-0.014	0.018
Proportion Information	0.344	0.131	0.065	0.202	-3.988	872.035	<.001	1.449	-0.045	-0.015
Proportion Exploration	0.238	0.366	0.226	0.343	0.632	588.292	0.527	0.035	-0.025	-0.049
Proportion Feedback	0.317	0.411	0.319	0.387	-0.089	590.208	0.929	0.005	-0.044	0.040

Note. "Lower" included turns with CVC scores of 1-2. "Medium/Higher" included turns with CVC scores of 3-6. Equal variances were not assumed. For "Lower," $n=437$, and for "Medium/Higher," $n=2,333$.

Valence following child responses

Valence of the intervention was coded for all feedback interventions and was a way to measure the tone of leader interventions when giving feedback. Valence, the independent variable, was coded as positive, negative, or neutral. Using the aggregated data set that contained columns for feedback interventions of the leader following child responses the relationship between feedback valence and mean child response was explored. An ANOVA with three levels of valence within leader feedback (leader following child) as the independent variables and mean child cognitive level prior to leader feedback interventions as the dependent variable was

significant and is displayed on Table 46 below. The majority of feedback interventions were neutral (n=1,137). There were 71 instances of negative feedback and 115 instances of positive feedback. The mean child cognitive score that received negative feedback was 3.23, neutral was 3.56, and positive was 4.23. There was a significant effect for leader valence of feedback following child cognitive responses (CVC level) at the $p < .05$ level for the three conditions (positive, negative, or neutral) indicating that the leader adjusted the tone of feedback depending on the child's response, $F(2, 28.50) = 36.582, p < .001$. This indicates that the leader provided different feedback depending on the child's mean cognitive response within a turn. Post-hoc comparisons indicated that mean differences between all three groups were significant at the .05 level; this indicates that higher mean CVC scores were consistently followed by more positive leader feedback. Lower scores were linked with negative feedback. Neutral feedback followed more mid-level responses.

This analysis was also run (ANOVA) with the leader feedback preceding child responses. As would be expected, there was no relationship between the valences of feedback when looking at leader speaking turns that came before child responses. The leader only adjusted the tone of feedback when the feedback followed the child's response.

Table 46

Anova of Valence of Leader Feedback following Child Verbalizations

Variable	Mean Child Verbalization	SD	n		
Valence	3.60	0.91	1,323		
Neutral	3.56	0.88	1,137		
Positive	4.23	0.87	115		
Negative	3.23	0.99	71		
Source	SS	df	MS	F	η^2
Valence	57.00	2.00	28.50	36.58*	0.05
Error	1,028.38	1,320	0.78		

Note . $R^2=.053$, adj $R^2=.051$

* $p < .001$.

Disorganized child responses

Child responses that were highly disorganized were considered the most disruptive to the group. These responses (CVC-2, Type 1) required clarification or redirection from the leader and due to their length took up more group time than other child verbalizations. The frequencies and proportions of CVC Level 2 responses across book and sessions are portrayed on Table 47 and 48 below. Child C was absent during the first session. Since he was responsible for the most Type 2 (disorganized) responses overall, data from the first session/no book from this session should be interpreted with caution. Over the course of the three books there was not a significant decrease in Type 2 (incorrect or interruptions) responses. However, the frequencies of disorganized responses were lowest in frequency and proportion during the third book. There was only one disorganized response during the final session. While low level responses did not decrease over time, this specific type of

undesirable response occurred at much lower rate during book 3 and during the last four sessions of the group.

Table 47
Frequencies and Porportions of CVC Level 2 by Book

Book	Type 1		Type 2		Total
	Frequency	Proportion	Frequency	Proportion	
No Book	0	0.0%	10	1.6%	608
Book 1	42	1.7%	96	3.9%	2485
Book 2	33	2.3%	101	7.1%	1429
Book 3	21	0.7%	129	4.6%	2804
Last Session	1	0.2%	7	1.4%	490

Note. Chi Square was significant for CVC Level 2 by Book. $\chi^2=83.89$, $df=8$, $p<.001$

Table 48
Frequencies and Porportions of CVC Level 2 by Session

Session	Type 1		Type 2		Total
	Frequency	Proportion	Frequency	Proportion	
2	10	1.9%	17	3.3%	523
4	13	2.0%	19	2.9%	665
5	11	1.5%	32	4.5%	715
6	8	1.3%	28	4.6%	615
7	11	2.0%	40	7.4%	540
8	21	3.8%	39	7.0%	558
10	5	0.9%	41	7.5%	547
11	8	1.5%	27	5.1%	526
12	4	0.5%	27	3.6%	745
13	2	0.3%	21	3.2%	656
14	3	0.5%	35	5.5%	634
15	1	0.2%	7	1.4%	490

Note. Chi Square was significant for CVC Level 2 by Session. $\chi^2=127.55$, $df=24$, $p<.001$

Chapter 5

Discussion and Future Directions

This study detailed the course of a narrative-based intervention, STORIES (Structure, Themes, Open Communication, Reflection, Individuality, Experiential Learning, Social Problem Solving), for a group of fourth grade students with intensive academic and social emotional needs. STORIES aims to have children discuss and process problems through the use of books with a goal of making connections to their own lives. The goal is to have children discuss book content to lead to better understanding of their own experiences, so that children can share and process results. This program has been successfully implemented for students with emotional and behavioral deficits (Teglasi & Rothman, 2001; Rahill & Teglasi, 2003). However, this current case study indicated the need for modifications to the program to address the varying needs of child participants.

The group participants were referred to group for presenting as “shy” or withdrawn in the classroom. However, children often present as withdrawn in school for a variety of reasons. Rubin, Coplan, and Bowker (2009) list correlates of social withdrawal as including peer rejection or victimization, negative thoughts and feelings about the self, potential weaknesses in expressive and receptive language skills, and lack of displayed academic competence in early and late childhood. For the selected group, withdrawn classroom behaviors were linked to many factors. Pre-test data and in-group performance supported the theory that shyness and withdrawal within the classroom setting was at least partially related to below average cognitive

skills, inaccurate schemas, and a lack of the necessary background knowledge to understand grade level curricula. Functional communication was also a known weakness for the group members at pretest.

While this study lacks a comparison or control group that did not receive the same level of modification and support, this group was part of a larger study based on the same referral criteria—presenting as shy or withdrawn in the classroom. The larger sample consisted of eight groups and forty-five participants (N=45). This particular study group differed from the other groups in the larger project in a number of ways. First, the other groups that were being conducted at the same time did not require the same intensity of modification for the participants to be able to discuss the book content. Second, this group had almost perfect attendance and no “drop-outs” or attrition. Sedlik (2009) noted that almost all of the other participating groups had one or more students leave by choice. The consistent attendance within this group, along with specific child feedback, provides support that the level of engagement within this group was high. Modifying the material by providing scaffolds, or a variety of supports, and various group interventions (GLIS) promoted an environment where the group members wanted to participate and attend the group.

This study utilized two detailed coding systems to capture dynamics within the group. The Group Leader Intervention System (GLIS) measured leader behaviors and interventions within the group. This GLIS consisted of six global categories (Structure, Group Cohesion, Modeling, Information, Exploration, and Feedback); each global category had at least two subcategories. The GLIS was modified for the purposes of this study. The most important modifications were as follows. First,

several modifications were made to include a new subcategory under the Structure domain to capture interventions specific to “lunch-time” behaviors. Since previous projects using STORIES took place during class time, this type of Structure was not included when this coding system was originally developed (Teglasi & Rothman, 2001; Nuijens et. al, 2006). Second, the new subcategories of Positive and Negative Structure were added to capture leader attempts to promote or extinguish behaviors. Third, other categories were specifically updated to look at the level of assistance the leader needed to provide in order to keep the group members engaged and promote understanding of the story content. Fourth, a new category called “scaffolding”, which was a four level scale, measured the amount of support linked with exploration questions within the group. This ranged from low (open-ended questions with minimal background) to very high (leader provides all information needed to answer the question). This new subcategory of exploration looked specifically at supports within questions, several of the GLIS categories represented leader attempts to scaffold, or shape, better responses from the group. All GLIS categories and definitions are found in Appendix A.

Scaffolding and Leader Modifications

This study focused primarily on leader behavior within the group to explore the accommodations, modifications, and scaffolds used to maintain the group process as measured by the GLIS and by corresponding student cognitive levels throughout the group associated with GLIS intervention. Child verbalizations were measured on a six point scale, the Child Verbalization Codes (CVC), which can be found in Appendix B. This study adds to the literature in that it looks at the reciprocal

dynamics between the leader and group members. Most studies on group counseling have looked at leader and child behaviors individually. “Scaffolding” is a common term in the literature for reading and academic interventions. It is typically defined as “a range of interactional supports that are structured by adults to maximize the learning of at-risk children” (Maliky, Juliebo, Norman, & Pool, 1997). Research supports the use of scaffolds by teachers in classrooms to support student learning when there is a variety of developmental levels. Studies have demonstrated that within interactions, teacher scaffolds had immediate effects, delayed effects, indirect and direct effects, and reciprocal effects. Additionally, in studies exploring scaffolding techniques it was found that children often pick up strategies used by teachers and can employ them in later work and discussions. The most common scaffolding techniques include prompting, coaching (comments to give perspective and structure), modeling, telling (giving meaning or background information), and discussing strategies (May, et. al, 2011, Malicky et. al, 1997; Kim & White, 2008). In this intervention study, all of these methods were employed in various capacities and were measured using the GLIS system. In addition, the wording of the exploration questions and amount of support prior to asking questions were examined in order specifically study leader scaffolds. This strategy was not planned in advance of the group, but comprised the leader’s methods of adapting to the low cognitive level of the group.

The term “scaffolding” is not typically used in the counseling literature. However, commonly used terms to describe leader techniques, such as modeling, align with the above definition. The STORIES program was designed primarily as a

social-emotional intervention with children's literature serving as the vehicle for introducing group topics and teaching important skills. Understanding, processing, and thoughtful discussion of the books presented in the group are key ingredients for change (Teglasi & Rothman, 2001). The use of age appropriate literature makes STORIES overlap with academic instruction in many ways. This overlap opens up the valuable opportunity of assessing how leader scaffolds to promote child understanding of the group material are useful for counseling, as well as academic, purposes. Further understanding the types and amount of supports different populations of children will need to access and benefit from this type of intervention will help improve referral practices and planning of appropriate interventions matched to child needs.

The importance of leader techniques has been studied in the counseling literature; Leichtentritt and Shechtman (1998) found that the therapist's techniques and responses are important in promoting a therapeutic group environment. The three therapist factors that stand out in promoting a successful group process are structuring activities, questioning, and modeling self-disclosure. These three areas are included in the GLIS (Structure, Exploration, and Modeling). Use of Feedback, Group Cohesion, and providing Information were also studied in this group. This study suggests that group leaders need to consider that different developmental levels will require scaffolding to access and understand content of groups (social emotional) and not just academic work.

This study looked solely at within-group functioning by studying transcripts. Future studies may wish to explore longer term effects of participating in a group

where the leader provides support to match student functioning, both socially and academically. Moreover, while there was variability in child characteristics, this group was homogeneous in terms of general cognitive level and the need for high to very high levels of scaffolding and a large amount of Structure. More heterogeneous groups may require a very different pattern of scaffolding from the leader to promote engagement and understanding from group members.

Scaffolding in the current group

Leader interventions coded using the GLIS made up the majority of verbalizations within the group, indicating that the leader often provided multiple statements and interventions prior to a child turn. Structure, Exploration, and Feedback made up the majority of these interventions within the current group. Group cohesion, Modeling, and Information interventions occurred at much lower rates. However, all six global categories occurred across phases (pre-book and book), activities (general discussion, review of books, guided reading, structured activity and other), and books (Session 1, *The Day I Saw my Father Cry*, *Big Al*, termination session). As mentioned earlier, books served as a proxy for time in this study.

Analyses of the new scaffolding category indicated a high level of support throughout the group process when questions were posed to the group members. Overall, 80% of leader scaffolds associated with exploration questions were rated as “high” or “very high” indicating a need to provide clues, supports, and background for students to answer questions at an acceptable level. The other 20% of scaffolds were rated as “low” or “medium”, indicating open-ended questions with more

minimal supports. In general, the leader followed a sequence where questions would get easier or more specific if the children were having difficulty coming up with an appropriate answer. Therefore these high or very high scaffolds were often given once children had already made an attempt to answer a less supported question without success. Scaffolds in this pattern were used more to prevent lower level responses, rather than promote the highest levels of child responses.

As noted above, STORIES aims to have children discuss and process problems through the use of books with a goal of making connections to their own lives (Teglasi & Rothman, 2003). This process is a variation of self-disclosure tasks that have been shown to have therapeutic effects for adults and children (Reynolds, Brewin, & Saxton, 2000; Soliday, Garofalo, & Rogers, 2004; Fivush et al., 2007). Studies on self-disclosure tasks with children have seemed to indicate a need for more structure to have a benefit (Fivush, et. al, 2007). Within STORIES, the leader provides guidance using children's literature with the hope that children will learn to process emotions by talking about the characters and generalizing to their own experiences. The program, while not scripted, is highly structured. This study using STORIES seemed to support the idea that children do not naturally match stories and self-disclose, and those children with lower cognitive abilities may need even more adult support to process and understand emotions. Leaders may have to monitor and adjust content due to varying developmental levels and provide additional structure for students to meet demands of discussions and activities. In order to have children share personal stories or answer questions about books, the leader needed to prepare them by using scaffolding techniques. Modeling self-disclosure and providing

supports prior to asking questions were attempts to improve child comprehension and performance. These supports, however, did not serve academic goals alone. In STORIES, having children discuss book content also has the purpose of leading them to better understanding of their own experiences and emotions so that they can share and process events. The level of scaffolding needed across this group supports previous literature in that children do not share appropriate personal narratives without additional support.

Reciprocal effects of group

May and colleagues (2011) mentioned that the interactions between teachers and students have reciprocal effects. Research on group counseling also indicates that the interactions between the leader and participants influences group functioning and dynamics (Pan & Lin, 2004; Shechtman, 2007). This study supports that within group counseling interventions both leader and child behaviors affect group functioning. Analyses of alternating turns between leader and child indicate that leaders change their behavior to promote certain child responses and also change their behavior based on child performance within sessions. Children also respond to certain interventions provided by the leader.

Perhaps the most interesting piece of this study was the reciprocal interactions between the leader and group members. A clear goal within this group was for the leader to promote higher level cognitive responses within a group discussion. Promoting understanding of the content is a critical element in promoting positive mental health effects. Given the functioning of the children in this group, another

goal turned out to be minimizing incorrect or highly disorganized responses. When exploring GLIS interventions prior to child responses, this study found that the use of certain GLIS interventions promoted higher (CVC level 5 or 6) responses from the group members. On the other hand, certain GLIS interventions preceded very low child responses (CVC 1 or 2). Leader turns with more Structure and Modeling were more often followed by these desirable responses. Feedback interventions were more often followed by lower child responses, which seems to indicate that exchanges involving series of feedback may have occurred when responses were more off-target and feedback was an attempt to reframe. Additionally, child turns following feedback may have been interruptions and the children earned low scores on the CVC for this type of behavior. Scaffolding level by the leader was also related to child level of responding; however, this relationship was more complicated and is discussed in the *scaffolding* section below.

More Structure interventions seemed to prevent interruptions while making expectations for responding clear to the participants. Modeling an appropriate interaction or story also seemed to give students a more clear expectation of appropriate responses. Simple responses were the clear mean and modal response in the group. When the leader modeled responses it may have provided a “jumping off” point for students to tell personal stories or make connections and therefore they could earn higher scores. Overall, the results indicated that higher proportions of all GLIS categories were related to better mean CVC levels. This indicated that in parts of the group where the children were speaking more with less leader guidance between turns their overall responses were of lower quality. When the child

responses were later grouped to sort out the higher and lower responses, more Structure and Modeling seemed to be the GLIS interventions most likely to bring about higher ratings.

Yet, in this group, the positive effects of modeling came with some limitations. The children often mimicked stories modeled by the leader or other group members and therefore only earned CVC scores indicating a low level of responding. These students may have needed more support and cognitive strategies to make higher level connections. In future studies with similar groups, specific models and examples built into the STORIES program structure may promote more of these on-target (level 5) and integrative responses (level 6). Children with below average cognitive abilities, like the children in this group may need more examples and specific instructions to try to understand book themes and moral and to think of their own stories to share in group. Some children never made their own connections or interpretations that were unique to their own experiences, more modeling, role playing, and other types of supports may encourage these in future groups. For other children, reducing disorganized stories may be the best possible outcome; integrative responses may be too high of a goal depending on child characteristics. Reducing the frequency of negative, incorrect, and disorganized responses is discussed below.

Another leader goal of the program is to reduce the frequency of disruptive behaviors and incorrect or disorganized responses within a group. In this group, purposefully disruptive responses were rare, but there was a high frequency of incorrect, interrupting, or disorganized responses. Certain leader interventions prior to child responses were linked with a lower rate of these types of responses. For the

purpose of this study, low responses (1-2 on CVC) were grouped together and analyses looked at leader interventions that occurred before and after these undesirable responses. .

If this group study showed that some interventions promoted higher performance, and others limited negative behavior, it also showed how still other interventions accompanied reduced performance. Specific Exploration interventions were less likely to precede low level child responses which indicated when asked a specific question the children were less likely to give an inappropriate verbalization. When these exploration questions were highly scaffolded, the likelihood of a CVC of 1-2 was reduced. Without the structure of a specific question to guide child verbalizations the children's verbalizations were more off-topic on average.

Higher rates of feedback occurred before lower level responses. Although feedback is typically expected to follow a child response there was often a sequence of interactions between the leader and child. Therefore, the lower responses following feedback may represent interruptions and off-topic responses by the group members along with attempts by the group leader to use feedback to shape future responses. More feedback may have indicated that the student's thought process was not following the expected trajectory of the discussion.

Finally, less group cohesion interventions occurred before lower responding indicating that team building or engagement building comments by the leader may promote better responses. It may also suggest that it is difficult for the leader to provide positive comments about the group and group functioning during portions

when there are high levels of disorganization. The effect size of the relationship between cohesion and child cognitive level is weak due to the low base rate of cohesion interventions within the group, but it appears that more positive statements about the group occurred before better responses.

Scaffolding

As mentioned above, scaffolding is often thought of as a technique used by teachers to promote understanding and reading and academics. Since STORIES has a reading component and a focus on understanding literature, scaffolding in this study was used in a similar way. The “scaffolding” specific category was a measure of specific level of support when asking the children to answer questions about the book, the group process, and their personal experiences. Since individuals function best when there is a match between the stimuli presented and their own capacities and needs it is important to adjust academic environments so that they are neither too easy or too hard (Ziegler, 1981). Scaffolding in this study took many forms. For example, models of types of responses or providing information were types of scaffolding. Scaffolding within the Exploration category included asking questions with more support built into the leader query. All of these leader behaviors within this study were attempts to provide more of a match between child skill and the tasks presented.

Data about scaffolding level and level of child responses, however, did not exhibit a simple relationship between the two and required closer examination to be understood. Due to the high rate of mid-level child responses (tangential and simple) mean scaffolding level did not have an overall relationship with level of child

responses. Very high scaffolds (level 4) eliminated the chance of a child earning a 5 or 6 because the default code for a child response following a leader query where the answer was provided was a level 4 response, indicating only simple low-level understanding. The use of very high scaffolds promoted engagement, but also made responses following this type of query to be capped at a level 4. These very high scaffolds were often used after children demonstrated low levels of understanding or were used intermittently to keep high levels group engagement by giving members the opportunity to repeat certain ideas or interact with story content. For example, after learning the strategy to say the word “so” when a bully makes a mean comment, the leader gave several examples and then asked, “what would you say?” The children all answered “so” and only earned a CVC code of 4, but the exercise provided reinforcement and entertainment for the group. In general, these more simple and structured questions were only provided in cases where it was very unlikely for children to provide an integrative or interpretive response without reinforcement and support from the leader. The very high scaffolds prevented the very low responses and promoted at least simple and accurate responses (Level 4).

More specific ways of grouping the data also revealed complex relationships between high levels of scaffolding and student performance. The mean child verbalization score for the group was a 4 and this type of response occurred much more frequently than any other coded level. The effects of leader scaffolding were much more apparent when the child data was grouped to pull out the lower or higher level responses. Scaffolding within Exploration had a different effect when considering specific goals of reducing lower (CVC 1-2) responses or encouraging the

children to make more of their own connections (CVC 5-6). Child responses were grouped to pull out the lower level (1-2) and higher level (5-6) responses and analyses examined the mean scaffolding level that preceded each of these types of child verbalization. When the data were analyzed in this manner, it was clear that the leader's use of scaffolding did in fact have a significant relationship with child cognitive level.

First, if one separated out lower level responses, analyses indicated that lower level responses (1-2) followed a mean scaffold of (2.89) whereas medium to high responses (3-6) followed a mean scaffold of (3.15). This indicates that children often needed more support to give correct responses and that higher level scaffolds minimized or lowered the likelihood of the less desirable behaviors and responses in the group. Cohen's *d* of .31 indicated the effect size for this relationship was moderate and that higher scaffolds by the leader are associated with fewer low child responses.

But if one separated out only the upper level (5-6) responses, a very strong effect ($d=.90$) was found when looking at the relationship between leader scaffolds before high responses (5-6) compared to the other levels (1-4). In this case, lower scaffolds ($M=2.44$) were followed by the highest on-target and integrative responses. Other levels of responses (1-4) followed a mean scaffold of 3.18. This indicates that high scaffolds may prevent low level responses, but also may prevent integrative responses in some cases. Correspondingly, the lower scaffolds may allow student to give more complex responses or more original responses, but in other cases allow the students to give wrong, disorganized or off-topic answers.

While this data seems to be contradictory in some ways, the fact that both low and high scaffolds can be associated with more desirable responses is linked to the variation in difficulty with group content and also the differences in child skill and performance. The contribution of high level responses was not due to any specific group member or members, nor was the rate of low level and disruptive responses. The variation in scaffolds allowed some of the children to provide more integrative responses and at the same time to give others the opportunities to provide correct responses to simple questions. This supports the idea that the leader needs to provide a range of opportunities for students to respond using questions of varying difficulty including open ended, more specific, and very simple and reinforced questions to keep engagement high and allow students to demonstrate their knowledge. This finding matches literature on scaffolding within academic domains; classroom or academic instructors need to provide a range of supports to match varying skills levels of students within a classroom to improve student outcomes (May, et. al, 2011, Malicky et. al, 1997; Kim & White, 2008).

Leader adjustments following child responses

This study also indicated that leaders change and adjust their behavior depending on child verbalizations at various levels. Analyses also looked at leader responses that followed the low or high sets of child responses. The strongest relationship was found for feedback interventions. In this study the valence of the leader's feedback also varied significantly based on the child's type of response. Overall, small proportions of negative and positive feedback were associated with leader feedback, and most feedback provided was neutral in tone. Neutral feedback

was often provided even following incorrect responses. Following higher (5-6) responses, the leader provided much higher rates of positive feedback. In general, a lower level of negative feedback was associated with leader responses following a child response coded as 1-2 on the CVC. One reason that feedback overall was associated with the higher compared to the lower responses is that when children gave lower level responses, indicating a lack of understanding or a behavioral disruption, the leader had to use other types of interventions to get the group back on target such as providing Structure, providing more information, or asking a simpler exploration question. Significantly more Modeling occurred after low level responses, indicating that the leader likely attempted to demonstrate an appropriate story or response to guide the children towards more appropriate answers. The literature suggests that children and leaders often have specific patterns of behavior within counseling groups (Shechtman, 2007); these current findings suggest that both child and leader behaviors change in relation to each other within the group setting and are not independent within child counseling groups.

Emotional Content

As mentioned in Chapter 4, the group leader provided the majority of verbalizations in the intervention that contained emotional content. Higher rates of emotional content were expected overall. The group members in this case may not have had the communication skills, background knowledge, or breadth of vocabulary to accurately talk about their emotions and those of the characters in the stories. Within the group, the leader created a display board of emotional vocabulary during the fourth session that was displayed during the following sessions. This was an

attempt to address the vocabulary deficit and encourage children to use words other than “happy”, “sad”, or “mad.” Despite this intervention, use of emotional vocabulary within child verbalizations did not increase over time within this group.

In this group, even after the vocabulary activity, the leader tried to draw more emotional responses from the group, but they responded with actions. For example, when asked, “How would you feel if...” the students responded with, “I would do...” This type of response indicates a skill deficit in need of intervention. Despite Modeling and high scaffolds, the children continued to have difficulty incorporating feeling words into responses.

The study did not find that the spontaneous use of feeling words increased over the course of the intervention despite an intervention goal of helping the participants process emotions. The specific books varied in terms of how many instances of emotional content occurred, but the use of feeling words did not increase chronologically. In this case, time did not seem to relate to the incorporation of emotions into the discussion as much as specific activities. The highest rate of emotional words occurred during the guided reading, which indicated that the use of the literature provided some Structure and encouraged discussion of feelings (character and self). This provides support for the use of STORIES as a social-emotional intervention in that the books promoted children to have dialogue that include this type of vocabulary. The children in this intervention seemed to benefit from the use of the text to encourage discussion of feelings. Even with the use of the text, most child responses including emotional content were directly prompted by the leader and not initiated by the child. For example, after reading a section the leader

would ask, “How do you think the character feels?” The leader asked feeling questions across all three books, but some book topics may have been easier for the children to relate to compared to others. Future groups of this type may need to lead with some pre-teaching of emotional vocabulary as compared to trying to teach new vocabulary as it arose in the group. Structured activities may need to place additional emphasis on understanding feelings of the characters and encourage group participants to make connections to their own feelings and experiences. This was attempted in the current group, but this population may need even more Structure, Modeling, and reinforcement before being able to incorporate more feeling vocabulary into their discussion.

Empathy

Results of this study indicated very low levels of child empathetic statements and responses throughout the course of the group. Eisenberg and colleagues (2006) defined empathy as “an affective response that stems from the apprehension or comprehension of another person’s emotional state or condition, and is very similar or identical to the other person’s feelings.” Within the group, any statement where a group member or leader demonstrated this type of response the verbalization was coded for empathy. The group leader provided 96 out of the 102 verbalizations coded for empathy (94.12%). Four of the six group members each provided one empathetic verbalization throughout the course of the group. The content of the group discussions included loss of a family friend, trouble making friends, and dealing with teasing or bullying, should have drawn more instances of empathy out of the children. MacEvoy and Leff (2012) conducted a study on

children's empathy and sympathy with children of a similar age and demographic to the current study. They indicated that most children tend to express sympathy and empathy when talking or hearing about more overt behaviors, such as bullying. It is believed that a variety of factors contributed to this low rate of empathy despite the nature of the group content. These factors include lower than average cognitive ability (IQ), problems with attention, and potentially an inability of the group members to verbally express what they were feeling internally.

Marton and colleagues (2008) found that in a sample of 92 children ages 8-12 that IQ was a significant predictor of social perspective taking skills, a key ingredient for displays of empathy. In this group, teacher ratings and within group ratings of cognitive level indicate that members of this group all had below average to very low cognitive abilities. Future groups working with this type of population will likely need even more structured and modified tasks to help build social problem solving skill. Additionally, instruction in the vocabulary needed to match and express feelings of empathy would be a prerequisite for children with lower cognitive abilities to be able to make empathetic statements. For STORIES, there may need to be a combination of pre-teaching and learning through the experience of the group process. In general, children with lower cognitive abilities will likely need additional instruction and supports to be able to understand the perspectives of others and demonstrate that they can understand and connect with the feelings of others. Since STORIES is not a scripted intervention it allows the leader to make changes based on the functioning of the group participants and to spend more time reinforcing or building skills if it is discovered that there is a weakness or deficit.

In this group, five of the six children were rated by their teacher as having “at-risk” or “clinically significant problems” with attention on the BASC-2 at pretest. Impulsive behaviors, such as interruptions, within the group supported these observations. Social perspective taking skills are known to be weaker for children diagnosed with ADHD compared to those without this condition. Children with ADHD are less likely to take multiple perspectives, which will often have social ramifications (Marton et. al, 2008; Cohen, Kersher, & Wehrspann, 1985). Marton and colleagues (2008) found that children with ADHD did not rate themselves as less empathetic than their non-identified peers. The parents of children with ADHD rated them as significantly less empathetic. These researchers suggested that children with ADHD may actually experience more empathy internally than they are able to present behaviorally. This scenario applies to the current group; the children seemed engaged, but may have lacked the verbal and behavioral skills to demonstrate that they understood the perspectives and emotions of each other and the characters in the books. While there is not enough variability in child performance to make a direct link between attention problems and low rates of empathetic statements within this small group, historically attention deficits have been linked with weaker abilities to express empathy. Since STORIES group activities directly teach and model perspective taking skills, this may be a useful intervention for students who struggle with attention and social perspective taking skills. Future studies may investigate the potential link between STORIES and building empathy in young children.

Group Selection, Group Composition, and Group Cohesion

With respect to child characteristics and skills that promote group cohesion or

lead to conflict, some researchers believe a heterogeneous group is best and that participant learn from the differences within the group. Others believe that child characteristics should be matched on many variables. It seems as though some issues may be best addressed through homogenous group composition because they are unique in their origin and presentation (Corey & Corey, 2006; Shechtman & Ifragan, 2009). By contrast, for groups where participants are diverse in their skills and competencies, bonding may result through opportunities to share and learn from the experiences of others (Shechtman, 2002). In either case group leaders should develop selection and exclusion criteria and carefully screen prospective participants to maximize the chances of a successful small group experience (Corey & Corey, 2006, Yalom & Leszcz, 2005). Some children may not be appropriate for group interventions and too many low functioning children can lead to regression within a group (Shechtman, 2008). Appropriate screening and exclusion criteria should be considered when setting up groups. In this group some of the factors that may have influenced group functioning were gender, variability in executive functioning skills (such as impulse control), and individual comfort speaking in a group. Additionally, the presence of two high impact students (in terms of participation rate and level of disorganization) influenced the group's dynamics.

The project included a detailed case study of six students with intensive academic and social needs who lacked competencies in social and academic domains. These children presented with a range of issues within group. Some members demonstrated problems with organization and communication deficits. Problem behaviors were not seen as purposeful or manipulative, but several members had trouble sitting still and

controlling impulses. The group was relatively homogenous in terms of academic skill, with some variation. Shyness or withdrawal, tendency to be a leader or a follower, and hyperactivity/impulsivity varied. At the start of the group, only one female participant had been referred and later a second female student joined the group, but she was not considered to be a study participant.

Gender

In general, most researchers believe that groups with elementary age children can be mixed in terms of gender (Corey & Corey, 2006). In this group, the one female member participated less in early sessions and then expressed discomfort in the group because she was the only girl. This was addressed with the group and the other members did not see this as a problem. To increase the comfort of the female participate another female classmate was allowed to join the group from sessions 9-15. This change seemed to increase her comfort and rate of participation. Future groups may need to consider even ratios of boys to girls or keep groups homogenous in terms of gender.

Dominant participants

As mentioned in the results section, there was extreme variability in rates of participation by group members. Child B and Child C contributed half of all verbalizations. These two children also accounted for almost all of the responses coded as highly disorganized. The extreme variability in participation rates raises questions about group selection and how to address these types of behaviors in the group. Both of these students reported liking the group, but their high rates of low

level responses that required redirection or intervention took too much time from the group process and may have prevented other students from being able to share and contribute. Their high rates of responding at lower levels clearly impacted the group's mean scores across all areas measured in this study. Other students may have felt uncomfortable competing with these students for turns to speak. Or, interruptions by these students may have taken opportunities away from students who may have had a more thoughtful response.

These students also seemed to have more trouble inhibiting responses and organizing their thoughts. It was clear to the leader and to other participants that these two children were not intentionally behaving badly. Student comments and behaviors indicated that they were well liked; however, their rate of participation along with responses that required redirection, clarification, or behavioral consequences lowered the mean cognition rates of the group. There is limited research on these specific types of behaviors (one or two lower dominant child participants in group).

Withdrawn participants

Child D spoke fewer than 100 times across the sessions and these times were usually prompted by the group leader rather than being spontaneous. The student mentioned in the last session that he did not like to be called on. It is hypothesized based on the students pre-test data indicating significant learning problems that the material in the group was too hard for this student even with modifications and scaffolds and his behavior and participation was linked to a low level of understanding.

For future studies it would be important to make attempts to have participants contribute more equally in group or to find ways other than verbal participation to better assess whether students are benefitting and comprehending group material. Strategies to encourage more thoughtful responses and to downplay rambling, disorganized responses from group members with a tendency to dominate time could be beneficial. It may also be important to include expectations about participation when establishing group norms and group rules in the first session. Having a statement about participation on the rules poster may increase student awareness of their own participation and behavior in the group. For students with very low impulse control, additionally interventions such as visuals or “turn taking cards” may be needed so that students can learn to self-monitor in-group behavior. In future projects, statistics on each individual child’s cognition over time to see if some improve while others do not change could provide more support for how to select group members and how to promote functioning for all group members. It would be important to see what factors influence individual child performance, since this study focused more on the group as a whole and leader interventions. This kind of future study would help improve group selection.

Use of Lunch for Service Delivery

Group formats are often used in schools as a means of delivering mental health services to children to allow for the treatment of more children with fewer resources. School mental health professionals often do not have the time to deliver one-on-one interventions, thereby rendering small-group delivery a viable and logical format (Davis, et al., 2006; Foster et al., 2005; Prout & Prout, 1998). In addition,

with demands and resources being focused on academic test scores, psychologists and counselors are often limited to lunch/recess time to provide mental health services. There is very limited research on lunch-time interventions and this study adds to the literature base on the utility of lunch-time groups. Lunch groups or “Lunch Bunches” are common formats in the school that do not interfere with regular school programming, and allow the psychologist or counselor access to students in need. Use of this format is logical and sometimes the only available option (Josephson, 2006). Furthermore, the use of food in group can represent emotional and symbolic nurturing; Mishna, Muskat, and Schames (2002) suggested that using food within groups may help bring up salient topics or conflicts and issues with which group members are struggling. In the current group, the transition to lunch as part of the group process may have established a warm and safe environment. On several occasions, when students forgot or did not have money for lunch the leader and other students helped solve problems by sharing and demonstrating prosocial behaviors in a natural environment.

The first two studies utilizing STORIES (Teglasi & Rothman, 2001; Rahill & Teglasi, 2004) used class time and not the lunch hour to provide the intervention. For this study, lunch with the addition of time taken from recess was allotted. Therefore the study of this group was divided into two phases: pre-book (lunch) and book (post-lunch). The pace of child transition and their own rates of finishing up lunches controlled some of this division of the phases. The thought units across the two phases ended up being almost even (51% pre-book, 49% book). For about half of the group the students had their lunch trays out and then these were removed. Discussion

of books occurred in both phases; however, for practical reasons the books were not distributed until phase 2 (book).

It was hypothesized that lunch may detract from student focus and therefore there were anticipated differences between the two phases. Some minor differences were found when exploring phase; however, child performance did not seem to vary significantly from one phase to the next. There were some differences found in terms of leader interventions, but these did not seem to have a meaningful impact on group performance. Structure occurred fairly evenly across the two phases. Positive and negative Structure occurred at similar rates across phase. As expected, lunch related Structure occurred mostly during phase 1 (pre-book). General Structure, that included turn-taking and preparing the students for activities and transitions, occurred more during phase 2 (book). There were more cases of leader Modeling during the first phase, which may be related to sharing personal stories and modeling how to interact during this time. There were no other significant differences by phase. This provides support for the use of lunch service providers in school since there were similar levels of cognition, use of emotion, and patterns of leader behavior across the two phases. There were some aspects where the phases looked different, but this study did not seem to indicate that child performance was any better or worse during the lunch phase.

The major difference between the phases was the type of discussion. Chi square analyses of the subcategories of exploration questions (Reading, Group Events, Group Member Experiences) indicated that the types of questions the leader asked the children was very different during pre-book (lunch) and book. During the

time children were eating lunch the discussion focused much more on group member experiences. This is because group members often entered the group with a topic they introduced or the leader transitioned the students to the group by asking about personal experiences (weekend events, holidays, etc.). Discussion of group events and discussion of the reading occurred much more during the second phase (book) as indicated by the leader's higher rate of questions specific to these areas. This does not indicate that the discussion was "better or worse" during lunch, but there was clear difference in content and the types of questions the children were answering. The lack of variation in child cognitive level over phase indicates that the children provided similar responses to these different types of questions.

Scaffolding occurred across both phases, but results indicate that more open-ended questions were used while children were eating lunch and more questions with high levels of support were used during "book" time. There is evidence that children needed more support when they were discussing stories compared to their own experiences. This was one of the more significant differences between the phases. More research would be needed to determine the meaning of this difference. It is clear that the book content was likely harder for the children to relate to and therefore they needed more support to answer questions. The lunch portion of group in this case may have provided them the opportunity to feel successful answering questions about their own experiences which may have made them more ready to tolerate the challenges of the "book" phase of group. Additionally, there is no need to judge "correctness" when children are sharing or discussing their own experiences. During that part of the group the organization of child stories was more important and was

captured in the ratings.

Eating lunch together may have provided some social benefits and allowed for the natural modeling of sharing and taking turns. This group provided support that leaders can deliver a variety of interventions while students are eating lunch and that children are able to use emotional vocabulary at similar rates during lunch as compared to a more traditional group setting. As mentioned above, emotional vocabulary usage and empathy were relatively low overall and did not increase over time.

Activities within STORIES and performance

The STORIES program often encourages students to talk about the traumas or problems of others, so students are often discussing problems that they may not have experienced firsthand. Researchers have found that adults writing about either real or imaginary traumas produce equal beneficial effects (Greenberg, Wortman, and Stone, 1996). Adaptations of this type of task for children seemed to indicate that differences in developmental needs for children may not make writing the best format and that children may need more guidance from adults so that they process events rather than “vent” (Fivush et. al, 2007). In the STORIES program, it is believed that talking about problems in children’s literature in a structured manner will have social-emotional benefits for participants. Within the program there are a variety of activities, but talking about the books is expected to help students process and understand their own emotions (Teglasi & Rothman, 2001). The five activities within this program were: general discussion (which was guided by group members or general questions from the leader), review/discussion of books (reviewing or making

predictions about reading when books are not present), guided reading (using the book to read and discuss stories), structured activities, and other (first/last session).

There was more variability in interventions by the leader (GLIS), emotional content, and mean child verbalization (CVC score) when examining activity compared to other group breakdowns. In general, the most emotional content occurred during the guided reading (34%) and review/discussion of book (29%) which provides supports that the aspects of using stories as a vehicle for group counseling allows for more discussion including emotional content. Children had much more difficulty using emotional words when talking about their own experiences, which happened most often during the general discussion. As mentioned above, more exploration questions about personal experiences occurred during lunch and children seemed to neglect to use as many feeling words when answering questions about themselves compared to the characters.

Despite more emotional vocabulary, mean child responses were lowest during guided reading. As mentioned above, this activity requires the students to give “correct” answers to questions about the stories. This demand may make it more likely that they earn scores of 3 or lower, indicating tangential or incorrect responses. This activity should provide potential opportunities for students to make connections and interpretations, so that the opportunity to earn 5 or 6’s is present. However, in this group the children had trouble making connections, inferences, and interpretations. As mentioned above, use of emotional content was often initiated by the leader and even with leader prompts the children were only sometimes were children able to respond using emotional vocabulary.

Book Content

There was some variability by book, but not in a pattern that could have been predicted. In general, performance varied across the books. Mean child verbalization scores seemed to decrease from book 1 to book 2, and then slightly increase again. It is suspected that the content of the books, rather than the order had an impact on child performance. Book 1, *The Day I Saw my Father Cry*, was about a friend who teaches an important lesson, but then dies of natural causes. Throughout the discussions of the three books, the leader helped the students identify “imports,” or important ideas that relate to morals or key messages in the stories. Some of these imports were that “we need to stop and make a distraction to get out of a conflict” and that if “someone teaches you something the lesson stays with you forever.” The children did not seem to have well-developed schemas or ideas related to this book’s content. Book 2, *The Meanest Thing to Say*, was about bullying and games where children win by making fun of others. The children in the group could relate to this; however, the content seemed to evoke some inappropriate responses (CVC 1-2) from many of the students as they talked about personal fights and conflicts. For example, one disorganized response from Child C was, “One time, um it was in my old old school. It was a bad, bad school and everybody get hit and stuff. So when I was just when I was 4 when I was 5 years old at the time, I was um I was um 2nd grade I think and then I went to the court and this big huge boy I think he was 7th grade he threw the basketball in my face and I had a mark right here. I had a huge mark from here and I was bleeding. I said, ‘why you do that for?’ and then he said, ‘because don’t let me beat you up’ and then he called me a lot of mean stuff.” The children seemed to have developed schemas about conflicts that were inappropriate and hard to change. The children

wanted to continue to talk about mean things others have said to them or mean things they could think of in the moment. The most Type 2 (disorganized) responses occurred during the second book. Finally, *Big Al* was about being different and making friends. This book was simpler in terms of reading level and main ideas, but the students may have had more difficulty relating to the characters use of various strategies. In this book, there was more of a pattern of behavior for the main character that involved multiple attempts to change his outward appearance. The leader focused more on steps for problem solving and perspective taking during this book. This demand may have been harder for the group members to navigate, even with the high level of support. Despite a failure to provide more high level responses during the third book, there was a significant decrease in frequency of disorganized responses. This may indicate some improvement in inhibition and monitoring of responses over the course of the group.

In future studies, a different order of books or possibly different selected books may improve student performance. Again, rules and expectations about responses and behavior should be made clear in the first session and then reviewed. This was the process for this group and other groups utilizing STORIES. For lower functioning students, especially for children with difficulty self-regulating, even more reinforcement of rules may be needed.

Child Feedback

Rhule (2005) noted that “intervention programs, particularly experimental programs undergoing evaluation, would profit greatly in soliciting feedback from participants, clients and members of their environments regarding their response to,

and experience of, the intervention.” Within session 15 the children were asked to report their favorite thing or what they liked best about the group. They were also asked to provide feedback about things they did not like about the group or things the group leader could do better in future groups. Students were promised that they would not hurt anyone’s feelings by giving negative feedback. Raw data of student responses can be found in Appendix D.

Student responses indicate that the majority of the students favored the structured activities, such as drawing a Story Board, to reinforce the books. While the group did not “play games” as some of the students commented, many small activities were framed as games. For example, “Let’s play a game about times when you would say “so” [to a bully]. It is suspected that the group members interpreted several of the activities as “games.” Two of the children reported enjoying the reading process. Also, for some of the children it seemed that the social aspect of the group, such as sharing and working together was important.

It was interesting that Child B, who probably had the most trouble with following rules, enjoyed the process of making rules and remembered the idea of “confidentiality” and commented that he liked making and learning rules. Confidentiality was presented in Session 1 and reinforced in Session 2. Several later sessions reinforced this idea when students would share stories. It is suspected that the structured process of making the rules was most significant for the student with known difficulty with emotional and behavioral regulation.

The children were then asked to give feedback for future groups about what they did not like about the group or what could have been better. Most group

members declined to give negative feedback about the group. As mentioned earlier, Child D rarely spoke in group and when he did he was usually called on by the group leader following a scaffolded question. It is believed that this student not only met the criteria for group (internalizing issues), but that his withdrawal in the class was related to a combination of anxiety and a low level of understanding. He specifically mentioned in the last session that he “felt scared” when called on in group.

Limitations

The data reported in this study provide support for the continued investigation of the STORIES program as an intervention in schools. This study supports the idea that STORIES can be modified to work with a number of challenging populations beyond students with aggression (Teglasi & Rothman, 2001; Rahill & Teglasi, 2003). As with the study by Nuijens and colleagues (2006) this study indicated that leader behaviors can be coded reliably and that group leaders modify their behaviors based on group member needs. However, the study has several limitations. The small number of participants may limit generalizability. The group, though homogeneous in cognitive level, was heterogeneous in terms of severity of presenting problems and behavior. The varying rates of participation of the group members influenced mean and modal levels of group cognitive levels. Future studies and implementations of STORIES should examine the effects of students who “dominate” sessions and explore ways to minimize this behavior to prevent potential negative effects. To do this, groups with more even levels of participation could be compared to groups like the current group. Another possibility is for leaders to selectively remove group

members who continue to dominate sessions despite interventions and sessions with and without these members can be compared.

Nuijen's and colleagues (2006) noted that in the STORIES program the leader needs to be well-trained in "child development, group dynamics, and individual differences". In this group, the severity of group member needs was not apparent until the group was in process and interventions and changes were made to try to accommodate for needs. Further study is needed to incorporate evidence-based accommodations and modifications to the program to support the needs of different student populations. Within this group, the students may have benefited from intervention in the front end of the group with respect to using emotional vocabulary, allowing all students to participate, and additional activities to provide background knowledge may have supported group discussion. More frequent use of the structured activities may have promoted understanding and generalization. Within this group, child cognition was somewhat higher during the structured activities. Additionally, pre-test data in this study was used mostly to gather information and not to screen students or establish the groups. Future studies may want to use pre-test data more systematically to try to improve group composition and refer students who may not be a good fit or who may need more intensive support to interventions that better meet their needs.

Future studies might use different methods for evaluating change in schemas and understanding. Pre and post-tests may examine children's understanding of the specific topics covered within the group. This group looked at fourth grade students who were identified as "at-risk" or requiring special education services. These

students may likely need more intensive intervention and likely would have benefitted from intervention earlier in their school history. Earlier intervention for students beginning to present with problems may be more beneficial in changing schemas and teaching students social-emotional skills before problems become so severe. Future studies may examine STORIES for younger students using simple books and highly structured group environments.

Appendices

Appendix A.

GROUP LEADER INTERVENTION SCALES (GLIS) CODING MANUAL (Revised January 2012)

Goals of the STORIES program are to establish a process of experiential learning to build frameworks for understanding self, others, and the world. The following scales are designed to code interventionist's verbal behaviors in relation to group process and social information processing framework building.

RULES FOR USING THE SCALES:

Thought Units

- Codes from the GLIS are assigned to thought units. Thought units are defined as verbalizations by the interventionist that together makes a cohesive idea or intention.
- Thought units are indicated in the text by a backslash and are numbered consecutively throughout a session.
- Idle chatter not related to the session and/or group is not broken into thought units or coded. Likewise, story content (verbatim reading) covered in readings is not broken into thought units or subsequently coded.
- Units may be one sentence or a group of related sentences. One speaking turn may contain several units or it may take several speaking turns to comprise a thought unit.
- If the leader is interrupted before a thought was finished and he or she picks up on that same thought at the beginning of the next speaking turn it would be considered one thought unit. A separate thought unit may occur in between a continued thought unit within the same speaking turn. For example, the group leader may have to bring group members' attention back to him or her prior to finishing the original thought. Continuations of previous thought units would receive the same number with "(con't)" after it to indicate it is a continued thought unit.
- Each thought unit is coded for one main element (category A-G), and for subcategories contained within each main element. (Defined later in manual)
 - Whether the intervention was directed toward an individual or the group will be coded for all interventions.
 - Valence of Intervention (Positive, Negative, And Neutral) is coded for all applicable units: Structure (A) and Feedback (F).
 - Level of Scaffolding (Low to Very High) will be coded for all Exploration units.

- Presence of Emotional Content is noted for all verbalizations/interventions.
- Presence of Empathy is coded for all verbalizations/interventions.
- Two consecutive pieces of information provided by the group leader that are not related and are separated by either a reading or a group member comment are considered separate thought units rather than a continuation of the same “information” thought unit.
- If the group leader poses a general question or provides information to the group and then calls on a specific member it would be divided into two thought units. For example, “What’s Bobby feeling guilty about? How do you feel inside, when you feel guilty? Yes, Tammy?” would be split into two thought units: “What’s Bobby feeling guilty about? How do you feel inside, when you feel guilty?” (exploration) and “Yes, Tammy?” (structure).
- One sentence may contain multiple intents and would be broken into more than one thought unit. A sentence such as, “That is a good idea, what do other group members think about this?” would be split into two thought units: “That is a good idea” (feedback) and “what do other group members think about this?” (exploration).
- When a question is raised and immediately answered by the group leader that is clearly intended to set the stage for an upcoming session or group event, such as “Now what do you think is going to happen, we’re going to find out next week,” it will not be separated into separate thought units. This is in contrast to, “Who do you think might be Isaac from the front cover? Probably him right?” where it is harder to tell from the written transcript if the information was subsequently given because the group members did not respond to the question.
- Determining at what point reframing or elaborative feedback becomes exploration or information. Rule of thumb: when feedback veers substantially from the content included in group members’ previous comments (within several speaking turns) it would be considered information or exploration and, therefore, would require separate thought units.

Scenario 1: The group is discussing the meaning of “war,” and one of the members says, “A bunch of different people get together and fight.” The group leader response being coded is, “They fight over something. Usually it is different countries, isn’t it?” This speaking turn would remain one thought unit (an elaborative feedback) because the information provided by the group leader is actually an extension of the content already provided by the group member and, therefore, is linked to the feedback.

Scenario 2: Following a reading in a book, the group leader asks group members what information they just learned about a character. A group member replied, “His father left him with his uncle.” The group leader response being coded is, “Yeah, so his parents left him and he said that after that happened, he always...?” This speaking turn would be separated into two thought units, “Yeah, so his parents left him” (paraphrasing feedback) and “and she said that after that happened, he always...?” (exploration) because the group leader is pulling for additional content that has not been brought up by the group member.

Scenario 3: The group member tells a story about breaking a glass. The group

leader responds by asking her if she felt guilty about it. The group member replied, “Yes, but she [her mother] didn’t do anything about it.” The group leader response being coded is, “Ok, she understood that it was an accident. Because sometimes if you do something wrong and you don’t tell anyone you feel guilty inside, meaning you feel bad.” Since the second portion of the thought unit veers from the content contained in the group member’s comment, it would be divided into 2 thought units, “Ok, she understood that it was an accident (elaborative feedback) and, “Because sometimes if you do something wrong and you don’t tell anyone you feel guilty inside meaning you feel bad” (information).

- Because the co-leader’s verbal role is minimal in the STORIES program, co-leader interventions are not coded.
- Interventions that cannot be classified within any categories (i.e., miscellaneous ones) will be tallied and examined for implications in revising the measure.

GLIS Codes (A-G)

Instructions: Code A-G on all interventions. Code subcategories applicable to each main category. For all applicable interventions, code valence (positive, negative, or neutral), the direction of the intervention (Group, individual, or both), level of scaffolding (for exploration primarily) and mark the presence of emotional content and empathy for all.

A. **Structure** – Interventions used to manage the flow of sessions and help the group function. These may be directed to the group or individual, but their intent is to manage the group.

(Code A, subtype (1-4) and direction of intervention)

Types of structure:

1. Structure 1: includes Long-term structure, Routine and general group management (interventions intended to keep the group moving and manage the flow of the sessions.- Provides an advanced organizer for what to expect later in the session or for future sessions. This may include the presentation of possible ideas/topics to be explored during the next session.

“Before we get started I want to tell you about the tape recorder”

“We are not starting a story today, next week we will start a story”

“Before we read today, I will review what we learned last time.”

“We can start filling out our character web now.”

“We’ll see [following a prediction]. Chapter 3 everybody.”

“Think about these questions and we’ll talk about them next time”

– Includes redirecting a comment or topic, facilitating turn taking by responding to verbal or nonverbal initiatives.

“Yes, David?” (or any indication of calling on a specific child)

“Hold your thoughts [for now].”

“Please keep your books open to page 3.”

“Let’s skip this part and go down to the bottom of page 14.”

“Did you want to say something?”

“Say that again.”

“Let’s see what happens” (as attempt to keep moving)

Let's stop and think for a minute"
"Let's slow down and think about the problem"

- Includes specifying behavioral expectations or correction of misbehavior. clues that allow for self-correction by group members are coded as structure 3)
"Jason, sit down."
"Chris, come back to the table."

*Note: If the group leader is repeating a previously asked question as a way of calling on another member, it would more appropriately fall under this category rather than exploration because the main intent is facilitating turn taking. Asking for repetition or clarification of what child said, as a means to keep sessions moving and account for missed information is coded here.

2. Structure 2: includes cases where the leader points out a positive behavior of one or more group members as a strategy to promote that behavior. These are attempts to establish and maintain appropriate group behaviors. This reinforces individuals engaging in expected or positive behaviors (sharing, etc.) (pointing out a self-behavior would be modeling)

"I like how Joe is sitting quietly."

"I like how we are listening while Jessica is speaking."

3. Structure 3: – includes cases where the leader points out a negative behavior of the group or individual to allow for correction. These can be redirections of misbehavior or enforcement of a rule, but allow for the child to correct their behavior without being told explicitly.

"We are all a little messy today." (also code empathy)

"I'm not sure everyone can hear Michael when others are talking."

4. Structure 4: LUNCH: Used only for lunch-time groups. This category includes practical help to keep the group moving that is related to lunch content such as eating or clearing lunch trays. This category can include washing hands or using the restroom after eating, as this would not happen in a class time group. Questions that are simple and intended only to move this process along are coded here instead of exploration.

"Here is a napkin."

"Let's throw our trays away."

"Did you all get enough juice?"

"Pass the ketchup to Chris."

B. Group Cohesion - Efforts to engage members in the group and to foster a sense of group identity or belonging (i.e., individuals are valued by the group; the group is special). A code of group cohesion is appropriate if the group leader offers support/encouragement spontaneously.

Types of group cohesion:

1. Team building (GrpCT) - Creating an atmosphere or building traditions that foster group members' identification as a team. This includes coming up with the group name, establishing common rules, etc.

“Our group is very special.”

“I will call your group name when I come to get you.”

“In order to help our group, it is important to listen to each other.”

“We will always pick a leader and a sweep.”

“She has already been the leader. Let's give someone else a turn.”

“We are going to work together to make something beautiful.”

2. Emotional engagement, building excitement/motivation or support for group activities and relationships (GrpCEE)- Fostering investment in relationships among group members; demonstrating the importance of each individual and the value of their contribution to the group; expressing that the group is a safe place to share.

“I'm so excited we finally got to start our group.”

“I am so happy to see all of you.”

“We missed you when you were absent last week.”

“You may not be friends in the classroom, but we are going to get to know each other pretty well and you will learn to help each other.” “I am really happy that we have the whole group here, and I brought you guys a little treat”

“I have a lot of nice people in this group. A lot of sharers”

Note: Spontaneous comments from leader are coded here.

If the support is solicited through previous comments from a group member(s), it would be coded rather as positive feedback. For instance, if a group member first says, “I love coming to group” and the group leader responds, “And I love having you here.”

C. Modeling – Interventions that attempt to demonstrate how to perform an action or express an idea or emotion.

Types of modeling:

1. Self-disclosure (ModelSD) - Sharing a personal thought, feeling or experience. Sometimes explanations or ideas are expressed in the context of self-disclosure.

“I was in a dark mood today, I don't know why. I just was.”

“I never liked pop quizzes myself.”

“Sometimes I get mad over silly things that have nothing to do with what is really bothering me...then when I say what is really bothering me I feel better.”

“Well, I remember starting a new school when I was your age and I was pretty nervous.”

Note: Disclosures that follow a group member statement or question

such as, “I can see that too” or, in response to a previous comment, “You know what that tells me? That tells me...” would be coded as feedback rather than self-disclosure.

2. Interaction with others (ModelI) – Interventions that attempt to demonstrate a prosocial or appropriate behavior.

“Can I help color in your picture?”

“Thank you for reminding me. I had forgotten.”

“Let me help you...”

“You’re very welcome.”

“Thank you for your response.”

“What?” or “Can you repeat that?” when the leader did not hear a response is coded here for modeling how to ask someone to say something again.

D. Information – Interventions that provide known facts, clarifications, reasons or explanations for new or previously covered readings or events that occur within or outside the group (e.g., popular culture, historical references). This includes reviewing story content to ensure group member understanding prior to moving on.

Note: Group leader responses such as “yes” or “no” that occur following a group member question are coded as information rather than feedback—simple acknowledgment. (e.g., a group member asks, “Can you do that?” and the group leader responds, “Sure.”).

Providing information:

1) Initiated by the group leader (New Information/Providing background knowledge)(InfoGLN) - the focus of the intervention is providing information. The intervention is not directly related to the content contained in a group member’s question or statement immediately preceding the intervention. Provides information that is new to support the group or a conversation.

2) Review of information (InfoGLR)- Information provided to aid student recall. This may include reviewing information from a previous session or earlier in the same session.

3) Given in direct response to a group member’s question (InfoDR)- If the group member asks the leader a question about group events or the story and the leader gives the answer the response is coded here. Responses that modify or clarify a child’s incorrect response would be coded under Feedback-Reframing.

E. Exploration - Interventions that invite or engage group members to think about an idea, feeling or event in order to further clarify or extend the lesson beyond the

readings or known facts. These interventions are almost always worded as a question. This rubric includes working with the concept through discussion, connecting an occurrence/activity in the group to ideas from the story, or exploring lessons that have been learned from the stories or life experiences. Exploration includes asking questions and making predictions

Note: Repetition of a previously asked question that is clearly a method of facilitating turn-taking rather than exploration should be coded as structure 1.

Topic of exploration:

1. Further exploration of the readings (ExpR) - Questions about intentions or predictions for what will happen next in the story or what a character would like to do.

“What did the character want?”

“Why do you think the character asked for help?”

“How is the character feeling inside when she broke her pencil?”

“What’s a pop quiz?” (Or any concept just introduced in the text.)

“How do you think the character will react?”

“Can nice people have heart attacks?”

“Are you guys surprised, who is surprised, did anyone say maybe he looked like a friendly fish?”

2. Further exploration of a group event (ExpGE) - Explore the reasons for, or determine the implications of, an event that occurred within the group/among group members.

“Did it hurt your feelings when he told you your idea was stupid?”

“Why do you disrupt other group members when they are talking?”

“Were you going to say that too?”

“Who was the leader on the way here?”

“What was your favorite activity?”

“Do you want to keep going or stop here?”

3. Further exploration of group members’ experiences outside the group (ExpGME)-Determine implications of how an idea or experience (generated either through readings or group events) relates to one’s life outside the group or broader society. Any questions about events that did not occur in the group setting are coded here.

“What would happen if you told one of your friends that?”

“Has that ever happened to you?”

“How do you feel inside when you feel guilty?”

“Have you always been a good singer or have you practiced a lot?”

“Do you all have pets at home?”

Level of Scaffolding (Exploration Subcategory):

Level of Scaffolding: This is coded for all Exploration interventions and also will be indicated if the leader verbalization was directed at the whole group or to one or two of the members (if possible, the code will be entered for each child). Scaffolding will

be coded for all group leader interventions that elicit a response (primarily exploration) and will address the amount of support provided by the leader to help group members respond correctly:

Level 4 (Very High): Highest level of support. The leader gives the answer and then asks group or individual to repeat/respond. The leader provides all of the information required for response before asking a question.

“He looked silly and little Bill looked cool. So did the strategy work?”
(Yes.)

“Do you think Big Al is a good looking fish?” (Clearly no.)

“Where are they, are they in the ocean?”

“We talked about what steer clear meant. Does it mean they went up and hugged Big Al?”

“What did he do on this page?” (Showing picture, after discussion—puffed up.)

“So he is down at the bottom. Does he look big anymore? Does he look big here?” (Pointing to picture.)

Leading questions where children simply need to agree are coded here.

Level 3 (High): The leader provides most of the necessary information, or the leader asks the group or individual a forced choice question.

“Did Big Al live in the sea or on land?”

“Were we using it (thermometers) to measure heat or temperature?”

“Do they look like they are being **mean** to each other in this picture?”
(Provides a feeling choice.)

“When do you think it is easier to be bad? In the classroom or outside?”

“I am not sure if he cried. Maybe you guys can look at the feelings board? How was Michael Riley feeling?”

“What else did he do? He thought it **was funny**, so he was doing something else.” (Response was laugh.)

“At the end, were Bill and Michael still enemies?” (No.)

“How do you think these little fish would feel if they saw Big Al? coming toward them?”

“Do you think he is mean or nice?”

“His teeth look scary. What else looks scary?”

“Is it easy to change your face?”

“You could put make-up on, but can you change your face a lot?”

“Did his plan work?” (Yes or no.)

Level 2 (Medium): The leader provides clues or background knowledge, but the group or individual must make connections to come up with an appropriate response.

“The book is called *The Meanest Thing to Say*. Look at the Cover.

What do you think the book is going to be about?
“I don’t know if we have enough copies of the book. What do you guys think is the solution to that problem?”
“What happened in the schoolyard? What happened? Little Bill went to the schoolyard and Michael Riley was there. What happened?”
“How did Michael Riley feel when little Bill was saying ‘so’?”
“Why was Little Bill saying ‘so’ over and over again?”
“What did Bill ask Michael to play” (Basketball.)
“How are they going to know that Big Al is nice if they run away?”
“If someone said something mean like that what would you say? What could you say if someone said something mean?” (After reviewing book about saying “so.”)

Level 1 (Low): The leader asks an open-ended question with few supports. Information may have been provided earlier in the session or in previous weeks, but the child must draw from personal information or recall and connect information to respond.

“Why do you think it is important to learn about stuff that happened in the past? Is there a reason we learn about all of this history?”
“What do you guys think are things that would show that we worked together as a group well? What makes us a good group?”
“Why do you think he (Michael Riley) waited until recess to cause trouble?”
“What happened last time?” (Without prior review.)
“What are some other things he could have said besides ‘so’?”
“Can anyone think of a time when it would not be ok to say ‘so’?”

F. Feedback – Comments or reactions to a group member’s idea, feeling or behavior that stems from the readings or an experience within or outside the group.

Types of feedback:

1. Simple acknowledgement or disagreement (Feed1) - Such as:

“Yes,” or “No.”
“Maybe,” or “Probably.”
“Okay” or “Alright”
“Right.”
“Wow.”
“That could be one way.”

Note: If a previous group member’s comment is not related to the leader response, routine structure would be more appropriate since it was likely said to shift attention back to the discussion or to a different segment of the session.

2. Paraphrase or restatement (Feed2) - A group member’s response is

repeated or rephrased *without changing the meaning* of the statement or adding any additional information.

“Oh, so you already study anyway.” (Which occurred in response to a group member comment, “I already study.”)
“Mira.” (Occurred in response to a group member indicating that Mira was the character being referred to in the discussion.)
“You would run away too.”

3. Reframing (Feed3) - A group member’s response is altered to a more accurate or appropriate answer and/or false information is corrected.

“Yeah, or they might just think you’re a show off, right?”
“Well, it is a little different than that. It is more like...”
“You’re right, it does move in that way, but it doesn’t sink.”
“I guess so, but sometimes it is hard to remember, isn’t it?”

Note: If there is a clear intent to provide information that is not linked to the content contained in the group member’s response, a code in the information category would be more appropriate. Information in direct response to a question from a child is coded under InfoDR.

4. Elaboration – A group member’s response is extended or connected to an additional interpretation/explanation, but *is not contradicted or altered*.

“Yeah, and that tells us that...” (extending a group member’s response)
“You would do that, you wouldn’t let yourself get pushed around, right?” (Following a group member comment that he would have stood up for himself.)

Note: If there is a clear intent to further explore the group member’s response beyond the content originally contained in the group member’s response, a code in the exploration category would more appropriate. For instance, the speaking turn, “Ah ha, so did you feel guilty about that?” would be divided into two thought units: “Ah ha,” which is actually neutral feedback using simple acknowledgment and “so did you feel guilty,” which would be coded in the exploration category.

Examples of Valence for Feedback (code for all F interventions):

1. Neutral feedback – A group member’s response is reflected, repeated or acknowledged without an indication of acceptance or disagreement (the inability to take into account nods and other non-verbal forms of communication is a limitation of coding written transcripts). *Most feedback would be coded as neutral*, unless the leader is correcting a response or praising a child’s response.

“Ah,” or “I see.”
“OK”
“Wow.” (when used to show acknowledgment- often used after

member shares a story. “Wow that was a great answer,” would be coded as positive.”

“Okay, so she understood that... (Repeating group member’s response.”

“Yeah, we know it’s a name like a boy.”

2. Negative feedback - Comment or reaction that indicates disagreement or disapproval of a group member’s response.

“Not exactly”

“No, the character’s name was...”

“You’re not listening well today.”

“Well, not exactly, that happened in Chapter 2.”

3. Positive feedback – explicit comment or reaction that indicates approval or acceptance of a group member’s response or behavior.

“Yes, that is one good way to handle the problem.”

“I think that is a very good example.”

“You’re right Brittney.”

“What a good summary!”

G. Miscellaneous - if the above categories are not applicable to the thought unit. These will be discussed with a second rater.

DIRECTION OF INTERVENTION (code for all GLIS categories)

After choosing the type of intervention above, identify whether the intervention was:

1. Directed toward the *entire group*- Introducing a new concept or providing an advanced organizer to the group that is not in response to an individual group member’s statement or question or directed to a particular group member.

“Today we are going to start a new book.”

“What do you all think about...?”

“Everybody, please open your books to page twelve.”

“We are good sharers in this group.”

2. Directed to an *individual* - Direct reply or feedback (including paraphrases and restatements) to an individual group member’s statement or question; calling on a particular member to answer a question or provide an opinion.

“Andrea, did you have something to add?”

“I don’t think so either.”

“Wow. What did you do about it?”

“David, what were you going to say?”

“You must be so excited for your birthday party.”

Emotional content: The presence or absence of emotional content can apply in all categories (A-G). Since a goal of STORIES is to promote integration of cognition with emotion to develop, flagging interventions that aid this process is important. Talking about feelings or expressing feelings within any category would be included. All coded GLIS statements could be classified as to whether or not they are emotional in content. The presence of a feeling word or a question that asks for feelings would be coded in this category. This includes, but is not limited to: happy, mad, sad, upset, jealous, embarrassed, excited, frustrated, and lonely. Questions could include:

“How was he feeling?”

“How do you think they felt when they saw Big Al?”

“How would you feel if you were a fish?”

“How do you feel when someone dies?”

Empathy: The presence of empathy can apply to all categories above and child responses on the CVC. This includes any attempt to support the feelings of others and show understanding. Soothing, normalizing, or pointing out the feelings of others would be coded here.

“You don’t have to talk about it now if you don’t want to.”

“It is OK not to remember sometimes.”

“We all make a mess sometimes.”

“Everyone gets distracted once in a while.”

“You must have felt very sad when that happened.”

“It is sad when a pet dies.”

“Are you not so hungry? Is your tummy hurting or anything? Are you OK?”

Child Verbalization Codes

Level of Response:

1= negative, uncooperative or disrespectful;--regardless of whether or not it is on or off-topic would be included at this level. This level of responding represents an attempt to disengage from the group. Examples could include:

- “that’s stupid”
- “is it recess time yet?”
- Any comment that is making fun of another group member.
- Comments that require specific and immediate behavioral redirection from the group leader would be coded at this level, even when the intent may not have been bad. For example, “What bad word did he say?” This required the leader to explain that we should not encourage others to say bad words in group.

2=off task, out of context or personalized. The response is intended to be cooperative but shows significant misunderstanding of the situation in the story or in the group; highly disorganized responses, personal stories that do not match the discussion at all, or responses to questions about books that are incorrect would be coded at this level. This may include interruptions due to excitement or impatience, but reflect engagement in the group process.

Code Type 1 (2-1) for **highly disorganized** thoughts or stories. If the story is unclear to the coder code here.

- Long and rambling personalized stories
- The child continues to give details that do not fit or make sense in context

Code Type 2 (2-2) for interruptions, off-topic or clearly incorrect responses.

- Include responses where a child raised their hand and forgot or was not prepared.
- Include “spoiled” responses, where at least part is completely incorrect. (Close, but not quite accurate code 3)
- Include “lying”- attempts to participate and engage, but the story is clearly fabricated.

- Interrupts the leader or another student

3=tangential or loosely connected to the topic at hand or mildly inappropriate (e.g. repeats what has just been said); personalized responses that are somewhat related to the topic, or comments about the stories that are close, but not quite accurate would fall at this level.

4=on target, responsive (answers factual questions), constructive engagement in the group process; Direct answer to clear question—giving a fact or signal agreement or disagreement. Simple correct responses to personal questions, indicates a low level of understanding of the topic.

- Correct responses to yes or no questions.
- Correct answers to highly scaffolded exploration questions.
- Lunch related questions or comments that are on topic or politely or appropriately introduced.
- Child questions that are clear and demonstrate age appropriate social skills. For example, “Could you repeat that?” or “Why did the character say that?”
- Include child responses that appear to be on target, but it is not clear on the transcript due to missing information from other students talking over, transcript errors, or audio errors.

5=spontaneous, accurate contribution limited to factual information. Factual information, offered spontaneously or in response to an open-ended question, to contribute spontaneously or to open ended question contributes to group process; accurately recalling something from previous discussion or reading or asking a question that is thoughtful or seeking clarification. The response at this level shows more initiative and active engagement than above—which is cued by leader prompts and direct questions. To be scored at this level, child verbal responses must show basic understanding of the topic under discussion.

- Also include spontaneous offers from group members to assist the leader or other group members.
- “Can I pass out the books?”
- “Do you want to share the markers?”

6=interpretive or integrative, communicating insight about the

psychological world of the characters, self, others (uses information learned to formulate a moral, apply a moral, predict actions or reactions or suggest appropriate problem-solving). Responses coded at this level indicate a higher level of understanding, active engagement, and making connections. Therefore, to be coded at this level, the verbalization should not repeat what was said earlier or pulled by substantial scaffolding.

Appendix C.

STORIES Group Session Summaries.

Session 1. Served as the introductory session. The students had already met with the group leader to sign assent forms and complete rating scales and pre-test measures. They were given a review of the program, the opportunity to ask questions, and then completed two introductory activities: creating a group name and then group rules. The group then colored in cut-out letters that together spelled the group name. These were put together to show how their individual art work could be put together to make something beautiful. The procedure of having a line leader and “caboose” to return to class was established.

Session 2. The group began with a review of the previous session. One student had been absent, so the others told him what he missed. The idea of confidentiality was reviewed. The children shared some stories that they would want to stay in the group during the lunch portion. The children also were shown the cover of their first book, *The Day I Saw My Father Cry*, and were asked to make predictions during lunch. Discussed the problems in the book, and how a helper gave the characters a strategy to use. Completed Chapter 1.

Session 3. Session is not recorded. The group continued to read the book, *The Day I Saw my Father Cry*.

Session 4. The group talked about the upcoming break and told stories about their pets. The group reviewed what they had read so far in *The Day I Saw my Father Cry*. The group cleaned up lunch and talked about germs and cleanliness. They were given candy canes as treats for their group work to save for later. The group then finished reading the book. They had a discussion about heart attacks and if you could be a nice person and still have a heart attack. The group also shared sad stories and talked about what it meant to have a “broken heart.”

Session 5. This was the first session back after the holiday break. The students talked about their holiday experiences and gifts. The group reviewed the Steps for Problem Solving Poster and how it applied to the book they had finished, *The Day I Saw My Father Cry*. The group decided which steps they would illustrate on a “Storyboard” poster. The group spent the rest of the group drawing and working together.

Session 6. The group talked about their weekends as they transitioned to group. They looked at Story Board that they began session 5. They brainstormed ideas to complete storyboard while eating. Then they completed the Storyboard and ended the session with a “temperature taking” activity where they rated their behavior in group. They were presented with the next book, *The Meanest Thing to Say*, which would begin during Session 7.

Session 7. Child F did not want to attend group. The group was instructed to tell

Child F that they missed her and the group is not the same if anyone is missing. The leader spoke to the student after group and found that she did not like being the only girl. Another girl was given a permission slip and joined for session 9. The group had a day off from school for Martin Luther King Day and the group had a discussion about Martin Luther King and what the holiday symbolized. The group completed another temperature taking activity and then began to read the new book.

Session 8. The group began without Child F; the co-leader convinced her to come later. The group celebrated Child B's birthday. The group reviewed the First chapter of *The Meanest Thing to Say*. The group talked about thinking/planning vs. reacting. The group gave examples of actions and reactions. The books were passed out and the group read Chapter 2 and discussed feelings, such as frustration.

Session 9. This session did not record. The group continued to read and discuss *The Meanest Thing to Say*. The group finished the book by the end of the session.

Session 10. The group talked about their lives and pets and then reviewed the book they had finished. The group talked about bullying and times you would use the strategies that worked for the characters, such as saying "so" when called a name. The group then looked at their next book, *Big Al* and made predictions based on the cover. They read a few pages.

Session 11. The group reviewed the beginning of *Big Al*. They had a discussion about looking ugly, but being nice on the inside. The group continued to read. They talked about *Big Al*'s features and how his strategies were usually to disguise himself. They talked about what a disguise was. The group was short due to a teacher request to have them back earlier.

Session 12. A new co-leader attended the session and the children introduced themselves and talked about what they had been reading and doing as a group. The group reviewed *Big Al* and made predictions about what would happen next. The group continued to read *Big Al*. They leader talked about what they would do when they got back from their Spring Break.

Session 13. The group shared snacks and lunch with Child D, who did not have his lunch. They talked about field day at school. The group worked on a web poster about *Big Al*. They also added words to their Feelings Poster. The group continued to read the book and discuss the strategies that worked or did not work. The group finished the book and discussed how much they liked it.

Session 14. This session included a review of the book *Big Al*. The group members also created a wish list for their final session celebration. They planned for what they would like to have at a party. The group then created a Story Board for *Big Al*.

Session 15. This session included all of the concluding activities for the group. There is no clear lunch/post-lunch delineation. The children were asked to tell the school

counselor what they had learned. They talked about what they liked or did not like about group. They were also each given a certificate to show what they had done well.

Appendix D.

Raw data of child feedback from Session 15:

Children were asked to each give feedback about what they liked about group:

CHILD A- “I like that we played games and learned fun things and draw and share with each other.”

CHILD B- “The rules” and “the last one.”[L- *Which rule did you like?*]. “It says, it was, what is said in the group stays in the group.” Child B also reported: “Confidentiality” and later “we drew pictures of the main characters.”

CHILD C- “What I like about the group is that we read books.” and “Play games, sometimes we play games”

CHILD D- “When we share.”

CHILD E- “The best part of group was getting to read the book and doing the drawing. We draw pictures of the story we read.”

CHILD F- “The posters when we draw”

In response to “what didn’t you like?” responses were:

CHILD A- “I liked everything.”

CHILD D- “When people ask me questions, I feel scared.”

References

- Anderson, J.M., Nguyen-Jahiel, R.C., Miller, K., Kim, B.W., Li-Jen Dong, I, & TingWu, X. (2011) Influence of a teacher's scaffolding moves during child-led small-group discussions. *American Educational Research Journal*, 48, 194-230.
- Arnold, M., & Hughes, J. (1999). First do no harm: Adverse effects of grouping deviant youth for skills training. *Journal of School Psychology*, 37, 99-115.
- Berns, C.F. (2003). Bibliotherapy: Using books to help bereaved children. *Omega: Journal of Death and Dying*, 48, 321-336.
- Blankman, C., Teglassi, H., & Lawser, M. (2002). Thematic apperception, narrative schemas, and literacy. *Journal of Psychoeducational Assessment*, 20, 268-289.
- Block, C.C., Parris, S.R., Reed, K.L., Whiteley, C.S., & Cleveland, M.D. (2009). Instructional approaches that significantly increase reading comprehension. *Journal of Educational Psychology*, 10, 262-28.
- Bloome, D., Katz, L., & Champion, T. (2003). Young children's narratives and ideologies of language in classrooms. *Reading & Writing Quarterly: Overcoming Learning Difficulties*, 19, 205-223
- Bohlin, G., Hagekull, B., & Rydell, A. (2000). Attachment and Social Functioning: A Longitudinal Study from Infancy to Middle Childhood. *Social Development*, 9(1), 24-39.
- Bradshaw, C.P., Buckley, J.A., & Ialongo, N.S. (2008). School-based service utilization among urban children with early onset educational and mental health problems: The squeaky wheel phenomenon. *School Psychology*

- Quarterly*, 23, 169-186.
- Burns, M., & Coolong-Chaffin, M. (2006). Response to intervention: The role and effect on school psychology. *School Psychology Forum: Research in Practice*, 1(1), 3-15.
- Cohen, J. (1960). A coefficient for agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37-46.
- Cohen, N. J., Kershner, J., & Wehrspann, W. (1985). Characteristics of social cognition in children with different symptom patterns. *Journal of Applied Developmental Psychology*, 6, 277-290.
- Collaborative for Academic, Social, and Emotional Learning. (2003). *Safe and Sound: An Education Leader's Guide to Evidence-Based Social and Emotional Learning (SEL) Programs*. Retrieved, January 12, 2009 from <http://www.casel.org/pub/safeandsound.php>.
- Corey, M., & Corey, G. (2006). *Groups: Process and Practice* (7th Ed.). Belmont, CA: Thompson Learning.
- Cramér, H. (1999). *Mathematical Methods of Statistics*. Princeton University Press.
- Davis, A., Kruczek, T., & McIntosh, D. (2006). Understanding and treating psychopathology in schools: Introduction to the special issue. *Psychology in the Schools*, 43, 413-417.
- Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J.; Sawyer, K., Auerbach-Major, S., & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence. *Child Development*, 74, 238-256.

- Eisenberg, N., Spinrad, T. L., & Sadovsky, A. (2006). Empathy-related responding in children. In M. Killen & J. Smetana (Eds.) *Handbook of moral development* (pp. 517-549). Mahwah, NJ: Erlbaum Associates Publishers.
- Elledge, L.C., Cavell, T.A., Ogle, N.T., & Newgent, R.A. (2010). School-based mentoring as selective prevention for bullied children: A preliminary test. *The Journal of Primary Prevention, 31*, 171-187.
- Epkins, C., & Meyers, A.W. (1994). Assessment of childhood depression, anxiety, and aggression: Convergent and discriminate validity of self-, parent-, teacher-, and peer-report measures. *Journal of Personality Assessment, 62*, 364-381.
- Fang, Z. (2001). The development of schooled narrative competence among second graders. *Reading Psychology, 22*, 205-223.
- Fratraroli, J. (2006). Experimental disclosure and its moderators: A meta-analysis. *Psychological Bulletin, 132*, 823-865.
- Freud, S. (1942). Psycho-analysis (1922). *The International Journal of Psychoanalysis, 23*, 97-105.
- Fivush, R., Marin, K., Crawford, M., Reynolds, M., & Brewin, C.R. (2007). Children's narratives and well-being. *Cognition and Emotion, 21*, 1414-1434.
- Gardner, P., & Lemerise, E. (2007). The roles of behavioral adjustment and conceptions of peers and emotions in preschool children's victimization. *Development and Psychopathology, 19*, 57-71.
- Gravetter, F. J. & Wallnau, L.B. (2004). *Statistics for the behavioral sciences: A short course and student manual*. Lanham, MD, US: University Press of America.

- Graybeal, A., Sexton, J.D., & Pennebaker, J.W. (2002). The role of story-making in disclosure writing: The psychometrics of the narrative. *Psychology & Health, 5*, 571-581.
- Greenberg, M.A., Wortman, C.B., & Stone, A.A. (1996). Emotional expression and physical health: Revising traumatic memories or fostering self-regulation. *Journal of Personality and Social Psychology, 71*, 588-602.
- Gresham, F. (2007). Response to intervention and emotional and behavioral disorders: Best practices in assessment for intervention. *Assessment for Effective Intervention, Special issue: IDEIA 2004 and the 2006 regulations: Implications for Assessment, 34*, 214-222.
- Gresham, F.M. (2005). Response to intervention: An alternative means of identifying students as emotional disturbed. *Education and Treatment of Children, 28*, 328-344.
- Haapasalo, J., & Tremblay, R. E. (1994). Physically aggressive boys from ages 6 to 12: Family background, parenting behavior, and prediction of delinquency. *Journal of Consulting & Clinical Psychology, 62*(5), 1044–1052.
- Hanish, L., & Guerra, N. (2000). Predictors of peer victimization among urban youth. *Social Development, 9*, 521-543.
- Hanish, L., & Guerra, N. (2004). Aggressive victims, passive victims, and bullies: Developmental continuity or developmental change? *Merrill-Palmer Quarterly, 50*, 17-38.
- Herman, K. C., Lambert, S.F., Reinke, W. M., & Ialongo, N S. (2008). Low academic competence in first grade as a risk factor for depressive cognitions and

- symptoms in middle school. *Journal of Counseling Psychology*, 55, 400-410.
- Hickling, A.K. & Wellman, H.M. (2001). The emergence of children's causal explanations and theories: Evidence from everyday conversation. *Developmental Psychology*, 37, 668-683.
- Hines, P., & Fields, T. (2002). Pregroup screening issues for school counselors. *Journal for Specialists in Group Work*, 27, 358-376.
- Hoag, M. J. & Burlingame, G. M. (1997). Evaluating the effectiveness of child and adolescent group treatment: A meta-analytic review. *Journal of Clinical Child Psychology*, 26, 234-246.
- Hoagwood, K. & Erwin, H. (1997). Effectiveness of school-based mental health services for Children: A 10-year research review. *Journal of Child and Family Studies*, 6, 435-451.
- Holmes, S. E., & Kivlighan, D.M. (2000). Comparison of therapeutic factors in group and individual treatment processes. *Journal of Counseling Psychology*, 47, 478-484.
- Hughes, N., Barker, D., Kemenoff, S., & Hart M. (1993). Problem ownership, causal attributions, and self-efficacy as predictors of teachers' referral decisions. *Journal of educational and psychological consultation*, 4, 369-384.
- Hymel, S., Rubin, K., Rowden, L., & LeMare, L. (1990). Children's peer relationships: longitudinal prediction of internalizing and externalizing problems from middle to late childhood. *Child Development*, 61(6), 2004-2021.
- Izard, C., Fine, S., Schultz, D., Mostow, A., Ackerman, B., & Youngstrom, E. (2001).

- Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science*, 12(1), 18-23.
- Josephson, H. L. (2006). Fostering the social development of shy students: A preventative intervention study. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 66, 3929.
- Kavale, Kenneth A. & Forness, Steven R. (1996). Social skills deficits and learning disabilities: A meta-analysis. *Journal of Learning Disabilities*, 29, 226-237
- Keat, D.B. (1990). Change in child multimodal counseling. *Elementary School Guidance & Counseling, Special issue: Multimodal theory, research, and practice*, 24, 248-262.
- Klecan-Aker, J.S. & Caraway, T.H. (1997). A study of the relationship of storytelling ability and reading comprehension in fourth and sixth grade African-American children. *European Journal of Disorders of Communication*, 32, 109-125.
- Kim, J.S. & White, T.G. (2008). Scaffolding voluntary summer reading for children in grades 3 to 5: An experimental study. *Scientific Studies of Reading*, 12, 1-23.
- Kivlighan, D.M., Multon, K.D., & Brossart (1996). Helpful impacts in group counseling: Development of a multidimensional rating system. *Journal of Counseling Psychology*, 43, 347-355.
- Landis, J. R., Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33,159-174.
- Lane, K.L., Pierson, M.R., and Givner, C.C. (2004). Secondary teachers' views on

- social competence: Skills essential for success. *The Journal of Special Education*, 38, 174-186.
- Leichtentritt, J. & Shechtman, Z. (2010). Children with and without learning disabilities: A comparison of processes and outcomes following group counseling. *Journal of Learning Disabilities. Special issue: Models of reading component skills in low-literate adults*, 43, 169-179.
- Leichtentritt, J. & Shechtman, Z. (1998). Therapists, trainees, and child verbal response modes in child group psychotherapy. *Group Dynamics: Theory, Research, and Practice*, 2, 36-47.
- Linares, O. L., Rosbruch, N., Stern, M. B., Edwards, M. E., Walker, G., & Abikoff, H. B. (2005). Developing cognitive-social-emotional competencies to enhance academic learning. *Psychology in the Schools*, 42 (4), 405-417.
- Locraft, C., & Teglassi, H. (1997). Teacher rated empathic behaviors and children's TAT stories. *Journal of School Psychology*, 35, 217-237.
- Lorch, E.P., Diener, M.B., Sanchez, R.P., Milich, R., Welsh, R., & van den Broek, P. (1999). The effects of story structure on the recall of stories in children with attention deficit disorder. *Journal of Educational Psychology*, 91, 273-283.
- Lyubomirsky, S., Sousa, L., & Dickerhoof, R. (2006). The costs and benefits of writing, talking, and thinking about life's triumphs and defeats. *Journal of Personality and Social Psychology*, 90, 692-708.
- MacEvoy, J.P. & Leff, S.S. (2012). Children's sympathy for peers who are the targets of peer aggression. *Journal of Abnormal Child Psychology*, 40, 1137-1148.

- Marton, I., Wiener, J., Rogers, M. Moore, C. & Tannock, R. (2009). Empathy and social perspective taking in children with attention-deficit/hyperactivity disorder. *Journal of Abnormal Child Psychology*, *37*, 107-118.
- Martens, B.K., Erchul, W.P., & Witt, J.C. (1992). Quantifying verbal interactions in school-based consultation: A comparison of four coding schemes. *School Psychology Review*, *21*, 109-124.
- Mash, E., & Barkley, R. (2003). *Child Psychopathology* (2nd Ed.). New York: The Guilford Press.
- Masten, A., & Curtis, J. (2000). Integrating competence and psychopathology: Pathways toward a comprehensive science of adaptation in development. *Development and Psychopathology*, *12*, 529-550.
- May, J., Anderson, R. C., Nguyen-Jahiel, K., Miller, B. W., Kim, I., Li-Jen Dong, T., Wu. X. (2011). Influence of a teacher's scaffolding moves during child-led small-group discussions. *American Educational Research Journal*, *48*, 194-230.
- McConaughy, S. H., & Skiba, R. J. (1993). Comorbidity of externalizing and internalizing problems. *School Psychology Review*, *22*, 421-436.
- McGinnis, E., & Goldstein, A. (1997). *SkillStreaming for the elementary school child: New strategies and perspectives for teaching prosocial skills* (Revised Ed.). Champaign, IL: Research Press.
- McGraw, K.O., & Wong, S.P. (1996) Forming inferences about some intraclass correlation coefficients. *Psychological Methods*, *1*, 30-46.
- Mishna, F. & Muskat, B. (2004). School-based group treatment for students with

- learning disabilities: A collaborative approach. *Children & Schools*, 3, 135-150.
- Mishna, F., Muskat, B., & Schames, G., (2002). Food for thought: The use of food in group therapy with children and adolescents. *International Journal of Group Psychotherapy*, 52, 27-47.
- NASP (2003). *NASP position statement on mental health services in the schools*. www.nasponline.org. Retrieved 10/15/08.
- NASP (2003). *NASP position statement on inclusive programs for students with disabilities*. www.nasponline.org. Retrieved 10/15/08.
- NASP (2002). *NASP position statement on advocacy for appropriate educational services for all children*. www.nasponline.org. Retrieved 10/15/08.
- Nathanson, R.; Crank, J.N., Saywitz, K.J., & Ruegg, E. (2007). Enhancing oral narratives of children with learning disabilities. *Reading and Writing Quarterly*, 23, 315-331.
- Nelson, J.R., Dykman, C., Powell, S. & Petty, D. (1996). The effects of a group counseling intervention on students with behavioral and adjustment problems. *Elementary School Guidance and Counseling*, 31, 21-33.
- Newman, D.W. & Beail, N. (2002). Monitoring change in psychotherapy with people with intellectual disabilities: The application of the assimilation of problematic experiences scale. *Journal of Applied Research in Intellectual Disabilities*, 15, 48-60.
- Noble, F., Ohlsen, M., & Proff, F. (1961). A method for the quantification of psychotherapeutic interaction in counseling groups. *Journal of Counseling*

- Psychology, 8, 54-61.
- Nuijens, K.L., Teglasi, H., Simcox, A. G., Kivlighan, D.M., & Rothman, L. (2006). Development and Validation of Group Leader Intervention System, *Group Dynamics: Theory, Research, and Practice*, 10, 116-135.
- Olweus, D., & Endresen, I.M. (1998). The importance of sex-of-stimulus object: Age trends and sex differences in empathetic responsiveness. *Social Development*, 7, 370-388.
- O'Neil, R., Welsh, M., Parke, R.D., Wang, S., & Strand, C. (1997) A longitudinal assessment of the academic correlates of early peer acceptance and rejection. *Journal of Clinical Child Psychology*, 26, 290-303.
- Pan, P.J.D., & Lin, C.W. (2004). Member's perceptions of leader behaviors, group experiences, and therapeutic factors in counseling. *Small group research*, 35, 174-194.
- Paone, T.R., Packman, J., Maddux, C., & Rothman, T. (2008). A school-based group activity therapy intervention with at-risk high school students as it relates to their moral reasoning. *International Journal of Play Therapy*, 17, 122-137.
- Pennebaker, J.W. (2007). Current issues and new directions in psychology and health: Listening to what people say- the value of narrative and computational linguistics in health psychology. *Psychology and Health*, 22, 631-635.
- Pennebaker, J.W. (1997). Writing about emotional experiences as therapeutic process. *Psychological Science*, 8, 162-166.
- Pennebaker, J.W. & Beall, S.K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of abnormal psychology*, 95,

274-281.

Perusse, R., Goodnough, G.E., & Lee, V.V. (2009). Group counseling in the schools.

Psychology in the Schools, 46, 225-231.

Pole, N., Ablon, J.S., & O'Connor, L.E. (2008). Using psychodynamic, cognitive behavioral, and control mastery prototypes to predict change: A new look at an old paradigm for long-term single-case research. *Journal of Counseling Psychology, 55*, 221-232.

Prout, S., & Prout, T. (1998). A meta-analysis of school-based studies of counseling and psychotherapy: An update. *Journal of School Psychology, 36*, 121-136.

Rahill S. & Teglasi, H. (2003). Processes and outcomes of story-based and skill-based social competency programs for children with emotional disabilities. *Journal of School Psychology, 41*, 413-429.

Rapee, R.M., Abbott, M.J., & Lyneham, H.J. (2006). Bibliotherapy for children with anxiety disorders using written manuals for parents: A randomized control trial. *Journal of Consulting and Clinical Psychology, 74*, 436-444.

Reynolds, M., Brewin, C. R., Saxton, M. (2000). Emotional disclosure in school children. *Journal of Child Psychology and Psychiatry, 41*, 151-159.

Rhule, D.M. (2005). Take care to do no harm: Harmful interventions for youth problem behavior. *Professional Psychology: Research and Practice, 36*, 618-625.

Rogeness, G.A., Stokes, J.P., Bednar, R.A., & Gorman, B.L. (1977) School intervention program to increase behaviors and attitudes to promote learning. *Journal of Community Psychology, 5*, 246-256.

- Rubin, K. H., Coplan, R.J., & Bowker, J.C. (2009). Social withdrawal in childhood. *Annual Review of Psychology, 60*, 141-171.
- Sage, R. (2000). Dear diary...the thoughts of Katy—a 12-year-old pupil needing learning support. *Support for Learning, 15*, 67-70.
- Severson, H., Walker, H., Hope-Doolittle, J., Kratochwill, T., & Gresham, F. (2007). Proactive, early screening to detect behaviorally at-risk students: Issues, approaches, emerging innovations, and professional practices. *Journal of School Psychology, 45*, 193-223.
- Shechtman, Z., & Toren, Z. (2009). The effect of leader behavior on processes and outcomes in group counseling. *Group Dynamics: Theory, Research, and Practice, 13*, 218-233.
- Shechtman, Z. (2007). How does group process research inform leaders of counseling and psychotherapy groups? *Group Dynamics: Theory, Research, and Practice*. Special issue: Groups in educational settings, *11*, 293-304.
- Shechtman, Z. (2002). Child group psychotherapy in the school at the threshold of a new millennium. *Journal of Counseling & Development, 80*, 293-299.
- Shechtman, Z. & Ben-David, M. (1999). Individual and group psychotherapy of childhood aggression: A comparison of outcomes and processes. *Group Dynamics: Theory, Research, and Practice, 3*, 263-274.
- Shechtman, Z., & Ifargan, M. (2009). School-based integrated and segregated interventions to reduce aggression. *Aggressive Behavior, 35*, 342-356.
- Shechtman, Z. & Katz, E. (2007). Therapeutic bonding in group as an explanatory variable of progress in the social competence of students with learning

- disabilities. *Group Dynamics: Theory, Research, and Practice*, 11, 117-128.
- Shechtman, Z. & Leichtentritt, J. (2010). The association of process with outcomes in child group therapy. *Psychotherapy Research*, 20, 8-21.
- Shechtman, Z. & Nir-Shfirir, R. (2008). The effect of affective bibliotherapy on clients' functioning in group therapy. *International Journal of Group Psychotherapy*, 58, 103-117.
- Shechtman, Z. & Pastor, R. (2005). Cognitive-behavioral and humanistic group treatment for children with learning disabilities: A comparison of outcomes and process. *Journal of Counseling Psychology*, 52, 322-336.
- Sherr, L. & Sterne, A. (1999). Evaluation of a counseling intervention in primary schools. *Clinical Psychology and Psychotherapy*, 6, 286-296.
- Shields, A., Dickstein, S., Seifer, R., Giusti, L., Magee, K.D., & Spritz, B. (2001). Emotional competence and early school adjustment: A study of preschoolers at risk. *Early Education and Development*, 12(1), 73-96.
- Shirk, S. R., Russell, R. L. (1996). Change processes in child psychotherapy: Revitalizing treatment and research. New York, NY, US: Guilford Press.
- Smith, D.S. & Nagle, R.J. (1995). Self-perceptions and social comparisons among children with LD. *Journal of Learning Disabilities*, 28, 364-371.
- Smyth, J. M. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, 66, 174-184.
- Soliday, E., Garofalo, J. P. & Rogers, D (2004). Expressive writing intervention for adolescents' somatic symptoms and mood. *Journal of Clinical Child and*

Adolescent Psychology, 33, 792-801.

- Strayer, J. & Roberts, W. (1997). Facial and verbal measures of children's emotions and empathy. *International Journal of Behavioral Development*, 20, 627-649.
- Swanson, H.L. & Malone, S. (1992). Social skills and learning disabilities: A meta-analysis of the literature. *School Psychology Review*, Vol. 21, 427-443.
- Teglasi, H. (2010). *Essentials of TAT and Other Storytelling Assessments*, 2nd Edition. Hoboken, NJ: John Wiley & Sons Inc.
- Teglasi, H., & Rothman, L. (2001). STORIES: a classroom-based program to reduce aggressive behavior. *Journal of School Psychology*, 39, 71-94.
- Teglasi, H., Rothman, L., Sedlik, S., & Sweeney, S. (2006, September). *Story guided group counseling to enhance social reasoning*. Center for School Mental Health Analysis and Action. Workshop presented at the 11th Annual Conference on Advancing School-Based Mental Health, Baltimore, MD.
- Thompson, R. & Litrell, J.M. (1998). Brief counseling for students with learning disabilities. *Professional School Counseling*, 2, 60-67.
- United States Department of Health and Human Services. (1999). *United States Department of Health and Human Services, Mental Health: A Report of the Surgeon General*, U.S. Department of Health and Human Services: Washington, DC.
- United States Public Health Service. (2000). *United States Public Health Service, Report of the Surgeon General's Conference on Children's Mental Health: A national action agenda*, Department of Health and Human Services: Washington, DC.

- Utay, J.M. & Lampe, R. E. (1995). Use of a group counseling game to enhance social skills of children with learning disabilities. *The Journal for Specialists in Group Work, 20*, 114-120.
- Martin A Volker (2006): Reporting effect size estimates in school psychology research. *Psychology in the Schools, Vol. 43(6)*, 653-672.
- Waters, E., Wippman, J., & Sroufe, L. (1979). Attachment, positive affect, and competence in the peer group: Two studies in construct validation. *Child Development, 50*, 821-829.
- Westerveld, M.F. & Gillon, G.T. (2008). Oral narrative intervention for children with mixed reading disability. *Child Language, Teaching, and Therapy, 24*, 31-54.
- Westerveld, M. F., Gillon, G. T. & Moran, C. (2008). A longitudinal study of oral narrative skills in children with mixed reading disability. *International Journal of Speech-Language Pathology, 10*, 132-145.
- Wilde, M.E. & Sage, R. (2007). Developing the communicative competence and narrative thinking of four and five year olds in educational settings. *Early Child Development and Care, 117*, 679-693.
- Williams, J. P. (1993). Comprehension of students with and without learning disabilities: Identification of narrative themes and idiosyncratic text representations. *Journal of Educational Psychology, 85*, 631-641.
- Williams, J. P., Brown, L. G., Silverstein, A. K., deCani, J. S. (1994). An instructional program in comprehension of narrative themes for adolescents with learning disabilities. *Learning Disability Quarterly, 17*, 205-221.
- Williams, J.P, Lauer, K.D., Hall, K.M. Lord, K.M. Gugga, S.S. Bak, S., Jacobs, P.R.,

- & deCani, J. S. (2002). Teaching elementary school students to identify story themes. *Journal of Educational Psychology, 94*, 235-248.
- Wolman, C., van den Broek, P., & Lorch, E. P. (1996). Effects of causal structure on immediate and delayed story recall by children with mild mental retardation, children with learning disabilities, and children without disabilities. *The Journal of Special Education, 30*, 439-455.
- Yalom, I., & Leszcz, M. (2005). *Theory and practice of group psychotherapy* (5th ed.). New York: Basic Books.
- Ysseldyke, J., Burns, M., Dawson, P., Kelley, B., Morrison, D., Ortiz, S., Rosenfield, S., Telzrow, C. (2006). *School psychology: A blueprint for training and practice III*. Bethesda, MD: National Association of School Psychologists.
- Ziegler, R.G. (1981) Child and context: Reactive adaptations of learning disabled children. *Journal of Learning Disabilities, 14*, 391-393.