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SCHOOL-BASED SOCIAL SKILLS TRAINING TO REDUCE CHILDREN'S DEPRESSIVE SYMPTOMATOLOGY

by

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A dissertation submitted to the Graduate Faculty in Educational Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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Abstract

SCHOOL-BASED SOCIAL SKILLS TRAINING TO REDUCE CHILDREN'S DEPRESSIVE SYMPTOMATOLOGY

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Alison G. Soffer

Adviser: Professor Georgiana Shick Tryon

This study investigated the efficacy of using social skills training to increase the social skills and decrease the depressive symptomatology of fifth grade children in a New York City public school. Participants (N = 72) were randomly assigned to one of three groups: A) social skills training with peer interaction, B) peer interaction alone, or C) no treatment control. Participants' depressive symptomatology and social skills were assessed at pre-test, posttest, and 1-month follow-up. Depressive symptomatology was measured with self- and teacher-reports on the Reynolds Child Depression Scale (RCDS; Reynolds, 1989). Social skills were assessed with self- and teacher-reports on the Social Skills Rating System (SSRS; Gresham & Elliot, 1990) and a behavioral role-play measure of social skill effectiveness. Results showed no significant differences between the groups on the standardized measures of depression and social skills. Participants who received social skills training with peer interaction scored significantly higher on observed ratings of starting conversations, using free time, and compromising than those participants who received peer interaction alone. Ratings of clinically significant change were also measured using the reliable change index (RC; Christensen & Mendoza, 1986). At posttest, 4 participants (all of whom were in the treatment groups) had clinically

significant lower self-rated depressive symptomatology. At follow-up assessment, 10 participants (8 of whom were in the treatment groups) had clinically significant lower self-rated depressive symptomatology. In addition, 2 participants (both in the social skills training with peer interaction group) had clinically significant improvements in teacher-rated social skills at 1-month follow-up assessment. Participants and their teachers rated the social skills programs as favorable and worthwhile.

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CHAPTER I

Introduction

Depressive disorders among children and adolescents are a major health concern. While the existence of depression in children was questioned for some time, currently, the existence of childhood depression is no longer debatable (Kovacs, 1989). Recently, more research has been conducted to understand, diagnose, and treat depressive disorders in children and adolescents (Rehm & Sharp, 1996). Identifying and treating these disorders has become a great concern for psychologists working in schools (Stark, Brookman, & Frazier, 1990).

Throughout the past two decades, depressive disorders among children and adolescents have been well documented in clinical and community settings. In a critical review of the literature, Birmaher et al. (1996) reported prevalence rates of depression in children that range from .4 to 2.5% and .4 to 8.3% in adolescents. Of great interest to practitioners working in schools is the presence of sub-clinical depressive symptoms in children and adolescents. In a study of the prevalence rates of depressive disorders in a non-clinical sample of high school students, Kashani et al. (1987) found that 22% of the adolescents reported enough depressive symptoms for a diagnosis of depression, yet these youngsters did not meet diagnostic criteria because their symptoms did not render them dysfunctional or in need of treatment. Without intervention, these symptoms may develop into more debilitating conditions.

Researchers have identified a number of biological and psychosocial correlates and risk factors associated with childhood and adolescent depression. In terms of genetic factors, there is a greater prevalence of mood disorders in the relatives of depressed

individuals than in the general population (Weissman, Warner, Wickramaratne, Moreau, & Olfson, 1997). In addition, there is an increased probability of developing the disorder for more closely related relatives (McGuffin & Katz, 1986). In terms of psychosocial correlates, researchers have reported that depressed children are more likely to exhibit a pessimistic explanatory style for events and attribute stable, internal, and global causes to negative events (Nolen-Hoeksema, Girgus, & Seligman, 1992), exhibit loneliness and low self-esteem (Brage & Meredith, 1993), experience greater parental psychopathology (Kaslow, Deering, & Racusin, 1994), and report aggressive intrafamilial conflict (Kashani, Burbach, & Rosenberg, 1988). In addition, the presence of comorbid diagnoses such as anxiety disorders increases the risk of recurrent depression (Kovacs, 1989).

Depression in youth can have a major impact on later life functioning. Children and adolescents who are depressed are more likely to abuse illegal substances, drop out of school, think about and attempt suicide, as well as suffer from psychiatric disorders in adulthood (Harrington, 1993; Kandel & Davies, 1986; Rohde, Lewinsohn, & Seeley, 1994). It appears that depression in youth is a significant problem that warrants continuous clinical attention.

According to one hypothesis, there is a strong link between depression and social skills deficits. This social skills model introduced by Lewinsohn (1974) indicates that individuals who lack social skills may be more vulnerable to develop depressive symptoms because they are unable to obtain rewards that come from socializing with others. In a recent meta-analysis on the relationship between impaired social skills and

depression, Segrin (2000) reported, "there is a substantial body of evidence indicating that poor social skills are [also] common among depressed children" (p. 388).

Despite this theoretical formulation linking depression and social skills deficits, few studies have used social skills training to reduce depressive symptoms in children and adolescents. These studies involved the instruction of social skills in individual and group settings and have been found to be moderately effective in decreasing depressive symptomatology (Fine, Forth, Gilbert, & Haley, 1991; Frame, Matson, Sonis, Fialkov, & Kazdin, 1982; Miller & Cole, 1998; Reed, 1994). However, due to the limited number of studies, small sample sizes, and in some cases, the absence of a control group, the effectiveness of social skills training for decreasing depression in children and adolescents is considered to be preliminary. In addition, only one study was found (Frame et al., 1982) that examined the use of social skills training to decrease child depression. Although the intervention resulted in improvement in the target skills (i.e., quality of speech, flat affect), because the researchers did not interview the participant for symptoms of depression nor administer a self-report measure of depression at post-treatment, the effectiveness of social skills training to decrease the participant's experience of depression remains unclear. To date, no other study has reported the use of social skills training to decrease symptoms of depression in children. This study explored the efficacy of school-based social skills training to reduce depressive symptomatology in a group of fifth grade children.

Some researchers (e.g., Bierman & Furman, 1984) have demonstrated that the conversational skills and peer acceptance ratings of students who have received coaching in social skills coupled with peer involvement are greater than for others for whom only

coaching in social skills was provided. Involvement with socially skilled peers provides knowledge of how to listen and contribute to conversations as well as expectations about the consequences of their behavior. However, while researchers have stressed the importance of learning from peers to develop social competence, there is a paucity of studies that provide evidence that such experiences have changed the affect of children. This study sought to clarify the role of social skills instruction and peer interaction in the development of social skills and how these factors relate to the reduction of children's depressive symptomatology.

According to Nolen-Hoeksema et al. (1992) cognitive-behavioral and skill-based interventions should be implemented for children soon after their depressive symptoms are identified in order to prevent long lasting "scars" on children's explanatory styles. These researchers concluded that early interventions may prevent the child from developing more severe depressions in the future (Nolen-Hoeksema et al., 1992). Thus, there is a critical need for short-term, manualized, empirically supported interventions that school psychologists, and perhaps teachers, can use to reduce children's depressive symptoms. Because school is where children spend most of their day, it seems desirable that interventions for depressive symptoms be undertaken in the school environment. This study employed a commercially available social skills training package Skillstreaming the Elementary School Child (McGinnis & Goldstein, 1997) with peer interaction in a school-based program to reduce depressive symptoms in fifth graders.

Elementary school students were randomly assigned to one of three conditions: social skills training with peer interaction, peer interaction alone, or no treatment control. In the social skills training with peer interaction condition, students received instruction

on three target social skills for two sessions per week over a 4-week period, while working collaboratively on role-play activities with peers. In the peer interaction alone condition, students met for two sessions per week for 4-weeks and worked collaboratively on role-play activities with peers without direct instruction in the three target social skills. Participants in the no treatment control condition were not given either of the active treatments during the study, however, after the follow-up assessment, this group received 1-hour of social skills training with peer interaction.

Participants were assessed at pre-test, posttest, and 1-month follow-up assessment. It was hypothesized that participants who received the combined social skills training with peer interaction program would display significantly greater social skills and less posttest and follow-up depressive symptomatology than participants who received peer interaction alone or participants in the no treatment control group. It was also hypothesized that participants receiving peer interaction alone would exhibit significantly greater social skills and lower post-treatment and follow-up depressive symptomatology than participants in the no treatment control group. Instructors of the active interventions were trained to use a session-by-session treatment manual. Sessions were audiotape recorded and rated for treatment integrity by outside observers. The outside observers also rated the participants' effective use of each target skill from the taped role-play activities. Participants and their teachers in both active treatments were surveyed to determine the favorability and effectiveness of the training programs.

CHAPTER II

Depression in Children

Definition and Historical Overview

Feelings of sadness or unhappiness are aspects of normal existence; however, depression is not synonymous with sadness or unhappiness (Harrington, 1993). Although these characteristics are often noted with depression, the negative mood associated with depression is more accurately described as "feelings of flatness" or "emotional emptiness" (Harrington, 1993. p. 2). Clinical depression refers not only to a state of depression but also to a syndrome of psychomotor and somatic symptoms lasting for weeks or months (Matson, 1989). Clinical depression affects an individual's ability to live normally and includes symptoms such as loss of interest in activities and low self-esteem (Matson, 1989).

Although depression is widely accepted in adults, historically, it was questioned whether children and adolescents could experience depression. There was an effort to transfer the symptoms observed in adults to children in order to describe those disorders in young populations (Matson, 1989). However, when this approach was attempted with childhood depression, there was much debate. Some researchers believed that children's symptoms were unique and should not be defined in the same way as adult symptoms (Matson, 1989). In addition, psychoanalysts did not believe depression could exist in children because depression was a superego function (Rochlin, 1959). By 1980, results of empirical studies showed that depression does occur in childhood (Matson, 1989). This section will briefly review some of the literature on the history of depression in children.

An early study that suggested the presence of depression in children was conducted by Spitz and Wolf (1946) who observed the behavior of 123 infants who were abruptly separated from their mothers during the first year of life. As a result of the separation, some infants displayed severe symptoms of distress that were labeled "anaclitic depression" (p. 321). This syndrome included characteristics such as weepiness, withdrawal, slowness of movement, retardation of development, refusal to eat, loss of weight, insomnia, and depressed facial expressions (Spitz & Wolf, 1946). According to the authors, a main etiological factor in the depressive syndrome was "loss of the love object" (Spitz & Wolf, 1946, p. 320).

In contrast, Klein (1949) believed that depression is a normal phenomenon of development. As a result of the author's play-based observations, she theorized that normal infants pass through a depressive stage. According to Klein (1949), this depressive stage was brought on by the infant's realization that objects may take on "good" and "bad" characteristics.

Bowlby (1960) also studied infants and focused on the relationship between attachment, separation, and depression. He stated that as a result of a separation from the mother, the infant would pass through a series of stages (i.e., protest, despair, detachment). He proposed that the resulting emotional state would lead to pathological effects on later development including depression or delinquency (Bowlby, 1960).

During the 1960's a predominant view in psychoanalytic literature was that depression could not exist in children because their personality structures were too immature (Rie, 1966). Rochlin (1959) asserted that depression in middle childhood was impossible because the superego was said not to develop until the latency stage of

adolescence. In marked contrast, Glasser (1967) stated that depression in children and adolescents often goes unnoticed because it tends to be hidden in symptoms not readily associated with depression as seen in adults. The depressive reaction of children was termed "masked depression" and included behaviors such as disobedience, temper tantrums, and psychosomatic complaints (Lesse, 1974). Toolan (1962) argued that suicide attempts in children and adolescents had been overlooked due to the flawed belief that this population does not experience depression. He stated that although children and adolescents do not present themselves with the same signs and symptoms as adults, they do exhibit other signs and symptoms of depression (Toolan, 1962). Overall, the concept of masked depression was difficult to use clinically because there was no way to determine if the symptoms were occurring as a result of depression or if they were occurring as part of another disorder (Harrington, 1993).

In the 1970's and 1980's, operational diagnostic criteria for childhood depression began to emerge. These systems included the DSM and the International Classification of Disorders (ICD) series. These diagnostic systems represent an important progression in the advancement of the conceptualization of depressive disorders in children and adolescents (Harrington, 1993).

Currently, the existence of depression among children and adolescents is without debate (Kovacs, 1989). The existence of major depressive disorder (MDD) among children and adolescents has been widely documented in clinical and community settings. The lasting effects of depression and its correlation with suicide signify that depression in children and adolescents is a serious disorder worthy of in-depth study.

Diagnostic Classification

According to Kamphaus and Frick (1996), psychopathology has been conceptualized in two ways. The first approach is categorical and is best exemplified by the Diagnostic and Statistical Manual of Mental Disorders (DSM) series published by the American Psychiatric Association. The second approach is dimensional and is demonstrated through the use of inventories that assess the intensity of symptoms. This section will summarize these two classification systems. A rational will be provided for the use of the dimensional system in the proposed study.

In the categorical approach, individuals are classified as either having the disorder or not having the disorder based on the number of criteria to which they subscribe. According to the recent fourth edition of the DSM (DSM-IV; American Psychiatric Association, 1994), the essential feature of MDD is a history of one or more Major Depressive Episodes (MDE) without a history of Manic, Mixed, or Hypomanic Episodes. See Appendix A for a letter of permission to reprint the DSM-IV criteria for MDE, MDD, Dysthymic Disorder, and Depressive Disorder Not Otherwise Specified. The DSM-IV defines a MDE as follows:

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

(1) depressed mood most of the day , nearly everyday, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful). **Note:** In children and adolescents, can be irritable mood.

(2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly everyday (as indicated by either subjective account or observation made by others)

(3) significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly everyday. Note: In children, consider failure to make expected weight gains.

(4) insomnia or hypersomnia nearly every day

(5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)

(6) fatigue or loss of energy nearly every day

(7) feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)

(8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)

(9) recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

B. The symptoms do not meet criteria for a Mixed Episode.

C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism).

E. The symptoms are not better accounted for by Bereavement, i.e., after the loss of a loved one, the symptoms persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation (p.327).

According to the DSM-IV, the diagnostic criteria for Dysthymic Disorder include:

A. Depressed mood for most of the day, for more days than not, as indicated either by subjective account or observation by others, for at least 2 years. In children and adolescents, mood can be irritable and duration must be at least 1 year.

B. Presence, while depressed, of two (or more) of the following:

1) poor appetite or overeating

2) insomnia or hypersomnia

3) low energy or fatigue

4) low self-esteem

5) poor concentration or difficulty making decisions

6) feelings of hopelessness

C. During the 2-year period (1 year for children and adolescents) of the disturbance, the person has never been without the symptoms in Criteria A and B for more than 2 months at a time.

D. No Major Depressive Episode has been present during the first 2 years of the disturbance (1 year for children and adolescents); i.e., the disturbance is not better accounted for by chronic Major Depressive Disorder, or Major Depressive Disorder, In Partial Remission.

Note: There may have been a previous Major Depressive Episode provided there was a full remission (no significant signs or symptoms for 2 months) before development of the Dysthymic Disorder. In addition, after the initial 2 years (1 year in children or adolescents) of Dysthymic Disorder, there may be superimposed episodes of Major Depressive Disorder, in which case both diagnoses may be given when the criteria are met for a Major Depressive Episode.

E. There has never been a Manic Episode, a Mixed Episode, or a Hypomanic Episode, and criteria have never been met for Cyclothymic Disorder.

F. The disorder does not occur exclusively during the course of a chronic Psychotic Disorder, such as Schizophrenia or Delusional Disorder.

According to DSM-IV, Depressive Disorder Not Otherwise Specified includes disorders with depressive features that do not meet the criteria for Major Depressive Disorder, or Dysthymic Disorder, Adjustment Disorder With Depressed Mood, or Adjustment Disorder With Mixed Anxiety and Depressed Mood. Sometimes depressive symptoms can present as part of an Anxiety Disorder Not Otherwise Specified. Examples of Depressive Disorder Not Otherwise Specified include:

1. Premenstrual dysphoric disorder: in most menstrual cycles during the past year, symptoms (e.g., markedly depressed mood, marked anxiety, marked affective lability, decreased interest in activities) regularly occurred during the last week of the luteal phase (and remitted within a few days of the onset of menses). These symptoms must be severe enough to markedly interfere with work, school, or usual activities and be entirely absent for at least 1 week postmenses.

2. Minor depressive disorder: episodes of at least 2 weeks of depressive symptoms but with fewer than the five items required for Major Depressive Disorder.
3. Recurrent brief depressive disorder: depressive episodes lasting from 2 days up to 2 weeks, occurring at last once a month for 12 months (not associated with the menstrual cycle).
4. Postpsychotic depressive disorder of Schizophrenia Major Depressive Episode that occurs during the residual phase of Schizophrenia.
5. A Major Depressive Episode superimposed on Delusional Disorder, Psychotic Disorder Not Otherwise Specified, or the active phase of Schizophrenia.
6. Situations in which the clinician has concluded that a depressive disorder is present but is unable to determine whether it is primary, due to a general medical condition, or substance induced.

G. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism).

H. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

According to Rehm and Sharp (1996), a limitation of the DSM approach to diagnosis of childhood and adolescent disorders is the assumption that the child is disordered independent of his or her environment. A child's behavior is often a function of the environment, and depression in children should be viewed in the context of family, peers, and school (Rehm & Sharp, 1996).

The second approach to comprehending psychopathology is dimensional. This approach assumes that psychopathology exists on a continuum. Psychopathology is measured in terms of degree of severity using reliable and valid psychological tests. Examples of such tests include the Minnesota Multiphasic Personality Inventory-Adolescent (Butcher et al., 1992), the Personality Inventory for Youth (Lachar & Gruber, 1994), and the Youth Self-Report (Achenbach & Edelbrok, 1991). These inventories assess several areas of psychopathology, but researchers have also developed single construct personality inventories. These measures include the Child Depression Inventory (CDI; Kovacs, 1992) and the Reynolds Adolescent Depression Scale (RADS; Reynolds, 1986b). Advantages of the dimensional approach include the ability to relate degrees of specific psychopathology, such as depression, to other participant information, and the ability to examine the effect of intervention on subclinical symptomatology. The dimensional approach was used in this study to assess depressive symptomatology in school-aged children. This was done because the purpose of the study's interventions was to decrease depressive symptomatology regardless of whether or not it reached some clinical threshold.

Prevalence

There is some variation in the literature regarding the prevalence rates of depressive disorders in children. According to Harrington (1993), this variation is due to differences in definitions of depression, assessment measures, sampling procedures, and data collection. In a critical review of the literature on childhood and adolescent depression, Birmaher et al. (1996) estimate that the point prevalence of MDD ranges from .4% to 2.5% for children and .4% to 8.3 % for adolescents. The lifetime prevalence

rate of MDD among adolescents is approximately 15% to 20%, and suggests that adult depression may begin in adolescence (Kessler et al., 1994a). In addition, the prevalence rate for DD ranges from .6 to 1.7% in children and 1.6% to 8% in adolescents (Birmaher et al., 1996).

According to population samples of children and adults, there is an increased risk of developing mood disorders for individuals born in the second half of the 20th century (Birmaher et al., 1996). In addition, these disorders manifest at a younger age (Gershon, Hamovit, Guroff, & Numberger, 1987; Kessler et al., 1994a). The reason for this has not been identified, but researchers speculate that the increase in depressive disorders is due to a combination of biological and environmental factors (Gershon et al., 1987).

Harrington (1993) reports that the most consistent finding among epidemiological studies of depressive disorders in children and adolescents is the increase in prevalence rate with age. For example, Kashani, Rosenberg, and Reid (1989) conducted a developmental study that assessed the prevalence of depression across three age groups (8, 12, and 17 years). The researchers reported a 1.4% prevalence in both the 8 and 12-year-old group. However, depression was approximately four times more common in the 17-year-old group (Kashani et al., 1989).

Studies have also been conducted to explore the relationship between gender and prevalence rates of depression in children and adolescents. It is well documented in the literature that the rates of depression in children are similar for girls and boys (Kashani et al., 1983; Fleming, Offord, & Boyle, 1989; Velez, Johnson, & Cohen, 1989). However, among adolescents, MDD is twice as likely in females compared to males, which parallels adult MDD gender prevalence (Nolen-Hoeksema & Girgus, 1994). While there

is no clear reason for the sex difference in prevalence, this difference has been linked to genetics, biological changes associated with puberty, and sociocultural factors (Birmaher et al., 1996).

The prevalence rate of depression for children and adolescents seen at mental health centers varies greatly. Angold (1988b) reviewed studies of prevalence rates of depression among referred samples and found that they ranged from 0% to 61%. As a result of the introduction of specific diagnostic criteria such as the DSM, there is less variation with 10% to 30% of child psychiatric outpatients meeting criteria for a depressive disorder (Angold, 1988b).

Of great interest to practitioners working in schools is the prevalence rate of sub-clinical depressive symptoms in children and adolescents. For example, Kashani et al. (1987) assessed the prevalence rates of depressive disorders in a non-clinical sample of high school students. They found that 4.7% of the adolescents met criteria for major depression, and 3.3% met the criteria for DD. However, 22% of the adolescents reported enough depressive symptoms for a MD or DD classification, yet these youngsters did not meet diagnostic criteria for either disorder because their symptoms did not render them dysfunctional or in need of treatment. The researchers concluded that it is of great importance to determine how many adolescents with depressive symptoms who do not have current impairments in functioning will later suffer from clinical depression.

In summary, studies conducted on the prevalence rates of depressive disorders in children and adolescents yield some variation. According to the meta-analysis conducted by Birmaher et al. (1996), the prevalence rate of major depression in children ranges from .4 to 2.5 % and .4% to 8.3% in adolescents. There is an increase in prevalence associated

with increased age (Harrington, 1993). In terms of gender differences, prior to puberty, there is no significant difference in the prevalence of depression with respect to gender (Kashani et al., 1983). However, gender differences do begin to appear during puberty, when girls display a higher rate of depression than boys (Nolen-Hoeksema & Girgus, 1994). Of great interest to school psychologists is the high percentage of youngsters reporting numerous depressive symptoms. Without intervention, these symptoms may develop into more debilitating conditions. It may be that if school-based interventions, such as those in this study, result in decreases in children's depressive symptomatology, more debilitating depressions later in these individuals' lives might be prevented.

Etiology, Correlates, and Risk Factors

Recent interest in child and adolescent depression has produced considerable research on its possible causes and associated characteristics (Weisz, Rudolph, Granger, & Sweeney, 1992). Researchers have studied biological and psychosocial risk factors that may be related to the occurrence of depression in children. Biological factors that may impact the emergence of depressive disorders in children include genetics, brain structural anomalies, neuroendocrine dysregulation, neurotransmitter anomalies, and hemispheric activation asymmetries (Cicchetti & Toth, 1998). In terms of genetic factors, there is a greater prevalence of mood disorders in the relatives of depressed individuals than in the general population (Weissman et al., 1997). In addition, there is an increased probability of developing the disorder for more closely related relatives (McGuffin & Katz, 1986).

Psychosocial factors that have been explored in relation to depressive symptoms include cognitive factors (i.e., information processing, attributional style), personal

factors (i.e. self-esteem, loneliness), and family factors (i.e., familial relations, parenting styles). This section will provide a brief overview of the literature investigating the various correlates and risk factors associated with depression.

In terms of cognitive factors associated with depression, Beck (1976) proposed that depression results from negative views of oneself, the world, and the future labeled the "Cognitive Triad." According to Beck (1976), when an individual interprets an environmental event in a negative way, the misinterpretation of the event leads the individual to exhibit symptoms of depression. Research indicates that moderately depressed youth display a depressogenic attributional style similar to that of depressed adults (Kaslow, Rehm, & Siegel, 1984). In a 5-year study of predictors and consequences of childhood depression, Nolen-Hoeksema et al. (1992) found that children with depressive symptoms tended to display more pessimistic explanatory styles for events compared to children without depressive symptoms. Children with depressive symptoms attribute internal, stable, and global causes to negative events (Nolen-Hoeksema et al., 1992).

Kendall, Stark, and Adam (1992) explored the nature of the cognitive disturbance among depressed children. They found that depressed children display a negative distortion rather than a deficit in the way they process information. Depressed children also exhibit a negative style of evaluating the self (Kendall et al., 1992). In addition, Quiggle, Garber, and Panak (1992) found that children with depressive symptoms are more likely to assign hostile intentions to individuals in ambiguous situations.

Research has been conducted to determine the relationship between depression in youth and personal factors. Brage and Meredith (1993) examined the responses of 156

adolescents (aged 11-18 years) on self-report measures of depression and measures of personal factors such as loneliness and self-esteem. Results illustrated that loneliness and self-esteem had a direct influence on depression in adolescents. According to the researchers, interventions for depression should focus on improving self-confidence, social competency, and problem-solving skills (Brage & Meredith, 1993).

Variables such as familial psychopathology and family environment have also been explored to determine their influence on the development and maintenance of childhood depression. Parental depression is a major risk factor for depression in children and adolescents (Kaslow, Deering, & Racusin, 1994). A child with a clinically depressed parent is six times more likely to develop depression compared to a child with non-depressed parents (Downey & Coyne, 1990).

Kaslow, Rehm, and Siegel (1984) studied psychosocial correlates of depression in 108 elementary school children. Results showed that depressed children perceived their family environment to be more distressed compared to their non-depressed peers (Kaslow et al., 1984). In a study of the perceptions of family conflict resolution and depressive symptomatology in adolescents, Kashani, Burbach, and Rosenberg (1988) found that adolescents with depressive symptomatology perceived themselves and their mothers as more verbally aggressive and violent during intrafamilial conflict compared to non-depressed adolescents. In addition, greater difficulties in resolving intrafamilial conflict were associated with higher levels of adolescent depressive symptomatology (Kashani et al., 1988).

Early life events and specific life experiences have been studied to determine their correlation with depression in children (Harrington, 1993). In terms of early experiences

and vulnerability, children who are insecurely attached to others are thought to possess less social competence and display cognitive biases such as pessimism regarding their abilities (Harrington, 1993). These feelings of hopelessness and lack of self-worth may lead to depression, or indirectly predispose the child to depression, due to impairments in social functioning (Harrington, 1993). Specific adverse experiences such as bereavement, divorce, abuse, and disaster have also been assessed for their relationship to depression in children (Harrington, 1993). According to Harrington (1993), due to significant individual differences in children's affective responses to various adverse events, there is little specificity in the association of adverse life events and depression in youngsters (Harrington, 1993).

Additional correlates of childhood depression include a strong association with other psychiatric disorders. In terms of comorbidity, 40% to 70% of depressed children and adolescents develop an additional disorder, and 20% to 50% are estimated to have two or more cormorbid disorders (Cicchetti & Toth, 1998). According to Kovacs (1989), the most common comorbid disorders include anxiety disorders, disruptive disorder, and substance abuse. Overall, comorbid disorders appear to enhance the risk for depression and to affect the duration of the depressive episode, suicide attempts, outcome, response to treatment, and use of mental health services (Birmaher et al., 1996).

In summary, depression in children has been related to a number of biological and psychosocial factors. Depressed children are more likely to exhibit a pessimistic cognitive style and attribute stable, internal, and global causes to negative events. Personal factors such as low self-esteem and loneliness have also been associated with depression in youth. Family correlates of depression in youth include parental

psychopathology and intrafamilial conflict. The presence of comorbid diagnoses, such as anxiety disorders, increases the risk of recurrent depression. It should be noted that many correlates of children's depression relate to their interpersonal environment. This has led cognitive-behavioral theorists to posit models of depression based on social interactions. Evidence for one such model, the social skills deficit model, is reviewed in the next section.

Relationship of Depression and Social Skills

According to Segrin (1992), social skills can be defined as the ability to interact with other people in a manner that is both appropriate and effective. Behavioral and cognitive-behavioral models suggest a relationship between depression and social skills deficits (Spirito, Hart, Overholser, & Halverson, 1990). According to Lewinsohn (1974), people become depressed when they experience a lack of response-contingent positive reinforcement. Inadequate social skills can lead to a dearth of positive reinforcement from others. Children with poor social skills may be excluded from group activities and may not experience rewarding social interactions. These children may be more likely to develop a pessimistic cognitive style and depressive symptoms than children with better social skills. Research results tend to support this formulation. This section will summarize the literature on depression and social skills and provide a rationale for the use of social skills training for treating children's depressive symptoms.

Several studies have investigated the relationship between social competency and depression in children. These studies have found that depressed children rate their own social skills lower than their nondepressed peers (Dalley, Bolocofsky, & Karlin, 1994; Hops, Lewinsohn, Andrews, & Roberts, 1990). Blechman, McEnroe, Carella, and

Audette (1986) studied the relationship between academic and social competency and depression in elementary school students. Researchers found that children who were more academically and socially competent had significantly lower self-rated scores on depression measures and higher peer-nominated happiness scores compared to children with higher depression scores.

Chan (1997) also conducted a study to explore the relationship between perceived competence and depressive symptoms in school-aged children. The students completed self-report measures of academic and social competence as well as the Children's Depression Inventory (CDI; Kovacs, 1992). Results showed that students who perceived themselves to be either socially or academically incompetent tended to be depressed; however, those who perceived themselves as both socially and academically incompetent were even more likely to be depressed (Chan, 1997). A similar study was conducted by Cole, Martin, Powers, and Truglio (1996) to examine the relationship between academic and social competence and depression in third and sixth grade children. The results revealed that depression strongly correlated with academic competence ($r = -.53$); however, the correlation between depression and social competence was even higher ($r = -.81$), especially in the sixth graders.

Social skills deficits in depressed children are also reported by teachers, parents, and peers (Segrin, 2000). For example, Shah and Morgan (1996) found that children who score higher on self-rated depression were rated by their teachers as having social skills deficits compared to children who score lower on self-rated depression. In addition, Wierzbicki and McCabe (1988) found that parent and self-ratings of children's social skills were significantly negatively related to children's depressive symptomatology.

Kennedy, Spence, and Hensley (1989) report that depressed youngsters received lower ratings of peer popularity, received few positive peer nominations, more negative peer nominations, and were more likely to be rejected and isolated by their peers.

Numerous studies have reported that depression in children is associated with impairments in interpersonal relationships (Goodyer, Wright, & Altham, 1990; Puig-Antich et al., 1985a). Puig-Antich et al. (1985a, 1985b) assessed the interpersonal functioning of prepubertal children during episodes of major depression. The results showed that compared to non-depressed peers, the depressed children exhibited significantly worse mother-child relationships, as well as worse relationships with siblings and peers (Puig-Antich et al., 1985a).

Segrin (2000) reviewed the empirical data on the relationship between impaired social skills and depression and reported, "there is a substantial body of evidence indicating that poor social skills are [also] common among depressed children" (p. 388). This relationship has been reported by the youngsters themselves as well as observed by teachers, parents, and peers. According to Sommers-Flanagan, Barrett-Hakanson, and Clarke (2000), since social skills deficits and poor self-concept have been linked to the development of depressive disorders, interventions that address social skills deficits are a promising way to treat childhood depressive disorders. Therefore, this study employed social skills interventions to reduce children's depressive symptomatology.

Course

The stability of childhood and adolescent depressive disorders has been studied. Specifically, the relationship between depression in youngsters and a number of psychosocial variables (i.e., substance abuse, academic failure, and suicide) has been

explored. In addition, there are studies concerning the relationship between depression in youth and later psychiatric illness. This section will summarize the literature on the course of depressive disorders during childhood and later life.

Holsen, Kraft, and Vitterso (2000) conducted a 6-year longitudinal study to determine the relative stability of depressed mood throughout adolescence. The study included 538 adolescents between the ages of 13 and 19. Results of the study showed a tendency for adolescents to maintain their relative level of depressed mood. In addition, depressed mood was most stable in a subgroup of adolescents with elevated initial depressed mood scores (Holsen et al., 2000).

Depression in children and adolescents is associated with poor psychosocial and academic outcomes including increased risk for learning difficulties, substance abuse, and impaired social relationships (Harrington, 1993). For instance, depression-related poor concentration and psychomotor retardation may impede the process of learning (Harrington, 1993). Kandel and Davies (1986) found that self-rated dysphoria in adolescence was related to frequent cigarette smoking, increased involvement in delinquent activities, and impaired social relationships as young adults.

Rohde, Lewinsohn, and Seeley (1994) studied the effects of an episode of major depression in an adolescent community sample and found a wide range of residual effects that they labeled "psychological scars" (p.1289). Psychological scars were defined as characteristics that were evident after, but not before, the depressive episode. These factors included stressful major life events, internalizing behavior problems, emotional reliance on others, cigarette smoking, and sub-clinical depressive symptoms (Rohde et al., 1994). In addition, both before and after the depressive episode, the depressed

adolescents reported more physical health problems compared to the never-depressed controls. Due to the larger amount of scars found in adolescents compared to previous research with formerly depressed adults, the researchers concluded that early-onset depression is a serious form of the disorder that may impact adolescents more severely than adults (Rohde et al., 1994).

In order to assess the presentation and course of major depression during childhood and later life, Kovacs (1996) explored existing studies that included inpatients and outpatients between the ages of 6 and 80. The focus of her study was to explore 6 clinical features of MDD including number of episodes, presentation of symptoms, psychiatric comorbidity, recovery from index episode, recurrence of MDD, and switch to bipolar disorder. Results showed that children and adolescents with MDD, as compared to adults and the elderly, are mostly first-episode probands, have comparable symptoms, recover more rapidly from first episode of MDD, display similar psychiatric comorbidity, have similar recurrence rates, and are at greater risk for the switch to bipolar disorder. As a result of these findings, Kovacs (1996) concluded that MDD in children and adolescents is a serious form of affective illness.

Early onset MDD and DD are disorders that are frequently associated with other psychiatric disorders and often continue into adulthood (Birmaher et al., 1996). Depression in children and adolescents often occurs in association with other psychiatric conditions with some type of anxiety disorder as the single most prevalent comorbid diagnosis (Kovacs, 1996). In a study that assessed adult outcomes of childhood and adolescent depression, Harrington, Fudge, Rutter, Pickles, and Hill (1990) found that the

depressed group had a greater risk for affective disorder in adult life as well as an increased risk for psychiatric hospitalization and psychiatric treatment.

Depressive disorders are strongly associated with suicide, one of the leading causes of death among adolescents (Cicchetti & Toth, 1998). In a study by Ryan et al. (1987), that explored suicidal ideation among depressed children and adolescents, approximately 60% of children and adolescents with major depression exhibited suicidal ideation. Another study on the link between depression and suicidal behavior by Mitchell, McCauley, Burke, and Moss (1988) indicated that 67% of depressed children and adolescents engaged in suicidal ideation and 39% made a suicide attempt. In addition, a follow-up study of adults diagnosed with childhood depression revealed that depression in childhood was a significant predictor of attempted suicide in later adulthood (Harrington et al., 1994).

In summary, depression in children and adolescents is likely to continue throughout the lifespan. These individuals are likely to abuse illegal substances, drop out of school, think about and attempt suicide, as well as suffer from psychiatric disorders in adulthood. Information regarding the course of depression has important implications for the immediacy of treatment for such individuals. According to Kovacs (1996), the high rate of recurrence of depression in youths also has implications for the type of treatment delivered to this population. Specifically, the researcher recommends a treatment program that incorporates long-term care, patient education, and continued monitoring (Kovacs, 1996).

Treatment

As a result of the varying theories of the causes of depression in children and adolescents, different treatment approaches exist and include pharmacological as well as psychosocial interventions. According to Clarizio and Payette (1990), although studies on the efficacy of treatment of depression in children are few in number, there is preliminary evidence of the effectiveness of cognitive-behavioral strategies in the school setting. Cognitive-behavioral treatment of depression in children and adolescents has been derived mainly from treatment studies with adults. However, these programs have been adapted to the unique needs and abilities of children. Clinical trials as well as school-based programs have been conducted to explore the efficacy of cognitive-behavioral treatments to decrease depressive symptomatology in children and adolescents. The ability to treat students in a school setting has important implications for school psychologists. This section provides two decades of empirical support for the use of cognitive-behavioral interventions to treat child and adolescent depression.

In an early study, Butler, Miezitis, Friedman, and Cole (1980) explored the efficacy of role-play and cognitive restructuring interventions for treating depressive symptoms in fifth and sixth grade children. Fifty-six children demonstrating depressive symptoms as judged by teachers and a self-report battery were assigned to one of the following 10-week conditions: role-play treatment, cognitive restructuring treatment, attention placebo, or control. Results indicated that the role play intervention was more effective than the cognitive restructuring, attention placebo, and control conditions in decreasing depressive symptoms as demonstrated by teacher reports and responses to a self-report battery.

Reynolds and Coats (1986) examined the efficacy of a brief cognitive-behavioral intervention for decreasing depressive symptomatology in adolescents. Thirty moderately depressed adolescents were selected by cutoff scores determined by the researchers on the Beck Depression Inventory (BDI; Beck et al., 1961), the Reynolds Adolescent Depression Scale (RADS; Reynolds, 1986b), and the Bellevue Index of Depression (BID; Petti, 1978). These adolescents were randomly assigned to cognitive-behavioral treatment, relaxation training, or a wait-list control condition. Both treatment groups were conducted in 10, 50-minute sessions over 5 weeks in a school setting. The cognitive-behavioral program included training in self-control, self-monitoring, self-evaluation, and self-reinforcement techniques. The relaxation training provided information on the relationship between tension and depression with direct instruction in muscle-relaxation. In order to assess treatment outcome, participants completed two self-report measures of depression that included the RADS and a modified version of the BDI as well as a clinical interview. Additional outcome measures included self-report measures of self-esteem and anxiety.

Results illustrated that both active treatments were effective in decreasing depressive symptomatology in adolescents, and these effects were maintained at 5-week follow-up. In addition, improvements in anxiety and academic self-concept also resulted from the active treatments. The researchers attribute the lack of differentiation between the relaxation program and the cognitive-behavioral program to a small sample size ($\underline{n}$ =30).

Stark, Reynolds, and Kaslow (1987) evaluated the effectiveness of self-control therapy and behavioral problem-solving therapy with 29 mildly to moderately depressed

9-12 year old children in a school setting. Children were screened for depression using the Children's Depression Inventory (CDI; Kovacs, 1981). Children who scored higher than 16 on the CDI were administered the CDI again along with the Child Depression Scale (CDS; Reynolds, 1988), a depression interview, and the Children's Depression Rating Scale-Revised (CDRS-R; Poznanski et al., 1984). Each child's parent completed the internalizing, depression, and social withdrawal subscales of the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983).

Children were randomly assigned to one of the two active treatments or a wait-list condition. The Self-Control therapy (S-C) was a highly structured treatment that involved instruction in setting more realistic standards for performance, increased self-reinforcement, and less self-punishment. In addition, this treatment included focus on cognitive events such as the development of pleasant cognitions and attribution retraining. In contrast, the Behavioral Problem-Solving therapy (BPS) was less structured, focused more on social relationships, and allowed for more discussion about specific problems. The BPS treatment included self-monitoring, the acquisition of problem-solving skills, and pleasant activity scheduling. Participants in both active treatments met for 12, 50-minute sessions over a 5-week period.

Outcome measures included self-report measures of depression, self-esteem, and anxiety as well as a clinical interview for depression. Results of the study showed that participants in both active treatments reported significantly less depression on self-report and interview measures, while those individuals who did not receive treatment reported no change. Improvement for individuals in the active treatments was maintained at an 8-week follow-up (Stark et al., 1987).

In a study designed to extend the research by Reynolds and Coats (1986), Kahn, Kehle, Jenson, and Clark (1990) investigated the efficacy of short-term cognitive-behavioral therapy, relaxation training, and self-modeling for 68 moderately depressed early adolescents. Selection criteria for the study included two self-report measures of depression and a structured clinical interview for depression. These measures as well as a self-report measure of self-esteem were used to evaluate treatment outcome.

Youngsters between the ages of 10 and 14 were randomly assigned to one of the three active treatment groups or a wait-list-control group. Cognitive-behavioral and relaxation training participants were seen in small groups of 2 to 5 adolescents for a total of 12, 50-minute sessions over a 6-8 week period. The cognitive-behavioral treatment utilized a modified version of the Coping with Depression course (adolescent version) (Clarke & Lewinsohn, 1986). Adolescents were provided with workbook materials and instructed in skills and problems associated with depression including communication skills, problem-solving, and negotiation. The relaxation treatment contained information of the relationship between anxiety and depression as well as procedures for relaxation (i.e., counting, breathing, and mental imagery). The self-modeling treatment included 12, 10-12 minute individual sessions with a therapist and focused on identifying, videotaping, and observing covert and overt behaviors that are incompatible with depression (i.e., verbalizing positive self-attributions, smiling) (Kahn et al., 1990).

The results of the study demonstrated that all three active treatments, compared to the wait-list control group, resulted in a decrease in depressive symptoms and an increase in self-esteem (Kahn et al., 1990). The researchers noted that approximately twice as

many participants in the cognitive-behavioral group scored in the functional range on the posttest measures compared to those participants in the self-modeling group.

Lewinsohn, Clarke, Hops, and Andrews (1990) conducted a controlled outcome study to evaluate the efficacy of a cognitive-behavioral intervention with and without parental involvement. Fifty-nine depressed adolescents aged 13-18 years as evaluated by DSM-III or Research Diagnostic Criteria (RDC; Spitzer, Endicott, & Robins, 1978) criteria were randomly assigned to one of three treatment groups. The cognitive-behavioral group intervention used in this study was the adolescent version of the Coping with Depression course (CWD-A; Clarke & Lewinsohn, 1986). This intervention consisted of 14, 2-hour sessions conducted over 7 weeks. These groups consisted of a 14-session cognitive-behavioral treatment (CBT), the same CBT program supplemented with a separate parent group, or a waitlist control condition. Results found significant post-treatment effects for the two active treatments. In a 2-year follow-up of this study, there were few differences between the two groups, suggesting that the addition of parent involvement did not significantly add to the treatment effects (Lewinsohn et al., 1990).

Stark, Brookman, and Frazier (1990) developed a comprehensive school-based treatment program that resulted from 3 years of research in schools. The program consisted of 26 sessions and included 5 components: cognitive procedures, self-control training, behavioral procedures, parent training, and consultation with school faculty. According to the researchers, meetings should take place twice per week due to the additive nature of the program and the need to develop group cohesiveness. In addition, strategies were described to encourage a more developmentally sensitive program. For example, the researchers proposed a structured, small group format in a fun and engaging

atmosphere that encouraged the active involvement of participants. The researchers also suggested the use of cartoons to illustrate therapeutic concepts (Stark et al., 1990). No study was found that empirically tested this intervention program.

Jaycox, Reivich, Gillham, and Seligman (1994) conducted a cognitive-behavioral program to reduce depressive symptoms in "at-risk" 10-13 year old children. Children were considered "at-risk" based on self-reported depressive symptoms and self-reported parental conflict. The treatment group consisted of 69 children divided into groups of 10-12. These participants received 12, 1½ hour sessions of cognitive-behavioral training in an effort to improve their cognitive and social-problem solving skills. The children were compared to 73 children in matched no-treatment control groups. Results of the program showed that depressive symptoms were reduced in the treatment group; this reduction of symptoms continued at 6-month follow-up (Jaycox et al., 1994). In order to investigate the long-term effects of this prevention program, Gillham, Reivich, Jaycox, and Seligman (1995) reported the results of the program at 2-year follow-up. Two years later, children who participated in the prevention program were less likely to report depressive symptoms compared to the control group (Gillham et al., 1995). Overall, the prevention program produced lasting positive results.

Wood, Harrington, and Moore (1996) explored the effectiveness of brief, individual, cognitive-behavioral therapy for treating adolescent outpatients diagnosed with depression. Fifty-three child and adolescent psychiatric outpatients were randomly assigned to a cognitive-behavioral therapy (CBT) or to a control condition of relaxation training. Participants received 5-8 sessions of CBT including training in cognitive restructuring, problem-solving skills, and activity scheduling. Results at post-treatment

indicated the CBT condition showed a greater decrease in depressive symptoms and an improved overall adjustment compared to the relaxation training condition (Wood et al., 1996).

In a recent study, Clarke, Rohde, Lewinsohn, Hops, and Seeley (1999) replicated and expanded upon the Lewinsohn et al. (1990) study by increasing the number of participants and incorporating "booster sessions" to maintain treatment gains. One hundred twenty three adolescents (aged 14-18 years) with a current DSM-III diagnosis of MDD or DD were randomly assigned to one of three 8-week treatment groups: 1) adolescent group CBT (16, 2-hour sessions), 2) adolescent group CBT supplemented with a separate 9-session parent group, or 3) wait-list control group. The CBT included mood monitoring, increasing pleasant activities, improving social skills, decreasing anxiety, reducing depressogenic thoughts, fostering communication, and improving conflict resolution. Participants received workbooks that included short readings, quizzes, and homework assignments. The CBT with parent group included a parallel but separate course for the parents of the depressed adolescents. During this parent course, parents reviewed the adolescent curriculum and learned the same problem-solving and communication skills. In addition, parents met separately with a therapist once per week for 8, 2-hour sessions. Two sessions were held jointly for adolescents and their parents in order to practice conflict reduction skills (Clarke et al., 1999).

Outcome measures included a diagnostic interview conducted with the adolescent, the Longitudinal Interval Follow-up Evaluation (LIFE; Shapiro & Keller, 1979); interviewer ratings on a modified version of the Hamilton Depression Rating Scale (HAM-D; Hamilton, 1960); a self-report measure, the BDI (Beck et al., 1961); and a

parent report measure, the CBCL (Achenbach & Edelbrock, 1983). Results indicated that both adolescent CBT groups yielded higher depression recovery rates (66.7%) compared to the waitlist control group (48.1%). In addition, the researchers found a greater reduction in self-reported depression for those participants receiving CBT interventions. There were no significant differences in outcome between the adolescent only group and the adolescent group with parent group conditions.

Immediately following the post-treatment assessment, participants in the two active treatment conditions were randomly assigned to one of three, two-year follow-up conditions: 1) "boosters" (received booster sessions and independent assessments every 4 months), 2) "frequent assessments" (assessments every 4 months), or 3) "annual assessments" (assessments every 12 months). Booster sessions included 1-2 meetings and focused on the use of specific skills learned during treatment (i.e., social skills, pleasant events, and relaxation) to cope with the participants' specific problematic situations. Although booster sessions did not significantly reduce the rate of depression recurrence, they did expedite recovery among participants who were still depressed at the end of the 16-session treatment. Adolescent rates of recurrence during the 2-year follow-up period were lower than the recurrence rates found with treated adult depression; thus indicating the importance of treating depression early in life. The overall results support the evidence that CBT is an effective treatment for depression in youth (Clarke et al., 1999).

In a critical review of the treatment literature, Reinecke, Ryan, and Dubois (1998) assessed the effectiveness of cognitive-behavioral treatment approaches to treat depression as well as the stability of therapeutic gains. The meta-analysis included post-

treatment and follow-up comparisons from six studies containing 217 participants aged 11-19 years. The overall effect size for the posttest difference scores was significant (ES = -1.02). At follow-up, the effect size was also significant (ES = -.61). The findings indicate that CBT may be useful for reducing depressive symptoms in adolescents and that these reductions are maintained over time (Reinecke et al., 1998).

According to Nolen-Hoeksema et al. (1992), cognitive-behavioral and skill-based interventions for children's depressive symptomatology should be implemented soon after their symptoms are identified in order to prevent long lasting "scars" on their explanatory styles. These researchers conclude that early interventions may prevent the child from developing more severe depressions in the future (Nolen-Hoeksema et al., 1992). This study represents an early intervention targeted at reducing depressive symptomatology in school children.

In conclusion, a number of controlled clinical studies have been conducted to explore the efficacy of cognitive-behavioral interventions for child and adolescent depression. The results of these studies yield support for the effectiveness of short-term, structured, cognitive-behavioral, school- and community-based interventions for the treatment of child and adolescent depression. In addition, the results of the meta-analysis by Reinecke et al. (1998) suggest the long-term effectiveness of cognitive-behavioral interventions for treating depressive symptoms in late childhood and adolescence. The ability to treat students in their natural school setting has important implications for school psychologists.

Summary

Depression in children and adolescents is of great concern to psychologists working in schools. The prevalence of depression in children and adolescents increases with age as well as in prevalence for females compared to males. There are also higher prevalence rates of children and adolescents reporting depressive symptoms compared to diagnoses of depressive disorders. Depression in youth has been related to a number of biological and psychosocial factors. In addition, the presence of comorbid diagnoses, such as anxiety disorders, increases the risk of recurrent depression in children.

In addition to cognitive, personal, and family correlates of depression, there is evidence to support the relationship between social skills deficits and depression in children (Segrin, 2000). In terms of the stability of depressive disorders, depression in children and adolescents is likely to continue throughout their lifespan. These children are likely to abuse illegal substances, drop out of school, think about and attempt suicide, as well as suffer from psychiatric disorders in adulthood. In order to treat these depressive disorders, studies have shown support for the effectiveness of short-term, structured, cognitive-behavioral school-based and clinic-based interventions.

CHAPTER III

Social Skills Training

Importance of Social Skills and Social Skills Training

During the past few decades, clinical attention has shifted from a focus on "pathology" and "disorder" to increased attention on "positive mental health" and "adaptation" (Dubois & Felner, 1996). Positive mental health has recently been a focus in the literature regarding childhood and adolescent mental health and includes concepts such as social competence and social skills (Dubois & Felner, 1996). Empirical research has identified a significant positive correlation between measures of social competence and measures of mental health in youth (DuBois & Felner, 1996). According to Kauffman (1999), teachers should recognize that aggressive and disruptive behavior, failure to meet academic goals, and social rejection are signs of later developmental difficulties. As a result, practitioners can enhance primary prevention by implementing school wide programs offering instruction in academic and social skills. This section will begin with a discussion on the importance of social competence followed by a review of the literature on social skills training in youth. It will conclude with a rationale for using social skills training in this study to reduce depressive symptomatology in children.

According to Gresham (1998), social competence is defined as the degree to which individuals establish and maintain satisfactory interpersonal relationships. The development of skills for successful social relationships is one of the most critical accomplishments of childhood (Elliot, Racine, & Busse, 1995). However, some children do not develop adequate social skills and consequently, experience maladaptive child-child and/or child-adult relationships (Elliot et al., 1995). Problems with social

competence affect social, psychological, and educational functioning that often results in intervention and remediation strategies (Gresham, 1998). In an early study, Roff (1963) demonstrated that children who were rejected by their peers at age eight were more likely to be diagnosed with psychosis in adulthood or to be discharged from the military when compared to children who were accepted by their peers during childhood. Recent studies have identified the link between impaired social competence and specific problems such as aggression (Dodge, 1983), juvenile delinquency (Parker & Asher, 1987), drug and alcohol abuse (Kandel, 1982), and school dropout (Coie, Terry, Lenox, Lochman, & Hyman, 1995; Parker & Asher, 1987).

If left untreated, social skills deficits during childhood may continue and increase the risk for later academic and social adjustment problems (Parker & Asher, 1987). The teaching of prosocial skills at an early age may improve a child's personal development and aid in the prevention of serious mental health difficulties, such as depression in adolescence and adulthood (McGinnis & Goldstein, 1984). According to McGinnis and Goldstein (1984), the teaching of prosocial skills should be a part of all educational programs and carried out in a manner similar to the teaching of academic subjects.

Social Skills Training with Children and Adolescents

Social Competency Training (SCT) and Social Skills Training (SST) are popular treatments for peer rejection as well as childhood behavior problems. There have been many studies of the effectiveness of social skills training with children and adolescents. According to Pellegrini and Urbain (1985), school settings may be more appropriate than clinical settings for conducting social skills interventions with young populations. Elliot et al. (1995) have classified social skills training interventions into three approaches

(operant, social learning, cognitive-behavioral) that contain similar treatment features and assumptions regarding how social skills are learned. This section will review the literature on social skills training interventions with children and adolescents.

Operant interventions. Operant interventions focus on observable behaviors and the antecedents and consequences that maintain those behaviors (Elliot et al., 1995). Procedures based on antecedent control suppose that the environment does not provide the opportunity for the performance of social behavior (Gresham, 1995). In this case, cues and prompts do not occur in the environment, or the individual is not able to discriminate the cues and prompts. Interventions based on antecedent control create opportunities for the individual to discriminate cues and prompts and to develop positive social behavior. For example, social behaviors are controlled through environmental events such as having a peer ask another peer to join an activity. Operant procedures include consequent strategies in which the individual knows how to perform a social behavior but does not do so because of little or no reinforcement of the skill (Gresham, 1995). Common operant intervention procedures include peer-mediated interventions and reinforcement-based strategies (Gresham, 1995).

Peer-mediated interventions are relatively new and focus on the idea that peers can be successful agents for change in children with social skills performance deficits (Elliot et al., 1995). Peer-mediated interventions include three types of interventions: 1) peer initiations, 2) peer modeling, and 3) peer tutoring (Kohler & Strain, 1990). In peer initiation strategies, target children's peers are used to initiate and sustain social interactions with a socially isolated child. These socially skilled peer confederates are instructed to interact with the target child and report any difficulties they find in their

interaction efforts. According to Gresham (1995), these procedures are effective in the natural classroom for enhancing the interactive behaviors of socially isolated children.

Peer tutoring is another strategy under the classification of peer mediation techniques. Peer tutoring involves peers teaching social skills to children with social skills deficits. Gresham (1995) asserted that peer tutoring has potential to be an effective strategy for teaching social skills to children because of their familiarity with social customs and values of peer groups. According to Gresham (1995), there are no controlled studies of peer tutoring, to date, in the social skills training literature.

In a study that includes some aspects of peer mediation, Bierman and Furman (1984) utilized involvement with socially accepted peers to increase the social skills of unaccepted children. According to the researchers, although coaching programs have been implemented to teach unaccepted children new social skills, one factor mediating the effectiveness of these programs is the reaction of peers to unaccepted children. Programs that focus on enhancing skills and changing peer responses may be more effective than programs that focus on only one of these areas (Bierman & Furman, 1984). Therefore, the researchers conducted a study to determine the additive effects of peer involvement with social skills training on the social adjustment of 56, 5th and 6th grade students in a large metropolitan area. Students were included in the study if they were rated low on conversation skills using self-ratings and observer ratings. Students were also included in the study if they were rated as unaccepted by their peers as assessed by the Roster and Rating Scale (Hymel & Asher, 1977) and the withdrawal scale of the Pupil Evaluation Inventory (PEI; Pekarik, Prinz, Liebert, Weintraug, & Neale, 1976).

The participants were randomly assigned to one of four treatment conditions: 1) conversational skills training, 2) peer involvement, 3) conversational skills with peer involvement, and 4) no-treatment control. All of the students received 10, 30-minute sessions over a 6-week period. The conversational skills training consisted of three skills (self-expression, questioning, leadership) that were coached using instruction, rehearsal, and performance feedback. Participants met individually with an adult skills trainer. The peer involvement group consisted of groups of three children, 1 identified child and 2 same-sex peers randomly chosen from classmates scoring in the upper two-thirds in sociometric status. The participants were given the opportunity to interact with peers while making a videotape about friendly interactions. The conversational skills with peer involvement group also included 1 identified child and 2 higher social status peers. These children were given the opportunity to make the same friendly interaction tape with the addition of instruction and practice of the three conversational skills (Bierman & Furman, 1984).

Students were assessed at pre-treatment, post-treatment, and 6-week follow-up on measures of conversational skills, peer acceptance, and self-perceptions of social competence using The Social Self-Efficacy Scale designed by the investigators. Results of the two interventions showed strong, positive, and differential effects. Students in the skills group displayed increased conversation skills compared to students who did not receive skills training. Students in the peer involvement groups demonstrated significantly greater improvement in peer acceptance and feelings of social efficacy than children who were not involved with peers (Bierman & Furman, 1984). While the improvement in the sociometric status for the peer involvement only group was

temporary, the students in the combined intervention group (skills training plus peer involvement) produced general and sustained improvement in both peer acceptance and social skills. Through the focus of peer interaction, this study identifies the value of developmental considerations in the design of intervention programs (Bierman & Furman, 1984). To increase the positive effects of this training program, the researchers suggested more extensive peer involvement as well as having a greater number of peers participate in the program (Bierman & Furman, 1984).

Sacks and Gaylord-Ross (1989) compared peer-mediated and teacher-directed interventions for teaching social skills to students with visual impairments. Fifteen students with visual impairments were randomly assigned to one of three training conditions: peer-mediated, teacher-directed, or control. Five same-aged non-handicapped peers, labeled peer trainers, were assigned to the peer-mediated condition. Prosocial skills were separated and instructed in a multiple-baseline format. Both social skills training programs took place 3 times per week, for 40 minutes, over 4-weeks. At the beginning of each week of the teacher-directed intervention, the peer trainers received 30-minutes of training on the strategies for teaching the target skills to their visually handicapped peer. In the peer-mediated condition, a non-handicapped peer was paired with a peer that was visually impaired and selected an activity for the session. Although the teacher remained in the room with the pairs, she did not interact with the students. During the session, peer trainers used prompting and modeling strategies that they learned during the teacher training. At the end of the training session, the teacher met with the peer trainers to provide feedback and suggest ways to enhance their performance. In the teacher-directed intervention condition, the teacher provided

instruction to each visually impaired student. The teacher used a structured social skills training program that incorporated modeling, role-play, and verbal feedback. This condition did not include any non-handicapped peers (Sacks & Gaylord-Ross, 1989).

A number of outcome measures were assessed at pre-and post-training. Outside observers assessed the behaviors of the visually impaired students for direction of gaze, body posture, positive social initiations, and sharing and joining in group activities. The students with visual impairments completed measures of perceived self-concept and competence; while the non-handicapped peers completed questionnaires which rated the acceptance of those students with visual impairments. In addition, teachers were asked to rate the behaviors of students with visual impairments on a likert-type scale. Results showed that students in both active treatment groups displayed improvements in social behavior, self-perceptions, peer-ratings, and teacher ratings compared to students in the control group. However, students in the peer-mediated group produced significantly greater skill acquisition, generalization, and maintenance of the prosocial behaviors compared to those students in the teacher-directed group. The authors attribute the success of the peer-mediated intervention to Stokes and Bear's (1977) "method of common stimuli" theory in which the peer trainer is a similar element between the training and generalization settings. In addition, the less structured nature of the peer-mediated intervention may be more similar to children's natural play encounters. The researchers concluded that stylistic and person factors need to be further investigated in future studies on social skills training (Sacks & Gaylord-Ross, 1989).

In a review of peer-mediated interventions to promote the social skills of children and adolescents with behavior disorders, Mathur and Rutherford (1991) concluded that

peer-mediated interventions have illustrated success in producing immediate positive treatment gains and have enhanced the generalization of training. The researchers described factors that contribute to the success of these interventions. Factors include the selection and training of peers, importance of target behaviors, selection of outcome behaviors, and procedures for generalization and maintenance of skills (Mathur & Rutherford, 1991).

In addition to antecedent strategies, Gresham (1995) described consequent strategies for teaching social skills. Consequent strategies may include reinforcement as well as positive practice techniques. The theory behind reinforcement-based procedures presumes that the child has the ability to perform the social behavior but fails to do so due to a lack of reinforcement of that particular behavior. Therefore, reinforcement strategies should include social praise, tokens, or group-contingencies in response to the use of prosocial behavior (Gresham, 1995). Positive practice is the repeated practice of an adaptive behavior that is incompatible with a maladaptive behavior. According to Gresham (1995), positive practice should also be included in all social skills interventions; naturally occurring incidents can help teach the individual adaptive alternatives to the maladaptive behavior.

In conclusion, operant procedures include antecedent and consequent control techniques (Gresham, 1995). Reinforcement and positive practice are recommended techniques for social skills interventions. Peer mediation interventions have also received empirical support (Bierman & Furman, 1984; Mathur & Rutherford, 1991). According to Elliot et al. (1995), peer-mediated interventions may be more effective than teacher-mediated interventions due to the peer's ability to monitor and reinforce the target child's

prosocial behavior. In addition, the researchers assert that peer mediation interventions are cost-effective.

Social learning interventions. In addition to operant procedures to teach social skills, social learning interventions have also been studied. Social learning intervention procedures stem from Bandura's (1977) theory, in which social behavior is the result of observational learning and vicarious reinforcement. This theory assumes that observation is sufficient for the learner to acquire new prosocial behaviors. As the learner observes a model receiving reinforcement or punishment for producing a behavior, the learner in turn, is receiving vicarious reinforcement or punishment. An individual can use a model to direct his or her behavior and estimate the likely result of his or her behavior. Observers will then produce a behavior that is reinforced in others and inhibit a behavior that is punished (Bandura, 1977).

There is a great amount of empirical support for the use of modeling to teach social skills to children and adolescents (Gresham, 1985; Wanlass & Prinz, 1982). Modeling can be divided into two types: live modeling in which children observe the social behaviors of peers in the natural environment (i.e., classroom) and symbolic modeling in which children observe videotapes of children engaging in prosocial behaviors.

Wise, Bundy, Bundy, and Wise (1991) developed a systematic assertiveness training program that involved the use of symbolic models to teach assertive skills. The assertion training involved a two-step process. First, information by the symbolic model was presented regarding the assertive action and its likely consequence. Next, the

individual was given opportunities to achieve successful performance through practice of the assertive behavior in specific situations (Wise et al., 1991).

According to Wise et al. (1991), adolescents can learn and remember symbolic information necessary to produce assertive behavior. Participants in this study included two classes for a total of 42, 6th grade students. One class (22 students) received assertiveness training and while the other class (20 students) served as the control group. The treatment group received 6, semi-weekly 40-minute lessons focusing on definitions and feelings associated with assertiveness and aggressiveness. Two female adults conducted lessons utilizing puppet demonstrations and video presentations identifying assertive and aggressive behaviors. The videos were created by the investigators and included 11- and 12-year-old non-class members illustrating typical adolescent interactions. Role-play activities were conducted at the end of each training session and children were coached to act assertively with immediate feedback provided. Students were presented with certificates at the completion of the program (Wise et al., 1991).

The outcome measure of this study was a 26 multiple-choice question test related to the learning objectives of the assertiveness training. This measure was completed at pre-treatment, post-treatment, and 6-month follow-up. Results indicated that students in the treatment group performed significantly better on the multiple-choice questions at post-treatment and at 6-month follow-up when compared to students who did not receive the assertiveness training. According to the researchers, these results show that adolescents can learn and retain assertiveness skills through symbolic information (Wise et al., 1991).

While most research has been conducted using symbolic models, live models are more flexible and efficient in a classroom environment (Elliot et al., 1995). For example, Matson, Fee, Coe, and Smith (1991) used peer and puppet models to change the social behaviors of preschoolers with developmental disabilities. Results of the study showed that children who received social skills training with the peer and puppet models decreased inappropriate behaviors and increased positive social interactions as compared to control children who did not receive the intervention (Matson et al., 1991).

Cognitive-behavioral interventions. Cognitive-behavioral procedures for teaching social skills focus on developing the child's ability to solve problems and regulate his or her behaviors (Elliot et al., 1995). Coaching is a cognitive-behavioral strategy that involves direct verbal instruction from a coach (teacher or psychologist) who is proficient in the target behavior. In a typical coaching intervention, a target child is presented with a skill to be learned; the target skill is practiced with the coach, and the coach provides informational feedback (Elliot et al., 1995). Coaching interventions have also been enhanced with the use of modeling (Elliot et al., 1995).

Coaching children in social skills with the addition of social learning procedures such as modeling and peer interaction has received substantial empirical support (Ladd, 1981; Oden & Asher, 1977). Oden and Asher (1977) conducted a study in which 33 third and fourth grade socially isolated children, as rated by peers, were randomly assigned to one of three experimental conditions (coaching, peer-pairing, or control). In both the coaching and peer-pairing conditions, high-accepted children were paired with low-accepted children. Children in the coaching condition received 5-7 minutes of instruction in skills such as paying attention, cooperation, communication, and being friendly. The

children listened to an explanation of the skill, practiced the skill during a play session, and then answered post-play review questions. During the post-play review, the coach asked questions regarding the use of target behaviors during the play session. In the peer-pairing condition, the partners engaged in a play session utilizing the same games as in the coaching condition. These participants however, did not receive coaching instructions or the post-play review. In the control condition, the children were taken into the playroom with the same children who served as partners for the other conditions; however, the children played separately and did not receive coaching. All children were involved in 6 play sessions over a 4-week period.

Outcome measures included a behavioral assessment of two target behaviors: task participation and social orientation; both coded by two separate observers during the play sessions. In addition, at post-treatment, roster-and-rating sociometric questions such as "How much would you like to play with this person at school?" and "How much do you like to work with this person at school?" were administered to all child participants. Results of this study showed that children in the coaching condition increased their play sociometric ratings significantly more than children in the peer-pairing and control conditions. No significant differences were found between the groups on the behavioral assessment. At 1-year follow-up, children in the coaching condition demonstrated sustained progress on the play sociometric ratings (Oden & Asher, 1977).

Bulkeley and Cramer (1990) conducted a group social skills training program incorporated into the curriculum in a secondary school setting. Participants included 9 children within the 12 to 13-year age range identified as having social skills difficulties based on a teachers' rating of social skills, a self-report questionnaire of social skills, and

a sociometric procedure. The control group included same age peers without identified social skills difficulties. Group social skills instruction was provided for the 9 adolescents with social skills difficulties and conducted in 10 weekly sessions that lasted 1 ¼ hour each. The training provided opportunities to learn new skills through observation, participation, practice, and discussion (Bulkeley & Cramer, 1990).

Participants in both groups were rated at pre-treatment, during treatment, and post-treatment on three measures that included a social skills questionnaire, a self-report measure of social situation problems, and a sociometric scale. At the end of the program, significant improvement on the teachers' social skills questionnaire and the self-report measure of social skills was found for the treated subjects compared to the non-treated peers (Bulkeley & Cramer, 1990). The results did not reveal a change in sociometric status for the treated adolescents (Bulkeley & Cramer, 1990).

Cognitive-behavioral procedures have also been used to teach problem solving skills to children and adolescents. Gettinger, Doll, and Salmon (1994) conducted a study to increase prosocial behavior by developing a child's ability to understand the other child's point of view as well as the likely consequences of his or her behaviors. The program incorporated problem solving and goal setting. In addition, Gettinger et al. (1994) asserted that children learn about social interaction through the family and believe that parents are a likely source of support for children with friendship difficulties. The purpose of their study was to determine the differential effects of problem solving and goal setting as well as parent training interventions.

In order to identify children with friendship difficulties, parents and teachers completed a problem identification form, a rating scale regarding the child's friendships,

and the CBCL (Achenbach & Edelbrock, 1983). Twenty-one children aged 9 to 11 years met criteria for inclusion in the study; parents of 16 of the children gave consent to participate. The target children were randomly assigned to one of four treatment conditions: 1) Goal setting, 2) Problem Solving, 3) Problem Solving and Goal Setting Combined, and 4) no treatment. Although all of the parents were invited, only 9 parents chose to participate in the 8 weekly parent sessions. Children in each group participated in 8, 45-60 minute sessions that were held once per week. The goal setting group allowed children to experiment with new skills with friends and promoted children's reflections of these new social actions. The problem-solving group enabled children to evaluate different points of view in problematic situations with friends and helped these children feel they have choices and control over their social interactions. The problem solving and goal setting program combined both treatment components. Parents were divided into two groups and participated in sessions to enhance their understanding of children's friendships as well as increase their effectiveness in helping children with friendship problems (Gettinger et al., 1994).

A variety of outcome measures were used in this study including parent and teacher ratings of friendship abilities, child self-reports of friendship beliefs, and observed peer interactions. These measures were assessed at pre-treatment, during intervention, post-treatment (1 week following the last treatment session), and follow-up (2 months after the last session). Results showed that children receiving the combined problem solving and goal setting interventions illustrated the most significant change on all social outcome measures. The researchers also reported that parents who participated

in the parent training sessions showed improved understanding of their child's friendships (Gettinger et al., 1994).

In terms of the different approaches to social skills training, Elliot and Gresham (1993) concluded that many practitioners and researchers utilize a combination of operant, social learning, and cognitive-behavioral procedures. In addition, the researchers provided suggestions from the literature for the development of social skills in children. These procedures included a) manipulating the environment to provide opportunities for social interactions that facilitate desired behavior, 2) reinforcing socially appropriate behavior, and 3) modeling of appropriate social skills with the addition of coaching, reinforcement, and feedback (Elliot & Gresham, 1993).

Lindberg, Durlak, and Gregory (2001) conducted a meta-analysis of 134 SCT interventions for children that were published between 1991-2000. For the purpose of their study, SCT was defined as cognitive and/or behavioral interventions that included the direct training of social skills (i.e., self-management, peer relations, assertion). The results showed an overall effect size of 0.36, indicating a moderate effect for SCT in the short term. Significant differences emerged for treatment type, with behavioral (ES =.49) and cognitive-behavioral interventions (ES = .41) yielding the largest effects. Significantly larger effects were found for socially valid outcomes such as peer interaction (ES = .24), academic achievement (ES = .34), and internalizing/externalizing problems (ES = .55).

Lindberg et al. (2001) assert that the effect of different outcome moderators such as specific type of social skills training, level of adjustment, and age of participant still needs to be determined. According to the researchers, future programs should consider

behavioral, cognitive-behavioral, and peer mediation interventions. Multisystemic interventions that incorporate the family and school should help maintain treatment gains over time (Lindberg et al., 2001).

Social Skills Training and Depressive Disorders

While social skills training has been shown to be an effective intervention for improving the social behaviors of children and adolescents, it is still unclear whether these interventions improve other aspects of adjustment (Lindberg et al., 2001). One area of adjustment that may be positively affected by social skills training is depressive symptomatology. According to Lewinsohn's (1974) theory of depression, individuals become depressed because they lack social skills that result in positive reinforcement from the environment. As such, Lewinsohn and Clarke (1984) assert that increasing social skills will allow the individual to obtain more positive reinforcement, therefore reducing depressive symptoms. Despite this theoretical formulation linking depression and social skills deficits, few studies have used social skills training to reduce depressive symptoms in children and adolescents. This section will review the studies that have incorporated training in social skills to decrease depressive symptoms in children and adolescents.

Frame, Matson, Sonis, Fialkov, and Kazdin (1982) conducted a study to evaluate a behavioral intervention to treat depression in a 10-year-old hospitalized male child. The participant met DSM-III criteria for major depressive episode and demonstrated approximately 1.5 standard deviations below average intellectual ability on a standardized intelligence test. The participant also met criteria for depression on three measures completed by his mother, such as the CDI (parent-rated) (Kovacs & Beck,

1978), the Child Behavior Problem Checklist (CBP; Achenbach, 1978), and the BID (Petti, 1978). In addition, a rater observed a video-taped interview of the participant and completed the CDI and another depression checklist. This rater judged the participant to be in the clinically depressed range on both of the measures. Target behaviors were identified by hospital staff and included poor eye contact, flat affect, poor quality of speech, and inappropriate body position. The behavioral intervention was administered individually to the participant by a therapist and involved 20-minute daily sessions in skills training to improve the participant's social interactions. The intervention included instructions, modeling, role-playing, and feedback. A total of 20 sessions were conducted in the treatment (Frame et al., 1982).

The intervention was evaluated using a multiple-baseline design across the four target behaviors over a baseline, treatment, and 12-week follow-up phase. Results of the study showed improvement in each target behavior when the skills training was introduced. These results continued at the 12-week follow-up assessment. However, at the conclusion of the treatment, the participant did not complete a self-report measure of depression nor was he administered an interview of depressive symptoms. Therefore, conclusions regarding the effectiveness of this intervention for eliminating the depressive disorder could not be made (Frame et al., 1982).

Schloss, Schloss, and Harris (1984) conducted a multiple-baseline analysis of an interpersonal skills training program for 3 adolescents diagnosed with DSM-III depressive disorders. This training involved the use of modeling, behavioral rehearsal, feedback, and contingent reinforcement in a group setting to teach skills that included

greeting and saying "goodbye" to adults as well as continuing conversations. Participants received five, 30-40 minute sessions to teach those target skills.

Outcome measures included observations of the participants' interpersonal skills during the training sessions as well as throughout the day in their classroom setting. The results illustrated that the social skills training increased the depressed adolescents' interpersonal skills in the training sessions. In addition, the interpersonal skills were also generalized to the classroom setting. Although the purpose of the study was to increase social skills, the authors stated that the development of interpersonal skills might aid the depressed individual in achieving response contingent social reinforcement. Therefore, the development of interpersonal skills may ultimately replace depressive reactions to stimuli (Schloss et al., 1984).

In a study with adults, Hersen, Belack, Himmelhoch, and Thase (1984) contrasted social skill training to more standard approaches for the treatment of depression. The researchers evaluated the effectiveness of: social skill training plus placebo, social skill training plus amitriptyline, amitriptyline alone, and psychotherapy plus placebo in females diagnosed according to DSM-III with unipolar depression. One hundred twenty unipolar depressed women, who ranged in age from 21 to 60, were randomly assigned to one of the four treatment groups. All of the participants received treatment one time per week for 12 weeks followed by 6 months of maintenance treatment. Social skill training included 12 weekly, 1-hour sessions that consisted of the identification of skills deficits, therapeutic instructions, feedback, practice in the environment, social perception training, self-evaluation, and self-reinforcement. Treatment maintenance included 6 to 8 sessions of problem solving and review. The researchers reported that although skill training was

tailored to the specific deficits of the individual participant, the training followed a session-by-session treatment manual.

Participants were evaluated using multiple measures of depression and general symptomatology at baseline, after 6 weeks of treatment, after 12 weeks of treatment, after 3 months of maintenance treatment, and at the conclusion of maintenance treatment. Results of the study showed no significant difference among the four groups. Each treatment was effective and resulted in improvement on measures of depression and overall symptomatology (Hersen et al., 1984). The researchers concluded, "However, from the broader standpoint of identifying effective treatments for the large proportion of outpatient depressives who do not meet criteria for melancholia, findings of the present study are in concert with an emerging literature documenting the efficacy of psychosocial treatments" (Hersen et al., p. 35).

Social competency training has also been evaluated for its use with suicidal adolescents. According to Lerner and Clum (1990), as a result of the high rate of suicide attempts and completions among adolescents, there is an urgent need to develop effective interventions for those individuals "at risk" for suicide. These researchers suggest that suicidal individuals have poor interpersonal problem solving skills. Lerner and Clum (1990) conducted a study to investigate the effectiveness of social problem-solving therapy compared to supportive therapy for treating 18 suicidal older adolescents. Participants were assigned to a treatment group that included 2 to 5 adolescents and one adult leader. Each intervention was conducted for 10 sessions for 1.5 hours per session over 5 to 7 weeks. The problem-solving therapy involved instruction in the four steps of solving problems (problem orientation, problem definition, generating alternatives,

evaluating consequences). During the treatment session, each member selected a problem and with the help of group members, attempted to solve this problem using the four steps. The supportive therapy encouraged the sharing of personal experiences within the group. The therapist instructed the adolescents on how to use reflective listening skills both inside and outside of the group.

Dependent measures were assessed at pre-treatment, post-treatment, and at 3-month follow-up and included self-report scales of suicidal ideation, problem-solving skills, and feelings of hopelessness and loneliness. Self-report of depression was assessed using the BDI (Beck, 1961). Results of the study showed that at post-treatment, problem-solving therapy was more effective than supportive therapy for reducing depression and improving problem-solving skills. Problem-solving therapy was slightly more effective in reducing suicidal ideations but the difference in effect was not significant. At 3-month follow-up, problem-solving therapy was superior to supportive therapy in reducing depression and feelings of hopelessness and loneliness. In summary, both treatments were effective in reducing suicidal ideation; however, problem-solving therapy was more effective than supportive therapy for reducing depression and hopelessness, which are two risk factors for suicidal behaviors in adolescents (Lerner & Clum, 1990).

In a study that examined the efficacy of two forms of short-term group therapy for depressed adolescents as well as their long-term impact on depressive symptoms, Fine, Forth, Gilbert, and Haley (1991) assigned 66 depressed adolescents to either a social Skills Training Group (SSG) or a Therapeutic Support Group (TSG). Fifty-eight of the adolescents met DSM-III criteria for a current episode of major depression and eight met

compared to those participants in the SSG group. However, at 9-month follow-up, there were no significant differences in depression measures, self-concept measures, and cognitive distortion scores between the TSG group and the SSG group. According to the researchers, in the period between post-treatment and follow-up, participants in the SSG group improved and caught up to the participants in the TSG group. The researchers were surprised by the success of the TSG group. They stated that the explicit encouragement and opportunity for self-expression may be required by depressed adolescents prior to approaching a more task oriented social skills training. In addition, there may be a latency period in the successful application of the newly learned social skills and their effect on mood (Fine et al., 1991). The researchers concluded that future studies may need to focus more specifically at improving skills that are deficient in depressive participants or aim at getting them to use the skills in their repertoire (Fine et al., 1991). For this reason, the study utilized the results of a previous study (Tryon, Soffer, & Winograd, 2001) on the relationship between self-rated depressive symptomatology and self-rated social skills in an adolescent population. The study found a number of social skills deficient in a population of adolescents with elevated depressive symptomatology. In addition, the study included a follow-up assessment to evaluate the longer-term impact of social skills training on depressive symptomatology. Specifically, the follow-up assessment explored the possibility of a latency period in the application of learned social skills and its impact on mood as discussed in Fine et al. (1991).

Reed (1994) implemented a social skills training program titled Structured Learning Therapy (SLT) to decrease depression in adolescents. The SLT training sessions were delineated in a social skills curriculum titled Skillstreaming the Adolescent

(Goldstein, Sprafkin, Gershaw, & Klein, 1980). Participants included 18 male and female adolescents between the ages of 14 and 19 who met criteria for depression from DSM-IIIR. Adolescents were randomly assigned to the treatment or control group. Both groups received 6, biweekly, 60-minute sessions lead by two therapists. The treatment group received instruction and modeling of the social skills presented by the group leaders. The adolescents role-played the skills and received feedback from their peers and the group leaders. In addition, they were encouraged to practice the new skills at home and in their community. The control group participated in Art and Imagery exercises. These adolescents were given the opportunity to express themselves through creativity as well as discussions of feelings (Reed, 1994).

All participants were assessed at pre-treatment, post-treatment, and 6-8 week follow-up on measures of depression, self-esteem, and personality. Depression was assessed with measures including the CDI (Kovacs & Beck, 1977) and the BDI (Beck et al., 1961). Post-treatment results showed that depression was reduced for the male treatment participants compared to the males in the control group; this was also maintained at the follow-up assessment. However, the depression levels in females remained relatively unchanged and were not significantly different from the females in the control group. According to Reed (1994), the results suggest the differential effectiveness of this treatment across gender. The researcher stated that due to the small sample size, this study only provided preliminary evidence that social skills training is an effective intervention for treating depression in adolescents. Reed (1994) advised replications of this study with increased sample size and variations in the length of treatment in order to increase efficacy in females.

Miller and Cole (1998) recently explored the effects of a school-based social skills training program on an adolescent with comorbid conduct disorder and depression. The adolescent met criteria for depression as a result of his self-report on the RADS (Reynolds, 1986b) and the Depressed Module (child version) of the Diagnostic Interview Schedule for Children, Version 2.3 (DISC; Shaffer, 1992). The school classified the participant with Serious Emotional Disturbance (SED) and exhibited low average intellectual functioning as measured by standardized testing. Additional assessment measures used for inclusion in the study and to measure the effects of the intervention were the SSRS-T (Gresham & Elliot, 1990), teacher ratings from the CBCL (Achenbach & Edelbrock, 1983), and sociometric data.

Social skills training involved the use of instruction, modeling, role-play, and performance feedback. The target social skills selected were based on the results of the SSRS-T and included giving a compliment, offering help to others, and responding appropriately to teasing. A psychologist conducted training sessions in his office for 20-30 minutes twice per week for 8 weeks. The psychologist and an outside observer collected data during the pre-treatment and treatment phases of the study to determine if the participant had appropriately displayed the target behavior. The criteria for an appropriate response were determined and practiced by the observers prior to the beginning of data collection. Target behaviors in the in the natural environment at randomly selected lunch periods were also assessed by an independent observer (Miller & Cole, 1998).

A within-subject multiple-baseline design across behaviors was utilized in the study. Results showed that during treatment conditions the participant consistently

displayed increases in each target social behavior as compared to baseline conditions. In addition, there was an increase in the giving compliments skill in the natural lunch- room environment. At post-treatment, there was a reduction in depressive symptoms as measured by the participant's self report on the RADS and his responses on the DISC. However, neither the teacher's post-treatment ratings on the SSRS-T nor the teacher's ratings on the CBCL changed significantly from pre-test to post-treatment. The participant's sociometric ratings also did not change significantly from pre-treatment to post-treatment; both ratings were in the average range.

While Miller and Cole's (1998) school-based social skills treatment resulted in an increase in target social skills and a decrease in self-reported depressive symptoms, the authors did discuss some limitations of the study. A primary concern focused on the limited external validity as a result of using only one participant. Another concern was that the intervention was conducted in an analog setting rather than in a natural setting. Thus, the social skills training may not have generalized to the natural setting enough to change the teacher's perceptions on the SSRS-T and the CBCL. In addition, homework assignments aimed to practice the target skills apart from the training sessions were not formally assessed. Finally, the authors stated that variables other than the social skills training (i.e., individual attention, positive reinforcement) may have accounted for the decrease in depressive symptoms. To increase the generalization of these skills, the authors suggested that the training of target skills be conducted in the participant's natural setting as well as having a formal check on whether or not homework assignments are completed (Miller & Cole, 1998).

Social Skills Training and Generalization

An important consideration for programs that teach social skills is the generalization to the natural environment as well as the maintenance of treatment gains. According to McGinnis and Goldstein (1984), generalization is enhanced when the teaching setting closely resembles the natural setting where the skills will be used. If possible, instruction should take place in the school where children will be instructed along with other children with whom they are likely to interact (McGinnis & Goldstein, 1984).

According to McGinnis and Goldstein (1997), there are many strategies to enhance skill maintenance and transfer. In their social skills training curriculum, Skillstreaming the Elementary School Child, McGinnis and Goldstein (1997) propose the "Skill of the Week" bulletin board. One skill is to be taught each week during the Skillstreaming group. The skill is displayed in a colorful manner during the session and is a constant reminder of the target skill to be used. The authors also state that it is common practice to dedicated two or three sessions to learning and practicing one social skill. To decrease the interference of new learning on previously learned skills, a new skill should only be introduced when the learner can produce the steps of the first skill taught. The individual must also be given sufficient time to practice the skill outside of the teaching environment (i.e., homework assignment) (McGinnis & Goldstein, 1997). In this curriculum, students are also given social skills folders to keep forms and homework assignments. The folders also serve as records of the social skills they have learned and practiced.

According to Gresham (1995), another way to enhance generalization is to teach behaviors that are relevant to a given environment. The target skills selected in the proposed study (starting conversations, using free time, compromising) have been found to be deficient in a population of adolescents with elevated depressive symptomatology (Tryon et al., 2001). The teaching of conversational skills as a focus in social skills interventions has received support. According to Gottman, Gonso, and Rasmussen (1975), deficits in conversational skills have been specifically linked to overall ratings of poor social competence. Training in conversational skills has been found to be effective for increasing social competence (Ladd, 1981).

In order to maximize generalization, this study taught three target social skills over 8 training sessions in the students' natural classroom environment. Stokes and Osnes (1989) have also identified the inclusion of peers in social skills training to enhance generalization. Peer interaction occurred during role-play activities throughout the social skills training. Homework assignments for each target skill were assigned and recorded by the group leader.

Summary

While a number of studies have demonstrated the effectiveness of social skills training to increase social behaviors in children and adolescents, fewer studies have investigated the use of social skills training to decrease depressive symptomatology in children and adolescents. Preliminary evidence has emerged that social skills training can be moderately effective for decreasing symptoms of depression in adolescents (Fine et al., 1991; Miller & Cole, 1998; Reed, 1994). However, the reviewed studies contained a number of methodological errors such as small sample size and the absence of a control

group that threaten their reliability and validity. Only one study was found (Frame et al., 1982) that examined the use of social skills training to decrease a child's depression. Although the intervention resulted in improvement in the target skills (i.e., quality of speech, flat affect), because the researchers did not interview the participant for symptoms of depression nor administer a self-report measure of depression at post-treatment, the effectiveness of social skills training to decrease the participant's experience of depression remains unclear. To date, no other studies have reported the use of social skills training to decrease symptoms of depression in children. This study explored the efficacy of using school-based social skills training with peer interaction to reduce depressive symptomatology in a group of children.

Problem Statement

The literature indicates a link between symptoms of depression and deficits in social skills (Segrin, 2000). There is also evidence that peer interaction enhances the development of social skills (Bierman & Furman, 1984), and that school-based interventions augment the generalization of skills to children's naturai environment. Despite these findings, few studies have tested the effectiveness of school-based social skills interventions, particularly in conjunction with peer interaction, to ameliorate depressive symptomatology in children. This study employed a commercially available social skills training package and peer interaction in a school-based program to increase social skills and reduce depressive symptoms in fifth graders.

Purpose

The purpose of this study was to investigate the efficacy of school-based social skills training to reduce children's depressive symptomatology. The study aimed to

clarify the role of direct social skills training and peer interaction in the development of social skills and how these factors related to the reduction of children's depressive symptomatology. This study compared social skills and depressive symptomatology, at pre-treatment, post-treatment, and follow-up for fifth grade children randomly assigned to the following conditions: 1) Group A- social skills training with peer interaction, 2) Group B- peer interaction alone, and 3) Group C- no treatment control.

Hypotheses

Based on the conclusions presented in the literature review, the following hypotheses were tested:

HY1: At pre-test. the self-rated Reynolds Child Depression Scale scores of Groups A, B, and C would not differ significantly.

HY2: At pre-test, the self-rated Social Skills Rating System scores of Groups A, B, and C would not differ significantly.

HY3: At pre-test, the teacher-rated Reynolds Child Depression Scale scores of Groups A, B, and C would not differ significantly.

HY4: At pre-test, the teacher-rated Social Skills Rating System scores of Groups A, B, and C would not differ significantly.

Because the children were randomly assigned to groups, it was anticipated that Groups A, B, and C would not differ significantly on the Reynolds Child Depression Scale (student and teacher rating form) and the Social Skills Rating System (student and teacher rating form) at pre-test.

HY5: At posttest, Group A would score significantly lower on the self-rated Reynolds Child Depression Scale than Groups B and C.

HY6: At posttest, Group B would score significantly lower on the self-rated Reynolds Child Depression Scale than Group C.

HY7: At posttest, Group A would score significantly lower on the teacher-rated Reynolds Child Depression Scale than Groups B and C.

HY8: At posttest, Group B would score significantly lower on the teacher-rated Reynolds Child Depression Scale than Group C.

HY9: At posttest, Group A would score significantly higher on the self-rated Social Skills Rating System than Groups B and C.

HY10: At posttest, Group B would score significantly higher on the self-rated Social Skills Rating System than Group C.

HY11: At posttest, Group A would score significantly higher on the teacher-rated Social Skills Rating System than Groups B and C.

HY12: At posttest, Group B would score significantly higher on the teacher-rated Social Skills Rating System than Group C.

HY13: At posttest, Group A would score significantly higher on the behavioral measure of Starting a Conversation than Group B.

HY14: At posttest, Group A would score significantly higher on the behavioral measure of Using Free Time than Group B.

HY15: At posttest, Group A would score significantly higher on the behavioral measure of Compromising than Group B.

HY16: At follow-up assessment, Group A would score significantly lower on the self-rated Reynolds Child Depression Scale than Groups B and C.

HY17: At follow-up assessment, Group B would score significantly lower on the self-rated Reynolds Child Depression Scale than Group C.

HY18: At follow-up assessment, Group A would score significantly lower on the teacher-rated Reynolds Child Depression Scale than Groups B and C.

HY19: At follow-up assessment, Group B would score significantly lower on the teacher-rated Reynolds Child Depression Scale than Group C.

HY20: At follow-up, Group A would score significantly higher on the self-rated Social Skills Rating System than Groups B and C.

HY21: At follow-up assessment, Group B would score significantly higher on the self-rated Social Skills Rating System than Group C.

HY22: At follow-up assessment, Group A would score significantly higher on the teacher-rated Social Skills Rating System than Groups B and C.

HY23: At follow-up assessment, Group B would score significantly higher on the teacher-rated Social Skills Rating System than Group C.

Based on the literature reviewed, it was anticipated that at post-treatment and follow-up assessments participants in both treatment conditions would show greater increases in social skills and a greater reduction in depressive symptoms than control participants. Participants who received the combined treatment were expected to achieve greater improvements in social skills and greater reductions in depressive symptoms than children receiving peer interaction alone. This is due to the belief that the direct instruction in specific target skills combined with the opportunity to practice these skills with peers would enhance the learning of the social skills. While peer interaction should

be a positive experience for the children, it was believed that without the direct instruction in relevant social skills, less improvement would occur.

CHAPTER IV

Method

Design

Figure 1 presents a schematic representation of the study design. This design enabled a comparison of the effectiveness of (a) social skills training with peer interaction versus peer interaction alone; (b) social skills training with peer interaction versus a no treatment control group; and (c) peer interaction alone versus a no treatment control group. By comparing this combined treatment with peer interaction alone, it was possible to see the additive effects of direct social skills training for increasing social skills and decreasing depressive symptomatology. The design also allowed for repeated assessment of the no treatment control group. A minimum of 21 participants per group was needed to achieve a statistical power of .80 for a large effect size (Cohen, 1992). This study included 24 participants in each group.

Figure 1. Schematic representation of study design

Group[a]	Pre-test Assessment	Intervention (8 Sessions)	Posttest Assessment	Follow-up Assessment
A	RCDS-S RCDS-T SSRS-S SSRS-T	Social Skills Training with Peer Interaction	RCDS-S RCDS-T SSRS-S SSRS-T	RCDS-S RCDS-T SSRS-S SSRS-T
B	RCDS-S RCDS-T SSRS-S SSRS-T	Peer Interaction Alone	RCDS-S RCDS-T SSRS-S SSRS-T	RCDS-S RCDS-T SSRS-S SSRS-T
C	RCDS-S RCDS-T SSRS-S SSRS-T	No Treatment Control	RCDS-S RCDS-T SSRS-S SSRS-T	RCDS-S RCDS-T SSRS-S SSRS-T

Note. Group A = Social Skills Training with Peer Interaction, Group B = Peer Interaction Alone, Group C = No Treatment Control. RCDS-S = Reynolds Child Depression Scale-Self-Rated. RCDS-T = Reynolds Child Depression Scale-Teacher-Rated. SSRS-S = Social Skills Rating System-Self-Rated, SSRS-T = Social Skills Rating System-Teacher-Rated.

[a] $n = 24$ for each group.

Participant Descriptive and Selection Information

The participants in this study were fifth grade students attending a public elementary school in an ethnically diverse, lower-middle class, urban neighborhood in Brooklyn, New York. The school district includes 31 schools that serve approximately 30,000 students from pre-kindergarten through 12th grade. Approximately 700 students were enrolled in the target school that includes pre-kindergarten to fifth grade. According to school records, 59% of the students were Caucasian, 12% were African American, 11% were Hispanic, and 11% were Asian, and 7% were of other ethnicity. In addition, the school was considered Title 1, and 75% of the students received free lunch.

Permission to participate in this study was sought from the parents of all fifth grade students in general education classes. Of the 96 students whose parents were sent consent forms, 72 agreed to participate (75%) and 24 refused participation. Agreement of the child to participate was also obtained by having the child sign an assent form at the initiation of the study.

The mean age of the participants was 10.53 years (SD = .556). The age range of 10 to 11 years was selected as a result of several factors. According to Bulkeley and Cramer (1990), pre-adolescence is a time when youngsters often experience uncertainty and are most likely to benefit from a program that will enhance their social skills in a range of situations throughout their teenage years. In addition, P. Kendall (personal communication, January 3, 2002) stated that a preferred time to begin social skills training is in 5th and 6th grade.

Fifth grade children were also chosen for their ability to complete self-report measures. According to Kamphaus and Frick (1996), it is both practical and useful to administer self-report inventories to older elementary children and adolescents. Children between the ages of 7 through 11 years are within the late pre-operational and concrete operational stages of development and are cognitively and verbally mature enough to quantifiably express symptoms of depression (Kovacs & Beck, 1978).

Sixty percent (n = 43) of the participants were Caucasian, 14% (n = 10) were African American, 8% (n = 6) Hispanic American, 8% (n = 6) Asian American, 4% (n = 3) were mixed ethnicity, and 6% (n = 4) were of other ethnicity. There were 34 female and 38 male participants in the study. Socio-economic status (SES) was rated using the Hollingshead Four Factor Index of Social Status (Hollingshead, 1975). The

average SES rating from the Hollingshead Index for the sample was 35.37 (SD = 11.67). The majority of the participants' parents reported that they were employed within the skilled craftsmen, clerical, and sales worker domain, which is considered to fall in the middle income range (scores from 30-39). However, 12 of the participants' parents refused to report their profession. It is believed those parents who did not report professions were in the lower income range.

Reading scores for the study participants were obtained from school records. Reading scores were rated from 1 to 4; a score of 1 indicating poor reading skills and a score of 4 representing the highest score. The mean reading score for the study sample was 2.72 (SD = .745).

Table 1 presents age, gender, SES, and reading scores for each group. Overall, the groups did not differ by gender, χ^2 (2, N = 72) = 3.45, p = .178; age, F (2, 71) = .308, p = .736; SES rating, F (2, 71) = .881, p = .420, or reading level, χ^2 (6, N = 64) = 3.78, p = .707. However, the groups did differ by ethnicity, χ^2 (10, N = 72) = 20.95, p = .021. Table 2 shows the ethnic composition of each group. Group C was less ethnically diverse than Groups A and B. There were more Caucasian students in Group C compared to Groups A and B. However, the majority of the Caucasian participants in Group C are immigrants or have immigrant parents from countries such as Turkey and Russia.

Table 1

Means and Standard Deviations for Age, Gender, SES, and Reading Score by Group

Group	Age	Gender	SES	Reading Score
A	M = 10.58	Females = 15	M = 32.86	M = 2.74
	SD = .584	Males = 9	SD = 12.13	SD = .752
B	M = 10.46	Females = 10	M = 36.03	M = 2.64
	SD = .588	Males = 14	SD = 10.62	SD = .848
C	M = 10.54	Females = 9	M = 37.50	M = 2.79
	SD = .509	Males = 15	SD = 12.12	SD = .631

Table 2

Ethnicity by Group

Group	Hispanic American	Asian American	African American	Caucasian	Mixed Race	Other Ethnicity
A	5	1	4	11	2	1
B	1	4	4	11	1	3
C	0	1	2	21	0	0

Note. Numbers indicate number of participants in each cell.

Participants in this study only included students in general education classes. However, some of the participants were classified as students with special needs according to the Individuals with Disabilities Education Act (IDEA), which was

reauthorized in 1997 (P.L. 105-17). The researcher reviewed the records of the participants with IDEA classifications. Of the 72 participants in the study, 9 students had an IDEA classification. Of these 9 students, 8 had a classification of Learning Disability and 1 had a classification of Emotional/Behavioral Disorder. Table 3 presents the frequency of IDEA classification by group. There were no significant differences between the groups on IDEA classification, χ^2 (2, N = 72) = 3.05, p = .218.

Table 3

IDEA Classification by Group

Classification	Group A	Group B	Group C
Learning Disability	3	4	1
Emotional/Behavior Disorder	0	1	0

Note. Numbers indicate number of participants in each cell.

Dependent Measures

A number of dependent measures were utilized in this study. This section presents a review of each scale and its psychometric properties. Strengths and limitations of the measures are summarized.

Social Skills Rating System (SSRS; Gresham & Elliot, 1990). The SSRS is a standardized, norm-referenced, multirater assessment tool designed to measure the social behaviors that influence peer acceptance, relationships with teachers, and academic performance (Gresham & Elliot, 1990). The purpose of the SSRS is to "assist professionals in screening and classifying children suspected of having significant social behavior problems and aid[s] in the development of appropriate interventions for

identified children" (Gresham & Elliot, 1990, p. 1). The SSRS includes three forms (teacher, parent, and student) that may be used alone or in combination. Student self-report forms measure social skills while the teacher form measures social skills, problem behaviors, and academic competence (Gresham & Elliot, 1990). The total social skills scores from both the student and teacher forms were utilized in the study.

SSRS items include statements about social behaviors where the individual responds on a 3-point likert-type scale ranging from 0 to 2. A score of 0 indicates that the behavior never occurs, a rating of 1 means the behavior sometimes occurs, and a rating of 2 indicates that the behavior very often occurs. Scoring of the SSRS yields a Total Social Skills Score that consists of three subscales: Cooperation, Assertion, and Self-Control. The parent form includes the subscale of Responsibility and the student form includes the Empathy subscale. Behavior levels, standard scores, and percentile ranks are provided for the Total Social Skills, Total Problem Behaviors, and Academic Competence Scales. The standard scores have a mean of 100 and a standard deviation of 15 (Gresham & Elliot, 1990).

The SSRS was standardized on a national sample that consisted of 4,170 children and adolescents (Gresham & Elliot, 1990). Children from both general education as well as special education classes were included in this sample. According to the authors, the standardization sample is a slight overrepresentation of White and African American children, and an underrepresentation of Hispanic American and other minority children (Gresham & Elliot, 1990).

Coefficient alpha reliabilities for the teacher, parent, and student forms are reported in the SSRS manual (Gresham & Elliot, 1990). The authors report an internal

consistency rating of .94 for the teacher form-elementary level. For the student form-elementary level, the alpha of .83 was reported. Test-retest reliability ratings were conducted 4 weeks apart and showed .85 correlation for the teacher form and .68 correlation for the student form (Gresham & Elliot, 1990).

According to Gresham and Elliot (1990), a critical assessment of instrument quality is the evaluation of its validity. To provide content validity, the authors state that item development for the SSRS was based on a comprehensive survey of the empirical literature on the assessment and training of social skills in children and adolescents (Gresham & Elliot, 1990). In addition, expert judgement was insured as experienced researchers nominated the pool of items. Social validity of the SSRS is provided through the use of the Importance ratings for each item. Users of the SSRS are able to select items that are perceived as important by students, parents, and teachers. By focusing interventions on social skills not likely to occur yet very important to the individual, the social validity of the intervention is augmented (Gresham & Elliot, 1990).

The criterion-related validity of the SSRS is supported as a result of studies that compare the SSRS with already established measures of social skills and problem behaviors. Gresham and Elliot (1990) reported the results of a study that assessed the relationship between the SSRS-teacher form and the Social Behavior Assessment (SBA; Stephens, 1978). The SBA is a teacher rating scale of social behaviors separated into four domains, Environmental Behaviors, Self-Related Behaviors, Interpersonal Behaviors, and Task-Related Behaviors. Results of the study revealed a moderate to high correlation between the two measures. In a comparison of six published social skills rating scales used to assess the social skills of school-aged children, Demaray et al.

(1995) concluded that the SSRS is the most comprehensive instrument due to its multi-source approach and relationship to intervention. In addition, the authors noted that the psychometric properties of the SSRS are excellent (Demaray et al., 1995).

There are similarities between the items in the Skillstreaming the Elementary School Child (McGinnis & Goldstein, 1997) curriculum that was used in this study and the SSRS student and teacher forms. For example, skills such as "starting conversations", "using free time", and "compromising " are found in the Skillstreaming curriculum and on the SSRS. The study utilized the 34-item student elementary level version of the SSRS as well as the 57-item teacher form. Participants and teachers completed the SSRS at pre-treatment, post-treatment, and at 4-week follow-up assessment.

Reynolds Child Depression Scale (RCDS; Reynolds, 1989). The RCDS is a 30-item paper-and-pencil, self-report inventory designed to measure the presence and severity of depressive symptomatology in children and adolescents ages 8 through 12 years. According to Reynolds (1989), in addition to measuring and screening for depressive symptomatology in clinical and school-based populations, the RCDS is also a tool to evaluate treatment outcomes. The RCDS assesses a broad range of depressive symptoms such as sadness, interpersonal problems, and somatic complaints. The child is instructed to read each item and mark the response that best describes how he or she is feeling over the past two weeks. Items include statements such as "I feel sad", "I feel like having fun", and "I have trouble sleeping." The child is asked to select whether this statement has occurred: "Almost never", "Sometimes", "A lot of the time", or "All the time." Items are measured on a 4-point rating scale except for the last item that is scored

from 1 to 5 and requires the child to circle the face that describes how he or she feels. Seven items are reverse scored to increase attention to each item, identify response sets, and check for inconsistent responses (Reynolds, 1989).

To calculate the total score on the RCDS, the scores for each item (1-30) are added and the result is labeled "RCDS Total Score." Total scores range from 30 to 121, with higher scores indicating higher degrees of depression. The RCDS manual contains tables to convert RCDS total scores to percentile ranks that are separated by gender and grade level. According to Reynolds (1989), a child who scores at or above 74 on the RCDS should be identified for further assessment to explore possible significant psychopathology. Thus, this study utilized a cutoff score of 74 as evidence of significant depressive symptomatology. For each student who scored at or above the cutoff, the principal investigator notified the school-based support team of the need for further evaluation of depressive symptoms. In this study, 4 students scored above the cutoff score of 74 on the RCDS. Three of these students were in the social skills training with peer interaction group (A) and 1 student was in the peer interaction alone group (B).

The standardization sample for the RCDS included 1,620 children from grades 2 through 7 attending schools in Midwestern and Western states (Reynolds, 1989). The majority of the sample consisted of children from grades 3 to 6. There was an equal number of male and female students in the standardization sample with 52.9% of the sample being female. In terms of ethnicity of the sample, 70.9% were White, 18.4% were Black, 4.8% were Hispanic, 3.7% were Asian, and 2.1% were from other ethnic groups. Although the students were mostly White, Reynolds (1989) asserts that the

standardization sample represents age and ethnic diversity that supports the generalization of scores from the RCDS standardization sample.

In terms of the reliability of the RCDS, Reynolds (1989) reported high reliability coefficients that ranged from .87 in grade 3 to .90 in grades 4, 5, and 6. The manual provides reliability coefficients for gender and ethnicity of the standardization sample and reports high internal consistency for gender and ethnicity of the sample. Split-half reliability was also studied for the entire standardization sample and was found to be .89. According to the manual, test-retest reliability was studied by Breen (1987) and Reynolds and Graves (1989). Breen (1987) conduced a study in which 24, 5th grade children in elementary schools in the Midwest completed the RCDS with a 2-week interval. The results of the study showed high test-retest reliability, $\underline{r} = .82$. The researcher reported a score change of approximately 1 point. Another study of test-retest reliability was conducted by Reynolds and Graves (1989) in which 220 children from grades 3 to 6 completed the RCDS twice with a 4-week interval. The results revealed high test-retest reliability for the sample, $\underline{r} = .85$. Reynolds (1989) concluded the RCDS is a reliable, internally consistent, and stable measure of depressive symptomatology in children.

The validity of the RCDS has also been assessed in a number of studies. Content validity of the RCDS is displayed through a table that lists the specific items of the RCDS and how they each relate to symptoms of depression on such scales as the DSM-IIIR (APA, 1987) and the Weinberg Criteria (Weinberg, Rutman, Sullivan, Penick, & Dietz, 1973). In a study that evaluated criterion-related validity, Reynolds (1986a) compared the RCDS to an already established measure of depression in children. The researcher administered the RCDS to 82 children from grades 3 to 6 and conducted interviews using

the Children's Depression Rating Scale-Revised (Poznanski et al., 1984). The results of the study revealed a strong relationship between scores on the RCDS and scores on the Children's Depression Rating Scale-Revised. Reynolds (1989) reported the convergent validity of the RCDS with another self-report scale of depression in children, the Children's Depression Inventory (CDI; Kovacs, 1992). Reynolds (1989) reported in the manual that correlations between the two measures ranged from .68 to .79, thus illustrating that the RCDS has strong, significant correlations with the CDI.

According to Kamphaus and Frick (1996), the RCDS is a thorough measure of depressive symptomatology. There are a number of strengths of this measure including: its ease of administration and scoring, good evidence of content validity and criterion-related validity, and strong internal consistency. Weaknesses include the fact that standard scores are not included in the manual and only percentile rank scores are offered. In addition, specific data regarding the standardization sample such as SES scores are incomplete (Kamphaus & Frick, 1996).

While there is a paucity of studies utilizing teachers as reporters of adolescent internalizing behavior, some researchers (Ward, 1998) have used teachers to predict depressive symptoms in youth. Ward (1998) conducted a study to identify affective, social, and academic factors predicting depressive symptomotology in 244 early adolescents in southern California. Data were collected over a three-year period and included self-reports of depressive symptoms using the RCDS, loneliness, self-concept, as well as teacher-reports of academic competence, social skills, and critical events. Critical events included frequency ratings of internalizing behaviors that the researcher used as teacher reports of depressive symptoms. Peer ratings and student archival records

were also assessed. Results of the study found that the strongest predictors of adolescent depression included teacher-rated social skills, academic competence, and critical events as well as self-reported self-image, loneliness, and self-concept. The researcher concluded that there is preliminary support for using teachers as accurate reporters of depressive symptomatology in youth (Ward, 1998).

Although self-report measures of depression are generally administered to the child, for research purposes self-report measures, such as the CDI (Kovacs, 1992), have been completed by teachers (Ines & Sacco, 1992), parents (Frame et al., 1982), and by outside observers (Frame et al., 1982). Some authors have asserted that teachers and parents are not often able to notice child-reported anxiety and depression (Herjanic & Reich, 1997). However, Ines and Sacco (1992) explored the relationship between teacher ratings of elementary student depression on the CDI and student-self-ratings of depression on the CDI and found moderate correspondence (r = .44) for both measures. The authors assert that teachers are potentially valuable resources for the early identification of childhood depression (Ines & Sacco, 1992).

Mesman and Koot (2000) explored the relationship between child-reported depression and anxiety and parent- and teacher-reported problems. The researchers found that teachers were more likely than parents to report internalizing symptoms as well as social and academic problems for children who noted depression and anxiety. They noted that teachers were more aware of children's internalizing symptoms because the classroom provides opportunities to observe factors related to internalizing symptoms such as social and academic problems (Mesman & Koot, 2000). Thus, in this study, the RCDS was administered to both student participants (RCDS-S) and their teachers

(RCDS-T). Teachers were asked to complete the RCDS for each participant in a manner that best described that child over the past two weeks. This procedure allowed for participants and their teachers to respond to the same items that measure depressive symptoms.

This study originally proposed to use the CDI to assess depressive symptomatology. However, the administrator from the New York City Board of Education's Proposal Review Committee did not approve of the CDI due to its explicit assessment of suicidality. According to administrator, "The Reynolds Child Depression Scale is preferable in a study like yours because it does not have questions related to suicide. Moreover, the magnitude of the score does not necessarily suggest additional referral." For this reason, the RCDS was utilized in the study.

Social Skills Training Manual

In a review of the history of treatment manual use, Luborsky and DeRubeis (1984) stated that the use of treatment manuals is a "small revolution" in psychotherapy research. According to these authors, there has been a dramatic increase in the development and use of manuals to study the effectiveness of specific types of therapy. The study utilized a treatment manual adapted from the procedures and curriculum of the prosocial skills training program titled Skillstreaming the Elementary School Child (McGinnis & Goldstein, 1997).

Skillstreaming is a commercially available social skills training program developed for children and adolescents in general education and special education classes. Skillstreaming originated in 1976 as a social skills training program for adults and adolescents. In 1984, McGinnis and Goldstein published the first edition of

Skillstreaming for children and a separate edition for adolescents. However, in 1997 the authors published a revised edition of Skillstreaming that included the input of many practitioners who use the curriculum with a diverse population of students. According to McGinnis and Goldstein (1997), throughout the past decade educators have realized that the systematic teaching of social skills should be developed and implemented in the same manner that academic skills are taught.

Skillstreaming, an intervention initially used by mental health professionals, has been adapted to teach prosocial skills in a variety of settings. Skillstreaming focuses on four principles of learning that include modeling, role-playing, feedback, and transfer. This program assumes a skill-deficit model, that the learner is weak in a specific skill. Therefore, the goal of the program is to teach desirable social skills (McGinnis & Goldstein, 1997). Skillstreaming uses active learning strategies such as role-playing and practice to teach students the skills needed to solve daily life problems, to be assertive in social situations, and to increase the possibility that students will have successful relationships. The curriculum includes 60 specific social skills that are divided into five skill groups: 1) Classroom Survival Skills, 2) Friendship-Making Skills, 3) Skills for Dealing with Feelings, 4) Skill Alternatives to Aggression, and 5) Skills for Dealing with Stress. Each skill group contains approximately ten specific social skills such as asking for help, introducing yourself, and reacting to failure. Skillstreaming is flexible and individual skills may be taught if appropriate (McGinnis & Goldstein, 1997).

According to the Skillstreaming curriculum, the social skills instructor is referred to as the "group leader" and the participants in the study are referred to as "students." The group leader follows the procedures outlined in the treatment manual during the

treatment phase of the proposed study. See Appendix D for a complete description of each training session that incorporates the Skillstreaming curriculum.

Target Social Skills

Three target social skills were selected from the Skillstreaming manual for use in this study. The skills included starting conversations, using free time, and compromising. These skills were selected for instruction as a result of several factors. First, the teaching of conversational skills as a focus in social skills interventions has received support in the literature. According to Gottman et al. (1975), deficits in conversational skills have been specifically linked to overall ratings of poor social competence. Training in conversational skills has been found to be effective for increasing social competence (Ladd, 1981). Links have also been found between the nature of children's free time activities and their adjustment (McHale, Crouter, & Tucker, 2001). In addition, a study of the relationship between self-rated depression and social skills in an adolescent population conducted by Tryon et al. (2001) revealed that these specific social skills were related to elevated depressive symptomatology in a population of adolescents. Providing instruction in the specific social skills of starting conversations, using free time in a good way, and compromising during disagreements might decrease depressive symptomatology in the sample of fifth graders.

Procedure

The following procedures were implemented in this research study.

1. The City University of New York Graduate School and University Center's Institutional Review Board reviewed and approved the research study. Written permission to conduct the study was obtained

from the New York City Board of Education Department of Research as well as from an administrator from the target elementary school.

2. The principal investigator met with the fifth grade teachers in the target school to inform them of the nature of the study and the time requirements. She also secured their assistance in the assessment of their students' social skills and depressive symptoms.

3. The principal investigator met with fifth grade students in their individual classrooms and described the nature and duration of the study, the risks and benefits to the participants, and the ability to withdraw from the study without penalty. Parent/guardian consent forms (see Appendix B) were distributed to the students with instructions to return completed forms to their teacher within 3 days. Parent/Guardian consent forms included questions regarding parental education and employment. All parent/guardian forms were to be returned whether or not the parent/guardian granted or denied permission for their child to participate. The students were informed that for each class with a 100% returned parent/guardian forms, a party with refreshments would occur.

4. Children whose parent/guardian did not return the signed forms within three days were given a second form. If the parent/guardian did not respond within three days to the second request for participation, the student did not participate in the study. Students whose parents did not

grant permission were supervised by a fifth grade teacher during the times that the study took place.

5. During the pre-test assessment, those students whose parents granted permission completed a child assent form (see Appendix C). Consenting children completed a packet including a measure of general information (age, gender, ethnicity), a self-report measure of social skills (SSRS-S), and a self-report measure of depression (RCDS-S). The principal investigator was present in the classroom during the administration of these self-report measures. If any child was unable to read an item, the principal investigator read the item to the individual.

6. During the pre-test phase of the study, teachers completed ratings of the participants' social skills (SSRS-T) and depressive symptoms (RCDS-T). Each teacher was given an envelope for the completed ratings scales and asked to return the envelope to the principal investigator within one week.

7. After the initial assessment, the investigator scored the RCDS-S, SSRS-S, RCDS-S, and SSRS-T. If any student scored at or above the cut off level of 74 on the RCDS-S, the principal investigator notified a member of the school-based support team. A member of the school-based support team conducted a follow-up interview with four students who scored above the cutoff. Following this, each participant was assigned an identification number for the remainder of the study.

8. Participants were randomly assigned to one of the three treatment conditions (A, B, or C). Classroom teachers were unaware of each participant's group assignment and were not present during the training sessions.

9. All treatments consisted of 8, 40-minute sessions conducted twice per week for 4 weeks. Group A received social skills training with peer interaction administered by a trained social skills instructor. The principal investigator served as the group leader and was trained using a specific treatment manual prior to the intervention phase of the study. Group A was provided with direct instruction in the three target social skills (starting conversations, using free time, compromising) using modeling, role-playing, positive reinforcement, performance feedback, and homework assignments. In addition, students were given the opportunity to work together to role-play specific scenarios involving the target social skills. During each session that included role-play activities, the group leader selected dyads to work together. The dyads role-played in pairs and then role-played in front of the group. After the dyads role-played in front of the group, the group leader and peers provided verbal praise and performance feedback to the pair of students. The performance feedback included a description of the skill steps that were presented during the role-play as well as the strengths and weaknesses of the role-play. For a complete description of Group A's training sessions see Appendix D. Group A participants were also

required to complete a homework assignment on a designated form. The homework assignment included an in-class and an at-home component (see Appendix E). The group leader recorded whether or not each student completed the homework assignment in a "Homework Log."

10. Group B received 8, 40-minute sessions (2 sessions per week) over a 4-week period of peer interaction conducted by a trained group leader. A doctoral student in educational psychology served as the group leader and was trained using a specific treatment manual prior to the intervention phase of the study. Students in Group B were given the opportunity to work together to role-play specific scenarios involving the target social skills. For each session that included role-play activities, the group leader selected dyads to work together. The group leader facilitated peer interaction during the role-play sessions but did not provide specific training in the three target social skills. The dyads role-played in pairs and then role-played in front of the group. After the dyads role-played in front of the group, the group leader and peers provided verbal praise. During the sessions that Group A participants received social skills training, Group B participants completed age-appropriate drawing and writing activities independently at their seats. For a complete description of Group B's training sessions see Appendix G.

11. Children in the no treatment control group (Group C) did not receive treatment throughout the 4-week program. Instead, these students completed age-appropriate drawing and writing activities independently at their seats. A doctoral student in educational psychology presented the activities and supervised the students. At the end of the study, Group C received 1-hour of social skills training administered by the principal investigator. For a complete description of Group C's manual see Appendix J.

12. After the treatment phase of the study was completed, all of the pre-test measures were repeated. The same measures were administered at a 1-month follow-up assessment.

13. To assess treatment integrity, the social skills training with peer interaction sessions and peer interaction alone sessions were audiotape recorded. Two independent raters reviewed the tapes and compared the session content to a predetermined protocol. The protocol included all of the major treatment components from the treatment manual (see Appendices F and H). In addition, the raters reviewed the tapes and completed a behavioral measure assessing how effective each participant was at achieving the target social skill (see Appendix I).

14. At the conclusion of the study, participants in Groups A and B completed a social validity questionnaire that contained items such as: "Is it important to start conversations, to use free time, and to compromise with others? Did you have fun role-playing together? Did

your behavior or feelings about yourself change after the program? Would you like to be in a program like this again?" Teachers of students in Groups A and B completed a questionnaire with items such as "Is the teaching of social skills a valuable part of education? Do you feel that the time spent on social skills training was worth the use of school time? Did you observe changes in behavior as a result of the training program? Would you be interested in learning more about social skills training in the future?"

Data Analyses

Analyses of variance (ANOVAs) were conducted at pre-test, posttest, and follow-up assessment to compare the scores of Groups A, B, and C on the RCDS-S, SSRS-S, RCDS-T, and SSRS-T. Analyses of ratings of skill effectiveness were conducted to compare the difference between participants in Groups A and B. In addition, clinically significant change was assessed for each participant.

Estimations of clinical significance and clinically significant change are gaining a place in the psychotherapy treatment outcome literature. However, clinically significant change has been defined in various ways. One assumption of clinically significant change is concerned with the individual's return to normal functioning (Jacobson, Follette, & Revenstorf, 1984). In addition to measuring whether or not the status of the individual has changed after therapy, Jacobson and Truax (1991) assert the importance of knowing how much change has occurred. According to the authors, it is possible that an individual's posttest score can cross the cutoff point but not be statistically reliable. To determine if change was statistically reliable, the authors suggest using the reliable

change index (RC) that was originally proposed by Jacobson, Follette, & Revenstorf (1984) and later amended by Christensen and Mendoza (1986). The RC was used in this study to measure clinically significant change for each participant's scores on the RCDS-S, SSRS-S, and SSRS-T. The RC is equal to $(X_2-X_1)/ S_{diff}$, where X_1 represents the participant's pre-test score and X_2 represents the participant's posttest score. The standard error of difference between the two test scores (S_{diff}) is calculated from the standard error of measurement (S_E) and is equal to $\sqrt{2(S_E)^2}$. An RC greater than 1.96 ($p < .05$) would be unlikely to occur without real change (Jacobson & Truax, 1991). The RC was not calculated for the teacher-rated RCDS because the RCDS is not standardized for use with teachers. As such, the manual does not report a standard error of measurement, which is a necessary component of the RC formula.

CHAPTER V

Results

This chapter includes the results of the data analyses conducted for this study. First, treatment integrity data will be reported. Interrater reliability coefficients for the behavioral measure of skill effectiveness will be specified. Results of analyses of variance (ANOVAs) will be given. Analyses of the behavioral measures for Groups A and B will be reported. The clinical significance ratings of the participants on the dependent variables will be specified. Finally, social validity data will be presented.

Treatment Integrity

In order to assess treatment integrity, two independent raters completed a treatment protocol checklist that evaluated the degree to which the group leaders followed the treatment manual. All treatment sessions were audiotape recorded. The raters listened to the sessions and recorded whether or not the group leader complied with the essential components of the manual (see Appendices E and G for treatment integrity protocol checklists). All sessions met 100% adherence to the treatment manuals according to the scores by the two independent raters.

Reliability of Behavioral Measures

Correlation coefficients were calculated to determine the interrater reliability between the two independent raters on the behavioral measure of skill effectiveness for each target skill (starting a conversation, using free time, compromising). Table 4 presents the means and standard deviations for each target skill by each rater. Table 5 presents the Pearson correlation between the two independent raters for each target skill.

Table 4

Means and Standard Deviations for Each Target Skill by Rater

	Rater 1		Rater 2	
	M	SD	M	SD
Starting a Conversation[a]	9.15	7.46	10.00	8.08
Using Free Time[b]	13.09	5.77	13.18	6.67
Compromising[c]	16.19	6.89	16.45	8.11

Note. Scores could range from 0-20 for Starting a Conversation and Using Free Time. Scores could range from 0-25 for Compromising. Higher scores on Starting a Conversation, Using Free Time, and Compromising mean higher ratings for performing the skill.

[a]n = 27 for Starting a Conversation.

[b]n = 33 for Using Free Time.

[c]n = 31 for Compromising.

Table 5

Interrater Reliability for Each Target Skill

Target Skill	Interrater Reliability
Starting a Conversation	.98**
Using Free Time	.89**
Compromising	.84**

**. Correlation is significant at the .01 level (2-tailed).

Statistical Analyses

The mean percentile rank on the RCDS-S at pre-test for Group A was 37.63, Group B was 41.00, and Group C was 32.42. The pre-test mean percentile rank on the SSRS-S for Group A was 59.21, Group B was 56.04, and Group C was 68.58. The mean percentile rank on the SSRS-T at pre-test for Group A was 36.21, Group B was 44.63, and Group C was 43.50. Results showed a correlation of -.44 between the self-rated scores on the SSRS and RCDS. The correlation was significant at the .01 level. These results are in accord with a previous study by Tryon et al. (2001) that found a correlation of -.45 between self-rated social skills and depression in an adolescent population.

ANOVAs were calculated to compare the scores between Groups A, B, and C on the dependent variables at pre-test, posttest, and follow-up assessment. Table 6 presents the group means and standard deviations for RCDS-S, SSRS-S, RCDS-T and SSRS-T for the pre-test assessment. The correlation between self- and teacher-rated depression on the RCDS at pre-test was not significant, $r = .10$. The correlation between self- and teacher-rated social skills on the SSRS at pre-test was significant at the .01 level, $r = .32$.

Table 6

Pre-test Means and Standard Deviations by Group on the RCDS-S, SSRS-S, RCDS-T, and SSRS-T

	Group A		Group B		Group C	
	M	SD	M	SD	M	SD
RCDS-S	52.21	15.73	51.37	11.00	49.25	8.35
SSRS-S	57.00	7.04	55.29	8.07	58.92	10.68
RCDS-T	49.33	10.12	49.13	9.60	51.33	10.98
SSRS-T	38.00	9.70	38.46	9.92	39.12	10.78

Note. Higher scores on the RCDS mean more depressive symptoms. Higher scores on the SSRS mean more social skills.

At pretest, there were no significant differences between the groups on the RCDS-S, F (2, 71) = .382, p = .684; SSRS-S, F (2, 71) = 1.03, p = .361; RCDS-T, F (2, 71) = .339, p = .713, and SSRS-T, F (2, 71) = .075, p = .928. Hypotheses 1, 2, 3, and 4 were confirmed.

Before the posttest assessment, Group A received social skills with peer interaction, Group B received peer interaction alone, and Group C received no treatment. Table 7 presents the group means and standard deviations for RCDS-S, SSRS-S, RCDS-T, and SSRS-T for the posttest assessment. The correlation between self- and teacher-rated depression on the RCDS at posttest was not significant, r = .01. The correlation between self- and teacher-rated social skills on the SSRS at posttest was significant at the .05 level, r = .29. Analyses of the posttest scores revealed no significant differences

between the groups on the RCDS-S, F (2, 71) = .438, p = .647; SSRS-S, F (2, 71) = 1.79, p = .175; RCDS-T, F (2, 71) = .026, p = .974, and SSRS-T, F (2, 71) = .211, p = .810. Hypotheses 5, 6, 7,8, 9, 10, 11, and 12 were not supported.

Table 7

Posttest Means and Standard Deviations by Group on the RCDS-S, SSRS-S, RCDS-T and SSRS-T

	Group A		Group B		Group C	
	M	SD	M	SD	M	SD
RCDS-S	50.75	14.22	52.25	12.78	49.00	8.30
SSRS-S	57.21	9.97	54.04	9.03	59.29	10.02
RCDS-T	47.33	9.95	46.75	10.25	46.79	9.43
SSRS-T	41.83	11.66	40.00	12.20	41.79	9.44

Note. Higher scores on the RCDS mean more depressive symptoms. Higher scores on the SSRS mean more social skills.

In the month between the posttest and the follow-up assessment, Groups A, B, and C did not receive social skills treatment. Three students did not return to school to complete the follow-up assessment. All of these students were in the social skills training with peer interaction group. Therefore, Group A had 21 participants at follow-up assessment. Table 8 presents the group means and standard deviations for RCDS-S, RCDS-T, SSRS-S, and SSRS-T for the follow-up assessment. The correlation between self- and teacher-rated depression on the RCDS at follow-up was not significant, r = -.08. The correlation between self- and teacher-rated social skills on the SSRS at follow-up was significant at the .01 level, r = .37. The analyses of the follow-up scores revealed no

significant differences between the groups on the RCDS-S, F (2, 68) = 1.62, p = .205; SSRS-S, F (2, 68) = 1.07, p = .350; RCDS-T, F (2, 71) = .008, p = .992; and SSRS-T, F (2, 71) = .047, p = .954. Hypotheses 16, 17, 18, 19, 20, 21, 22, and 23 were not confirmed. Because the groups differed significantly on ethnicity at pre-test, analyses of covariance (ANCOVAs) were also computed. There was no significant difference between groups when ethnicity was used as a covariate.

Table 8

Follow-up Assessment Means and Standard Deviations by Group on the RCDS-S, RCDS-T, SSRS-S, and SSRS-T

	Group A[a]		Group B[b]		Group C[c]	
	M	SD	M	SD	M	SD
RCDS-S	44.10	13.68	50.58	13.24	48.25	9.23
SSRS-S	59.67	9.78	55.29	9.21	57.21	10.98
RCDS-T	47.88	10.86	47.58	9.91	47.96	11.48
SSRS-T	43.92	12.38	42.83	13.38	43.38	10.91

Note. Higher scores on the RCDS mean more depressive symptoms. Higher scores on the SSRS mean more social skills.

[a]n = 21 for Group A.

[b]n = 24 for Group B.

[c]n = 24 for Group C.

Homework completion was calculated for the 24 participants in Group A. The results were as follows: 19 participants (79%) completed homework for the target skill of

Starting a Conversation, 18 participants (75%) completed the homework for Using Free Time, and 16 participants (66%) completed the homework for Compromising. In order to compare the scores on the dependent variables for those participants who completed their homework and those participants who did not complete homework, participants were separated into two groups. A participant who completed all 3 homework assignments was considered a homework completer. Table 9 presents group means and standard deviations for homework completers and non-completers at posttest. Anovas were computed to compare the scores of the homework groups on the dependent variables at posttest. No significant differences were found on the dependent measures at posttest between those participants who completed the homework and those participants who did not complete the homework on the RCDS-S, $\underline{F}$ (1, 23) = .561, $\underline{p}$ = .462; SSRS-S, $\underline{F}$ (1, 23) = 2.00, $\underline{p}$ = .171; RCDS-T, $\underline{F}$ (1, 23) = 2.23, $\underline{p}$ = .150; SSRS-T, $\underline{F}$ (1, 23) = .002, $\underline{p}$ = .968. Table 10 presents the group means and standard deviations for homework completers and homework non-completers at follow-up assessment. No significant differences were found on the dependent measures between homework completers and homework non-completers at follow-up assessment, on the RCDS-S, $\underline{F}$ (1, 20) = .004, $\underline{p}$ = .950; SSRS-S, $\underline{F}$ (1, 20) = .112, $\underline{p}$ = .742; RCDS-T, $\underline{F}$ (1, 23) = 2.75, $\underline{p}$ = .111; SSRS-T, $\underline{F}$ (1, 23) = .476, $\underline{p}$ = .498. However, the majority of students who had clinically significant lower self-rated depressive symptomatology at posttest and follow-up assessment were those participants from Group A who completed the homework assignments (see clinical significance analyses beginning on page 101).

Table 9

Posttest Means and Standard Deviations on the RCDS-S, SSRS-S, RCDS-T, and SSRS-T for Homework Completers and Non-completers

	Homework Completers[a]		Homework Non-completers[b]	
	M	SD	M	SD
RCDS-S	48.36	13.20	52.77	15.26
SSRS-S	60.27	11.01	54.62	8.57
RCDS-T	50.55	8.03	44.62	10.90
SSRS-T	41.73	14.24	41.92	9.56

Note. Higher scores on the RCDS mean more depressive symptoms. Higher scores on the SSRS mean more social skills.

[a] $n = 11$ for Homework Completers.

[b] $n = 13$ for Homework Non-completers.

higher behavioral ratings for Starting a Conversation than participants in Group B, $F(1, 26) = 15.93$, $p < .001$; Using Free Time, $F(1, 32) = 22.05$, $p < .001$; and Compromising, $F(1, 30) = 26.54$, $p < .001$. Therefore, hypotheses 13, 14, and 15 were confirmed.

Table 11

Average Mean and Standard Deviation for Each Skill Effectiveness Rating by Group

	Group A		Group B	
	M	SD	M	SD
Starting a Conversation[a]	16.87	1.60	6.50	7.20
Using Free Time[b]	17.61	2.68	9.84	5.72
Compromising[c]	22.08	1.47	12.17	6.79

Note. Scores could range from 0-20 for Starting a Conversation and Using Free time. Scores could range from 0-25 for Compromising. Higher scores on Starting a Conversation, Using Free Time, and Compromising mean higher ratings for performing the skill.

[a] $n = 27$ for Starting a Conversation.

[b] $n = 33$ for Using Free Time.

[c] $n = 31$ for Compromising.

Clinical Significance Analyses

To measure whether the magnitude of change for each participant in the study was statistically reliable, the reliable change index (RC) proposed by Jacobson et al. (1984) and amended by Christensen and Mendoza (1986) was computed for self-rated RCDS. Four students had clinically significant lower self-rated depressive symptomatology on the RCDS at posttest. Three of these students scored above the

RCDS clinical cutoff score at pre-test and were in treatment Group A. A chi-square was conducted and found no difference in change by group, χ^2 (2, N = 72) = 3.71, p = .157. Table 12 summarizes pre-test scores, posttest scores, and reliable change indices for the 4 participants on the self-rated depression measure at posttest. The reliable change index was not calculated for the teacher-rated RCDS because the RCDS is not standardized for use with teachers. As such, the manual does not report a standard error of measurement, which is a necessary component of the reliable change formula.

Table 12

Pre-test and Posttest Scores and the Reliable Change Index on the RCDS-S

Participant Code Number	Group	Pretest Score	Posttest Score	Reliable Change Index
1	A	79	64	-2.67
8	A	84	72	-2.14
26	A	88	75	-2.32
72	B	47	36	-1.96

Note. RC > -1.96 indicates clinically significant change. Higher scores indicate more depressive symptoms.

When each participant's self-rated depressive symptomatology scores on the RCDS were analyzed from pretest to follow-up, 10 students had clinically significant lower self-rated depressive symptomatology. Table 13 summarizes the significant

reliable change indices for the participants from pre-test to follow-up assessment on the self-rated depression measure. Five students in treatment Group A, 3 students in treatment Group B, and 2 students in the control group achieved clinical significant improvements in depression scores. Two of these students in Group A had scored above the clinical cutoff at pretest. A chi-square was conducted and found no difference in change by group, χ^2 (2, N = 72) = 1.63, p = .444.

Table 13

Pre-test and Follow-up Scores and the Reliable Change Index on the RCDS-S

Participant Code Number	Group	Pretest Score	Follow-up Score	Reliable Change Index
1	A	79	47	-5.70
6	A	70	52	-3.21
14	B	75	57	-3.21
16	C	48	37	-1.96
23	A	49	30	-3.39
32	B	68	55	-2.32
39	A	46	32	-2.50
52	C	61	46	-2.67
66	A	47	36	-1.96
72	B	47	35	-1.96

Note. RC > -1.96 indicates clinically significant change. Higher scores indicate more depressive symptoms.

An analysis of each participant's social skills scores on the self-rated SSRS from pretest to posttest and from pre-test to follow-up assessment revealed that no participants achieved clinically significant improvements in self-rated social skills. According to the analyses of teacher-rated social skills from pre-test to posttest, none of the students displayed clinically significant change on the teacher-rated SSRS. However, 2 students exhibited clinically significant improvements in teacher-rated social skills from pretest to follow-up assessment. Both students were from treatment Group A. A chi-square was conducted and found no difference in change by groups, χ^2 (2, N = 72) = 4.11, p = .128. Table 14 presents the significantly changed scores for the participants on the teacher-rated SSRS.

Table 14

Pre-test and Follow-up Scores and the Reliable Change Index on the SSRS-T

Participant Code Number	Group	Pretest Score	Follow-up Score	Reliable Change Index
6	A	26	53	2.39
47	A	30	56	2.32

Note. RC > 1.96 indicates clinically significant change. Higher scores indicate greater social skills.

Social Validity of Treatments

Social validity was assessed at the conclusion of the study. Participants in Groups A and B and their teachers completed a questionnaire to assess the subjective importance and value of the social skills programs. Teachers were asked to complete questions such

as: "Is the teaching of social skills a valuable part of education? Do you feel that the time spent on social skills training was worth the use of school time? Did you observe changes in behavior as a result of the training program? Would you be interested in learning more about social skills training in the future?" The format of the questionnaire was YES/NO as well as open ended to gain additional information. Teachers completed the questionnaires anonymously and were instructed to be honest and answer the questions in the space provided.

All 4 teachers involved with the study completed the questionnaire and their responses were overall positive. All of the teachers felt that the skills of starting conversations, using free time, and compromising with others were valuable skills for students to learn. One teacher commented that students do not often know how to make use of their free time. In addition, all of the teachers reported that the time spent training children to improve social skills and enhance emotional development was worthwhile. According to one teacher who stated that her students were lacking social skills, the students would benefit tremendously from the skills they have learned. Another teacher stated that the program was so worthwhile she would have liked it to continue for a longer period of time. This teacher also suggested introducing this type of curriculum at an earlier age. In response to whether the teachers observed changes in their students' behavior as a result of the training program, all of the teachers indicated that they have observed changes. One teacher noticed that her students were more "out-going" and another teacher stated that her students, "have learned to compromise and listen to others' opinions." One teacher stated, "Although it was a short period of time, I feel this program was a very positive experience for my students."

Three out of 4 of the teachers stated that they would like to learn more about the social skills curriculum for future use with students. The one teacher who did not want to learn more about the social skills curriculum reported that she would like to continue working in the same way that she does in her classroom. At the conclusion of the study, one teacher requested a report of the findings of the study. The principal investigator promised each teacher a written summary of the results of the study.

In addition to the social validity questionnaire, all 4 teachers completed the importance ratings on the SSRS-T. Teachers were instructed to read the list of 30 social skills and record whether the skill was "Not Important", "Important", or "Critical" for success in their classroom. All of the teachers rated the target skills (starting conversations, using free time, and compromising) as "Important." These results provide additional support for including these target skills in a social skills program for elementary school students.

The student participants also completed a questionnaire to measure the social validity of the treatments. Students were asked to answer questions such as: "Is it important to know how to start conversations, to use your free time, and to compromise with others? Did you have fun role-playing together? Did your behavior or feelings about yourself change after the program? Would you like to be in a program like this again?" The format of the questionnaire was YES/NO as well as open ended to gain additional information. Students completed the questionnaires anonymously and were instructed to be honest and answer the questions in the space provided.

Table 15 presents the responses to each question for each group. Chi-square analyses were computed for each question. Participants in Group A were more likely to

say that they would like to be in a program like this again compared to participants in Group B, χ^2 (1, N = 48) = 5.81, p = .025. In terms of the importance of starting conversations, using free time, and compromising, more participants in Group A felt that the skills were important, compared to participants in Group B, however, results only approached significance, χ^2 (1, N = 48) = 4.36, p = .055. All participants in Groups A and B stated that they had fun role-playing together, therefore, the participants in Groups A and B did not differ in their responses on this question, χ^2 (1, N = 48) = 1.02, p = .500. In response to the question of whether their behavior or feelings changed after the program, participants in Groups A and B did not significantly differ, χ^2 (1, N = 48) = 2.18, p = .119. Additionally, a parent of a participant in the social skills training with peer interaction group personally thanked the principal investigator for teaching her daughter how to compromise.

Table 15

Responses to Student Social Validity Questionnaire

	Group A		Group B	
	Yes	No	Yes	No
Is it important to start conversations, use free time, and compromise?	24	0	20	4
Did you have fun role-playing together?	24	0	23	1
Did your behavior or feelings about yourself change after the program?	17	7	12	12
Would you like to be in a program like this again?	24	0	19	5

Note. Numbers indicate number of participants in each cell.

CHAPTER VI

Discussion

This chapter will summarize and discuss the results of the study. The limitations of the study and recommendations for future research will be outlined. Finally, the implications for school psychologists will be presented.

This study explored the efficacy of school-based social skills training to reduce children's depressive symptomatology and increase social skills. This study sought to clarify the role of direct social skills training and peer interaction in the development of social skills and how these factors related to the reduction of children's depressive symptomatology in a non-clinical population. The social skills training program was adapted from the Skillstreaming curriculum (McGinnis & Goldstein, 1997). This study compared the social skills and depressive symptomatology at pre-treatment, post-treatment, and 1-month follow-up for fifth grade children randomly assigned to the following conditions: A) social skills training with peer interaction, B) peer interaction alone, and C) no treatment control. Prior to the intervention, treatment groups were equated in terms of age, gender, SES, and reading level. However, groups did differ in ethnic background. Treatment groups were equal on self- and teacher-rated depressive symptomatology measured with the RCDS. Groups were also equal at pre-test on self- and teacher-rated social skills on the SSRS.

Results at posttest and follow-up assessments showed no significant differences between the groups on self- and teacher-rated measures of depressive symptomatology and social skills. However, participants who received social skills training with peer interaction scored significantly higher on observed ratings of starting conversations,

using free time, and compromising compared to participants who received peer interaction alone. While the social skills ratings on the paper and pencil measure of social skills were not different, when the participants had to use the skills in a role-play scenario, the participants who received direct social skills training were more effective in their ability to display the skill compared to those participants who only received peer interaction. This indicates that children in the social skills with peer interaction group acquired the social skills that were taught while participants without specific instruction were deficient in these skills.

In recent years, traditional methods of measuring treatment efficacy have been called into question (Barlow, 1981). There is a growing concern that comparing group means does not assess how each participant responded to the treatment. As a result of these concerns, clinical significant change using the reliable change index (RC; Christensen & Mendoza, 1986) was calculated for each student on the RCDS-S, SSRS-S, and SSRS-T. The RC was not calculated for the participants' scores on the RCDS-T because this measure is not standardized for use with teachers. Results of the clinical significance ratings revealed that 2 participants in the social skills training with peer interaction group had clinically higher social skills on the teacher-rated SSRS. Four participants (all of whom were from the treatment groups) had clinically significant lower self-rated depressive symptomatology scores from pre-test to posttest. All 4 of these students had depressive symptomatology at pre-test that was above the clinical cutoff score. In addition, 10 participants (8 of whom were from the treatment groups) had clinically significant lower self-rated depressive symptomatology scores from pre-test to follow-up assessment. Three of the 10 students had depressive symptomatology at pre-

test that was above the clinical cutoff score. One must not prematurely assert that the change in depressive symptomatology was due to the social skills intervention because those students who scored above the cutoff on depressive symptomatology were then interviewed by the school social worker and invited to return to her office if they desired. The results, however, do show that despite the lack of group differences, individual children showed clinically reliable improvements. The majority of these children were in the treatment groups.

Results of social validity data indicated that participants in both treatment groups believed that the 3 target social skills were important and enjoyed the role-play activities. While the majority of students reported that they would like to be in a program like this again, more participants in the social skills training with peer interaction group wanted to be in a program again compared to participants in the peer interaction alone group. Overall, the teachers reported positive feelings toward the program and were interested in gaining more information about social skills training. In addition, a parent of a child in the social skills training with peer interaction group personally thanked the principal investigator for teaching her daughter how to compromise.

There are some limitations in this study including the short length of the social skills program. The program included 8 sessions over a 1-month period. Perhaps a program that is conducted over a longer period of time (i.e. 12 or 16 weeks) might allow for the development of more social skills and yield significant decreases in RCDS scores or increases in SSRS scores. In addition, the follow-up assessment for this study was only 1 month after the social skills program. It was not possible to conduct a longer follow-up assessment as the students graduated from the school. Because the follow-up

assessment was short, it was difficult to detect a latency period found in Fine et al. (1991) for the application of learned social skills and the impact on mood. Since the participants in this study graduated at the end of the school year, the study of a population of children who will be in the school the following year is recommended. Therefore, a longer social skills program with a longer follow-up assessment period is suggested for future studies.

The school setting in itself contains a number of strengths and limitations. First, it is quite possible that the students spoke to each other about the content of each session. Many of the students had classmates and friends that were in a different treatment group. The principal investigator observed the students talking to each other in the hallway after the sessions. As such, it is unclear whether those students in the control group were exposed to the social skills training and/or peer interaction. In addition, children in the no treatment control group completed age-appropriate activities in a classroom supervised by a doctoral student. However, the change in environment could have acted as an intervention by exposing participants to potential new friends.

Another limitation of the study was the measure used to assess social skills. The SSRS is a broad measure of social competence that includes a number of skills that were not taught during the training program. As such, the principal investigator developed and utilized a behavioral role-play activity and rating scale to measure skill effectiveness. The principal investigator suggests the establishment of a standardized behavioral measure to assess children's social skills. In addition, due to the high standard error of measurement reported in the SSRS manual, for a participant to achieve clinical significant change using the RC, the child must increase their social skills score by approximately 35 points. A number of students in the treatment groups had increased

self-rated social skills at follow-up assessment but no student had gains greater than 35 points. Finally, behavioral measures of the 3 target social skills should have been conducted at pre-test in order to compare the scores at posttest.

Another limitation focuses on the measure used to assess self- and teacher-rated depressive symptomatology. Self-report measures in general have been known to have several weaknesses including the possibility that students report desired responses rather than accurate responses. Students may also have difficulty understanding the items and therefore respond inaccurately. In addition, there is a paucity of measures used to assess teacher's ratings of depression in their students. Therefore, the teachers in this study completed the RCDS. Students and teachers, however, did not show agreement in ratings of depressive symptoms. It is believed that a specific measure of a teacher's perspective regarding a student's symptoms would yield a more accurate assessment of depressive symptomatology.

Perhaps the most important limitation of the study involves the study population. The participants in this study were not a clinical population. Therefore, the goal was to reduce depressive symptoms that for the majority of the participants did not exist at a high level. A better test of the effectiveness of the treatments would employ groups of clinically depressed youngsters. Due to the difficulty of acquiring a pathological sample of youngsters in the school setting, a single-case design could be utilized for future studies on social skills training for treating depression in children.

Findings from this study have implications for school psychologists. The results of the study show that the participants who received social skills training with peer interaction had ratings on the 3 target skills that were significantly higher than

participants who received peer interaction alone. In addition, 2 students in the social skills training with peer interaction group had clinically significant improvements in teacher-rated social skills. Therefore, teaching social skills using a direct teaching method with peer interaction has important benefits for skill acquisition. Because there is a link between depression and social skills in the literature, the higher social skills ratings found for Group A participants may result in less future depressive symptomatology. The long-term impact of school-based social skills training for increasing social skills and decreasing depressive symptomatology in children warrants further investigation.

Appendix A

APA Approval Letter

American Psychiatric Publishing, Inc.

AMERICAN PSYCHIATRIC PUBLISHING, INC.

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September 6, 2002

Alison Soffer
205 East 78th Street, 2E
New York, NY 10021

Dear Ms. Soffer:

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Sincerely,

Kathy Stein
Director of Financial and Business Ops.

Appendix B

Parent/Guardian Consent Form

Dear Parent or Guardian,

My name is Alison Soffer. I am conducting a research study as part of my doctoral training at the City University of New York (CUNY) Graduate School and University Center. The title of the study is: "School-Based Social Skills Training to Improve Children's Social and Emotional Functioning." Your child may benefit from this program by developing social skills as well as improving feelings about himself/herself.

Your child's participation in this study will involve the completion of three questionnaires: a social skills rating scale, a measure of sadness/worry, and a brief survey asking your child's age, gender, and ethnicity. It should take your child 25-30 minutes to complete the questions. I will also seek access to your child's most recent reading test score. Teachers will complete a social skills scale and measure of sadness/worry for your child. Your child will have the opportunity to participate in a group program to increase his or her social skills. By learning how to interact better with others, your child may develop more friendships and feel better about himself/herself.

Alison Soffer, or a graduate student in psychology, will conduct eight, 40-minute classes during the school day, twice per week for 4 weeks. The program will focus on social skills such as talking with peers and solving problems. The sessions will be tape recorded and reviewed by trained individuals. Your child's social skills and feelings of sadness/worry will be measured by your child and his/her teacher by completing the same two questionnaires at the end of the program and 4 weeks later. For completing the study, I will give your child a $3.00 coupon to McDonald's.

Information concerning your child will be used only for this research study and will not be part of his/her school records. My research advisor and I will be the only people who see your child's questionnaires. Results will be reported as group results and will not identify the name of any individual child. I will keep the questionnaires and tapes confidential in a locked file cabinet with sole access to me. If the measure of sadness/worry indicates that your child needs additional support, I will notify the School-Based Support Team and the guidance counselor.

Participation in this study is voluntary. You may withdraw your consent at any time. Deciding not to have your child participate will in no way influence the educational opportunities available to your child. There is no known risk to your child by participating in this study. However, should your child feel unhappy or embarrassed while completing the questionnaires, or during any of the group sessions, he or she may refuse to participate at any time without a problem.

If you have any questions about this study please contact me at (212) 472-9689 or Georgiana Tryon, dissertation advisor, at CUNY Graduate School and University Center at (212) 817-8293. If you have questions about your child's rights as a participant, you can contact Hilry Fisher, Sponsored Research/Graduate School and University Center/CUNY at (212) 817-7529.

Thank you in advance for giving this study your serious consideration.

_____

Alison Soffer, Principal Investigator

---PLEASE TURN OVER---

Please fill out the consent form below. Keep one of these forms for your records and give the other one to your child to hand in to me.

I **agree** to have my child _____ participate:
(child's name)

_____ _____
Parent's or Guardian's Signature Date

I agree to let my child's voice be tape-recorded for the sole purpose of this study
(Circle one)
Yes No

If you agree to let your child participate in the study, please complete the following information below.

Child's Father's occupation: _____

Child's Mother's occupation: _____

Highest level of school completed by child's mother:

_____less than 7th grade
_____junior high school (9th grade)
_____some high school (10th or 11th grade)
_____high school graduate
_____some college or specialized training
_____college or university graduate
_____graduate degree

Highest level of school completed by child's father:

_____less than 7th grade
_____junior high school (9th grade)
_____some high school (10th or 11th grade)
_____high school graduate
_____some college or specialized training
_____college or university graduate
_____graduate degree

I **do not** agree to have my child _____ participate:
(child's name)

_____ _____
Parent's or Guardian's Signature Date

Appendix C

Child Assent Form

My name is Alison Soffer. I am a student at City University of New York (CUNY) Graduate School and University Center. I am working on a study to learn how children get along with each other. After the study, you may get along better with others and feel better about yourself.

To participate in this study you must fill out three forms: 1) a form about getting along with others, 2) a form about your feelings of worry and sadness, and 3) a short form asking your age, if you are a boy or girl, and your ethnicity. Your teacher will also fill out a form about how you get along with others and a form about your feelings of worry and sadness.

You will also be able to participate in a group program about gaining skills such as talking with classmates and solving problems. Alison Soffer or a graduate student will give eight, 40-minute classes during the school day. These classes will happen two times per week for 4 weeks. The sessions will be tape-recorded and listened to by trained students. Your skills for getting along with others and your feelings of worry or sadness will be measured by you and your teacher by completing the forms at the end of the program. The same forms will be completed by you and your teacher about a month after the program. For finishing the study, I will give you a $3.00 coupon to McDonald's.

Information about you will only be used for this study. Information will not be part of your school records. Results of the study will not show your name. I will keep the information private in a locked file cabinet. If the measure of sadness and worry shows that you need some help, I will tell someone who works at your school. I will do this because it is important that people can help you feel better.

Participation in this study is your choice. If you do not want to participate, it is okay. If you feel unhappy or embarrassed, you may stop at any time without a problem.

If you choose to participate in the program, please sign your name and write the date below. Keep one of these forms and give the other one to me.

Child's Name	Investigator's Name
Date	Date

people can learn?" (Students respond) "Ok, let's use _____. Let's say someone has never _____ before but he/she wants to learn. What has to happen? (Students respond). Good! First, someone teaches you the steps of the skill. Then the person shows you how to do it. Next, you try to do it. Then you get feedback on how you did. Feedback is something that someone says or does is response to your actions. For example, feedback is when you do an activity and someone says, "Great job!" or "You're almost there, try it this way." Last, you practice what you've learned. That is how you learn any skill like playing basketball or doing ballet. You learn the steps, observe someone doing it, try it yourself, get feedback, and practice on your own.

4. **Purpose of Group**

   In the next few weeks we will meet two times per week and learn "people skills." "Everyone in this group will listen to the steps of a skill, observe me act out the skill, try the skill with your classmates, get feedback from myself and the classmates, and then practice on your own."

5. **Introduce Easel**

   (Show the students the easel with first page showing numbers 1-3) "At each group meeting I will use this easel to write the "Skill of the Week." We will learn 3 people skills over the next month. By the end of the month these 3 numbers will be filled in."

6. **Group Rules**

   "It is important to help and encourage each other. There are some things that we can do to be helpful. Let's think of some rules for the group. I will write them on the pad. For example, when someone is talking the group members should _____." (make sure the list contains: listen to the speaker, face the speaker, speak loudly and clearly).

7. **Name the Group**

   Encourage the students to brainstorm a name for the group that represents learning about the skills for interacting with others. Choose three ideas and have the class vote for each name. If they can't think of one, suggest "Skill Learners" or "Social Learners."

8. **Encourage Students to Participate**

   Create a comfortable atmosphere by encouraging students to ask questions and express their feelings about the course. Tell the students that their opinions are important.

9. **Show the Skill Folders**

   "Each member of this group will receive a Skill Folder. After some of the sessions you will have a homework assignment to complete. All of the completed assignments will be placed inside these folders. The folders will stay in a box that I will bring to each session."

10. Reinforcement for Participation

Each member of the group is given an additional piece of candy for their participation in the first session.

SESSION 2

Materials:
Training Manual
Large Easel Pad

Purpose: To review group purpose
To instruct, model, and discuss need for Skill #1- Starting conversations

Procedures:

1. Review Group Purpose

"Remember last session when I said that in this group we will learn about people skills? You will spend the next few weeks learning about 3 people skills and practicing them with your classmates."

2. Define Skill #1-Starting Conversations

"Today we are going to learn a very important skill. It is called starting conversations. What do you think that means?"

(Respond positively to students' answers) "Starting conversations with others means that a person begins talking with another person. This person may be someone in their class, a person their age, a teacher, or a parent."

3. Label and Explain Skill Steps

"Let's talk about how you can start conversations. Here are the steps that make up the skill of starting conversations."

(Group leader turns to the easel page to the pre-written Skill #1 and its 4 steps.) "I will read the steps of the skill called starting conversations and then describe each step."

1. Choose the person with whom you want to talk.
2. Decide what you want to say.
3. Choose a good time and place
4. Start talking in a friendly way

1. Choose the person with whom you want to talk.
(Remind students to consider if their talking is going to bother someone else- for example, if someone is trying to finish their work.)

2. Decide what you want to say.
(Suggest ideas such as hobbies, favorite sport, movie, or book, what they watched on TV last night)

3. Choose a good time and place.
(Discuss how to choose a good time. For example, when the other person is not busy and when the student isn't supposed to be doing something else like their classwork)

4. Start talking in a friendly way.
(Discuss body language and nonverbal communicators that show a friendly attitude and suggest watching the person to see if they are interested. Discuss not talking too long without giving the other person a chance to talk)

4. Model the Skill

"These four steps, in this order, make up a good way to start a conversation. I am going to model the skill for you and show you how to follow these steps. I will be like a coach who is teaching the players how to play football. You're my team so huddle in! Try to pick out the steps as I model the skill. Later, you will have a chance to go through these same steps.

"Here is the situation. I want to tell a classmate about a project that I did."
(Ask for a volunteer to help the group leader model the skill.)
"What should I do first? What is the first step?"
(Group leader points to the first step. Call on a child to say the first step aloud. Continue until all 4 steps are reviewed.)

"Now I am going to walk over to my classmate _____. I am thinking about what I want to say to him/her. I know! I will show him/her the project that I just finished. But I have to look around and make sure he/she isn't talking to someone else. OK, he/she is alone. So now I am going to start talking in a friendly way. Hi _____. What's up? I wanted to show you my art project. What do you think?"

"Did I follow all of the skill steps?" (Students respond)
"Did I choose a person with whom to talk?" (Students respond)
"Did I decide what to say?" (Students respond)
"Did I choose a good time and place?" (Students respond)
"Did I start talking in a friendly way?" (Students respond)

"How do you think I did on this skill?" (Students respond). I agree, pretty good!"

5. **Establish Student Skill Need**

"So I just modeled the skill. It's not always easy to start conversations with others. Let's think of some times in your real lives when you were nervous or didn't know what to say." When was there a time that you could have used some help starting a conversation?"
(Write a few students names on the easel with their problem situations)

"Who wants to try and solve these problems? Next group meeting we are going to use the steps to start conversations with others (Go to the easel and point to and say each step, choose a person with whom to talk, decide what to say, choose a good time and place, start talking in a friendly way). We will act out different situations. This is called role-playing. Get ready to have some fun and become actors and actresses! See you next time!"

SESSION 3

Materials:
Training Manual
Large Easel Pad
Skillstreaming Skill Cards

Purpose:

To review group rules
To review steps of Skill #1-Starting conversations
To assign pairs and have pairs role-play skill
To have students role-play skill in front of group
To give performance feedback to students
To complete in class part of the homework form and assign homework

Procedures:

1. **Review Group Rules**

"Do you remember the rules for the group?" (look at the speaker, listen carefully, speak loudly and clearly).

2. **Review Steps of Skill #1**

"Here are the steps for starting conversations with peers."
1. Choose the person with whom you want to talk.
2. Decide what you want to say.
3. Choose a good time and place
4. Start talking in a friendly way

3. **Assign Pairs for Role-Play Activity**

"I am going to read a list of pairs of students who will work together on an activity. Listen carefully for your name and your partner's name. When you find your partner, walk to a separate area of the room and wait for the next direction."

4. **Role-Play Skill in Pairs**

"Last session you came up with really good examples of situations when you needed some help starting a conversation. Now we are going to get into pairs and act out a situation. Each group will receive a Skill Card to remind them of the steps. (Give out one Skill Card to each group) Here is the situation-Start a conversation with your partner. When I tell you the time is up you must switch places and allow your partner to start a conversation. After you practice in pairs, each pair will present their role-play for the rest of the group."

(Give students 7-10 minutes to role-play in pairs. Have student spread out around the classroom so that they cannot hear other groups preparing their skits.)

5. **Role-Play In Front of Whole Group**

"Okay, before we get started with this role-play, I am going to ask you to watch carefully. Each person will get a chance to start a conversation. I want you to watch for each step. When the role-play is over, I need you to tell _____ and the rest of us what he/she did correctly. The actors will need to say out loud what they are thinking so we know they are following the steps. Are you ready?" (Call names of pairs to come up to the front of the room and role-play the scenario)

6. **Performance Feedback**

Instruct the class to applaud the role-play. "Let's give some feedback to _____. If you were the other person, how would you react with the way that he/she started a conversation? Did he/she follow the first step? Did he/she follow the 2nd, 3rd, 4th step? How did they do?" Call the next pair. (Repeat procedure for each participant)

7. **Assign Home Activity**

"Good job on the role-plays! (Collect Skill Cards) Now I am giving each of you a homework sheet. We are going to fill in the top right now. Write in the steps of starting conversations and write when, where, and with whom you might use this skill. Remember the steps for starting conversations and try the steps during the day and at home. We will talk about your experiences at the next group meeting."

SESSION 4

Materials:
Training Manual
Large Easel Pad
Skill Folders

Purpose: To ask students about homework experiences for starting conversations
To collect homework assignment forms

4. Start the activity.
"Begin the activity."

4. Model the Skill

"These four steps, in this order, make up a good way to use free time. I am going to model the skill for you and show you how to follow these steps. Try to pick out the steps as I model the skill. Later, you will have a chance to go through these same steps.

Here is the situation. My teacher just told me that after I finish the worksheet (hold up a worksheet), I have 5 minutes of free time to do whatever I want at my seat.
"What should I do first? What is the first step?"
(Group leader points to the first step. Call on a child to say the first step aloud. Continue until all 4 steps are reviewed)

"Ok. My teacher just told me that when I am finished with my worksheet I could have a five minutes of free time. Let me see if I finished my assignment. Yes. I answered all of the questions. What can I do with the next few minutes? Well, I can read my book, I can get up and walk around (but, everyone is still working, I can't bother them). I can start my homework for tomorrow. Which one do I want to do the most? Well, I think I will read. I want to see what happens to Harry Potter. Let me get my book out of my desk and get started."

"Did I follow all of the skill steps?" (Students respond)
"Did I make sure I finished all of my work?" (Students respond)
"Did I think of activities that I would like to do?" (Students respond)
"Did I choose an activity?" (Students respond)
"Did I start the activity?" (Students respond)

"How do you think I did on this skill?" (Students respond). "Great!"

5. Establish Student Skill Need

"So we just modeled the skill. Let's think of some times in your everyday lives when you finished all of your work or chores and you had to decide what to do. When was there a time that you could have done something with your free time?"

(Write a few students names on the easel with their problem situations)

"Who wants to practice using their free time in a good way? At our next group meeting we are going to use the steps to help us use our free time. Get ready to have some fun and become actors and actresses! See you next time!"

SESSION 5

Materials:
Training Manual
Large Easel Pad
Skillstreaming Skill Cards

Purpose: To review steps of Skill #2-Using free time in a good way
To assign pairs and have students role-play skill
To have students role-play skill in front of group
To give performance feedback to students
To complete in class part of homework form and assign homework

Procedures:

1. **Review Steps of Skill #2**
   1. Check to be sure you have finished all of your work.
   2. Think of the activities that you would like to do.
   3. Choose one.
   4. Start the activity.

2. **Assign Pairs for Role-Play Activity**
   "I am going to read a list of pairs of students that will work together on an activity today. Listen carefully for your name and your partner's name. When you find your partner, walk to an area of the room and wait for the next direction."

3. **Role-Play Skill in Pairs**
   "Last session you came up with really good examples of times when you finished an activity and needed to find other activities to complete. Now we are going to get into pairs and act out a situation. Each group will receive a Skill Card to remind them of the steps. (Give out one Skill Card to each group) We are going to role-play (act out) a situation. Here is the situation- Pretend you are at home and you just finished your homework. When you hear the bell ring, you must switch places and allow your partner to take a turn. After you practice in pairs, each pair will present their role-play to the rest of us."

   (Give students 7-10 minutes to role-play in pairs. Have student scatter around the classroom so that they cannot hear other groups preparing their skits.)

4. **Role-play in front of whole group**
   "Okay, before we get started with this role-play, I am going to ask you to watch carefully. Each person will get a chance to use his or her free time. I want you to watch for each step. When the role-play is over, I need you to tell _____ and the rest of us what he/she did correctly. The actors

will need to state out loud what they are thinking so we know they are following the steps. Are you ready?" (Call pairs to come up to the front of the room and role-play the scenario)

5. **Performance Feedback**
   Applaud the group. "Let's give some feedback to _____. How did he/she use their free time? Did he/she follow the first step? Did he/she follow the 2nd, 3rd, 4th step? How did they do? (Repeat for each participant). Call up the next pair.

6. **Assign Home Activity**
   "Super job on the role-plays! (Collect Skill Cards) I am giving each person a homework sheet. We are going to fill in the top right now. Write the steps of the skill called using free time and write when, where, and with whom you will use this skill. Remember the steps for using free time and try the steps during the day and at home. We will talk about your experiences at the next group meeting."

SESSION 6

Materials:
Training Manual
Large Easel Pad
Skillstreaming Skill Cards

Purpose: To ask students about homework experiences of using free time
To collect homework assignment forms
To instruct, model, and discuss skill need for Skill #3- Compromising

Procedures:

1. **Ask Students About Homework Experiences with Using Free Time**
   "Who wants to share with the group an experience they had with the skill of using free time in a good way?" (Choose 3 students to give examples). Students should pass their homework assignment forms forward. "I will put your homework forms into your Skill Folders."

2. **Define Skill #3-Compromising**
   "Today we are going to learn another very important skill. It's called Compromising." (Group leader turns easel to Skill of the Week page and writes Compromising at #3) "What do you think that means?"

   (Respond to students' answers) "Compromising means finding a middle ground during a disagreement to help both people be happy. When one person feels a certain way and another person feels a different way, sometimes there is an area in the middle that they might agree on. (Write definition next to skill #3)

3. Label and Explain Skill Steps

Let's talk about how you can compromise with others during disagreements. Here are the steps that make up the skill of Compromising."

(Group leader turns to the easel page to the pre-written Skill #3 and its 5 steps.) "I will read the steps of the skill called compromising and then describe each step."

1. Decide if you and the other person disagree.
2. Tell how you feel about the problem.
3. Ask the person how he/she feels about the problem.
4. Listen to the answer.
5. Suggest or ask for a compromise.

1. Decide if you and the other person disagree.
"Are you getting angry? Is the other person getting angry? What would that look like?"
2. Tell how you feel about the problem.
"Say this in a friendly way so that the other person doesn't get any angrier."
3. Ask the person how he/she feels about the problem.
"Well what do you think about this problem? What should we do?"
4. Listen to the answer.
"Remember to listen to their answer and not interrupt them while they are talking."
5. Suggest or ask for a compromise.
"Suggest a plan that will satisfy you and the other person."

4. Model the Skill

"These five steps, in this order, make up a good way to compromise with others during disagreements. I am going to model the skill for you and show you how to follow these steps. Try to pick out the steps as I model the skill. Later, you will have a chance to go through these same steps. Here is the situation. My parents want me to babysit my little brother but I need to do my homework.

"What should I do first? What is the first step?"
(Group leader points to the first step. Call on a child to say the first step aloud. Continue until all 5 steps are reviewed.)

"My parents just came home and tell me I have to babysit my little brother. But I don't want to. My teacher gave us so much homework and I have to get started. I do not agree with my parents that I should have to babysit. I am going to tell my Mom how I feel. Mom, I don't think I

should have to babysit for my brother. I have to do my homework. What do you think Mom? Mom explains that she has to go to my school for a meeting and I listen. How about this? If I babysit for my brother, when you come home can I stay in my room with the door closed to finish my work?"

"Did I decide if the other person and I disagree?" (Students respond)
"Did I tell them how I felt about the problem?" (Students respond)
"Did I ask the person how they felt about the problem?" (Students respond)
"Did I listen to the answer?" (Students respond)
"Did I suggest or ask for a compromise?" (Students respond)

"How do you think I did on this skill?" (Students respond).

5. **Establish Student Skill Need**

"So we just modeled the skill. Let's think of some times in your everyday life when you had a problem with someone because you wanted to do or have different things? When was there a time that you could have compromised?"

(Write a few students names on the easel with their problem situations)

"Who wants to try and solve these problems? Next group meeting we are going to use the steps to compromise with our partners. See you soon!"

SESSION 7

Materials:
Training Manual
Large Easel Pad
Skillstreaming Skill Cards
Bell

Purpose: To review steps of Skill #3-Compromising
To assign pairs to role-play skill
To role-play skill in front of group
To give performance feedback to students
To complete in class part of homework form and assign homework

Procedures:

1. **Review Steps of Skill #3**
   1. Decide if you and the other person disagree.
   2. Tell how you feel about the problem.
   3. Ask the person how he/she feels about the problem.
   4. Listen to the answer.

5. Suggest or ask for a compromise.

2. Assign Pairs for Role-Play Activity

"I am going to read a list of pairs of students who will work together on an activity. Listen carefully for your name and your partner's name. When you find your partner, walk to an area of the room and wait for the next direction."

3. Role-Play Skill In Pairs

"Last session you came up with really good examples of times when you had disagreements with others. Now we are going to get into pairs and act out a situation. Each group will receive a Skill Card to remind them of the steps. (Give out one Skill Card to each group) We are going to role-play (act out) a situation. Here is the situation- Pretend your friend comes to your house and wants to play one game, but you want to play another game. When you hear the bell ring, you must switch places and the other person must pretend. After you practice in pairs, each pair will present their role-play to the rest of us."

(Give students 7-10 minutes to role-play in pairs. Have student spread out around the classroom so that they cannot hear other groups preparing their skits).

4. Role-Play In Front of Whole Group

"Okay, before we get started with this role-play, I am going to ask you to watch carefully. Each person will get a chance to compromise with someone. I want you to watch for each step. When the role-play is over, I need you to tell _____ and the rest of us what he/she did correctly. The actors will need to state out loud what they are thinking so we know they are following the steps. Are you ready?" (Call a pair to come up to the front of the room to role-play the scenario).

5. Performance Feedback

Applaud the group. "Let's give some feedback to _____. How did he/she compromise? Did he/she follow the first step? Did he/she follow the 2nd, 3rd, 4th and 5th step? How did they do? (Repeat for each participant) Call up the next pair.

6. Assign Home Activity

"Terrific role-plays! (Collect Skill Cards) I am giving each person a homework sheet. We are going to fill in the top right now. Write the skill steps and write when, where, and with whom you will try the skill. Remember the steps of Compromising and try the steps during the day and at home. We will talk about your experiences at the next group meeting.

SESSION 8

Materials:
Training Manual
Large Easel Pad
Packets of Questionnaires

Purpose: To ask students about homework experiences with compromising
To collect homework assignment forms
To summarize all of the target skills and discuss session content
To administer packet of questionnaires

Procedures:

1. **Ask Students About Homework Experiences with Compromising**
   "Who wants to share with the group an experience they had using the skill of Compromising?" (Choose 3 students) Students should pass their homework assignment forms forward. "I will put your homework forms into your Skill Folders."

2. **Summarize Target Skills and Discuss Course Content**
   Over the past few weeks we have learned about 3 people skills. Who can remember what they were? (Turn to Skill of the Week page in easel). Read the skills to the group. You learned the steps of the skills. You also watched as I modeled the skills. Then you told me about times when you had to use the skill in your lives. You role-played the skill with a partner. Then you role-played the skill in front of the whole group. Your peers and I provided feedback about how you used the steps. Also, you completed homework activities and wrote about your experiences on the homework forms. You were very busy!

3. **Administer Packet of Questionnaires**
   I would like you to fill out this information packet. It is very important that you are honest when you answer the questions. (Students should take about 30 minutes to complete the questionnaires)

4. **Good-Bye to the Group**
   It was nice to get to know you over the last few weeks. I will be coming back to your school in about a month. At that time, I will ask you to fill out some forms again. Good-bye! See you soon!

Appendix E

Homework Report

Name: _____ **Date:** _____

FILL IN DURING THIS CLASS

1. Skill: _____
2. Steps:

_____

_____

_____

_____

_____

3. Where will you try the skill?

4. With whom will you try the skill?

5. When will you try the skill?

FILL IN AFTER DOING THE SKILL

1. What happened when you did the skill?

2. Which skill steps did you really follow?

3. How good a job did you do in using the skill? (check one)

   ____ excellent ____ good ____ fair ____ poor

4. Why did you check that one?

Appendix F

Social Skills Training with Peer Interaction Treatment Integrity Protocol

Session 1		
Group leader was prepared with the materials	Yes	No
Group leader was enthusiastic about the group	Yes	No
Group leader conducted the icebreaker activity	Yes	No
Group leader defined social skills	Yes	No
Group leader discussed the purpose of the group	Yes	No
Group leader introduced the easel	Yes	No
Group leader discussed the rules of the group	Yes	No
Group leader named the group according to vote	Yes	No
Group leader encouraged the students to participate	Yes	No
Group leader described the skill folders	Yes	No
Group leader provided the students with candy at the end	Yes	No
Session 2		
Group leader was prepared with the materials	Yes	No
Group leader reviewed the purpose of the group	Yes	No
Group leader defined the skill	Yes	No
Group leader labeled and explained the skill steps	Yes	No
Group leader modeled the skill	Yes	No
Group leader discussed the students need for the skill	Yes	No
Session 3		
Group leader was prepared with the materials	Yes	No
Group leader reviewed the group rules	Yes	No
Group leader reviewed the skill steps	Yes	No
Group leader assigned pairs for the role-play activity	Yes	No
Group leader had pairs create and practice their role-play	Yes	No
Group leader had pairs role-play in front of the group	Yes	No
Group leader provided performance feedback to students	Yes	No
Group leader assigned the homework activity	Yes	No

Session 4

Group leader was prepared with the materials	Yes	No
Group leader asked the students about homework experiences	Yes	No
Group leader defined the skill	Yes	No
Group leader labeled and explained the skill steps	Yes	No
Group leader modeled the skill	Yes	No
Group leader discussed the students need for the skill	Yes	No

Session 5

Group leader was prepared with the materials	Yes	No
Group leader reviewed the skill steps	Yes	No
Group leader assigned pairs for the role-play activity	Yes	No
Group leader had pairs create and practice their role-play	Yes	No
Group leader had pairs role-play in front of the group	Yes	No
Group leader provided performance feedback to students	Yes	No
Group leader assigned the homework activity	Yes	No

Session 6

Group leader was prepared with the materials	Yes	No
Group leader asked the students about homework experiences	Yes	No
Group leader defined the skill	Yes	No
Group leader labeled and explained the skill steps	Yes	No
Group leader modeled the skill	Yes	No
Group leader discussed the students need for the skill	Yes	No

Session 7

Group leader was prepared with the materials	Yes	No
Group leader reviewed the skill steps	Yes	No
Group leader assigned pairs for the role-play activity	Yes	No
Group leader had pairs create and practice their role-play	Yes	No
Group leader had pairs role-play in front of the group	Yes	No
Group leader provided performance feedback to students	Yes	No
Group leader assigned the homework activity	Yes	No

Session 8

Group leader was prepared with the materials	Yes	No
Group leader asked students about homework experiences	Yes	No
Group leader summarized target skills & discussed course content	Yes	No
Group leader administered the packet of questionnaires	Yes	No
Group leader said good-bye to the group	Yes	No

Appendix G

Group B- Peer Interaction Training Manual

SESSION 1

Materials:
Treatment Manual
Large Easel Pad
Bag of Candy
Folders

Purpose: To establish rapport between the group leader and the students as well as among the students
To outline basic information about the group
To determine a group name and group rules

Procedures:

1. **Introduction**
   The group leader will introduce herself and briefly describe the purpose of the group. Throughout the introduction the group leader will use an enthusiastic tone.

   "Hi everyone! My name is _____. I am here at your school for a special visit. Over the next few weeks we will get to know each other while you will be completing different activities. This first session is about getting to know each other and having some fun. Is everyone ready?"

2. **Icebreaker Activity**
   In order to facilitate the introductions of group members, the instructor will begin with an icebreaker activity. The group leader will approach each child with a bag full of candy and instruct the student to take as many as they want. (politely limit the student if they take more than five). After each child has taken candy, the group leader will select two pieces and place them in front of her. The group leader will tell the group that in order to get to know each other, for each piece of candy in front of them, he/she will say one important fact about himself/herself. The group leader will demonstrate the procedure by stating two important facts about herself. "My name is _____." " I like to _____."

3. **Purpose of Group**
   "This group will be working together sometimes and alone other times. Each week will be either an alone activity or a group activity. During the group activities, you will be working with a partner to act out different situations. This is called role-playing. During the alone activities, you will complete the activities that are in this packet. I might ask you to read, write, or draw."

4. **Group Rules**
   "It is important to help and encourage each other. There are some things that we can do to be helpful. Let's think of some rules for the group. I will write them on the pad. "For example, when someone is talking the group should _____." (make sure the list contains: listen to the speaker, face the speaker, speak loudly and clearly).

5. **Name the Group**
   Encourage the students to brainstorm a name for the group that represents interacting with others and acting out different situations. Choose three ideas and have the class vote for each name. If they have difficulty thinking of a name, suggest "The Interacters" or "School Actors."

6. **Encourage Students to Participate**
   Create a comfortable atmosphere by encouraging students to ask questions and express their feelings about the course. Tell the students that their opinions are important.

7. **Show the Folders**
   "Each member of this group will receive a Folder. During some sessions you will work on activities alone. When you are finished with the activity you will place it in your own folder. The folders will stay in a box that I will bring to each session."

8. **Reinforcement for Participation**
   Each member of the group is given an additional piece of candy for their participation in the first session.

SESSION 2

Materials:
Training Manual
Age-Appropriate Activity Sheet #1
Folders

Purpose: To review group purpose
To have students complete age-appropriate activities independently

Procedures:

1. **Review Purpose**
   "Remember last session when we talked about how you are going to sometimes complete tasks alone and how sometimes you are going to interact with each other?"

2. **Give out Age-Appropriate Activity Sheets**
   "Today you are going to work on an activity alone. At the next session you will be working together on an activity. If you have any questions, raise your hand and I will come to your desk." (Allow students 35 minutes to work on the activity. After the time limit is completed, collect their folders.)

SESSION 3

Materials:
Treatment Manual
Bell

Purpose: To explain how to role-play
To review group rules
To assign pairs and have pairs role-play skill
To have students role-play skill in front of group

Procedures:

1. **Review Group Rules**
   "Do you also remember the rules for the group?" (look at the speaker, listen, speak loudly and clearly).

2. **Assign Pairs for Role-Play Activity**
   "Today you are going to work together in pairs. I am going to read a list of pairs of students who will work together on an activity. Listen carefully for your name and your partner's name. When you find your partner, walk to a separate area of the room and wait for the next direction."

3. **Role-Play Skill in Pairs**
   "Now you are going to get into pairs and act out a situation. Here is the situation- Start a conversation with your partner. When I tell you the time is up, switch places and allow your partner to start a conversation. After you practice in pairs, each pair will present their role-play to the rest of the group.

   (Give students 7-10 minutes to role-play in pairs. Have students spread out around the classroom so that they cannot hear other groups preparing their skits.)

4. **Role-Play In Front of Whole Group**
   "Okay, I am going to ask you to watch the role-play carefully. Each person will get a chance to act out the situation." (Call a pair to come to the front of the room to role-play the scenario. When they are finished, instruct the class to applaud and call the next pair.)

the front of the room to role-play the scenario. When they are finished, instruct the class to applaud and call the next pair.)

SESSION 6

Materials:
Treatment Manual
Age-Appropriate Activity Sheet #3
Folders

Purpose: To have students complete age-appropriate activities independently

Procedures:

1. **Give out Age-Appropriate Activity Sheets**
   "Today you are going to work on an activity alone. At the next session you will be working together on an activity. If you have any questions, raise your hand and I will come to your desk" (Allow students 35 minutes to work on the activity. After the time limit is completed, collect their folders.)

SESSION 7

Materials:
Treatment Manual
Bell

Purpose: To assign pairs and have pairs role-play skill
To have students role-play skill in front of group

Procedures:

1. **Assign Pairs for Role-Play Activity**
   "I am going to read a list of pairs of students who will work together on an activity. Listen carefully for your name and your partner's name. When you find your partner, walk to a separate area of the room and wait for the next direction."

2. **Role-Play Skill in Pairs**
   "Today you are going to work in pairs and act out a situation. Pretend your friend comes to your house and wants to play one game, but you want to play another game. When you hear the bell ring, switch places and allow your partner to take a turn. After you practice in pairs, each pair will present their role-play to the rest of the group.

   (Give students 7-10 minutes to role-play in pairs. Have student spread out around the classroom so that they cannot hear other groups preparing their skit.)

3. **Role-play in front of whole group**
   "Okay, I am going to ask you to watch the role-play carefully. Each person will get a chance to act out the situation. (Pairs come up to the front of the room to role-play the scenario. When they are finished, instruct the class to applaud and call the next pair.)

SESSION 8

Materials:
Treatment Manual
Packets of Questionnaires

Purpose: To summarize and discuss the course content
To administer a packet of questionnaires

Procedures:

1. **Summarize and Discuss the Course Content**
   Over the past few weeks you have worked alone on activities and also worked together in pairs. You role-played different situations in pairs as well as in front of the group. You listened to each other and applauded when it was over. You were very busy!

2. **Administer Packet of Questionnaires**
   I would like you to fill out this information packet. It is very important that you are honest when you answer the questions. (Students should take about 30 minutes to complete the questionnaires)

3. **Good-Bye to the Group**
   It was nice to get to know you over the last few weeks. Someone will be coming back to your school in about a month. At that time, she will ask you to fill out some forms again. Good-bye!

Appendix H

Peer Interaction Treatment Integrity Protocol

Session 1		
Group leader was prepared with the materials	Yes	No
Group leader was enthusiastic about the group	Yes	No
Group leader conducted the icebreaker activity	Yes	No
Group leader discussed the purpose of the group	Yes	No
Group leader discussed rules of the group	Yes	No
Group leader named the group according to vote	Yes	No
Group leader encouraged students to participate	Yes	No
Group leader described the skill folders	Yes	No
Group leader provided students with candy at the end	Yes	No
Session 2		
Group leader was prepared with the materials	Yes	No
Group leader reviewed the group purpose	Yes	No
Group leader gave out age-appropriate activities packets	Yes	No
Session 3		
Group leader was prepared with the materials	Yes	No
Group leader explained how to role-play	Yes	No
Group leader reviewed the group rules	Yes	No
Group leader assigned pairs for role-play activity	Yes	No
Group leader had pairs create and practice their role-play	Yes	No
Group leader had pairs role-play in front of the group	Yes	No
Session 4		
Group leader was prepared with the materials	Yes	No
Group leader gave out age-appropriate activities packets	Yes	No
Session 5		
Group leader was prepared with the materials	Yes	No
Group leader assigned pairs for role-play activity	Yes	No
Group leader had pairs create and practice their role-play	Yes	No
Group leader had pairs role-play in front of the group	Yes	No
Session 6		
Group leader was prepared with the materials	Yes	No
Group leader gave out age-appropriate activities packets	Yes	No

Session 7		
Group leader was prepared with the materials	Yes	No
Group leader assigned pairs for role-play activity	Yes	No
Group leader had pairs create and practice their role-play	Yes	No
Group leader had pairs role-play in front of the group	Yes	No
Session 8		
Group leader was prepared with the materials	Yes	No
Group leader reviewed and discussed course content	Yes	No
Group leader administered the packet of questionnaires	Yes	No
Group leader said good-bye to the group	Yes	No

Appendix I

Social Skill Effectiveness Rating

Observers will record each student's effectiveness at achieving the skill.

Starting A Conversation	Poor					Excellent
Student chooses the person with whom they want to talk	0	1	2	3	4	5
Student decides what they want to say	0	1	2	3	4	5
Student chooses a good time and place	0	1	2	3	4	5
Student starts talking in a friendly way	0	1	2	3	4	5
Overall skill score						____

Using Free Time						
Student checks that he/she finished all of the work	0	1	2	3	4	5
Student thinks of the activities that he/she would like to do	0	1	2	3	4	5
Student chooses one activity	0	1	2	3	4	5
Student starts the activity	0	1	2	3	4	5
Overall skill score						____

Compromising						
Student decides that he/she and the other person disagree	0	1	2	3	4	5
Student tells the other how he/she feels about the problem	0	1	2	3	4	5
Student asks the other how he/she feels about the problem	0	1	2	3	4	5
Student listens to the answer	0	1	2	3	4	5
Student suggests or asks for a compromise	0	1	2	3	4	5
Overall skill score						____

Appendix J

Group C Manual

SESSION 1

Materials:
Folders
Candy

1. **Introduce Yourself**
   My name is _____. I am here at your school for a special visit. This group will be working on different types of activities. The activities will include some reading, writing, and drawing. Remember you must work on these activities alone.

2. **Give out Folders with Activity #1 Sheets**
   "Each person in the group will receive a folder. If you have any questions raise your hand and I will come to your desk." (Allow students 40 minutes to work on the activity. After the time limit, collect their folders.)

3. **Reinforcement for Participation**
   Each member of the group is given a piece of candy for their participation in the first session.

SESSION 2, 3, 4, 5, 6, 7

1. **Give out Folders with Activity Sheets**
   "Here is the activity for today. If you have any questions raise your hand and I will come to your desk." (Allow students 40 minutes to work on the activity. After the time limit, collect their folders.)

SESSION 8

Materials:
Packets of Questionnaires

1. **Administer Packet of Questionnaires**
   I would like you to fill out this information packet. It is very important that you are honest when you answer the questions. (Students should take about 30 minutes to complete the questionnaires).

2. **Good-Bye to the Group**
   Thank you for completing all of the activities over the last 4 weeks. Someone will be coming back to your school in about a month. At that time, she will ask you to fill out some forms again. Good-bye!

References

Achenbach, T. M. (1978). The Child Behavior Profile: I. Boys aged 6-11. Journal of Consulting and Clinical Psychology, 46, 478-488.

Achenbach, T. M., & Edelbrock, C. (1983). Manual for the Child Behavior Checklist and Revised Child Behavior Profile. Burlington: University of Vermont Department of Psychiatry.

Achenbach, T. M., & Edelbrock, C. (1991). Manual for the Youth Self-Report and Profile. Burlington: University of Vermont Department of Psychiatry.

American Psychiatric Association (1987). Diagnostic and statistical manual of mental disorders, (3rd ed., rev). Washington, DC: Author.

American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders, (4th ed.). Washington, DC: Author.

Anderson, J. C., Williams, S., McGee, R., & Silva, P. A. (1987). DSM-III disorders in preadolescent children: Prevalence in a large sample from the general population. Archives of General Psychiatry, 44, 69-76.

Angold, A. (1988b). Childhood and adolescent depression. II. Research in clinical populations. British Journal of Psychiatry, 153, 476-492.

Bandura, A. (1977). Social learning theory. Englewood cliffs, NJ: Prentice-Hall.

Barlow, D. H. (1981). On the relation of clinical research to clinical practice: Current issues, new directions. Journal of Consulting and Clinical Psychology, 49, 147-155.

Beck, A. T. (1976). Cognitive therapy and the emotional disorders. New York: International Universities Press.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J.E., & Erbaugh, J. K. (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 561-571.

Bierman, K. L., & Furman, W. (1984). The effects of social skills training and peer involvement on the social adjustment of preadolescents. Child Development, 55, 151-162.

Birmaher, B., Ryan, N. D., Williamson, D. E., Brent, D. A., Kaufman, J., Dahl, R. E., Perel, J., & Nelson, B. (1996). Childhood and adolescent depression: A review of the past 10 years. Part I. Journal of the American Academy of Child and Adolescent Psychiatry, 35, 1427-1439.

Blechman, E. A., McEnroe, M. J., Carella, E. T., & Audette, D. P. (1986). Childhood competence and depression. Journal of Abnormal Psychology, 95, 223-227.

Bowlby, J. (1960). Childhood mourning and its implication for psychiatry. American Journal of Psychiatry, 118, 481-498.

Brage, D., & Meredith, W. (1993). A causal model of adolescent depression. Journal of Psychology, 128, 455-468.

Breen, D. T. (1987). Changing family structures: An intervention study in the schools. Unpublished doctoral dissertation, University of Wisconsin-Madison.

Bulkeley, R., & Cramer, D. (1990). Social skills training with young adolescents. Journal of Youth and Adolescence, 19, 451-463.

Butcher, J. N., Williams, C. L., Graham, J. R., Archer, R. P., Tellegen, A., Ben-Porath, Y. S., & Kaemmer, B. (1992). MMPI-A, Minnesota Multiphasic Personality Inventory-Adolescent: Manual for administration, scoring, and interpretation. Minneapolis: University of Minnesota Press.

Butler, L., Miezitis, S., Friedman, R., & Cole, E. (1980). The effect of two school-based intervention programs on depressive symptoms in preadolescents. American Educational Research Journal, 17, 111-119.

Chan, D. W. (1997). Depressive symptoms and perceived competence among chinese secondary school students in hong kong. Journal of Youth and Adolescence, 26, 303-319.

Christensen, L., & Mendoza, J. L. (1986). A method of assessing change in a single subject: An alteration of the RC index. Behavior Therapy, 12, 295-307.

Cicchetti, D., & Toth, S. L. (1998). The development of depression in children and adolescents. American Psychologist, 53, 221-241.

Clarizio, H. R., & Payette, K. (1990). A survey of school psychologists' perspectives and practices with childhood depression. Psychology in the Schools, 27, 57-63.

Clarke, G. N., & Lewinsohn, P. M. (1986). The coping with depression course-adolescent version: A psychoeducational intervention for unipolar depression in high school students. Unpublished manuscript, Oregon Research Institute, Eugene, OR.

Clarke, G. N., Rohde, P., Lewinsohn, P. M., Hops, H., & Seeley, J. R. (1999). Cognitive-behavioral treatment of adolescent depression: Efficacy of acute group treatment and booster sessions. Journal of the American Academy of Child and Adolescent Psychiatry, 38, 272-279.

Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.

Coie, J., Terry, R., Lenox, K., Lochman, J., & Hyman, C. (1995). Childhood peer rejection and aggression as predictors of stable patterns of adolescent disorder. Development and Psychopathology, 7, 697-713.

Cole, D. A., Martin, J. M., Powers, B., & Truglio, R. (1996). Modeling causal relations between academic and social competence and depression: A multitrait-multimethod longitudinal study of children. Journal of Abnormal Psychology, 105, 258-270.

Dalley, M. B., Bolocofsky, D. N., & Karlin, N. J. (1994). Teacher-ratings and self-ratings of social competency in adolescent with low and high depressive symptoms. Journal of Abnormal Child Psychology, 22, 477-485.

Demaray, M. K., Ruffalo, S. L., Carlson, J., Busse, R. T., Olson, A. E., McManus, S. M., & Leventhal, A. (1995). Social skills assessment: A comparative evaluation of six published rating scales. School Psychology Review, 24, 648-671.

Dodge, K. A. (1983). Behavioral antecedents of peer social status. Child Development, 54, 1386-1399.

Downy, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. Psychological Bulletin, 108, 50-76.

DuBois, D. L., & Felner, R. F. (1996). The quadripartite model of social competence. In M. Reinecke, F. Dattilio, & A. Freeman (Eds.), Cognitive Therapy with Children and Adolescents: A Casebook for Clinical Practice (pp. 124-152). New York: Guilford Press.

Elliot, S. N., & Gresham, F. M. (1993). Social skills interventions for children. Behavior Modification, 17, 287-313.

Elliot, S. N., Racine, C. N., & Busse, R. T. (1995). Best practices in preschool social skills training. In A. Thomas & J. Grimes (Eds.), Best practices in school psychology-III (pp. 1009-1020). Washington, DC: National Association of School Psychologists.

Fine, S., Forth, A., Gilbert, M., & Haley, G. (1991). Group therapy for adolescent depressive disorder: A comparison of social skills and therapeutic support. Journal of the American Academy of Child and Adolescent Psychiatry, 30, 79-85.

Fleming, J. E., Offord, D. R. & Boyle, M. H. (1989). Prevalence of child and adolescent depression in the community: Ontario child health study. British Journal of Psychiatry, 155, 647-654.

Frame, C., Matson, J. L., Sonis, W. A., Fialkov, & Kazdin, A. E. (1982). Behavioral treatment of depression in a prepubertal child. Journal of Behavioral Therapy and Experimental Psychiatry, 3, 239-243.

Gershon, E. S., Hamovit, J. H., Guroff, J. J., & Numberger, J. I. (1987). Birth-cohort changes in manic and depressive disorders in relatives of bipolar and schizoaffective patients. Archives of General Psychiatry, 44, 314-319.

Gettinger, M., Doll, B., & Salmon, D. (1994). Effects of social problem solving, goal setting, and parent training on children's peer relations. Journal of Applied Developmental Psychology, 15, 141-163.

Gillham, J. E., Reivich, K. J., Jaycox, L. H., & Seligman, M.E. P. (1995). Prevention of depressive symptoms in school children: Two-year follow-up. Psychological Science, 6, 343-351.

Glasser, K. (1967). Masked depression in children and adolescents. American Journal of Psychotherapy, 21, 565-574.

Goldstein, A. P., Sprafkin, R. P., Gershaw, M. J., & Klein, P. (1980). Skill streaming the adolescent: A structured learning approach to teaching prosocial skills. Champaign, IL: Research Press.

Goodyer, I., Wright, C., & Altham, P. (1990). The friendships and life events of anxious and depressed school-age children. British Journal of Psychiatry, 156, 689-698.

Gottman, J. M., Gonso, J., & Rasmussen, B. (1975). Social interaction, social competence and friendship in children. Child Development, 46, 709-718.

Gresham, F. M. (1985). Utility of cognitive-behavioral procedures for social skills training with children: A review. Journal of Abnormal Child Psychology, 13, 411-423.

Gresham, F. M. (1995). Best practices in social skills training. In A. Thomas & J. Grimes (Eds.), Best practices in school psychology-III (pp. 1021-1030). Washington, DC: National Association of School Psychologists.

Gresham, F. M. (1998). Social Skills Training: Should we raze, remodel, or rebuild? Behavioral Disorders, 24, 19-25.

Gresham, F. M., & Elliot, S. N. (1990). Social skills rating system manual. Circle Pines, MN: American Guidance Service.

Hamilton, M. (1960). A rating scale for depression. Journal of Neurological and Neurosurgical Psychiatry, 12, 56-62.

Harrington, R. (1993). Depressive disorder in childhood and adolescence. Chichester, England: John Wiley.

Harrington, R., Bredenkamp, D., Groothues, C., Rutter, M., Fudge, H., & Pickles, A. (1994). Adult outcomes of childhood and adolescent depression: III. Links with suicidal behaviours. Journal of Child Psychology and Psychiatry, 35, 1309-1319.

Harrington, R., Fudge, H., Rutter, M., Pickles, A., & Hill, J. (1990). Adult outcomes of childhood and adolescent depression. Archives of General Psychiatry, 47, 465-473.

Herjanic, B., & Reich, W. (1997). Development of a structured psychiatric interview for children: Agreement between child and parent on individual symptoms. Journal of Abnormal Child Psychology, 25, 21-31.

Hersen, M., Belack, A. S., Himmelhoch, J. A., & Thase, M. E. (1984). Effects of social skills training, amitriptyline, and psychotherapy in unipolar depressed women. Behavior Therapy, 15, 21-40.

Hollingshead, A. B. (1975). Four factor index of social status. New Haven, CT: Yale University Press.

Holsen, I., Kraft, P., & Vitterso, J. (2000). Stability of depressed mood in adolescence: Results from a 6-year longitudinal panel study. Journal of Youth and Adolescence, 29, 61-78.

Hops, H., Lewinsohn, P. M., Andrews, J. A., & Roberts, R. E. (1990). Psychosocial correlates of depressive symptomatology among high school students. Journal of Clinical Child Psychology, 19, 211-220.

Hymel, S., & Asher, S. R. (1977). Assessment and training of isolated children's social skills. Paper presented at the biennial meeting of the Society for Research in Child Development, New Orleans, March 1977.

Ines, T. M., & Sacco, W. P. (1992). Factors related to correspondence between teacher ratings of elementary student depression and student self-ratings. Journal of Consulting and Clinical Psychology, 60, 140-142.

Jacobson, N. S., Follette, W. C., & Revenstorf, D. (1984). Psychotherapy outcome research: Methods for reporting variability and evaluating clinical significance. Behavior Therapy, 15, 336-352.

Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. Journal of Consulting and Clinical Psychology, 59, 12-19.

Jaycox, L. H., Reivich, K. J., Gillman, J., & Seligman, M. E. P. (1994). Prevention of depressive symptoms in school children. Behavior Research and Therapy, 32, 801-816.

Kahn, J. S., Kehle, T. J., Jenson, W. R., & Clark, E. (1990). Comparison of cognitive-behavioral, relaxation, and self-modeling interventions for depression among middle-school students. School Psychology Review, 19, 196-211.

Kamphaus, R. W. & Frick, P. J. (1996). Clinical assessment of child and adolescent personality and behavior. Needham Heights, MA: Allyn & Bacon.

Kandel, D. B. (1982). Epidemiological and psychosocial perspectives in adolescent drug abuse. Journal of the American Academy of Child Psychiatry, 21, 328-347.

Kandel, D., & Davies, M. (1986). Adult sequelae of adolescent depressive symptoms. Archives of General Psychiatry, 43, 255-262.

Kashani, J. H., Burbach, D. J., & Rosenberg, T. K. (1988). Perception of family conflict resolution and depressive symptomatology in adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 27, 42-48.

Kashani, J. H., Carlson, G. A., Beck, N. C., Hoeper, E. W., Corcoran, C. M., McAllister, H. A., Fallahi, C., Rosenberg, T. K., & Reid J. C. (1987). Depression, depressive symptoms, and depressed mood among a community sample of adolescents. American Journal of Psychiatry, 144, 931-934.

Kashani, J. H., McGee, R., Clarkson, S., Anderson, J., Walton, L., Williams, S., Silva, P., Robins, A., Cytryn, M., & McKnew, D. (1983). Depression in a sample of 9-year-old children: Prevalence and associated characteristics. Archives of General Psychiatry, 40, 1217-1223.

Kashani, J. H., Rosenberg, T. K., & Reid, J. C. (1989). Developmental perspectives in child and adolescent depressive symptoms in a community sample. American Journal of Psychiatry, 146, 871-875.

Kaslow, N. J., Deering, C. G., & Racusin, G. R. (1994). Depressed children and their families. Clinical Psychology Review, 14, 39-59.

Kaslow, N. J., Rehm, L. P., & Siegel, A. W. (1984). Social-cognitive and cognitive correlates of depression in children. Journal of Abnormal Child Psychology, 12, 605-620.

Kauffman, J. M. (1999). How we prevent the prevention of emotional and behavioral disorders. Exceptional Children, 65, 448-468.

Kendall, P. C., Stark, K. D., & Adam, T. (1992). Cognitive deficit or cognitive distortion in childhood depression. Journal of Abnormal Child Psychology, 18, 255-270.

Kennedy, E., Spence, S. H., & Hensley (1989). An examination of the relationship between childhood depression and social competence amongst primary school children. Journal of Child Psychology and Psychiatry, 30, 561-573.

Kessler, R. C., McGonagle, K A., Nelson, C. B., Hughes, M., Swartz, M., & Blazer, D. G. (1994a). Sex and depression in the national comorbidity survey: II. Cohort effects. Journal of Affective Disorders, 30, 15-26.

Klein, M. (1949). The Psychoanalysis of Children. London: Hogarth.

Kohler, F., & Strain, P. (1990). Peer-assisted interventions: Early promises, notable achievements, and future aspirations. Clinical Psychology Review, 10, 441-452.

Kovacs, M. (1981). Rating scales to assess depression in school-aged children. Acta Paedopsychiatrica, 46, 305-315.

Kovacs, M. (1989). Affective disorders in children and adolescents. American Psychologist, 44, 209-215.

Kovacs, M. (1992). The children's depression inventory (CDI). North Tonawanda, NY: Multi-Health Systems.

Kovacs, M. (1996). Presentation and course of major depressive disorder during childhood and later years of the life span. Journal of the American Academy of Child and Adolescent Psychiatry, 35, 705-715.

Kovacs, M., & Beck, A. T. (1977). An empirical-clinical approach toward a definition of childhood depression. In J. G. Schulterbrandt & A. Raskin (Eds.), Depression in childhood: Diagnosis, treatment, and conceptual models. New York: Raven Press.

Kovacs, M., & Beck, A. T. (1978). Maladaptive cognitive structures in depression. American Journal of Psychiatry, 135, 525-533.

Lachar, D., & Gruber, C. P. (1994). Personality Inventory for Youth (PIY). Los Angeles: Western Psychological Services.

Ladd, G. W. (1981). Effectiveness of a social learning method for enhancing children's social interaction and peer acceptance. Child Development, 52, 171-178.

Lerner, M. S., & Clum, G. A. (1990). Treatment of suicide ideators: A problem-solving approach. Behavior Therapy, 21, 403-411.

Lesse, S. (1974). Masked depression. New York: Jason Aronson, Inc.

Lewinsohn, P. M. (1974). A behavioral approach to depression. In R. M. Friedman & M. M. Katz (Eds.), The psychology of depression: Contemporary theory and research (pp. 157-185). New York: Wiley.

Lewinsohn, P. M., & Clarke, G. N. (1984). Group treatment of depressed individuals. The coping with depression course. Advances in Behavioral Research and Therapy, 6, 99-114.

Lewinsohn, P. M., Clarke, G. N., Hops, H., & Andrews, J. (1990). Cognitive-behavioral treatment for depressed adolescents. Behavior Therapy, 21, 385-401.

Lindberg, T. W., Durlak, J. A., & Gregory, R. J. (2001). A meta-analysis of interventions promoting social competency in children/adolescents. Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.

Luborsky, L., & DeRubeis, R. (1984). The use of psychotherapy treatment manuals: A small revolution in psychotherapy research style. Clinical Psychology Review, 4, 5-14.

Mathur, S. R., & Rutherford, R. B. (1991). Peer-mediated interventions promoting social skills of children and youth with behavioral disorders. Education and Treatment of Children, 14, 227-242.

Matson, J. L. (1989). Treating depression in children and adolescents. New York, NY: Pergamon Press.

Matson, J. L., Fee, V. E., Coe, D. A., & Smith, D. (1991). A social skills program for developmentally delayed preschoolers. Journal of Clinical Child Psychology, 20, 428-433.

McGinnis, E., & Goldstein, A. P. (1984). Skillstreaming the elementary school child: A guide for teaching prosocial skills. Champaign, IL: Research Press.

McGinnis, E., & Goldstein, A. P. (1997). Skillstreaming the elementary school child: New strategies and perspectives for teaching prosocial skills. Champaign, IL: Research Press.

McGuffin, P. & Katz, R. (1986). Nature, nurture, and affective disorder. In J. F. W. Deakin (Ed.), The biology of depression. (pp. 26-52). London: Royal College of Psychiatrists.

McHale, S. M., Crouter, A. C., & Tucker, C. J. (2001). Free-time activities in middle childhood: Links with adjustment in early adolescence. Child Development, 72, 1764-1778.

Mesman, J., & Koot, H. M. (2000). Child-reported depression and anxiety in preadolescence:II. Preschool Predictors. Journal of the Academy of Child and Adolescent Psychiatry, 39, 1379-1386.

Miller, D. N., & Cole, C. L. (1998). Effects of social skills training on an adolescent with comorbid conduct disorder and depression. Child and Family Behavior Therapy, 20, 35-53.

Mitchell, J., McCauley, E., Burke, P. M., & Moss, S. J. (1988). Phenomenology of depression in children and adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 27, 12-20.

Nolen-Hoeksema, S., & Girgus, J. S. (1994). The emergence of gender difference in depression during adolescence. Psychological Bulletin, 115, 424-443.

Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. P. (1992). Predictors and consequences of childhood depressive symptoms: A 5-year longitudinal study. Journal of Abnormal Psychology, 101, 405-422.

Oden, S. & Asher, S. R. (1977). Coaching children in social skills for friendship making. Child Development, 48, 495-506.

Parker, J. G., & Asher, S. R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? Psychological Bulletin, 102, 357-389.

Pekarik, E. G., Prinz, R. J., Liebert, D. E., Weintraub, S., & Neale, J. M. (1976). The pupil evaluation inventory: A sociometric technique for assessing children's social behavior. Journal of Abnormal Child Psychology, 4, 83-97.

Pellegrini, D. S., & Urbain, E. S. (1985). An evaluation of interpersonal cognitive problem-solving training with children. Journal of Child Psychology and Psychiatry, 26, 17-41.

Petti, T. A. (1978). Depression in hospitalized child psychiatric patients: Approaches to measuring depression. Journal of the American Academy of Child Psychiatry, 17, 49-59.

Poznanski, E. O., Grossman, J. A., Buchsbaum, Y., Banegas, M., Freeman, L., & Gibbons, R. (1984). Preliminary studies of the reliability and validity of the children's depression rating scale. Journal of the American Academy of Child Psychiatry, 23, 191-197.

Puig-Antich, J., Lukens, E., Davies, M., Goetz, D., Brennan-Quattrock, J., & Todak, G. (1985a). Psychological functioning in prepubertal major depressive disorders-II: Interpersonal relationships after sustained recovery from the affective episode. Archives of General Psychiatry, 42, 511-517.

Puig-Antich, J., Lukens, E., Davies, M., Goetz, D., Brennan-Quattrock, J., & Todak, G. (1985b). Psychological functioning in prepubertal major depressive disorders-I: Interpersonal relationships during the depressive episode. Archives of General Psychiatry, 42, 500-510.

Quiggle, N. L., Garber, J., & Panak, W. F. (1992). Social information processing in aggressive and depressed children. Child Development, 63, 1305-1320.

Reed, M. K. (1994). Social skills training to reduce depression in adolescents. Adolescence, 29, 294-302.

Rehm, L. P., & Sharp, R. N. (1996). Strategies for childhood depression. In M. Reinecke, F. Dattilio, & A. Freeman (Eds.), Cognitive therapy with children and adolescents: A casebook for clinical practice (pp. 103-123). New York: Guilford Press.

Reinecke, M. A., Ryan, N., & Dubois, D. L. (1998). Cognitive-behavioral therapy of depression and depressive symptoms during adolescence: A review and meta-analysis. Journal of the American Academy of Child and Adolescent Psychiatry, 37, 26-34.

Reynolds, W. M. (1986a). A model for the screening and identification of depressed children and adolescents in school settings. Professional School Psychology, 1, 117-129.

Reynolds, W. M. (1986b). Reynolds Adolescent Depression Scale. Odessa, FL: Psychological Assessment Resources.

Reynolds, W. M. (1988). Child Depression Scale. Odessa, Florida. Psychological Assessment Resources.

Reynolds, W. M. (1989). Reynolds Child Depression Scale: Professional Manual. Odessa, FL: Psychological Assessment Resources.

Reynolds, W. M., & Coats, K. I. (1986). A comparison of cognitive-behavioral therapy and relaxation training for the treatment of depression in adolescents. Journal of Consulting and Clinical Psychology, 54, 653-660.

Reynolds, W. M., & Graves, A. (1989). Reliability of children's reports of depressive symptomatology. Journal of Abnormal Child Psychology, 17, 647-655.

Rie, H. E. (1966). Depression in childhood: A survey of some pertinent contributions. Journal of the American Academy of Child Psychiatry, 5, 653-685.

Rochlin, G. (1959). The loss complex. Journal of the American Psychoanalytic Association, 7, 299-316.

Roff, M. (1963). Childhood social interactions and young psychosis. Journal of Clinical Psychology, 19, 152-157.

Rohde, P., Lewinsohn, P. M., & Seeley, J. R. (1994). Are adolescents changed by an episode of major depression? Journal of the American Academy of Child and Adolescent Psychiatry, 33, 1289-1298.

Ryan, N. D., Puig-Antich, J., Ambrosini, P., Rabinovich, H, Robinson, D., Nelson, B., Iyengar, S., & Twomey, J. (1987). The clinical picture of major depression in children and adolescents. Archives of General Psychiatry, 44, 854-861.

Sacks, S., & Gaylord-Ross, R. (1989). Peer-mediated and teacher-directed social skills training for visually impaired students. Behavior Therapy, 20, 619-638.

Schloss, P. J., Schloss, C. N., & Harris, L. (1984). A multiple-baseline analysis of an interpersonal skills training program for depressed youth. Behavioral Disorders, 9, 182-188.

Segrin, C. (1992). Specifying the nature of social skill deficits associated with depression. Human Communication Research, 19, 89-123.

Segrin, C. (2000). Social skills deficits associated with depression. Clinical Psychology Review, 20, 379-408.

Shaffer, D. (1992). NIMH Diagnostic Interview Schedule for Children, version 2.3. New York: Columbia University Division of Child Psychiatry.

Shah, F., & Morgan, S. B. (1996). Teachers' ratings of social competence of children with high versus low levels of depressive symptoms. Journal of School Psychology, 34, 337-349.

Shapiro, R., & Keller, M. (1979). Longitudinal Interval Follow-up Evaluation (LIFE). Technical report. Boston: Massachusetts General Hospital.

Sommers-Flanagan, R., Barrett-Hakanson, T., & Clarke, C. (2000). A psychoeducational school-based coping and social skills group for depressed students. Journal for Specialists in Social Work, 25, 170-190.

Spirito, A., Hart, K., Overholser, J, C, & Halverson, J. (1990). Social skills and depression in adolescent suicide attempters. Adolescence, 99, 543-552.

Spitz, R. A., & Wolf, K. M. (1946). Anaclitic depression: An inquiry into the genesis of psychiatric conditions in early childhood. Psychoanalytic Study of the Child, 2, 313-342.

Spitzer, R. L., Endicott, J., & Robins, E. (1978). Research diagnostic criteria: Rational and reliability. Archives of General Psychiatry, 35, 773-782.

Stark, K. D., Brookman, C. S., & Frazier, R. (1990). A comprehensive school-based treatment program for depressed children. School Psychology Quarterly, 5, 111-140.

Stark, K. D., Reynolds, W. M., & Kaslow, N. J. (1987). A comparison of the relative efficacy of self-control therapy and a behavioral problem-solving therapy for depression in children. Journal of Abnormal Child Psychology, 15, 91-113.

Stephens, T. (1978). Social skills in the classroom. Columbus, Ohio: Cedar Press.

Stokes, T. R. & Baer, D. M. (1977). An implicit technology of generalization. Journal of Applied Behavior Analysis, 7, 349-367.

Stokes, T. R., & Osnes, P. (1989). An operant pursuit of generalization. Behavior Therapy, 20, 337-355.

Toolan, J. M. (1962). Suicide and suicidal attempts in children and adolescents. American Journal of Psychiatry, 118, 719.

Tryon, G., Soffer, A. & Winograd, G. (2001, August). Relationship of social skills, depression, and anxiety in adolescents. Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.

Velez, C. N., Johnson, J., & Cohen, P. (1989). A longitudinal analysis of selected risk factors for childhood psychopathology. Journal of the American Academy of Child Psychiatry, 28, 861-864.

Wanlass, R. L., & Prinz, R. J. (1982). Methodological issues in conceptualizing and treating childhood social isolation. Psychological Bulletin, 92, 39-55.

Ward, S. L. (1998). Students at-risk for early adolescent depression: A retrospective longitudinal investigation using school-based predictors. Unpublished doctoral dissertation, University of California, Riverside.

Weinberg, W. A., Rutman, J., Sullivan, L., Penick, E. C., & Dietz, S. G. (1973). Depression in children referred to an educational diagnostic center: Diagnosis and treatment. Journal of Pediatrics, 83, 1065-1072.

Weissman, M. M., Warner, V. Wickramaratne, P., Moreau, D., & Olfson, M. (1997). Offspring of depressed parents: Ten years later. Archives of General Psychiatry, 57, 675-682.

Weisz, J. R., Rudolph, K. D., Granger, D. A., & Sweeney, L. (1992). Cognition, competence, and coping in child and adolescent depression: Research findings, developmental concerns, and therapeutic implications. Development and Psychopathology, 4, 627-653.

Wierzbicki, M., & McCabe, M. (1988). Social skills and subsequent depressive symptomatology in children. Journal of Clinical Child Psychology, 17, 203-208.

Wise, K. L., Bundy, K. A., Bundy, E. A., & Wise, L. A. (1991). Social skills training for young adolescents. Adolescence, 26, 233-241.

Wood, A., Harrington, R., & Moore, A. (1996). Controlled trial of a brief cognitive-behavioural intervention in adolescent patients with depressive disorders. Journal of Child Psychology and Psychiatry, 37, 737-746.