An Exploration of Children’s Solution-Thinking Abilities

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Thesis submitted to the Faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of Master of Science in Family and Child Development Child Development Option

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April 30, 1996
Blacksburg, VA 24060

Key Words: Young Children, Solution-Oriented Therapy, Vygotsky, Social Cognition
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Abstract

AN EXPLORATION OF CHILDREN’S SOLUTION-THINKING ABILITIES

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Combining techniques from Solution-Oriented Therapy and Vygotsky’s theory of cognitive development, this study examines young children’s abilities to respond to certain solution-oriented techniques. Developmentally, young children (ages up to five years) may have difficulty responding to abstract questions, such as questions designed to generate solutions. According to Vygotsky’s theory of cognitive development, children can be aided to understand more developmentally complicated concepts through a process called “scaffolding” (Wood, Bruner, & Ross, 1976). Adults or peers can provide scaffolding in the form of questions, clues, prompts, or modeling. Supplementing complex ideas with concrete objects can also aid the scaffolding process. In this qualitative study, five five-year-olds were interviewed using solution-focused questions and scaling questions based upon solution-oriented techniques. These techniques aid the search for solutions and the person’s awareness of resources. Concrete props and questions were the primary scaffolding techniques employed. Results of this study suggest that young children are able to respond to the solution-oriented techniques used in this study and are able to generate a variety of potential solutions. Common resources the children recognize include words, ways of sharing, adults, toys, and friends/siblings. An awareness
of individual differences is naturally important when interacting with children, as they each have unique experiences and resources. Because of the individual differences and the small sample size, these results have limited generalizability. Suggestions for future research are included. In addition, recommendations for other developmentally appropriate methods of adapting solution-oriented techniques when working with young children, primarily through play and stories, are proposed.
An Exploration of Children's Solution-Thinking Abilities

Chapter 1: Introduction

Problem-solving is a skill used in many everyday situations. In a problem-solving situation, people try to find or create a workable solution to the problem at hand. Adults use problem-solving in situations such as solving computer problems or settling disputes. Likewise, children use problem-solving in their interactions, such as putting puzzle pieces together or finding ways to share a popular toy. Solution-thinking is a type of problem-solving that can be defined as the process of generating potential solutions to a certain situation. Solution-thinking is unique in its search for exceptions to the problem and the belief that these exceptions will suggest a solution. When people engage in solution-focused thinking, they explore their strengths, abilities, and resources, doing so may prompt ideas regarding a solution (O'Hanlon & Weiner-Davis, 1989).

Certain skills have been identified as promoting problem-solving or solution-thinking, especially in social situations. One skill is the ability to generate alternative solutions to interpersonal problems. A related skill involves the ability to consider the consequences of potential solutions. The ability to articulate step-by-step methods which are necessary to implement the solution is another valuable skill. These three skills have been significantly related to quality of social adjustment (Shure & Spivack, 1981).
These skills can also be useful in a therapeutic setting. Solution-Oriented Therapy (SOT) is one such therapeutic method which focuses on people's strengths and emphasizes people's abilities to resolve their own issues (deShazer, 1988; O'Hanlon & Weiner-Davis, 1989). SOT has been used with adults, but its implications for helping children have remained largely unexplored in the literature. Wood (1988) described a way to include young children in solution-oriented family therapy. King Tiger, a fictional character, was created to help the therapist see through the eyes of a child and to respond to the child's imagination. The child, usually the identified patient, receives letters from the character in which change or progress is amplified. Also, the character relates stories about similar situations he or his friends have experiences (i.e., discussing how difficult it was for him to make new friends after moving to a new cave). While this method is creative, children's comprehension of this method has not been empirically tested.

Research Question

Both solution-thinking and SOT involve abstract concepts which may be difficult for children to understand without assistance. Vygotsky's theory of development suggests that by supplementing these concepts with concrete props and an adult's prompts or clues, children's understanding of these concepts and questions involving these concepts can be aided. In this study, children's ability to respond to solution-oriented questions will be examined. In addition, developmentally appropriate ways to ask children solution-oriented questions and aid in eliciting responses to such questions will be explored. The results of this study should have implications regarding how SOT can be used to help
children. The primary focus of this study is how children respond to these questions and how to aid the children’s understanding or “scaffold” for children.
Chapter 2: Review of the Literature

Overview of this Chapter

In this chapter, the conceptual framework for the study will be described. The conceptual framework consists of Vygotsky’s theory of cognitive development. The fit between solution-oriented techniques and Vygotsky’s theory will then be elaborated. Following this discussion, Vygotskian research will be critiqued to aid in determining an appropriate Vygotskian method. Research concerning social-cognitive problem-solving will then be explored because children will be responding to a social-cognitive situation in this study.

Conceptual Framework

Vygotsky’s primary interest was cognitive development. Guided by his contextualist beliefs, Vygotsky viewed cognitive development and learning in a social and cultural context. In fact, Vygotsky believed that cognitive development begins as a social process. When people interact, they bring with them their own views of the task or situation. Through communication and language, one of the most important tools used to achieve higher mental functioning, the people reach a shared understanding called intersubjectivity. This intersubjectivity becomes internalized, furthering cognitive development. During the process of internalization, the understanding is transformed to make more sense or be more relevant to the individual (Vygotsky, 1978; Tudge, 1992). Similarly, to understand the development of cognitive self-regulation and social-cognitive
problem-solving, it becomes necessary to consider the social context in which young children's problem-solving occurs. These skills develop through early social interaction (Freund, 1990).

Interactions also create a zone of proximal development which is defined as the distance between children's actual development and their potential development. The abilities within the zone are in the process of developing or maturing (Vygotsky, 1978, Miller, 1993). For children, a greater proportion of development within the zone occurs when a child interacts with a more skilled peer or adult. According to Vygotsky (1978), adults or peers can provide "scaffolding" within the zone of proximal development in the form of questions, clues, prompts, or modeling. "Scaffolding" is a way of elaborating and sustaining play by helping children to clarify their intentions and think of new ideas (Berk, 1994). Even though research suggests that young children (four years of age) do not understand the role of mental representation in pretending, pretense has been established as useful in scaffolding children to higher levels of skill than those demonstrated outside pretense situations (Lillard, 1993). Observational studies suggest that the presence of an adult produced prolonged concentration and rich elaboration in play (Bruner, 1983).

Through scaffolding, young children are able to understand more complicated, developmentally abstract concepts. Scaffolding, then, helps to build the zone of proximal development.

Vygotsky's theory also suggests that play creates the zone of proximal development. Because the zone of proximal development allows the child to behave in a more skilled manner than the level reflected in the child's actual development, play is a
leading activity that determines development. A greater proportion of development occurs when play is with an adult or more skilled peer because the more skilled play partner can scaffold for the other play partner (Tudge, 1992; Vygotsky, 1978).

**How Solution-Oriented Techniques Fit with Vygotsky’s Theory**

Solution-Oriented Therapy (SOT) is a relatively new therapeutic method. Instead of exploring the past for causes of the problem or complaint, SOT focuses on the future and the solution of the complaint. With its emphasis on competence, this approach is very empowering to clients. One of the primary assumptions of SOT is that clients have the resources and strengths to solve their complaints. The therapist’s job, then, is to help clients recognize their resources and strengths (O’Hanlon & Weiner-Davis, 1989).

Solution-oriented therapists employ certain skills or modes of behavior to aid the client. In SOT, therapists match the language and sensory modalities of their clients. They also use language to create an expectancy of change (O’Hanlon & Weiner-Davis, 1989). To enhance self-esteem and help create a hopeful outlook, solution-focused therapists reinforce anything positive and compliment the client. In establishing rapport and accepting the client’s outlook, the therapist understands the situation before searching for exceptions (deShazer, 1988, O’Hanlon & Weiner-Davis, 1989). However, sometimes the therapist tries to alter a person’s outlook by offering a different perspective; this technique is known as reframing. Similarly, co-creating reality is a process in which the therapist and client determine how experiences are constructed and described. Scaling
questions, which ask people to rate their feelings, is also a common SOT technique (deShazer, 1988).

SOT evolved through interactions with adult clients, so many of the processes and questions involve complex, abstract ideas. Working with children in a traditional solution-oriented framework can be challenging because children do not have a strong sense of time, and they may experience difficulties understanding or communicating complex, abstract ideas by themselves. According to Vygotsky (1978), adults or peers can provide “scaffolding” in the form of questions, clues, prompts, or modeling. Within the zone of proximal development which is co-constructed, young children are able to understand more complicated, developmentally abstract concepts. Of course, the zone of proximal development has an upper boundary as well. Some concepts are too complicated or abstract for young children to comprehend fully at their current level of development, although the children will be able to understand the same concepts as they continue to grow and develop.

An important part of this complex process of creating a zone of proximal development is intersubjectivity or a shared understanding, based on a common focus of attention, between the child and more competent person. Individuals come to a task or begin to play with their own subjective views. When they discuss things from their differing viewpoints, they may reach a shared understanding called intersubjectivity (Tudge, 1992, Vygotsky, 1978). Achieving intersubjectivity can be a difficult process. When the differing viewpoints are similar, achieving intersubjectivity is relatively simple because the viewpoints have something in common. In contrast, as the viewpoints
become more diverse, the common ground is more difficult to establish, and attaining intersubjectivity can range from challenging to nearly impossible. The key to achieving intersubjectivity is reaching a mutually agreed upon understanding. This process is reminiscent of the process of co-creating reality (deShazer, 1988), in which the client and therapist construct a workable perception of reality together.

Play is a central concept in Vygotskian theory. In play, the child creates and enters an imaginary world in which these unrealized desires can be fulfilled (Nicolopoulou, 1993; Rubin, et al, 1983). This process is similar to the thought process behind some solution-oriented questions which ask the client about ideal solutions or situations. In SOT, these questions are followed by a search to find ways to make these ideals or parts of them real (deShazer, 1988, O’Hanlon & Weiner-Davis, 1989).

Scaling questions (deShazer, 1988; O’Hanlon & Weiner-Davis, 1989) may seem difficult or awkward to use with children because children’s sense of numbers is not always very clear. Still, the essence of the scaling question can be asked in ways children can understand. Questions like, “Do you feel happy a lot of the time or a little of the time?” may be easier for children to answer. This type of questioning has been used concurrently with pictures and large or small circles in children’s questionnaires (Harter & Pike, 1984). Insoo Berg (1994) has attempted various ways of making scaling questions more concrete for children. Her methods include using rulers, a vertical number chart on a wall, and a scale. Questioning in this manner may also be useful in the search for exceptions (deShazer, 1988, O’Hanlon & Weiner-Davis, 1989)
As a preschool classroom teacher, I quickly learned that compliments, also a SOT technique (deShazer, 1988; O'Hanlon & Weiner-Davis, 1989), are an effective method of channeling children's behavior. In addition, highlighting those special skills, attributes, and abilities that children have by virtue of being alive and special people help to enhance self-esteem (Wood, 1988). Compliments may be helpful in terms of accessing inner strengths and resources as well.

Most children do not have much of a past to explore. Besides, for young children, thinking and remembering are closely connected processes (Vygotsky, 1978). Although it has been largely unexplored in the literature, SOT appears to have a unique potential for helping children resolve their complaints. In this study, preschoolers were asked solution-oriented questions about social situations. These questions have been phrased simply to make them as easy as possible for children to comprehend. To work within the zone of proximal development, various prompts were employed to aid the children's understanding. Because of the role of Vygotsky's theory in this study, relevant Vygotskian research is critiqued. Following this discussion, social-cognitive problem-solving literature is explored.

**Critical Analysis of Vygotskian Research**

Vygotsky's basic research paradigm involves the zone of proximal development, a concept previously discussed. In the basic paradigm, a child is presented with a task which is slightly above the child's actual level of development, and another object is placed nearby. The researcher studies the process of problem-solving, given a specific
object. Variations of this paradigm, such as having a more skilled peer partner collaborate or providing prompts or clues, can be performed as well (Vygotsky, 1978).

The graduated prompt procedure is one of these variations. By introducing a standard series of prompts or clues to the process of problem-solving, the examiner assesses the amount of information required for the child to solve the problem. The series of prompts is graduated in terms of the explicitness of the information given to the child. In this manner, the zone of proximal development is assessed. The child’s ability to transfer the learning to a new item can be assessed by presenting the child with a different version of the task. The main concern of the graduated prompt process is that the prompts are pre-determined and structured. The clues, then, can not be modified for each child’s unique learning needs (Misiuna & Samuels, 1989).

Most Vygotskian studies focus on the development of substitute object processes in symbolic play or look for the “benefits” of play by finding correlations between play and a specific cognitive ability (i.e., problem-solving, creativity, language) (Nicolopoulou, 1993). However, much of this research has been narrow in two ways. First, the focus has been, primarily, on direct, face to face interactions. Second, the emphasis has been almost completely on linguistic means through which shared meaning or intersubjectivity are achieved. In this manner, the research has been limited to a search for direct, unmediated effects that occur and can be recorded during the time that the research is being conducted. Unfortunately, a search of this type contradicts Vygotsky’s ideas. Vygotsky asserted that effects of the social world are often indirect and mediated rather than direct and unmediated. Research with a broader interpretive framework, in terms of both time
and space, would fit better with Vygotsky’s ideas (Nicolopoulou, 1993). The current study attempts to incorporate these recommendations. Having an on-going relationship with some of the participants and spending time the other participants prior to their involvement in the study broadens the temporal framework and allows for more confident interpretations. While the questions themselves naturally carry a linguistic, verbal orientation, as much as possible attempts to incorporate concrete objects, such as pictures, with the questions have been made.

Critique of Social-Cognitive Problem-Solving Literature

Shure and Spivack (1974, 1978, 1981) focused on social-cognitive problem-solving. They identified certain interpersonal problem-solving skills that related to adaptive behaviors in young children. These skills include the ability to generate alternative solutions to interpersonal problems, the ability to consider consequences, and the ability to articulate the steps necessary to carry out the solution. Then, Shure and Spivack (1974, 1978, 1981) developed an intervention program which fosters and encourages these skills. The Preschool Interpersonal Problem-Solving (PIPS) Test was developed to assess preschool children’s ability to solve the real life, interpersonal problems presented. The children are told a brief story presenting the situation and then asked what one of the characters can do to resolve it. Characters and toys are changed, although the basic story remains the same, until the child repeats previous responses. The goal of this test is for the child to generate as many solutions as possible. Their model proposes that the more relevant solutions the child can generate, the more choices that are
available; more choices, then, increases the likelihood that the child is able to select an
appropriate, positive solution or strategy (Mize & Cox, 1990). Shure and Spivack (1974,
1978, 1981; Shure, 1983) cited much success with their method, in both home and school
environments. Although much of their work focused on lower-income populations,
success has been noted in other populations as well.

Rickel, Eshelman, and Loigman (1983) identified two main assumptions behind
Shure and Spivack’s research: (1) that cognitive interpersonal skills can be learned and
(2) that these skills directly affect behavioral adjustment in preschool children. In their
own research on social problem-solving, Rickel, Eshelman, and Loigman (1983)
questioned these assumptions and attempted to replicate and extend the work of Shure,
Spivack, and their colleagues. They improved prior methods by randomly assigning
children to treatment and control groups, by using independent trainers, and by keeping
classroom teachers blind to both group assignments and the content of the training
sessions. Their research also included a one-year follow-up with 37 of the original 110
children. The children responded to the PIPS Test, the What Happens Next? Game which
assesses consequential thinking abilities, the Caldwell Preschool Inventory which is a 64-
item achievement inventory, and the Sharp Behavior Identification Checklist which is a
direct observational measure of the type and frequency of children’s interpersonal behavior
in pre-determined situations. In addition, teachers completed the Hahnemann Preschool
Behavior Inventory. The results of their follow-up study suggest that all groups
demonstrated improvement from pre-test to follow-up on generating alternative solutions,
consequential thinking, and achievements. The difference between these results and those
of Shure, Spivack, and their colleagues is primarily attributed to keeping teachers blind (Rickel et al., 1983).

Other research has suggested that teachers’ behavior is highly related to children’s reasoning about social issues. Holloway and Reichhart-Erickson (1988) studied 55 four-year-old children in an attempt to pinpoint aspects of teachers’ behavior and the environment that may nurture skills in resolving interpersonal dilemmas. The children’s classrooms were observed and rated using scales from the Early Childhood Observation Instrument. The children were observed during free play, and their behaviors were categorized. The children’s social problem-solving skills were assessed using a slightly modified version of the PIPS Test, the same basic procedures were used, but the responses were coded into Rubin’s (1981) seven prosocial and four antisocial categories. Their results suggest that the teacher rather than the physical setting conveys social problem-solving skills. A teaching style characterized by being respectful, engaging, responsive, and democratic was related to children’s knowledge of prosocial interpersonal problem-solving (Holloway & Reichhart-Erickson, 1988). Interestingly, these characteristics do not have the same cognitive emphasis as Shure and Spivack’s model.

Ridley and Vaughn (1982) recognized the importance of children’s cognitive problem-solving in resolving interpersonal problems. However, they believed that a comprehensive model of problem-solving should include behavioral problem-solving and empathic communication as well as the cognitive problem-solving. They developed a comprehensive preschool interpersonal problem-solving program which incorporates these three areas. To evaluate this program, 40 children (23 male, 17 female; 53-60 months)
were randomly assigned to treatment and control groups. Using a pre- and post-testing format, the children responded to the PIPS Test, the Behavioral Preschool Interpersonal Problem-Solving Test, and the Borke Empathy Measure. The results suggest that children trained in interpersonal problem-solving skills, as compared to the control group, demonstrated more effectiveness in solving peer problems after the training. These effects were still evident after three months. The results did not support any effects of training on the children’s empathy skill level. Interestingly, the researchers noted that “trained children appear to lose much of the efficacy when the task is exclusively verbal as was the case with PIPS” (Ridley & Vaughn, 1982, p. 87).

Vaughn, Ridley, and Bullock (1984) studied 25 children, who were identified as aggressive by the Hahnemann Pre-School Behavior Rating Scale, in the same interpersonal problem-solving training program. Results of this study suggest similar results. The children in the training program acquired the ability to generate relevant alternatives to problem situations and the ability to generate relevant solutions for resolving the problem situation. A three-month follow-up study suggests that these effects are maintained for at least that long.

In attempting to identify forms of non-social play that correlate positively or negatively with assessments of social-cognitive competence, Rubin (1982) used another modification of the PIPS Test. In this version, the characters varied systematically by age, gender, and race. The children were asked how a child would obtain a toy with which a younger child, an older child, a male child, a female child, etc. was currently playing. A concern of this testing format was raised in relation to Rubin’s (1982) study (Christie &
Johnsen, 1989), but is applicable to any administration of the PIPS Test. This concern relates to the construct validity of the test “which emphasized the ability to suggest multiple hypothetical solutions ‘another child’ might consider in reaching a goal in a social situation” (Christie & Johnsen, 1989). In this study both hypothetical and real/remembered situations are included. Perhaps the children’s responses to the different types of questions will provide some information relating to this concern.

Shure and Spivack’s model is not the only model for interpersonal problem-solving. An alternative model involves scripts. A script is a “cognitive representation of a familiar experience that is called into play to guide behavior given an appropriate context” (Mize & Cox, 1990, p. 118). According to this model, the characteristic or quality of the child’s first response is important because the first response demonstrates how the child is most likely to respond. The most appropriate way to assess this quality is to have the child act out the situation (Mize & Cox, 1990).

In their study, Mize and Cox (1990) compared the cognitive and script models. Their research involved 32 children (16 male, 16 female; average age 56.47 months) who responded to the PIPS Test and an enactive interview on different days, two to three days apart. Half of the children responded to the PIPS Test first, while the other half responded to the enactive interview first. In the enactive interview, hand puppets and small toys are used to present a series of six common peer situations that children are likely to encounter in preschool. The child and interviewer act out the stories, and the child responds with what the child would do next; this type of testing would appear to address the concerns of Christie and Johnsen (1989). To make these assessments more
comparable, the first response in the PIPS Test was coded for its quality of friendliness, and children were asked to enact or suggest as many strategies or solutions as possible. In addition, children were observed during peer interactions, and teachers rated the children’s behavioral style. Results indicated that both the friendliness of the first strategy and the number of strategies that they suggested were significantly related to some measures of their social behavior with peers. The researchers also noted that the children’s responses to the PIPS Test appeared to be better predictors of their actual behavior than responses to the enactive interview were (Mize & Cox, 1990).

**Summary**

This section has two major subdivisions: a critical review of relevant Vygotskian research and one of social-cognitive problem-solving research. Because Vygotsky’s theory provides the conceptual framework for this study, criticisms of previous research from this theory are useful in making this study stronger. Because most people seek therapeutic interventions for social/interpersonal issues, research concerning social-cognitive problem-solving is also relevant. Together, these areas justify my choices of methodology.

From the Vygotskian research, the utility of graduated prompts for working with children within the Zone of Proximal Development is explained. Criticisms of prior Vygotskian research note the limitations of the time frame (one interaction) and the emphasis of linguistic means of establishing intersubjectivity (shared understanding). Although one interaction with each child comprises the actual data collection in this study, I will have spent some time with the participants prior to the interview. The attempts to
incorporate concrete objects, primarily pictures, with the questions lessens the verbal focus. In addition, qualitative studies are more consistent with Vygotsky’s beliefs that the effects of the social world are frequently indirect, mediated, and diffuse (Nicolopoulou, 1993). Such effects are difficult to detect through tests or questionnaires.

The social-cognitive problem-solving research has been useful in determining what kinds of questions to ask as well as how to ask them and prompt responses. The work of Shure and Spivack (1974, 1981) explores different ways to assess children’s abilities to generate solutions, and the categories of solutions they developed may be useful in the current study. Shure and Spivack employed pictures when telling the scenario to the children, as is executed in this study. The story format used in this study is similar to that used by Shure and Spivack in their Preschool Interpersonal Problem-Solving Test. In addition, many of the prompts in this study follow their model. Most of the social-cognitive problem-solving models include group training periods. These group times are not included in this study because Solution-Oriented Therapy tends to be a brief, individual approach.
Chapter 3: Methodology

Overview of Research Design

This exploratory study attempts to assess children's responses to solution-focused questions. To accomplish this task, preschoolers were asked a series of questions concerning two common social situations. These questions primarily seek solutions to the given situations. In this manner, children's abilities to generate solutions and how adults can aid this process was assessed. The data from this study was analyzed qualitatively.

Sample

The sample consisted of 5 five-year-old children. At the time of the study, these children were enrolled in the Virginia Tech Child Development Laboratory Preschool program (Lab School). As a former teacher in the Lab School, I am very familiar with half the participants in this study because I taught them for two years. As a result of this ongoing relationship, rapport with these children is already established. Before interviewing the other children, I spent some time in their classroom to establish some rapport. During the study, I attempted to be aware of how the processes of creating intersubjectivity and scaffolding are affected by different levels of familiarity.

When parents enroll their children in the Lab School, they complete a form indicating their general consent to their child's being videotaped and involved in research (please see Appendix A). One week before the data collection began, parents were made
aware of this study, and their informed consent for their children’s participation in the current study was acquired.

The interviews occurred during regular Lab School hours, when I was not teaching. Various interviews and assessments are occasionally administered during Lab School, so the procedure should be somewhat familiar to the children. Each child was approached individually and asked to come out of the classroom to help me by answering some questions. None of the children were forced to come; participation was their choice. Likewise, the children could return to their classroom at any point in the interview, for any reason; while lengths of the interviews varied, all the children responded to the entire interview.

Instrumentation

The instrument for this study consists of two brief scenarios followed by a series of questions. The complete format is included in Appendix B. One story involves a child who wants to play with another child, but is rebuffed. The other scenario involves sharing a toy. The order of the stories in the interview alternated, doing so allows for the analysis of whether a particular situation is easier for the children to respond to or whether familiarity aids the children’s responses.

After describing one scenario, the participants were asked a series of questions about the characters in the scenario and their own related experiences. These questions primarily target potential solutions that the child can generate and the recall of what strategies were successful previously. These types of questions are fairly common
solution-oriented techniques. In addition, one scaling question for each scenario is included. The second scenario was described and corresponding questions asked following the same format.

**Data Collection Procedures**

During a center time in which another teacher is head teaching, I approached the participants individually in the Lab School and asked each of them to help me by answering a few questions. The interviews occurred in the Lab School conference room, and they were both videotaped and audiotaped. The videotapes were useful in analyzing physical aspects of the interaction, such as children’s pointing to certain things or looking certain places in the room. Audiotapes captured the conversation better than the videotapes. In addition, transcription is easier from audiotapes than videotapes.

The interviews consist of two scenarios, followed by a series of questions. The complete scenarios and questions are included in Appendix B. Each scenario focuses on a different social issue, either playing with a friend or sharing a toy. These issues are expected to be fairly common with young children. After the questions, I asked whether they have any other ideas. Then, I thanked the child for his or her help and walked the child back to the classroom. Because of scheduling, these interviews occurred in one day.

**Pilot Study**

For the pilot study, I interviewed three four-year-olds (1 female, 2 male) using only the scenario about friends. During the first two interviews, only two faces were used
on the ruler; a third, neutral face was placed between the other two faces on the ruler for the third interview. Adding the third face seemed to help to convey the sense of feelings in between “all bad” and “all good.” During the study, I elaborated this concept more by having the children give examples of foods they like, do not like, and like or do not like sometimes.

Although the children each provided different answers to the questions, it was challenging to prompt each child to give answers different from their first response. For instance, one child kept repeating variations of “get a teacher that will work that out.” Still, each child generated at least a couple different, possible solutions. One child asked to see the pictures of the other children, and seemed to use those pictures to scaffold for himself. Using two scenarios in the study should be useful in helping the children generate more diverse responses.

None of the children hesitated to leave the room with me, and a few of the other children in the room wondered aloud when their turn would come. While children are often taken from the classroom, it is usually done in short timespans. In fact, each interview was rather brief; the average length of each interview was just under 10 minutes. The children seemed ready to return to their rooms and verbalized this desire by saying, “I’m done now” or “That’s all my ideas.” During the study, I tried to be sensitive to these needs.

Concerning the setting in the conference room, larger chairs than those to which the children are accustomed were used. In the study, child-sized chairs were used. Also, holding the cards with the children’s pictures on them was difficult, and they were
awkward for the children to see when they were lying flat on the table. (This issue relates to the size of the chairs and table, too.) To accommodate the child-sized chairs, a smaller table will be used.

**Data Analysis**

First, the conversations as recorded on the audiotape were transcribed. Then, the behaviors as recorded on the videotape were noted with the corresponding statements. The resulting transcription was analyzed qualitatively, following the methods described by Strauss and Corbin (1990). Both the children’s responses (what they said and how they said it) and the methods used in attempting to provide scaffolding for the children were considered. Potential explanations as to which scaffolding methods were helpful in this study and possibly as to the processes of establishing meaning were drawn.

In addition, the children’s responses were categorized in order to determine the types of resources of which five-year-olds are aware. Possible categories for the responses include ask-beg, authority intervention, trade-bribe, force-attack, plan for future, force object, and wait (Shure & Spivack, 1978). Possible influences of the levels of familiarity with myself as interviewer were also considered when interpreting the data. The children who have spent more time with me may provide more socially acceptable responses, or they may perceive more freedom to provide a greater variety of responses. The results of this study should illuminate such issues.
Chapter 4: Results and Discussion

Each child and each interview offered a unique insight into how children respond to solution-oriented questions. All of the children were aware of resources and were able to respond to the solution-focused questions. Because of the uniqueness of the interviews, each interview will be described and analyzed individually; complete transcripts can be found in Appendix C. In the descriptions and analyses of the interviews, pseudonyms are used. Following these sections, broad themes across the interviews and therapeutic implications will be discussed.

Interview #1:

Bruce is the oldest of two children in his family. Both parents appear to be very involved with him and his brother. He is very pleasant and easy-going, with a great sense of humor. In the classroom, he is very well liked by his peers and seems to interact easily with them. At times, he has a tendency to be quiet, thoughtful, and observant.

Of the five interviews, this one was the briefest. I attribute that fact mostly to myself. Although I had intended to both accept and explore the children's ideas, I did not follow Bruce's leads well. I should have asked him to explain his ideas by asking questions like, "How do you do that?" "How would we know he was doing that?" and the like. As it was, he repeated his basic ideas in a different way. He also offered a limited number of options to resolve the situations.

Bruce sat farther away from the pictures and tape recorder than the other children. Still, he appeared interested in the stories and pictures. He looked attentively at the
pictures and responded thoughtfully to the questions. His responses were remarkably consistent. Both his suggestion for what another child should do and his idea about what he would do concern engaging in alternative play, finding something with which or someone else with whom to play. The most distinctively different responses followed an inquiry as to what a teacher would suggest. Responses to these types of questions focused on what a teacher could do, rather than what a teacher would suggest the child could do.

Analysis of Interview #1. From this interview, I learned how important it is to explore the children's ideas in order to fully understand their intent. I assumed I knew what Bruce intended by his responses without verifying my assumptions. I think my behavior also may have made Bruce feel uncomfortable or rushed; he did not offer many responses.

Bruce was the only one among those interviewed who did not really play during the interview. I wonder if this is related to his limited number of responses. Playing allows children to experiment with ideas as well as toys or props. Perhaps if he had played, he might have generated more responses or potential solutions to the given situations. In play, children combine new ideas and knowledge with familiar ones (Rogers & Sawyers, 1988). If this type of question was unfamiliar to Bruce, he may have had a difficult time responding to it. He may also have had trouble putting some of his ideas into words. Since play is children's natural method of communication, playing might have made it easier for him to respond.
Interview #2:

Lisa is the youngest of two children in her family. She has a consistent baby-sitter with whom she spends afternoons until her parents return home from work. She appears to be rather fond of her older brother; she often repeats things he does or says. She tends to prefer playing with a few close, consistent friends in small groups. During the two years I taught her, I witnessed a tremendous development in her abilities to use words to describe her feelings.

Lisa generated a wide variety of responses and solutions to the presented social situations. About half-way through the interview, she generated a series of potential solutions with little prompting. She seemed to be able to build upon or expand previous ideas when generating some solutions. Discovering ways to encourage this process carries important implications for both education and intervention.

For her, questions about what teachers may suggest elicited more sophisticated and complex responses. As her teacher, I am aware that she recalled ideas introduced to her by her teachers. Lisa was also keenly aware and able to recall precisely how she became friends with some of her classmates. Some methods used in these stories about becoming friends coincide with ideas suggested for the presented situations.

The scale appeared to cause some confusion for Lisa. She had originally identified the frowny face as sad, the neutral/middle face as mad, and the smiley face as happy. Because this framework is not conducive to scaling questions, I attempted to adjust the framework to feels sad, feels okay, and feels good or happy, respectively. As in the other interviews, I asked Lisa to name some foods as examples of each category. She did not
name an okay food. I did not pursue the question because I was concerned about making her uncomfortable. I could have tried using a different example, like toys, or used foods which I like, dislike, and neither like nor dislike to illustrate this point and verify that it was understood. Lisa's seeming discomfort with or misunderstanding of the intended meaning of the scale recurred during the interview. Although she typically identified mad as the emotion the hurt child in the story was feeling, she changed her answer to sad when she pointed to the frowny face. A scale with four faces, feeling very bad, kind of bad, kind of good, and very good, may resolve this situation.

Interestingly, in the story about friends, Lisa suggested things for Amber to do instead of Andrew; Amber was the child in the story who was being mean, and Andrew was the child in story who got his feelings hurt. Even in response to questions about what Andrew could do, Lisa suggested what Amber could do. These responses could reflect a predilection for interacting with people of the same gender; her self-identified best friends and stuffed animals and dolls are all female. It could also reflect a simple name confusion.

**Analysis of Interview #2.** As previously mentioned, Lisa seemed somewhat confused by the scale. I think that this confusion may relate to her ongoing development of emotional understanding. From her responses, she seemed to be developing an awareness that people can feel two different emotions concurrently. At first, children do not accept that two different emotions, especially those of different valence (i.e., happy and sad), can coexist. Then, they realize that two different emotions can occur consecutively. Later, they accept that two emotions of the same valence (i.e., sad and mad) can coexist. Finally, they realize that two opposite-valenced emotions can occur
simultaneously (Flavell, Miller, & Miller, 1993). Lisa appears to be reasoning at a level of understanding between knowing emotions can be experiences consecutively, a knowledge on which the scale is effectively based, and knowing two of the same-valenced emotions can coexist. She used mad and sad alternatively to describe the frowny face. However, when directly questioned about the possibility of being both mad and sad, Lisa remained noncommittal. Perhaps at this level of development, it might be helpful to make the faces on the scale more definitive for the emotion. Otherwise the child may become confused and focus more on deciphering the emotion than generating potential solutions. For some children, it may be easier or more developmentally appropriate to identify an emotion on a face, such as mad or sad, and move to a “happy face” than to understand degrees of emotions. Essentially, that is how this child adapted the scale for herself. Although the application is a little different, the basic concept remains consistent. Insoo Berg (1994) suggested other concrete methods of using scaling questions, including scales and rulers.

Lisa had no difficulty generating potential solutions. She seemed to be able to play with ideas while she played with the playdough. By elaborating and extending her own ideas, she demonstrated excellent divergent thinking skills. Through research, play has been linked to divergent problem-solving skills (Rogers & Sawyers, 1988). Divergent problem-solving tasks are those tasks for which multiple solutions are possible. Some of these studies examine the concept of ideational fluency, the ability to be aware of several aspects of a situation and associate a variety of problem-solving methods. As Rogers and Sawyers (1988) summarize, “perhaps divergent play experiences generalize better to many problem-solving situations” (p. 61). Naturally, children’s personality characteristics and
adults' interactional behavior will influence that relationship. When children play, they learn and retain a playful attitude which contributes to flexible problem-solving skills (Rogers & Sawyers, 1988).

Children can be aided in building upon previous ideas. According to Vygotsky (1990), combining ideas in new ways is the essence of creativity. Creatively combining ideas can help children become aware of previously unknown resources. I have found that questions can be used effectively toward this end. Possible types of questions include, "What do you think would happen when..." and "What needs to happen to achieve a desired result?" Introducing a parent or other role model by asking, "What do you think your Mom or Dad would suggest in this situation?" is an example of the first type; it encourages the children to view the situation from a different perspective. For a child who repeats the desire to be happy, an appropriate question could be, "What makes you happy?" or more specifically, "What needs to happen for you to feel happy now?" If encouraged to think in this manner, children are often capable of identifying what they need. A three-year-old boy in my classroom had trouble saying goodbye to his mother one day. When I asked him what would make this process easier for him, he said he wanted a toy airplane from the toddler room. Once he had this toy, he was able to say goodbye to his mother. This type of questioning is also important in SOT (deShazer, 1988; O'Hanlon & Weiner-Davis, 1989).

Asking a series of questions may frustrate children. Especially if similar questions are asked, the child may feel as if he or she is not being heard. One alternative to asking questions is making a statement on the topic, then waiting for the child's response
(Rogers, 1990). Statements can seem more inviting to conversation than questions, which can put people on the defensive or otherwise limit the dialogue. In this study, the use of statements in this manner was not explored.

Interview #3:

At the start of his second year at Labschool (when he was four years old), Jon got a new brother. Overall, he adjusted well to this major change, as he adapts to other changes. His parents are very involved with him, and they encourage him to be independent. He tends to have a philosophical attitude towards life. Typically, Jon demonstrates logical thinking skills, especially when building with blocks or similar situations. He is very well-liked by his peers, interacting easily with them. He also tends to be a leader in group situations.

The faces scale confused Jon as well. However, Jon responded differently—he worked hard to decipher what the faces meant and how they fit together. At one point during the interview, he focused all his attention on the scale and spoke, to no one in particular or to himself, about what he was thinking about the scale. Vygotsky identified this type of behavior as private speech. While this private speech was occurring, I simply let the child talk and tried to listen and understand as best I could. Unfortunately, I was not able to understand most of what the child said at the time. After Jon said, “that makes sense” and sat back, I sensed he was done. I tried to verify the conclusion he had drawn. He expressed such confidence in his conclusion that I did not want to question it too much. If he had paused in the middle of his private speech, I would have summarized his process to that point and asked questions to prompt him to some conclusion. Because of
his interest in the process through all the faces, I phrased my questions to focus on this process.

Jon was very attentive to both the pictures and the questions. He was somewhat confused by the pictures on the cards, because the faces on the cards did not match the feelings he expected them to experience. He also demonstrated his reasoning skills in responding to questions. Instead of simply stating the feeling he expected a character to have, he also explained why he expected that feeling.

He also asked questions of himself that complicated the given scenario. Usually these questions took the form of, “. . . but what if this happens?” or extending the storyline. As he answered the questions, he further extended the storyline.

During this interview, we discussed the differences between what teachers and parents do to help. According to Jon, both parents and teachers say things like, “Give the ball back.” He also had a good idea of what his parents would say and do. He appeared to carry on a parent-child conversation, with himself speaking for both.

Analysis of Interview #3. One of the most remarkable aspects of this interview involves this child’s private speech about the scale. Private speech is most easily defined as a self-task or self-instructional strategy (Moll, 1990). Most common among preschool children, private speech tends to arise spontaneously when children attempt to master slightly challenging situations. Private speech, then, is one of the tools children can use to solve to problems. As Vygotsky (1978) observed, private speech “consisted of a description and analysis of the situation, but it gradually took on a ‘planful’ character, reflecting possible paths to solution the problem.” (p. 25) From his observations,
Vygotsky concluded that children use speech as well as their eyes and hands to solve problems. Observing private speech is fascinating. Jon focused solely on the scale, excluding all else in the room. He was not concerned with anything I said; he seemed absolutely content to have reached his own conclusion in his own way. Following this incident, he appeared to have a clear understanding of the scale and answered questions about the scale readily and confidently. In addition, he voluntarily incorporated the scale into his responses.

Jon also demonstrated incredible social reasoning skills which seemed to aid him in generating potential solutions to the given situations. As mentioned in chapter 2, the ability to generate solutions is an important aspect of social-cognitive problem-solving. He also demonstrated some consideration of consequences, another important aspect. Social cognition is the term used to define people's ability to consider their social world (Rubin, 1980 in Rogers & Sawyers, 1988). Jon appeared to be quite observant in this regard. He seemed to be able to take other people's perspectives or at least identify typical behaviors and responses of others. He revealed the ability to complicate or elaborate the given situations, actually carrying on conversations and saying both people's parts. He demonstrated the same ability in describing conversations with his parents.

Although young children are typically considered egocentric, Jon's abilities demonstrated a capacity to decenter. In Piagetian terms, decentering is the ability to view situations or events from the perspective of others (Moll, 1990). This ability can allow a child to view a situation from many perspectives, and he may be able to generate more or a greater
variety of solutions as a result. These abilities may be useful in generating potential solutions.

However, Jon did not generate a wide variety of solutions. In fact, he tended to focus on using words as the most appropriate and useful manner to resolve situations. He may be aware of this tactic as his most useful method. From informal observations, he does appear to use his words well when interacting with his peers. This tendency may also reflect a trend by his parents and teachers to help his use his words; using words was the preferred method of problem-solving endorsed by those adults.

Jon seems to respond well to solution-oriented techniques. Although he took some time to decipher the scale, once he accomplished this task his responses came clearly and easily. Apparently, this framework was new to him, but he was able to integrate it within his frame of logic. Because he was able to accomplish this task, solution-focused techniques were appropriate. If he did not have this ability, these techniques would have been frustrating to him.

Interview #4:

Although I did not teach Mary, I did observe her in her classroom. Typically, she was quiet and interacted most comfortably in smaller groups. With her peers, she appeared to be friendly. She responded well to others’ initiatives and joined in conversations.

Mary was very interested in the stories presented. She tended to stop playing and look at the cards while listening attentively to the stories. She also asked questions seeking more information about the stories. I tried to reflect these questions back to her,
letting her fill in the details. If I had noticed her interest in stories during the interview rather than while watching the videotape, I would have tried to develop a story with her and phrase my questions within that framework. Using that approach could also have avoided some of her frustration with the series of “what else” questions.

Mary also played with the cards as if they were dolls. She enacted how the different children might play together. I could have asked more questions about how they were playing together. Another idea this situation suggests is the use of dolls instead of pictures on cards when presenting this type of story to children.

When generating potential solutions, Mary drew on her own related experiences. Interestingly, she related stories that were similar in emotion as well as in situation. Specifically, she discussed when she was mad at her Dad even though the story concerned peer relations. Apparently, this experience was relevant to her.

Because of my role as a teacher in the Lab School, I became distracted when Mary said that her teacher told her to “figure it out yourself.” Before the interview, I was unaware that she attended two different schools. Knowing her teacher, such a comment surprised me. Without that knowledge or involvement, we could have explored what she did when her teacher said those words to her.

I responded inappropriately to her response, “not go to school anymore”; I laughed. After my laugh, she interrupted my response with another idea. As a result of her interruption, we were unable to explore her first response. An exploration of her first response could have provided some insights regarding how she distinguished in and out of school friendships or differences in how parents and teachers respond to situations.
Especially because she often referred to her own experiences, this exploration and discussion could have been valuable.

**Analysis of Interview #4.** This interview demonstrated the utility of stories when interacting with children. Mary was particularly interested in the stories and the pictures that went with them. Stories are potentially useful in interviewing and communicating with children. Typically children respond well to stories and are able to select stories which are personally special. Because stories are a part of nearly every person’s experience from a young age, narratives are familiar. Stories, whether about family members, heroes, or fictional characters, can provide models for ways experiences can be organized into meaningful patterns (Crago, 1985). During development, particular stories seem special to children because they embody themes appropriate to their level of development and specific features of their personality. In this instance, special refers to “metaphoric or symbolic correspondence to the child’s interior construction of reality.” (Crago, 1985, p. 133) As children share their stories, insights about their personality or other aspects of their situation may be deduced. The metaphoric aspect of stories can also be used to aid communication. Because stories can be both relevant and indirect, they tend to be less threatening (Miller & Boe, 1990). Some of the therapeutic aspects of stories have been explored (Crago, 1985; Aurela, 1987; Miller & Boe, 1990), both separately and with some types of play.

Like Lisa, the child in the second interview, Mary alternated between feeling sad and mad for the frowny face. Still, Mary seemed to be able to accept that mad and sad could be grouped into a not-good or not-happy category. Whether or not she realized
that emotions could be concurrent, she appeared to understand that emotions can be categorized. She may realize that emotions with the same valence can occur simultaneously. Perhaps this understanding avoided some confusion about the scale.

Mary was able to relate experiences by their emotional content or valence. During the interview, she offered stories such as being mad at her Dad rather than stories about playing with friends. Obviously, this story was relevant to her. According to the tenets of SOT (deShazer, 1988; O’Hanlon & Weiner-Davis, 1989) stories and personal history are potential resources for finding solutions. In a therapeutic situation, a therapist could explore differences between times when she is and is not mad at her father, as well as what she does when she does not want to be mad at her father anymore. Because Mary voluntarily shared stories, she seemed to recognize their importance for generating solutions. Her use of stories could be used, encouraging her to tell more stories. For children who do not readily share stories, a therapist could try telling stories first. This procedure could have the same effect as making a statement, rather than asking a question (Rogers, 1990). Often, I have seen children exchange stories on the same subject once one child starts. Similarly, children sometimes feel encouraged to share personal stories when hearing fictional stories on a subject with which they are familiar. In my classroom, when I read a story about a pet dinosaur, children shared knowledge of dinosaurs as well as pet stories.

Mary’s resourcefulness was impressive. She was able to generate three alternate solutions to the given situations relatively easily. Other potential solutions she suggested seemed to build upon those three. This ability is an example of divergent thinking skills.
Divergent thinking skills are often influenced by children’s experiences. As children gain a wider set of experiences, they have more resources on which to draw when making associations (Rogers & Sawyers, 1988). In some ways, her resourcefulness seems to result from her prior experiences. As she mentions, her teacher has told her to solve her own problems. So, she needed to be able to find resources to solve her problems. She seemed to be able to recall which resources she used or which were effective to employ again later.

Interview #5.

Not teaching Tina, I know very little of her family situation. From classroom observations, she appears to be very friendly and outgoing with both adults and classmates. She also seems to be quite confident in her social interactions. She initiated several interactions with both peers and teachers and sometimes tried to include others in the conversation.

The format of this interview varied slightly from the others. Because Tina expressed interest in the faces when she first entered the room, we discussed the scale prior to the introduction of the stories. Unfortunately, most of this discussion occurred before informed assent was ascertained. However, during the first story discussion, we did explore the faces and their meanings again.

Although Tina said that she “couldn’t do this” referring to the faces, she did not appear to be upset or frustrated. I could have explored her perceptions of that situation by asking questions like, “What do you need to do to be able to do this?” Because she
seemed to be more interested in figuring out the meaning of the faces, I chose to aid that process instead.

Interestingly, her responses seemed to focus on facial expressions. She suggested tickling as a way to put a smile on someone's face, although she seemed to realize that tickling would not solve the situation. From her stories, it does not appear that this child has had to resolve many of her own situations. She often referred to parental intervention and eating as solutions in her own experience.

Alternative solutions were challenging to elicit. Tina played with nearly everything, including language. She was also particularly interested in the tape recorder; she wanted to hear everything at least twice. Simultaneously accepting her responses and seeking more obviously relevant responses was certainly difficult. However, I have the impression that she did not intend to be difficult; she simply did not seem to have experiences on which to draw.

Still, Tina told several of her own stories which usually had something to do with friends or getting along with people. Her suggestions were consistent with her experiences described in the stories, too. She suggested a character play with her sister, and in a story she mentioned playing with her sister when a friend would not play with her. She also seemed to consider her siblings friends. In one story, she talked about a situation with a friend who she later admitted, seemingly somewhat embarrassed, was really her brother.

**Analysis of Interview #5.** Like Mary, the child in the fourth interview, Tina seemed to draw on her own experiences. However, Tina did not appear to have many
experiences on which to draw. From her stories, her parents, especially her mother, seem to solve her problems for her. Perhaps her apparent lack of these experiences made it difficult for her to generate potential solutions. In the same way a variety of experiences provides more resources on which to draw, a dearth of experiences would have the opposite effect. Often as I prompted for alternate solutions, she would attempt to change the topic of conversion. Typically she would ask me questions or tell a story.

Several of the questions she asked concerned the scale, so we were able to explore her perceptions of the scale. She was curious about the scale and approached it with interest. Although it seemed challenging for her to understand the faces on the scale, she did not appear frustrated by this challenge. Until about the middle of the interview, she seemed to understand that the middle face was neutral. At that point, the middle face became a mad face. Perhaps at that point, a mad face made more sense to her or suited her purpose better.

She was able to incorporate the faces on the scale into some of the stories she told. Many of the stories involved problems or difficult situations from home. From these stories, it became clear that she rarely had to resolve her own situations. She demonstrated some creativity, though, by making props for her stories out of playdough. Like divergent thinking skills, creativity has been linked to play (Rogers & Sawyers, 1988). According to Vygotsky (1990), children’s creative processes are expressed in play. Play, then, can be considered a creative reworking of previous experiences. The ability to deal with change is closely related to creatively combining elements from past experiences. Typically, creativity issues from needs, so creativity can potentially be
employed in therapeutic situations. Vygotsky (1990) also identified a social aspect of creativity, which would fit with his socio-historical theory. This social aspect seems to be relevant in therapeutic situations as well. Perhaps in a therapy situation, this creativity can be directed toward generating creative solutions to social situations.

**Overall Analysis/Summary**

While similarities certainly exist across interviews, recognizing individual differences is also important. Any interviewer in this situation needs to be sensitive to these differences in order for the child to be comfortable and for relevant responses to be elicited. Solution-oriented therapists would agree with this attitude; solution-oriented therapists interact with and respond to people uniquely (O’Hanlon and Weiner-Davis, 1989). They prefer to interact with people as unique individuals rather than a type of person.

Having simple toys available with which the child can play during the interview may also be useful. Interestingly, nearly every child in this study found something with which to play. Several played with playdough, some played with the ruler/scale, and others found different things. Despite their playing, the children remained able to respond to the questions thoughtfully. A few of the children even used their props when answering the questions. Play is children’s natural language, so its therapeutic implications are evident. In this study, playing with something also seemed to help the children feel comfortable. Playing did not interfere with any responses, and in some cases supplemented them. Play has been incorporated into various therapeutic frameworks (Axline, 1969; Bishop, 1982, 1986, 1987; Gendler, 1986; Landreth, 1987; Vintruella &
James, 1987; Allen & Berry, 1987; Pickford, 1992) Rode (1985) believes that, “the structural choice of dual modalities within the session (rather than a purely “non-directive” approach) is particularly appropriate in short-term treatment.” (p. 5) Solution-Oriented Therapy is one such short-term treatment.

In general, the children in this study responded thoughtfully and intelligently to solution-oriented questions. They are aware of a variety of resources. In general, the children were aware of words, ways of sharing, adults, toys, and friends/siblings as resources. Some of these solutions are to be anticipated because of the environment to which these children are exposed. As long as children are at Lab School, teachers and other adults remind the children to “use their words” to resolve situations. If they need help, teachers are always available. Often parents employ the same or similar methods at home for consistency, too. They were aware of a variety of resources, and they appeared to know how to use them. The children used several different methods of generating their solutions. Some employed their own previous experiences, recalling what they did or what an adult (parent or teacher) recommended. Several children studied the pictures on the cards for clues to solutions. In addition, they were able to recall and consider what other people, such as parents and teachers, might suggest in the given situations. However, they did not identify peers or classmates as potential resources or as having any role in potential solutions. In my experience as a teacher, I have seen children volunteer solutions for friends and attempt to mediate disputes among their friends. The level of awareness of friends as resources would be an interesting area for future research.
The children in this study seemed to respond well to the solution-focused questions. In differing ways, the questions needed to be adapted to the individual children. For some, questions were simplified, such as eliminating the middle step from scale-related questions for those who did not accept the middle face as "feeling okay." For others, the more complicated or abstract questions were asked, such as asking Jon, once he understood the scale, about moving from an "okay face" to a "happy face." These adaptations were based on the reactions of each child to the opening, standard questions. In Bruce's interview, asking what a teacher would suggest helped him consider more potential solutions to the situation. The same variation of the question helped Lisa to consider more complicated solutions.

Still, the SOT techniques used in this study, solution-focused and scaling questions, appeared to be useful in aiding children's process of generating solutions to social situations. Each child suggested several possible solutions to both situations included in this study. By observing children in a classroom setting, it is possible to observe their applications of these solutions. Some children are able to adjust their strategy if the first one they tried did not work sufficiently. This study suggests that these SOT techniques can successfully be applied when working with young children. These results also suggest that individual differences need to be considered in adapting SOT techniques to young children to meet with the most success.
Limitations

While this study suggests implications for the use of SOT with young children, the small sample size limits their generalizability. For more generalizable results, this study would need to be replicated with more young children. The children in this study are not broadly representative. In general, they would be considered to be part of a relatively high socioeconomic status (SES). Because of their SES, their parents can provide certain opportunities for them, including this Labschool, which other parents may not be able to provide. The creative activities of combining new ideas, as described earlier, depend primarily on rich and varied experiences (Vygotsky, 1990). These opportunities can aid children by increasing their resources or teaching a greater variety of ways to resolve situations. So, they may have more solution strategies available for use.

This study does not encompass nearly all possible SOT techniques or potential ways to apply those techniques when working with young children. Some ideas were suggested in this study; other ideas have yet to be developed and explored. Further studies can expand the knowledge of how SOT can be applied when working with young children.

Conclusions and Recommendations

The results of this study suggest that young children are able to understand and respond to certain solution-oriented techniques, specifically solution-focused questions and scaling questions. They are able to generate several potential solutions to social
situations. To aid children in this process, solution-oriented techniques can be adapted to children’s level of development.

Because each of the children in this study played with the props, using play to adapt solution-oriented techniques appears logical. In addition, play is similar in quality to problem-solving (Bruner, 1983), so that quality of play fits well with SOT. Certain toys or props are commonly employed in play therapy. These toys include, but are not limited to, a doll house with furniture, doll family, clay, crayons, paper, toy cars, toy animals, telephones, puppets, and legos or blocks (Axline, 1969). Guerney (1983) suggests three primary criteria for selecting toys. She recommends (1) toys that can be used in a variety of ways, such as building toys; (2) toys, like bop-bags and baby bottles, which encourage the feelings most challenging to handle in real life experiences, fear and dependence; and (3) toys that can be used by one or two people, so that the child can choose whether or not to play with the therapist.

These considerations can guide the selection of toys for employing SOT with children. Instead of accepting or interpreting children’s play, the solution-oriented therapist can employ solution-focused techniques. As children play, they often incorporate portions of personal experience or what they see or hear from adults (Vygotsky, 1990). Therapists can respond to these experiences within the context of play, making the situation less threatening for children by communicating on a more symbolic or metaphoric level (Allen & Berry, 1987). Using the scaffolding which occurs in play (Vygotsky, 1978), therapists can better aid children to understand and respond to solution-focused techniques, should these techniques challenge the children. Therapists
can ask more specific questions or break down complex or abstract concepts into smaller components to scaffold for children. In this study, I asked specific questions about what solutions certain adults with whom the children were familiar, parents and teachers, would suggest.

As previously mentioned, solution-oriented therapists need to be sensitive to children's individual differences. By recognizing individual differences, therapists can adapt techniques or try different ones to help children most effectively. Because individual differences are recognized in SOT, solution-oriented therapists are accustomed to this process. In SOT, therapists try to match clients' language in order to build rapport (O'Hanlon & Weiner-Davis, 1989). Therapists attentively listen to what the clients say as well as how they say it. Then, by mirroring the clients' language and matching their metaphors, they can demonstrate understanding. Some therapists also attune themselves to whether clients are visually, auditory, or feeling-oriented and respond in the same sensory modality. Similarly, therapists can observe children to determine which methods are likely to be successful. If a child enjoys sharing stories or asks questions, wanting to know more about stories a therapist shares, that child will likely respond well to hearing and exploring stories. For a child who enjoys playing and avoids responding to a therapist’s direct questions, a therapist can enter the child’s world in play and attempt to communicate through play. Therapists can simply ask direct questions to a child who is frank or who is not interested in playing.

The techniques explored in this study, solution-focused questions and scaling questions, are not exclusive to therapeutic situations. As is evident from some of my
examples in this paper, these techniques can also be employed in preschool settings. Some techniques, especially asking solution-focused questions, can aid in the development of problem-solving skills.

These ideas and prospective adaptations of solution-oriented therapy need to be explored in research. Future studies can examine the incorporation of play into solution-oriented therapy as well as the use of stories. Sand play therapy (Allen & Berry, 1987; Vinturella & James, 1987; Pickford, 1992) can potentially be integrated with SOT as well; this match can be explored through research. Ways of adapting other solution-oriented techniques, such as exploring exceptions and setting goals, when working with children can also be explored.
References


Appendix A

Virginia Tech Lab School
Department of Family and Child Development
Permission Form
Children’s Solution-Thinking

VIRGINIA TECH LAB SCHOOL
Department of Family and Child Development
Permission Form

The main purpose of the program is to provide learning experiences for students. This includes both instruction and investigations of child and family development. In connection with this, photographs may be made, field trips may be taken away from the laboratory area or children may participate in varied activities connected with investigation and research projects. In addition, medical emergencies could arise which require immediate action. In order to be sure parents are aware of and understand these possibilities we are asking you to give permission. Please check the blanks and sign below.

1. Permission to Photograph. I understand that video, sound tape recordings, movies and photographs may be made of the laboratory groups. These will be used for educational purposes, publications and professional presentations.

2. Field Trips. I grant permission for my child to take occasional excursions away from the University and understand that parents will be informed at least one day ahead of such trips. Transportation will be provided by faculty, parents and students who are personally insured for liability. If I prefer that my child not go on a trip he/she will remain at home that day.

3. Investigations and Research Projects. I understand that students under the supervision of instructors, may occasionally question or provide special learning experiences for children that are usual and accepted in early childhood programs, and may be participants in student or faculty research projects which may be disseminated to other than class members. In this case, I understand I will be informed as to the specific study and can then decide if I want my child to participate.

4. Emergency Medical Care. If the staff determines that medical care is needed, every possible effort will be made to first contact a parent so that the parent can help in planning further steps to be taken in the particular situation. If emergency medical attention is needed and the parent cannot be reached or if there is no time to reach the parent first, the staff will contact medical aid in the following order: (1) the child’s physician named below; (2) Montgomery County Hospital Emergency Room. If the child should become ill during the session and the parents cannot be contacted, I will contact the non-emergency contact number listed below.

Child’s Name

Mother’s Name _______________ reach at telephone # _______________

Father’s Name _______________ reach at telephone # _______________

Child’s Physician __________________ telephone # _______________

Non-emergency contact __________________ telephone # _______________

I authorize the personnel in the University Laboratory School to secure emergency medical aid for my child.

Signed __________________________ Date _________________________

List any persons authorized to pick up your child _____________________
Appendix B

Scenarios

Scenario #1:

This is a boy named Andrew [show picture of a child]. There is a person in his school whom he would really like to play with named Tyler [show picture of another child]. No matter what Andrew does or tries Tyler says, “No, I don’t want to play with you; you’re not my friend.”

Questions for scenario #1:

1. How do you think Andrew feels?
2. If this end of the ruler [pointing to one end, with frowning face attached] is “feels bad,” and this middle face [pointing to neutral face in the center of the ruler] is “feels O.K.,” and this end of the ruler [pointing to the other end, with smiling face attached] is “feels good,” where do you think Andrew would be?
3. What could Andrew do to get from here [pointing to where child pointed in last question] to here [pointing to neutral face]?
4. What can Andrew do about this situation?
5. How did he make those friends?
6. If someone told you he didn’t want to play with you, how would you feel?
7. Has this ever happened to you?
8. What did you do to get someone to play with you?
Scenario #2:

This is a girl named Jenna [show picture of child], and this is a girl named Amber [show picture of child]. Amber is playing with a doll [show picture of toy], and Jenna would really like to play with the doll. Jenna tried asking for the doll but Amber said, "No, you can't have it."

Questions for scenario #2:

1. How do you think Jenna feels?

2. If this end of the ruler [pointing to one end, with frowning face attached] is "feels bad," and this middle face [pointing to neutral face in the center of the ruler] is "feels O.K.," and this end of the ruler [pointing to the other end, with smiling face attached] is "feels good," where do you think Jenna would be?

3. What could Jenna do to get from here [pointing to where child pointed in last question] to here [pointing to neutral face]?@

4. What can Jenna do about this situation]?@ 

5. If someone wouldn't let you play with a toy, how would you feel?

6. Has this ever happened to you?

7. What did you do to get to play with the toy?

@Prompts for this question include: "What else could the child do?" "If that doesn't work, what else could the child try?" "What would her teacher suggest she do?" and the like

** Names of children in their class will not be used.**
Appendix C

Interview Transcripts

The tape recordings and video were transcribed as accurately as possible. At
times, various participants mumble or speak concurrently; an attempt has been made to
document these situations as they occurred in the interview. In general, only the most
noticeable behaviors have been noted in the right hand column. Between comments such
as “starts playing with playdough” and “stops playing with playdough,” it can be safely
assumed that the child played with playdough for the duration. For the purposes of this
study, knowing that the child was playing was more relevant than recording each precise
movement of their play.

Few of my own behaviors as interviewer are noted on the transcripts. In each
interview, I sat leaning forward slightly, watching the child. When the pictures and ruler
were the focus of the discussion, I alternately looked at the pictures or ruler and the child.
For the most part, I attempted to mirror the child’s facial expressions as appropriate (i.e.,
smiling in return when the child smiled). For each story, I held the pictures, showing them
to the child as the names were mentioned. I put the pictures down when I picked up the
ruler to ask the scaling question. When telling the second story of the interview, I covered
the first set of pictures with the second. As much as possible, I attempted to be consistent
in the presentation of the stories.

Instead of using names throughout the transcripts, initials were used. The key is as
follows:

<table>
<thead>
<tr>
<th>Initial</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>Kristin</td>
</tr>
<tr>
<td>B</td>
<td>Bruce</td>
</tr>
<tr>
<td>L</td>
<td>Lisa</td>
</tr>
<tr>
<td>J</td>
<td>Jon</td>
</tr>
<tr>
<td>M</td>
<td>Mary</td>
</tr>
<tr>
<td>T</td>
<td>Tina</td>
</tr>
</tbody>
</table>
Interview #1:

K: This is a boy named Andrew. He goes to a school just like you do, like labschool. While he's at school, there's another boy he'd really like to play with named Tyler; this is Tyler. No matter what Andrew does or tries, Tyler keeps telling him, "I don't like you. You're not my friend." How do you think that Andrew feels about that?

B: Sad
K: He's sad... Do you know what this thing could be?
B: A sad or happy face thing?
K: Yeah. Is there a food you really really like?
B: Nachos
K: Nachos. So you had a smile on your face when you thought of nachos. What's a food that you really don't like?
B: Green beans.
K: Green beans. So you get sad when you see we're having green beans for lunch, huh?
B: Uh-huh
K: Are there some foods that are just OK to eat?
B: Mmmmm
K: What is a food like that?
B: Peanut butter and jelly
K: Peanut butter and jelly is just kinda ok; you're not happy, not sad, just kinda ok about it. You can use this for feelings about anything. You can say you're happy about some things, just ok about some things, and sad about some things. Where do you think Andrew would be on this scale

K shows pictures with names
B sits on couch, right hand on chair, right leg bouncing
K puts pictures down, picks up scale
B jumps a little, raises hand, smiles
B hands going from side to side
after Tyler said, “I don’t like you. You're not my friend”?
B: That one.
K: Down at the frowny face
B: Mhmm
K: What do you think would have to happen for Andrew to get from feeling sad to feeling ok?
B: He would have to try to forget about it.
K: Try to forget about it...If that didn’t work, what else do you think he could try?
B: Just not be around him for a while.
K: Not be around him for a while...There are some really good ideas. Can you think of any more?
B: No.
K: No. What do you think Andrew could do if people kept telling him that?
B: He could not stay around them.
K: Not stay around them...If somebody told you that he didn’t want to play with you, how would that make you feel?
B: Sad.
K: It would make you feel sad. Has that ever happened to you?
B: No.
K: No. What do you think you would do if it did happen, if somebody told you that?
B: I'd be sad.
K: What would you do to feel better when you’re sad?
B: Find somebody else.
K: Find somebody else to play with. What else could you do?
B: I don’t know.
K: Are you ready to meet some more people?
B: Mmhmm
K: This is a girl named Jenna, and this is a girl named Amber. Amber is playing with some playdough, like this, and Jenna would really like to play with some. Jenna tried asking for it, but Amber said, “No, you can’t have any.” How do you think that Jenna feels?
B: Sad
K: You think she would be sad. Do you remember this? Where do you think Jenna would be on this?
B: There
K: Down here at the frowny face. What do you think it would take for her to get from being really sad to feeling ok?
B: Say please
K: Say please—that’s an idea. Would that help her get some playdough?
B: I think.
K: What else do you think she can do about it?
B: Mmmm...I don’t know.
K: If somebody wouldn’t let you play with a toy, how would you feel?
B: Sad
K: What would you do?
B: Find another toy.
K: You’d find another toy.
B: Mmhmm
K: If that didn’t work, what else could you try?
B: Um...play a game that you don’t need a toy with.
K: Mmhmm. What else can you do? (pause) Do you ever ask a teacher for help?
K: What kinds of things does a teacher suggest?
B: Talking to ‘em
K: You could talk about it. What other things do teachers say?
B: Mmm. Put 'em in time out.
K: You think the teacher would do that? Or do kids put people in time out?
K: You think the teachers do.
(pause) Do you have any other ideas?
B: I think the teachers do.
B: No.
K: No. I really appreciate your help.
Interview #2:
K: This is a girl named Jenna, and this is a girl named Amber—Actually, it’s a boy named Tyler (sorry about that) Tyler is playing with some playdough. They go to school just like you do, and there is playdough out at their school today. Tyler is playing with some playdough, and Jenna would really really like to play with some playdough, too. She tried asking for some, but Tyler said, “No, you can’t have any.” How do you think that made Jenna feel?
L: Mad
K: She’d be mad.
L: Sad
K: Probably. Can she be both mad and sad?
L: Mmmm
K: Or do you think she’d be either mad or sad?
L: Sad
K: She’d be sad. Have you ever seen anything like this before? What do you think it could be for?
L: Sad, mad, and happy
K: That could be. Is there a food you really really like?
L: Yeah
K: What is it?
L: Steak
K: When you eat that, you smiled, so that is something you’re happy about. What is a food you don’t like very much?
L: (pause) Hamburger with salad and pickles.
K: You don’t like that. So then you’d get a frowny face if you had to eat that. And are there foods that are
K holds pictures with names
K holds playdough
L sitting back in chair
L puts hands on lap
L shrugs
K picks up ruler-scale
L shakes head no
K points to smiley face
L shakes leg
L nods head
just kind of ok to eat, that you like to eat sometimes and sometimes it just doesn’t matter?
L: Mmmm
K: Do you have that kind of face then, just an ok kind of face? Let’s see if Tyler told Jenna she couldn’t play with the playdough, where do you think she would be? She’d be down at the frowny face. What do you think she could do to get from a frowny face to an ok face?
L: Play with that or that.
K: Play with those things, and that would help her feel better. What else do you think she can do?
L: Mmm. She could play on that, and she’ll have fun.
K: That looks like fun. If that didn’t work, what else do you think she can do?
L: Uh, play with another thing.
K: Play with something else. Do you think she had teachers at her school? What might a teacher suggest she do?
L: Um, he could have it for 20 minutes, and then she could have it for 20 minutes.
K: That’s a neat idea about sharing. Do you think a teacher would have any other ideas?
L: Hmm. Going from numbers like she thinks of a number and they try to guess what number was highest, closest
K: And whoever is the closest gets it, is that what you mean? You have lots of different ideas. Can you think of any others?
L: Uh, he could give it to her
K: He could give it to her. What else could he do?
L: Um, if he was playing with that, she could have the playdough
K: What else do you think? You have lots of good ideas.
L: (pause) She could keep on playing with that, or she could say, “Could I please have it?”
K: Mmhmm. You have really good ideas.
L: Or, um, he could keep on playing with it, and when he’s finished with it, she can have it.
K: Mmhmm (pause) What else do you think Jenna can do?
K: If somebody didn’t let you play with a toy or some playdough, how would it make you feel?
L: I’d play with something else until he’s finished.
K: That’s what you would do? Has it ever happened to you that somebody said that?
L: Mmhmm. Or, um, they could cut some in half so everyone would have some.
K: That’s a real good idea, too.
L: Mm-mm
K: What happened?
L: Uh, she could play with something else while he’s playing with that, and then when he’s done with it, she can play with it, and he can play with something else.
K: Mmhmm. Lots of good ideas.
L: Like, if you leave him alone, he’ll leave it somewhere, and she’ll get it, and it’ll be her turn.
L: (laughs)
K: You got some on your ring?
   (pauses) What else do you think they could do?

L points to monkey bars

L reaches for some playdough and plays with it

L shakes head no
L: Uh, she could tell on a teacher, and then if he doesn't want to play with it, then she can play with it, and then it would be his turn again, and then her turn, and then his turn, and then her turn, and then his turn, and then they would have lots of fun with it.

K: Sounds like it. Do you have any other ideas?

L: Mmm (pauses) Yeah

K: Ok. What's your other idea?

L: The teacher could have some, and then they can have some. Or if he's playing with that, then she can have it, and then when he's finished with that, she can give it to him. Like if he's playing with that, she can play with the playdough. Then when he's finished, then he can play with it.

K: With the playdough? (pause)
Makes sense (pause) Lots of good ideas. (pause) Ready for our second story? We have two different kids. This is a boy named Andrew, and there's someone in his school who he'd really like to play with named Amber; this is Amber here. No matter what Andrew does or tries, Amber keeps telling Andrew that she doesn't like him, and he's not her friend. How do you think that makes Andrew feel?

L: Mad

K: You think it makes him feel mad

L: And sss--, I would say.

K: You think he'd be on a frowny face down here. What do you think Andrew can do to get from a frowny face down here to an up here face?
K: You think they would play with this and they'll be friends? The slinky?
L: No. Like, um, if they play together, they would be friends.
K: If they play together, they would be friends. (pause) What do you think Andrew can do about this situation?
L: Um, he can play with that, and she can play with the ball, and then she'll throw the ball to him, back and forth, and then he'll feel better.
K: You think they would. If that didn't work, what else do you think Andrew could try?
L: He, um, um, She will let him go over to her house, and play with each other, and have fun, and they'll get to be friends.
K: Well, how would Amber decide to invite Andrew over?
L: Um, since she's being mad to him, she would have to say she was sorry.
K: She would (pause) And then what would happen?
L: Then they would play, maybe, and watch tv, and watch anything.
K: (pause) If that didn't work, what else do you think they can try?
L: Um (pause) Maybe he could let her come over, and then they would have a lot of fun.
K: He would invite her over?
L: Mmmmm
K: What do you think a teacher might suggest to them?
L: Um, I don't know.
K: Has it ever happened to you, that someone told you they didn't want to play with you?
L: Kelley
K: Kelley did. How did that make you feel?
L: Mm Mad
K: It did (pause) What did you do to get someone to play with you?
L: Um, they could say sorry, and when they say sorry, the teacher would say to say you say sorry back, and he'll say sorry, and then they'll be friends
K: They would be after that.
L: They could get to friends.
K: Mmhmm
L: They could go to somebody's house.
K: Well, how would they get to be friends?
L: Um, they would get to—mm-mm
K: That's a tough question. How did you make your friends? You said that you and Kelley are friends (prior to taping). How did you guys get to be friends?
L: We were talking to the teacher, and she told a funny joke and stuff, and then she got mad still. She didn't like to go on the wagon, and I wanted to, so then I said I wanted to go on the wagon. She got the wagon out, and, um, then she went on the wagon, and, um, then she got off. She ran and ran, and then she went up on the big slide, and then I ran and ran, and then she said, "Lauren, come here," and I did, and we were playing then.
K: So you started playing together on the playground, with the wagon and the slide, when you became friends.
L: Mmhmm. But I didn't want to go, but I did
L adds playdough to bracelet, then bunches playdough
L sits back on chair; K still leaning forward
L makes new bracelet
L legs starts bouncing, she puts the bracelet on, then reaches for more playdough and adds the new playdough to her bracelet
L tries bracelet on other hand; the bracelet breaks, but L fixes it
K: Hmm (pause) What about some of your other friends? How did you get to their friend, or how did they get to be your friend?

L: Well, Meaghan said she wouldn’t let me come to her birthday, and then I said she can’t come to my birthday, and she ran away, and I went with her, and, um, then we got a talk, and then a teacher came, and then I said I’m gonna invite you to my birthday, and then she said—I said I would let her come to my birthday.

K: Mmmmm.

L: But Meaghan said she wouldn’t—Meaghan said I wouldn’t let her come to my birthday, and then I said I wanted to let her come to my birthday to hold my hamsters, and then she said, “I’m going to invite you to my birthday.”

K: So that’s how you guys got to be friends, huh? (pause) What about some of your other friends?

L: Well, today, Philip said, “Do you want to play with me and be my friend?” and I said, I was thinking, and then I said, “Yeah” when we were cleaning up.

K: Oh, that was nice. (pause) Are there any different ways you can think of to make friends?

L: Uh—uh—uh—uh. Um, playing with each other

K: Ok

L: Ah, you come back here. (pause) Uh—uh—um—um—um—um

K: So playing with each other is one way to make friends.

L: Yeah.

K: What’s another way?

L lifts up tape recorder cord

L puts bracelet on

L hands going down tape recorder cord

L bracelet breaks

L gets more playdough

L playing with playdough
L: Um (pause)
K: Can you think of anything else?
(pause) Well, you have been a super helper. Thank you very much for answering the questions. You can put the playdough back on the table, and we'll turn this off.

L shakes head no
Interview #3:

K: Our first story is about a little boy named Andrew. He goes to school, just like you do, and while he’s at his school, there’s this girl named Jenna who he would really, really like to play with, but no matter what Andrew does or tries, Jenna tells him, “No, I don’t want to play with you. You’re not my friend.” How do you think that makes Andrew feel?

J: Sad

K: You think that would make him feel sad. Did you ever see anything like this before?

J: No

K: No. See if you can figure out what the faces mean.

J: That’s happy?

K: Mmhmm Can you think of a food you really, really like?

J: Grapes

K: Grapes? Do you smile when you know you’re gonna get grapes? It makes you happy? What’s a food you really don’t like?

J: Lasagna

K: Lasagna you don’t like. So would you have that kind of face, a sad face, a frowny face?

J: Well, I like pizza

K: You like pizza, so that would give you that kind of face. Are there foods that are just kinda ok, that you don’t get excited about, but you eat them anyway?

J: Mmhmm

K: What’s a food like that?

J: Uh...I don’t know

K: That’s what that face means. Let’s see, if Jenna tells Andrew the she doesn’t like him, and he’s not her

J sitting back in chair

K holds up pictures as names are mentioned

K puts pictures down and picks up ruler

J points to smiley face

K points to smiley face

K points to frowny face

K points to smiley face

J shrugs

K points to neutral face
friend, where do you think he
would be on this? What kind of
face would he have? (pause) You
think he would have a frowny face?

J: And she might have that.
K: You think it would make her happy
to say that? It would make her feel
good to say that?

J: Yeah, and it would make him feel
sad.

** J & K both mumble
K: What do you think Andrew can do
to get from a frowny face to an ok
face?

J: Tell a teacher.
K: Tell a teacher. What do you think
a teacher would suggest that he
does?

J: Well, he's gonna haveta--I don't
know cuz it looks like she is, it
looks like he's real sad, and she's
real happy.

J: Yeah

K: What do you think Andrew can do
about this situation?

J: Maybe, um, tell on, "don't do that
again"

K: That's a good idea. If that didn't
work, what else could he try?

J: Um...da...I didn't like that.

K: He could say that, too.

J: Or he could do this: What he could
do is he could, like do something--I
don't know what I was thinking. I
knew a minute ago, but I forgot.
Or he could do this: just like this:
what he could do is he could go
over and tell him, "please can I play
with you," just like that.

K: That's a real nice way to ask. If
that didn't work, what else do you
think he could try?

J points to frowny face
J: Hmm I don’t know. (pause) I don’t know what he could do.
K: If someone told you that he didn’t want to play with you or be your friend, how would that make you feel?
J: Sad
K: Has that ever happened to you?
J: Mmm I don’t know
K: What do you think you would do if it did?
J: Uh...tell him I don’t like that.
K: What else could you do?
K: You think she looks real happy.
J: I could do this: I could like walk away and play with something else and play with him another day. That’s what I would do.
K: You come up with a lot of good ideas. Do you have any more?
J: Nope.
K: You ready for our second story then? Yeah? We have two different people in this story. This is a girl named Amber, and this is a boy named Tyler. Tyler’s playing with some playdough, like this, like what we have at labschool, and Amber would really really like to play with the playdough, too, but when she tried to ask Tyler, Tyler told her, “No, you can’t have any.” How do you think that would make Amber feel?
J: Sad cuz see that’s not nice cuz see he thinks only one person can play with the playdough.
K: Yeah, that’s true.
J: But there’s not really one person.
K: Yeah. Remember this scale?
J: Mmhmm
K: Where do you think Amber would be on this scale? (pause) What
J puts hand/fingers on edge of table
J plays with the drawstring on his shorts
J looks up at ceiling
K holds up pictures as names are mentioned
K points to playdough
J moves closer to table
J points to frowny face and sits back
could she do to get from frowny face to an ok face?

J: Just say, "I didn’t like that."

K: She could say that.

J: But I’d rather have a smiley face than an ok face. What he could do is he could like--What happens if she goes and snatchs and takes the pile away from her?

K: Oh, if he snatched the pile away from her?

J: Yeah, probably that would make her on that face.

K: Oh, yeah, I would think so.

J: And then what happens is the teacher or someone would have to get him to go, "Ok, I’ll give it back." And then she’d have that kind of face.

K: The teacher would make him give the ball back, and that would make her happy?

J: Yes, so because (mumbled words)

K: That’s a straight line, huh? (pause) Well, let’s see if Amber telling him that she didn’t like it gave her this kind of face, what could she do to get a happy face?

J: Like see this?

K: Uh-huh

J: That face to that face?

K: Yeah, from that face to that face

J: Aaw, I don’t know. I think if she--ok, ok... because...has the ball...and if he could...ok...and she says I’m--no, no, no...if she has that ball, and she kinda, no he kinda, she comes like that, and she’s there, and what he could do is if she snatched the ball...maybe...and he could...and him..or could give it back...and say, "Ok, I’ll give it back," and then ok,
you won’t be sad, you’ll be like that... and then it would be like this, and ok... and then it’d be that one, and I think that makes sense.

K: So if he was giving her the ball back? Is that right?

J: Yeah. That’s when he hasta give the ball back, and that’s when he took the ball away.

K: Ok. Has it ever happened to you that somebody wouldn’t let you play with a toy?

J: That makes me sad.

K: It makes you sad. What did you do to get to play with the toy?

J: I would do this: uh, “please give me the ball,” like that. And if that doesn’t work, I’d tell a teacher.

K: What would a teacher suggest you do?

J: They would tell him to give it back. Or if I’m at home, I would tell my Mom and Dad.

K: What would Mom and Dad do?

J: I don’t know. They would say, “Give the ball back.”

K: You think they would just say that.

J: Yeah.

K: What if they didn’t say that? What if they said something else, what else might they say?

J: “Why did you snatch it?”

K: They might try to find out why.

J: Yeah, because, see, “I wanted to play with it,” and “Well, you should ask.” That, maybe that one. And then they’d say, “ok,” but it wouldn’t be a frown face, it’d be just like that.

K: So as he gets the ball back, he gets happier. Is that right?

J: Mmmmm
K: Do you have any other ideas about things people could do to get to play with toys?

J: I think it's like do this, do this, do this, and do this, and when somebody takes a ball from you, what you can do is do this.

K: Well, what's the "this"?

J: Um, just like do something like, "Can I have it back please?" Like that.

K: Like that?

J: Yeah, so you don't haveta tell your Mom or Dad or a teacher.

K: Oh, so if you just ask, you don't haveta tell anybody.

J: Yeah, but what happens if they don't give it back? Then you gotta tell on the teacher. Then about a problem, that is, but see, now, then you be that face, then that face, then that face, and be all the faces (mumbling) Maybe what happens if you do this—that's one step, just to like, say someone punches you, then you tell your Mom or Dad. You can't do that or he won't have it anymore. Then you tell on your Mom and Dad.

K: So punching is different than if somebody takes a toy; punching you haveta tell somebody.

J: Yeah, if you're quiet then your face is sad. Then it's not sad.

K: Oh. Are there any other things you can try before you tell a teacher?

J: Hmm... I think if you do this, just like, "I didn't like that."

K: Do you have any other ideas?

J: Nope.

K: Well, I'll turn this off, and walk you back to your room.

J plays with drawstring again

J leans on table

J sits back in chair

J sits back in chair

J points to faces again

J touches playdough

J starts playing with playdough

J stops playing with playdough

J sits back in chair
Interview #4
K: Our first story is about this girl named Amber and a boy named Andrew is playing with some playdough, like we do at lab school while they’re at school, and Amber really would like to play with some playdough, too, but you know what Andrew does?
M: What?
K: He says, “No, you can’t have any” How do you think that would make Amber feel?
M: Sad
K: That would make her sad. Have you ever seen anything like this before?
M: I saw all different faces before, but not that kind.
K: Not this kind. Let’s see if we can figure out what the face means. Can you think of a food that you really, really like?
M: Uh-huh
K: What is it?
M: There’s 3 things: waffle, eggs, cereal
K: Waffle, eggs, cereal? Do you get happy when you know you get to eat that?
M: (slurping sound)
K: (laughs) You’ve got a smile now. What about a food that you don’t like very much?
M: spaghetti sauce
K: You don’t like spaghetti sauce. So do you get that kind of face when you haveta eat spaghetti sauce?
M: um...mad
K: You get mad (Laughs)
M: I eat spaghetti with butter on it.
K: Oh, with butter on it. That sounds pretty good. And what about a food that is just kinda ok to eat?
M: (pause) Let's see here. (pause) Granola bars.
K: Granola bars. Do you have that kind of face when you eat granola bars? Just kind of an ok face?
M: Yeah, I get that kind of face when I get sad.
K: That kind. So, that's a face when you don't feel very good, huh? If Andrew told Amber that he couldn't have any playdough, what kind of face do you think she would have? This one down here? What do you think Amber would do to get from this kind of face to feeling ok or happy up here? (pause) You want to get all the way to a happy face? What would she have to do to get to a happy face?
M: Make her own playdough.
K: She could make her own playdough. That's a good idea. What if she didn't have the stuff to make her own playdough, what could she try?
M: Ask for some.
K: She could ask for some.
M: Mnhm
K: Would she ask Andrew for some?
M: Yeah.
K: Yeah
M: Or her Mom.
K: What if that didn’t work, what else could she do?
M: (pause) Ask Mom to go to the store to buy some.
K: Ask Mom to go to the store too buy some. What if Mom couldn’t go to the store that day?
M: (pause) (sigh) Go ask somebody if she can borrow some playdough.
K: She can borrow some, that’s a neat idea. What else do you think Amber could do?
M: To get playdough?
K: Mmm
M: Ask Andrew for some playdough.
K: Ask Andrew. If somebody didn’t let you play with a toy, what would you do? Or how would you feel?
M: Mad.
K: You’d be mad. Has that ever happened to you?
M: Well, not for a toy, but mad.
K: You’ve been mad.
M: Today I got mad.
K: You did?
M: My Dad pushed me off the bed.
K: Aw, I guess you didn’t like that very much. You don’t seem mad now. What did you do to get from being mad to feeling better?
M: I went to my room.
K: To your room. Does just being in your room help you feel better? Or is there something special in there that you do?
M: Well, actually, I lay down on my bed, hold my birthday bear, and kinda like (unclear)
K: What do you think you would do if somebody told you that you couldn’t play with a toy you wanted to play with?
M: Mad
K: You would be mad.
M: That happened before when I wasn’t this age.
K: What did you do?
M: Tell somebody.
K: You told somebody. What did they do?
M: Told them to share?
K: How did you decide to share?
M: Compromised. First do one thing, and then do the other.
K: Do you think that Andrew and Amber have a teacher? If they went to ask a teacher for help, what do you think a teacher might say?
M: Figure it out yourself.
K: You think that is what a teacher would say?
(surprised)
M: Well, I have a teacher, and she says that every time.
K: Really? Do you go to other teachers who help you out more? Like April? Does April say that?
M: Miss Veigh.
K: What does April do?
M: I don’t know. I never had that problem before at lab school.
K: Oh, so you’re not sure what she would do. This is our second story. This is about a boy named Tyler. He goes to
a school, like you do, and while he's at school, there's this girl named Jenna who he'd really like to play with, but no matter what Tyler does, Jenna keeps telling him, "No, I don't like you. You're not my friend."

M: Why?
K: Why do you think she would say that?
M: I don't know.
K: You don't know.
M: Maybe cuz he goes to school, doesn't come home.
K: You think that's it? Cuz they don't play together at home? They only see each other at school?
M: No because he goes to school, and she doesn't
K: Oh.
M: They go to different schools.
K: That might be tough, huh?
(pause) How do you think Tyler would feel if Jenna would tell that to him, that they're not friends?
M: (pause) Mad-sad.
K: Mad or sad. Which face do you think that would be?
K & M talk at same time--can't understand
K: One of these faces? Is that one a mad face and that one a sad one?
M: Mmhmm
K: Yeah. What would Tyler haveta do to get from a mad or sad face all the way to a happy face?
M: (pause) Not go to school anymore.

K holds pictures up as names are mentioned

M watches cards

M playing

M points to both neutral and frowny faces

M looks at faces, then twists ruler again
K: (laugh) You think they play--
M: Tell how his feelings got hurt.
K: That’s a good idea, he could
say how his feelings got hurt.
If that didn’t work,
what else could he do?
M: Tell his Mom and Dad.
K: What would his Mom and Dad say?
M: Go help him out.
K: They would help him out.
How would they help him out?
M: They’d talk to that boy and
girl.
K: So they would talk to Jenna,
too. Do you know what they might say to Jenna?
M: Well, yeah.
K: What do you think?
M: “You hurt your friend’s feelings.” Wait...Jenna has a broken arm?
K: It looks like a cast, huh?
M: Is it?
K: Could be. That’s a very good idea.
M: It is.
K: You think so.
M: Well, she probably,
um...they’ll play after school,
and like one of my friends, we were playing by a bookshelf,
and it fell over and tipped on my friend’s leg. She had a cast on it. And, um, I think that when they were playing together I think Tyler tipped over, and she got an arm cast.

M smiles

M still playing with ruler

M comes up to table and looks at the pictures more closely, then picks up Jenna’s

M drops ruler

M stands by table

M switches cards, putting boys in one pile and girls in another

M holds pairs of cards up and plays with them
K: (pause) So you think he should come and play with him, and those 2 should play together?
M: See, watch this...He’s going to go outside and play on that, monkey bars.
K: Playing on the monkey bars. And Andrew’s going to go play with him?
M: Ah...boo!
K: If somebody told you that they didn’t want to play with you, how would that make you feel?
M: Mad.
K: Has that ever happened to you?
M: Um, sad. I don’t know.
K: Sometimes it’s tough to tell the difference between mad and sad, huh?
M: Yeah.
K: What do you think you would do if somebody told you that?
M: (pause) I don’t know.
(pause) Looks like he’s the boy from the other story. Looks like he’s not playing with playdough. She’s not playing with playdough either.
K: So, you think they’re all done playing with playdough now. They each found something else.
M: Yeah.
K: Do you have any other ideas?
M: No.
K: No. I think that’s it then. Thank you very much for your help.
Interview #5

K: You were looking at this before. You figured out we have happy, sad, and kinda in between. Can you think of a food you really like?

T: Rice.

K: Rice. You got a smile on your face when you said that, like this face... So that makes you happy. What about a food that you don’t like?

T: Um, I don’t like ah-ah-ah (pause) I don’t like cake.

K: You don’t like cake. Do you get that kind of face?

T: Yeah. Sometimes I throw up when I eat cake.

K: Really? I wouldn’t like it then either. What about a food that you eat, but is just kinda ok?

T: Yeah, I know, chicken.

K: Chicken? So you get like a middle face with chicken.

T: Mmmmm

K: Let’s see one of our stories.

T: Why don’t you do it again?

K: What you want to hear your voice again? Ok.

*listen to previous discussion*

K: Do you like playing with the tape recorder? This is a girl named Amber. She goes to a school, just like you do, and while she’s there, there’s this other girl there named Jenna who she would really like to play with, but no matter

T figured out faces prior to assent signing

K sets ruler on table

K points to smiley face

T shakes head no

K points to frowny face

K points to neutral face

T points to recorder

K holds up pictures as names are mentioned

T rests on table (head on hands)
what Amber tries or says,
Jenna keeps telling her, “No I
don’t like you. You’re not
my friend.” How do you
think that would make Amber
feel?

T: Sad.
K: Which of these faces would
that be?
T: Mad (laughs)
K: Which one is that? That one?
What would she have to do to
get from
feeling sad or mad down here
to feeling ok?
T: To tell she don’t like that.
K: She can tell her she doesn’t
like that.
T: Mmmmm
K: What else could she do?
T: Uh..Uh..Hmmm... I don’t
know. Let me think ...
nnnnnnn uh...I can’t do this.
K: Is that a tough question?
T: Yeah, I can’t even do this big
thing.
T & K both laugh.
T: Did you tape this?
K: Yeah, I taped the faces on
there.
T: Hmmm...hmm hmm
hmm...Sad
K: That one’s a sad face.
T: Mad
K: You think that one is mad
T: Mmmmm. She’d get mad and
tell her Mom.
K: What would her Mom
suggest she do?
T: If she had a sister, you could
play with her.
K: What do you think Amber could do to get her to be to a happy face, away from the sad and mad face?
K points to smiley face
T: She could tickle her.
K: If Jenna tickled her. You think?
T: Mmmmm
K: Does that put a smile on your face?
T: Mmmmm. If you don’t like it, you’re sad.
T points to frowny face
K: Mmmmm. What else do you think Amber could do about this situation?
T: Uh-uh-uh-uh... I forgot. I forgot ‘bout it
both T & K laugh
T: I always, always, always, always forgot. Is that gonna record me and you?
T points to recorder and to us
K: Mmmmm
T: Oh, I don’t know that. Ah, well. Sad and mad and sad, uh, happy. Happy, happy.
No, no. Happy, little bit, little bit sad, and sad. Well, this has big eyes. Did you, Who draw this?
T points to faces
K: I drew some of them.
T: What? Which ones?
K: I don’t remember.
T: Did you draw this one?
K: I think my friend drew that one.
T: I think you drew this one only. Did you do this one?
T points to neutral face
K: It looks like the same person did the 2 on the end, and a different person did the one in the middle. So if I did the one in the middle, I probably didn’t do the ones on the end.
T: hbdity
K: If someone told you that they didn’t want to play with you or be your friend, how would you feel?
T: Uh, happy
K: That would make you feel happy?
T: Yeah, because I have my own sister.
K: Oh, you’d be happy because you know you have a sister to go play with.
T: My brother always plays fights with me.
K: Yeah?
T: Yeah, that was fun.
K: Has it happened to you, that somebody told you that?
T: Yeah, yeah, yeah, yeah. Once my friend named Laurel didn’t play with me, only Catherine, and I played with someone else. And I just played on the monkey bars all by myself.
K: You found something else to do.
T: Mmhmm. That was fun, doing upside downs on the monkey bars.
K: It was. Do you have any other ideas about things you can do to get someone to play with you?
T: Uh, well, um. I forgot, I forgot. I always, always forgot, forgot, forgot. How about a chicken barks? I have a dog.
K: Mmhmm
T: It's just my next-door neighbor dog. He always comes to me and just barks to me, too. He always licks me when I lay in the grass. 
both T & K laugh.
T: He's always fun. Um, He's this big
K: That big? That'd be a big dog. Or is that your friend?
T: Friend
K: Oh, ok. If the dog was that big...(laughs)
T: That's all. Record it, record it, record it. Hurry!

**T & K listen to most of 1st story discussion

T: Second story, then record it again.
K: You want to hear the recorder again?
T: Uh-huh.
K: This is a boy named Tyler, and this is another boy named Andrew. Andrew is playing with some playdough, like we have at labschool, and Tyler wanted some, and Andrew said, "No, you can't have any," How do you think that made Tyler feel?
T: Sad.
K: You think he'd be sad. What would he have to do to get from feeling sad to feeling better or happy?
T: Uh-uh-uh---I always forgot, always. I got a big finger.
K: What do you think he could do to feel better?

T smiles
T holds arms out parallel to the floor
T points to recorder
K holds pictures up as names are mentioned
K picks up playdough
T takes playdough and starts to play with it
T points to frowny face
K points to faces
K puts ruler down
T: Um (pause) They could tickle each other.

K: Tickle each other. Would that help Tyler find a way to play with some playdough?

T: Um, no. Um, he could say please.

K: He could say please. If that didn’t work, what else could he do?

T: He could tell his Mom to get his own playdough out.

K: What would happen if Mom couldn’t get his own playdough?

T: Just get his own.

K: How would he get his own?

T: He would go in his room and get some.

K: What if all there was was out on the table, and Andrew was playing with it?

T: He could just get his own.

K: Well, how could he get his own if Andrew already had all of it?

T: Um, he could tell his Mom he got all of it, and she would say, “Share”

K: What are some ways that they can share?

T: Uh, well,...I don’t know. I can whistle (whistles)

K: Mmmmm

T: But even if he has a cat, the cat could jump and get some to give to him.

K: A cat could do that?

T: Mmmmm

K: That would be a special cat. Can you think of anything else Tyler could do about this situation?
T: Mmhmm...I forgot, always, always, always, always. This looks like a root.
K: Can you think of anything?
T: No
K: Has it ever happened to you that somebody wouldn’t let you play with a toy you wanted to?
T: Yeah, it happened really really true. What’s that picture for?
K: Just for decoration, I think
T: Oh.
K: What happened?
T: Um, once my friend Boyd didn’t play with me.
K: Mmhmn
T: And I, he didn’t let me borrow his skateboard.
K: He wouldn’t let you use his skateboard (said softly)
T: (whispers) I wanted to just play with it
K: You wanted to play with it (normal volume)
T: Uh-huh, but he said, “You broke it.” I will, never, never, never, never will.
K: Hmm. Then what happened?
T: Uh--uh--hmnn. Well, I told my Mom he didn’t share—it was just my brother. And my Mom said to my brother, “Share that toy.” So he did.
K: Hmm
T: And I just skated on it. It was too easy.
K: If Mom wouldn’t have been there, what could you have done?
T: I could, um, call her on the telephone, prob’ly.
K: Has this happened any other time?
T: Sometimes my sister always doesn’t share some stuff.
K: What happens then?
T: Then I tell my Mom—I have a bracelet on. My Mom let me wear a bracelet, and then my sister’s bracelet.
K: Mnhmm
T: Then, then my Mom made some rice for me and chicken with rice, and I ate it. I saved some for my sister.
K: You saved some.
T: Yeah. This is a snail! This is a ziggle ziggle, um, potato. Is somebody else going to come in here?
K: I don’t think so. I think you’re the last one today.
T: Oh.
K: Can you think of any other ideas about how people can share toys? Or how people decide to share toys?
T: Uh-huh. I can just—if you say, “Can I play with that toy?” that don’t makes nice. You haveta say, “Please can I play with that toy?” and they’ll say “Yes.”

K: So that always works.
T: Yup, yup, yup, yup, yup.
How about when I was at school, and the teacher said, “Put on your coat to go outside” and I didn’t. Then how about now come on it’s lunch time like the bell just rings like this--“ding” and “ding-dong” (mumbles) like that. Then all the people--my
shoe is off. Ah! (pause) But, uh, hmm.

K: When you share toys with somebody, how do you decide how to share them?

T: I could just let them, and they can borrow it.

K: They can borrow it from you and then give it back when they’re done?

T: Mmhmm. If they don’t, I will just tell my Mom, though, I will tell their Mom they’re not giving it back, they’re gonna keep it. Once a boy come and borrow a truck--I had a real truck--and I said, “Yes, sure, you can borrow it” Then he did. Then he didn’t give it back because

K: Really?

T: Mmhmm. Then my Mom just went to McDonald’s, and I didn’t know that, and she buyed me a sandwich. She bring me some french fries. Um, some french fries for me. Then my sister went with me. We got a happy meal at Wendy’s.

K: Mmhmm.

T: It was the toy I brought for show and tell.

K: You brought that in today?

T: It’s an airplane. Don’t tell no one.

K: I won’t tell anybody. Do you have any other ideas about how kids can share, about how people can share?

T: Well, these are french fries (mumbles) I ate my sandwich all, then I was feeling bad.

T looks under table and puts shoe on

T still playing with playdough

T makes a sandwich from playdough and pretends to eat it

T makes french fries from playdough

K shakes head no
K: You were?
T: Mmm. And I was feeling bad cuz I was having a stomachache.
K: Yeah, that does feel bad.
T: Then my Mom let me drink some cold milk. I feel better!
K: That's good.
T: And I was happy!
K: That put a smile back on your face. (pause) Well, if you don't have any more ideas, I think that's about it.
T: You record it. Hurry, hurry, hurry, hurry!

**T & K listen to part of the 2nd story discussion**