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UNIVERSITY OF SAN DIEGO  
Hahn School of Nursing and Health Science  
DOCTOR OF PHILOSOPHY IN NURSING

THE EFFICACY OF A SCHOOL-BASED SUPPORT GROUP  
ON ADOLESCENT SELF-ESTEEM AND SOCIAL SUPPORT

By

Julia Ann Smith

A dissertation presented to the  
FACULTY OF THE HAHN SCHOOL OF NURSING AND HEALTH SCIENCE  
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In partial fulfillment of the  
Requirements for the degree  
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Dissertation Committee

Dr. Susan Instone, Chairperson

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Abstract

Adolescents are faced with daily obstacles that affect their ability to progress into adulthood successfully. Rising divorce rates and subsequent single parenting, adolescent pregnancy, drug and alcohol abuse, violence, and lack of parental involvement represent only a few of the many issues teens confront. School nurses are on the front lines, attempting to educate youth against an alarming rise in personal and social controversies that impede their ability to come to school ready to learn. As part of the educational team, school nurses are in a prime position to develop and integrate intervention strategies aimed at assisting adolescents during this tumultuous period in their lives.

Research has linked self-esteem and social support with health compromising behaviors. Likewise, research has suggested a link between support group participation and a decrease in health compromising behaviors. School-based support groups are one intervention strategy that is currently being used to improve students' self-esteem and social support. The purpose of this research is to evaluate their efficacy on self-esteem and social support.

Thirty-seven students from an urban Southwestern high school participated in a 10-week support group. Self-esteem and social support were measured using Rosenberg's Self-Esteem Scale and the Personal Resource Questionnaire Part II. Results suggested that self-esteem and social support were moderately, positively correlated and, while students who participated in support groups did not report a statistically significant change in either self-esteem or social support, further research is needed to explore the relationship between these variables.

This dissertation is dedicated to my late father, Joseph Dixon Smith, who passed away unexpectedly two weeks after my defense.

Thanks dad for your love, support and encouragement.

I love you always.

I would like to acknowledge the guidance and support I received from my committee members, Drs. Susan Instone, Cynthia Connelly, and Donna Agan.

I would also like to express my appreciation to the entire doctoral faculty at the University of San Diego.

Table of Contents

1. CHAPTER 1 - Introduction.....	1
Background and Significance	
Developmental Issues	
Adolescent Risk Behaviors	
Purpose of Study	
Theoretical Framework	
Symbolic Interactionism	
Self-Esteem Theory	
Social Support Theory	
2. CHAPTER 2 – Literature Review.....	18
Self-Esteem, Social Support and Health Compromising Behaviors	
Binge Eating and Obesity	
Pregnancy	
Violence	
Suicide	
Multiple Health Behaviors	
Support Groups	
Support Group Theories	
Support Groups in Practice	
Ethical and Legal Issues in Adolescent Research	
Ethical Principles	
Adolescent Rights to make Health Care Decisions	
Minor's Participation in Research	
3. CHAPTER 3 - Methodology.....	43
Design	
Sample Population	
Sample Size	
Recruitment Procedure	
Measures	
Rosenberg's Self-Esteem Scale	
PRQ85	
Data Analysis	
Human Subjects	
Risk Management Procedures	
Potential Benefits	
Risk/Benefit Ratio	
Expense to Subjects	
Anticipated Study Limitations	

4. CHAPTER 4 - Results.....	57
Study Sample	
Specific Aim #1	
Specific Aim #2	
Specific Aim #3	
5. CHAPTER 5 – Discussion of Findings.....	64
Conclusions and Recommendations	
Strengths and Limitations of Study	
Implications for Further Research	
Implications for Nursing Practice and Education	
Summary	
6. List of Tables	
Table 1: Sample Demographics.....	58
Table 2: Instrument Reliabilities.....	59
Table 3: Tests of Between Subject Effects: Self-Esteem.....	60
Table 4: Self-Esteem by Age and Ethnicity.....	61
Table 5: Social Support by Age and Ethnicity.....	62
7. List of Appendices	
Assent form for Adolescent Participants.....	84
Parental Consent Form.....	86
Demographic Data Sheet.....	88
Rosenberg's Self-Esteem Scale.....	89
Personal Resource Questionnaire Part II.....	90
University of San Diego Committee on the Protection Of Human Subjects Approval.....	93
Sweetwater Union High School District Approval.....	94
Bonita Vista High School Approval.....	95

## Chapter 1

### *Introduction*

In 21<sup>st</sup> century America, one need not look very far to see the adversity facing adolescents. American youth encounter daily obstacles that affect their ability to progress into adulthood successfully. Rising divorce rates and subsequent single parenting, adolescent pregnancy, drug and alcohol abuse, violence and lack of parental involvement represent only a few of the issues teens are faced with today. School nurses are on the front lines, attempting to educate our youth against an alarming rise in social and personal controversies that impede their ability to come to school ready to learn. Research linking self-esteem and social support with health compromising behaviors has been documented. School nurses, as an integral part of the educational team, are in a prime position to develop and integrate intervention strategies into the school community to assist adolescents during this tumultuous time in their lives. Research suggested a link between support group participation and health compromising behaviors. School-based support groups are one intervention strategy currently being utilized to improve students' self-esteem. The purpose of this research is to evaluate their efficacy on adolescent self-esteem and social support.



The concept of self-esteem has been examined by many disciplines. Psychologists have viewed self-esteem within the context of personality (Mruk, 1995), and sociologists and social psychologists propose that social forces contribute to its development (Coopersmith, 1967; Rosenberg, 1965). Nurse scientists have examined the concept of self-esteem within the context of quality of life among adults (Dirksen, 2000; Han, Lee, Lee, & Park, 2003; Pedro, 2001) and health compromising behaviors of adolescents (Davies, DiClemente, Wingood, Harrington, Crosby, & Sionean, 2003; Ellickson & McGuigan, 2000; Kelly, Lynch, Donovan, & Clark, 2001; Stice, Cameron, Killen, Hayward, & Taylor, 1999). This research suggests a link between low self-esteem in adolescents and an increase in health compromising behaviors.

The concept of social support has been theorized to be positively linked to health outcomes (Weiss, 1974). Nursing researchers have examined this phenomenon within the context of adolescents (Yarcheski & Mahon, 1999; Yarcheski, Mahon, & Yarcheski, 2001; Yarcheski, Scoloveno, Mahon, 1994), suggesting that low levels of social support contribute to an increase in health compromising behaviors.

Nurse scientists have also studied the effects of support groups on teen behavior using both qualitative (Gance, 1995; King, Stewart, King, & Law, 2000) and quantitative methodologies (Connor, 1995; Wassef & Mason, 1996). Preliminary findings suggest that support group participation leads to teens with improved coping strategies, increased self-esteem, and improved relationships with family and friends. However, further research is needed to support these data. While anecdotal data corroborates these preliminary findings, further research is necessary to confirm these assumptions.

### *Background and Significance*

Adolescence is often depicted as a time of great turmoil in a person's life. During this time, adolescents undergo enormous changes in their physical, emotional and social selves within a relatively short period of time. Puberty, growth spurts, and concerns regarding self-image are changing constantly, creating stress and confusion in the adolescent. This period is perhaps the most challenging stage in a young person's life.

### *Developmental Issues*

Noted neo-Freudian psychoanalyst, Erikson (1968), examined psychosocial development across the life span. Erikson viewed development as a continuous process. As a result, he asserted that there are stages of psychosocial development, beginning in infancy. Erikson posited that each stage must be successfully mastered before the individual could proceed uneventfully to the next stage of development. Within each stage, Erikson identified specific crises that must be overcome if healthy psychosocial development was to continue. For example, the major psychosocial goal to master during the adolescent stage, occurring between the ages of 12 and 18, was the development of an identity, as opposed to role confusion, because "in the social jungle of human existence there is no feeling of being alive without a sense of identity" (p. 130). Identity and self-esteem were theoretically, positively correlated: as a strong identity developed, so did a positive self-esteem. According to Erickson (1968), failure to develop a coherent sense of self (i.e., ego identity) resulted in either significant role confusion or a negative identity that might lead to diminished self-esteem, risk behaviors, and delinquency. Family factors might also contribute to these consequences. For example, Brown, Bifulco, Veiel, and Andrews (1990) found that children who experienced negative

relationships with family members or did not have a close confiding relationship failed to develop the strong sense of self associated with low self-esteem.

Neinstein, Juliani, and Shapiro (1996) expanded Erikson's focus on the development of identity during adolescence by suggesting that there were four main tasks for teens to master: "Achieving independence from parents, adopting peer codes and lifestyles, assigning increased importance to body image and acceptance of one's body image, [and] establishing sexual, ego, vocational, and moral identities" (p. 41). The overall achievement of these tasks occurred as the individual progressed through three specific developmental phases of adolescence: Early adolescence (i.e., 10-13 years), middle adolescence (i.e., 14-17 years), and late adolescence (i.e., 18-21 years); each in which specific developmental issues arose.

Early adolescence was characterized by an increasing awareness of body image and concern that it is *normal*. At this stage, adolescents began looking to their peers for comparison, depended less on parental figures, and showed less interest in participating in family events. Early adolescents exhibited a lack of impulse control and subsequently might participate in risk-taking behaviors while concurrently beginning to develop their own identity and value system (Neinstein et al., 1996).

Characteristics of late adolescence included the development of a sense of direction, conscience, and goals. Late adolescents began to move away from peer group influences and might begin to accept parental advice and direction once again. The adolescent in this phase had appropriately separated from family and developed his or her own sense of self and positive self-esteem, provided he or she moved through the phases successfully.

Middle adolescents interacted less with their parents and more with their peers. Peer groups were most important in this developmental phase and often took the place of the parental role. Adolescents in this phase have feelings of immortality and omnipotence, leading to a significant rise in risk-taking behaviors (Davies et al., 2003; Ellickson & McGuigan, 2000). However, they were also more in touch with their own feelings and were beginning to be able to express them, while also being able to appreciate the feelings of others (Neinstein et al., 1996). Middle adolescents began developing an increased capacity for empathy, an important quality needed by support group participants. The development of self-esteem was at a critical phase during middle adolescence (Demo, 2001). Between the ages of 14 and 17, self-esteem development, either positive or negative, occurred rapidly. As Erickson (1968) asserted, adolescents who failed to develop positive self-esteem were at increased risk to engage in destructive behaviors (e.g., alcohol abuse, drug abuse; McGee & Williams, 2000). Therefore, intervention strategies designed to improve self-esteem by utilizing self-awareness and affective perceptual capacities should be geared specifically toward middle adolescents.

Erikson (1968) and Neinstein et al. (1996) emphasized the importance of the development of a strong sense of self during adolescence while addressing the negative outcomes of the failure to do so. Both developmental theories clearly identified the potential risks, including engaging in risk-taking and health compromising behaviors, especially during middle adolescence.

#### *Adolescent Risk Behaviors*

National statistics exemplified the severity of adolescent risk-taking behaviors. The Center for Disease Control's Youth Risk Behavior Surveillance (YRBS; CDC, 2001)

report clearly delineated the gravity of issues affecting today's youth. Nationally, students in grades 9 through 12 (generally 14-18 years of age) were sampled on topics such as sexual experiences, drug and alcohol use, depression, and violence. Results highlighted the increase in risk-taking behavior during middle adolescence. Nearly one-half of those surveyed had unprotected sexual intercourse at least once, 47% consumed alcohol, and 24 % smoked marijuana within the previous 30 days. Additionally, nearly 10% experienced dating violence within the previous year, 28% felt sad or hopeless within the previous thirty days to the extent that it disrupted their daily activities, and 15% seriously considered suicide to the extent that they had a specific plan established. Results from the 2001 CDC's YRBS remained unchanged from results obtained from the YRBS in 1999, indicating that these issues remained a concern.

The National Center for Health Statistics (2000) further illuminated the multiple issues facing adolescents. Teenage pregnancy has long been a concern to health and school officials. Teenage pregnancy in and of itself presented many health and educational challenges. Pregnant adolescents were more likely to deliver low birth weight babies than their counterparts in their 20s and 30s. Infant mortality rates were twice as high in 13- and 14-year-old adolescent mothers as they were in 19-year-old mothers. In addition to unintended births and subsequent health problems, consequences of teen pregnancy also included reduced educational attainment, fewer employment opportunities, increased likelihood of welfare, and poorer health and developmental outcomes among their infants.

Drug and alcohol use, sexual activity, and other risky behaviors placed youth at risk for serious acute and chronic health problems. However, nearly 20% of all youth age

10 to 19 were uninsured (CDC, 2001) resulting in a lack of access to health care and, subsequently, unmet health needs. Healthy People 2010 (U.S. Department of Health and Human Services, 2000) recommended that preventative services be available to adolescents in a wide range of settings, including schools. Improving self-esteem and perception of social support might be a worthwhile place to start.

### *Purpose of Study*

Given the current trends among high school students and the natural inclination of middle adolescents to take risks, educational settings are ideal sites for prevention and risk reduction services.

Educators are recognizing and attempting to deal with societal issues affecting youth by providing social support services on school campuses. These services range from on-site counseling and psychological assistance to providing healthcare to students and their families. One such social service is that of on-site support groups for students (San Diego County Office of Education, n.d.). These support groups, overseen by school staff members trained as support group facilitators, vary in their topics, ranging from family issues, grades, and stress, to dating and relationship issues.

Developmentally, adolescents are in a critical life stage. Support groups on school campuses might be one intervention that could be used to facilitate adolescents' successful transition into adulthood. Research suggested a link between self-esteem, social support and health compromising behaviors; however, limited research has been conducted measuring the effects of support group participation on these variables. Research needs to be done to examine this link. Therefore, the purpose of this study is to examine the efficacy of a 10-week support group in a high school setting on adolescent

self-esteem and social support. The research hypothesis to be tested is: Students who participate in a ten week support group will report a change in their self-esteem and perceived social support. The specific aims of this study are as follows:

1. To examine any significant change over time in self-esteem in students who participate in support groups.
2. To examine any significant change over time in perceived social support in students who participate in support group.
3. To compare the relationship between self-esteem and perceived social support.

Results from this study may contribute to the practice of nursing by providing support for continuing school-based support groups as an intervention for improving adolescent self-esteem and social support. Furthermore, this study may advance nursing science by building upon the theoretical relationship between self-esteem, social support, and health compromising behaviors, thereby providing insight into additional risk reduction interventional strategies.

In order to examine the phenomenon of support groups adequately on adolescent self-esteem and social support, it is essential to utilize a theoretical framework to guide and enlighten the research. Theoretical frameworks provide the roadmap from which the research can be organized, focused, and findings communicated (Meleis, 1997). It is equally important to define clearly those concepts under study. The following is an analysis of the theoretical framework chosen to guide this research, concluding with concept definitions.

### *Theoretical Framework*

The concepts under study, self-esteem and social support, each have specific mid-range theories that guide this research: Rosenberg's (1965) theory of self-esteem and Weiss' (1974) theory of social support. Symbolic interactionism, a grand theory, informs the work of both Rosenberg and Weiss.

*Symbolic Interactionism.* Symbolic interactionism as a theoretical perspective encompassed a broad set of premises that attempted to describe how both an individual and society were defined (Blumer, 1969), and sought to explain human behavior as a result of the meaning attached to persons, objects, and events (Charon, 1998). It was based largely on the original sociological theory of Mead (1934). However, Blumer, one of Mead's former students, further refined Mead's ideas and developed them into a systematic approach, coining the term, *symbolic interactionism*, in 1937.

Viewing the self through the symbolic interactionism lens resulted in the awareness that, to develop a sense of self as a human being, one must interact with people (Mead, 1934). Interaction resulted in other people's responses to an individual about how he or she was doing, what his or her worth was, and how the individual was identified, thereby shaping how an individual defined the self. Development of the self is a multi-step process (Charon, 1998). The individual began by *trying out* a specific behavior, leading to reactions from others, where the individual then reflected upon to understand its meaning. Based upon the derived meaning, the individual chose to continue the behavior or modify it. Blumer (1969) referred to this process as a self-indication process; reflected on others' responses or how the individual interpreted what other people meant was as crucial to self as was the individual's own behavior and the responses of others.



Symbolic interaction theory was an active theory of self development; growth was not the result of society and others' imposition of rules on the passive individual, rather it was the action of the individual to test out behaviors, make choices based upon others' responses, and the decision to accept or reject certain responses (Charon, 1998). As human and self-development progressed, individuals began to collect increasing numbers of referent others from whom meaning of the self were learned. Referent others could include family, friends, co-workers, and peer groups. However, referent others could also include others whom the individual did not know, such as celebrities or imaginary people. Regardless, the value of the response was directly proportional to the value the individual places on that specific referent other.

Self-concept was part of the symbolic interactionism self (Kaiser, 1990), or identity (Erikson, 1968) and consisted of two parts: the cognitive (i.e., objective) knowledge about the self and the affective (i.e., subjective) feeling about the self. Rosenberg (1965) identified self-esteem as the affective (i.e., subjective) portion of self-concept. According to Kaiser, sources of information about the self included direct social feedback, reflected appraisals, social comparison, and self-observation. Interpretation or meanings derived from the sources of information arise from interactions. Blumer (1969) posited that human beings acted toward things based on meanings that the things had for them; that meanings were directly attributed to the social interaction one had with others; and that meanings were created, maintained, and modified through an interpretive process used by the individual in dealing with the things he or she encountered.

*Self-Esteem Theory.* Rosenberg (1965), a cognitive social psychologist, integrated symbolic interactionism into his theories and beliefs about self-esteem. Symbolic

interactionism, as discussed previously, was a perspective that focused on interaction, such as social interaction and interaction with oneself (Charon, 1998). That interaction allowed humans to define their environment and determine what was of value based upon their interactions. Identity was formed, in part, based upon human's interactions with the environment (Erikson, 1968). Within this perspective, humans were viewed as dynamic and active, constantly undergoing change. The integration between symbolic interactionism and the concepts of self-esteem allowed Rosenberg to view the self as both an entity and a process and was pivotal in the development of his Self-Esteem Theory (Elliot, 2001). Rosenberg's theory was developed and refined after years of research with adolescents, and subsequently resulted in the development of the Rosenberg Self-Esteem Scale (RSES). Rosenberg held a core proposition, that self-esteem was a fundamental human motive, and that all humans maintained a universal need and desire to protect and enhance feelings of self-regard and self-esteem.

*Principles of Self-Esteem Formation.* Rosenberg (1965) viewed self-esteem as involving perceptual, cognitive, and social forces. He posited that the essential values of self-esteem resulted from what an individual learned through socialization, determining whether or not the individual was worthy of value and importance. Self-esteem, therefore, was rooted in social context (Mruk, 1995). Factors influencing this context included cultural, social, familial, and interpersonal processes. The interaction of *all* factors affected self-esteem. To improve self-esteem, an improvement in these contributing factors needed to occur.

Rosenberg (1965) suggested three main principles were involved in self-esteem formation; reflected appraisals, social comparison, and self-attribution. He further

delineated each principle by applying what he called, *selectivity mechanisms*, which served to further enhance self-esteem development.

Rosenberg's principle of reflected appraisals stated that an individuals' view of his/herself was strongly influenced and affected by his/her perception of how others viewed him/her (Owens, 2001). Social interactions affected an individuals' reflected appraisal. However, individuals could selectively influence their perception by interacting more with those who they believed saw them in a positive light and less with those who they felt viewed them negatively. Likewise, individuals valued opinions of those who viewed them positively more so than opinions of those who viewed them negatively (Demo, 2001). By utilizing selectivity mechanisms, the individual could enhance his/her reflected appraisal.

Social comparison was the principle by which individuals judged themselves based upon comparing themselves to others (Owens, 2001). Individuals selectively chose to compare themselves with specific referent others, either positively or negatively, and that resulted in an enhanced self-esteem (Demo, 2001). Individuals tended to compare themselves to those whom they felt they could measure up to in accordance with this principle.

The principle of self-attribution held that individuals drew conclusions about themselves because of their successes and failures (Owens, 2001). To enhance self-esteem, individuals chose to attribute successes to their efforts and talents, and failures to bad luck or poor timing. Additionally, more value was placed on those things individuals did well versus those that they did not excel in, thereby further building self-esteem (Demo, 2001).

Examining Rosenberg's Self-Esteem Theory within an adolescent developmental context illuminated many possible causes of destructive behavior. For example, adolescents were in a developmental period where they were looking more toward peers for guidance, direction, and affirmation, and less toward their parents. If these experiences with their peers or previous experiences with their family resulted in negative social interactions, then the adolescent would seek out interactions that enhanced their reflected appraisals, social comparisons, and self-attribution, resulting in improved self-esteem. However, while searching for positive social interactions, the adolescent might become involved with delinquent peer groups. Often, the delinquent peer group provided more positively reflected appraisals, social comparisons, and self-attribution than previous social interactions, which enhanced the adolescents' self-esteem (e.g., adolescents who are outwardly defiant at school frequently encountered a positive response from the delinquent group, positively enhancing their reflected appraisals). These same adolescents also looked towards the delinquent group for comparison. They viewed themselves within the context of the delinquent group, comparing how *good* they were at being delinquent. Finally, if the adolescent previously *failed* at conventional success, they looked to their successes with respect to members of the delinquent group (Rosenberg, Schooler, & Schoenbach, 1989) thereby enhancing their self-attribution and ultimately their self-esteem.

Rosenberg (1965) suggested that intervention strategies should be aimed at addressing the principles of self-esteem formation. Rosenberg theorized that self-esteem resulted from what an individual had *learned* through socialization. Since support groups

provided an environment for both learning and socialization, it seemed appropriate to investigate these as a source of self-esteem enhancement.

Rosenberg's Self-Esteem Theory comprised of many constructs related to self-esteem (Mruk, 1995). He included the involvement of perceptual, cognitive, and social forces, emphasized the process of socialization, identified self-esteem as a fundamental human motive, and articulated the relationship between the individuals' perceptions of others as a factor in self-esteem development.

Considering Rosenberg's (1965) theory and for the purposes of this research, the definition adopted for self-esteem is as follows: Self-esteem is that which is attained by an individual based upon a constant evaluation and re-evaluation of one's social interactions which result in either approval or disapproval of one's attitude, actions, or behaviors. Also, for the purposes of this study self-esteem will be measured using RSES.

*Social Support Theory.* Nursing literature suggested that a theoretical link existed between self-esteem and social support. Yarcheski and Mahon (1989) indicated that self-esteem and social support had a positive effect on health practices, while social support had a direct effect on self-esteem. Their follow-up study, Yarcheski, Mahon, and Yarcheski (2003) found that self-esteem, social support, and positive health practices were positively correlated. Davies et al. (2003) found that higher levels of self-esteem and social support potentially provided a protective factor against adolescent pregnancy.

Weiss (1974) proposed a theory of social support that addressed six categories of relational provisions: attachment, social integration, opportunity for nurturance, reassurance of worth, a sense of reliable alliance, and the obtaining of guidance during stressful situations. Weiss posited that individuals must maintain many of these relational

provisions in order to maintain well-being. Each category consisted of relationships that were affected by different social interactions and that it was the summative effect of those relationships that provide well-being.

Attachment occurred in relationships that provide participants a sense of security and a place in life. Adolescents might seek this level of attachment through healthy boyfriend/girlfriend relationships. Social integration involved relationships in which both participants shared concerns, either positive or negative. Often, social activities stem from such relationships (e.g., school-sponsored clubs, athletics). Opportunities for nurturance existed between teens and their parents, teachers, coaches, and other important mentors. This type of nurturance could also be seen between adolescents, where one friend was providing guidance to another, commonly seen in *best friend* relationships. Reassurance of worth "is provided by relationships which attest to an individual's competence in a social role" (Weiss, 2001, p. 24). Relationships that foster this included collegial relationships within the workplace or social arena. Adolescent peer groups could also serve as a source of reassurance. A sense of reliable alliance was generally provided only by family members, and included the sense of continual support and assistance despite existing differences. Finally, the obtaining of guidance was achieved through supportive relationships and was especially important during times of stress. Adolescents might turn to a teacher, counselor, or clergy member to fulfill this role.

However, it was important to note, as Weiss (1974) asserted, that not all categories would have equal importance to all individuals, and likewise the level of importance of each category often depended on the life/developmental situation (e.g., adolescence). Yet it was the comprehensive accumulation of relational provisions across

the lifespan, and within specific life stages that contribute to overall well-being.

Adolescent support groups could provide the opportunity for participants to experience many of these relational provisions, thereby enhancing well-being.

Drawing from the social support perspectives and theory proposed by Weiss (1974), for the purposes of this research, social support is defined as support, either actual or perceived, that is obtained through the provision of social relationships across the life span. For the purposes of this study, social support will be measured using the Personal Resource Questionnaire 85 (PRQ85).

### *Summary*

Developmentally, adolescents are at a critical time in their life span. Issues related to self-esteem and social support are in the forefront at this developmental stage. National statistics suggest adolescents are engaging in health compromising behaviors at an alarming rate. Symbolic interactionism theory links the development of the self with self-esteem, the affective component of self-concept. Erikson's (1968) developmental theory suggested that positive identity formation, developed via interactions with the environment, resulted in positive self-esteem. Rosenberg's theory clearly linked self-esteem needs to negative, and positive, behaviors (e.g., health compromising behaviors). Rosenberg suggested intervention strategies aimed at the principles of self-esteem formation. Similarly, Weiss' theory of social support linked the provision of social relationships with enhanced well-being, and recommended "an adequate life organization . . . that makes available a set of relationships that, together, can furnish all the above relational provisions" (Weiss, 1974, p. 24). Support groups as an intervention strategy seem to be appropriate and may meet these requirements; however, research linking their

efficacy to self-esteem and perceived social support among adolescents is needed to support this assumption.



## Chapter 2

### *Literature Review*

The purpose of this chapter is to analyze critically the current literature linking self-esteem and social support with health compromising behaviors. Due to the extensive research linking these concepts, only selected, relevant research will be presented. The second section will address adolescent support groups in general, including theories underpinning their use. Finally, pertinent ethical and legal issues will be discussed.

#### *Self-Esteem, Social Support, and Health Compromising Behaviors*

Research linking self-esteem and social support with health compromising behaviors has been documented in the nursing literature. The purpose of this section is to provide an overview of the variety of health compromising behaviors attributed to low self-esteem and lack of social support.

*Binge eating and obesity.* Eating disorders are far too common in adolescents. Stice, Presnell, and Spangler (2002) conducted a longitudinal study to determine risk factors associated with binge eating in adolescent girls, which had previously been linked to obesity (Stice et al., 1999). Two hundred thirty-one girls from two private high schools in Northern California were sampled. Participants ranged in age from 13 to 17 years old. Racial composition included 65% Caucasian, 20% Asian, 4% African American, 2% Hispanic, and 1% Native American. The remaining 8% categorized themselves as *other*. Participants were asked about their parents' highest educational degree obtained as a proxy for socioeconomic status. Forty-eight percent reported their parents had earned a bachelor's degree while 37% had earned a professional degree.

Researchers mailed letters to the parents of potential participants describing their study as an investigation of the mental and physical health of adolescents. Passive consent procedures were employed and written assents were obtained from the adolescents. Incentives for participation were employed; researchers held raffles for \$15 gift certificates to local book and music stores and magazine subscriptions. Researchers achieved a 94% participation rate (Stice et al., 2002).

Participants were given a seven-page survey and asked to complete it at the beginning of the study and at 10 and 20 month intervals. The survey consisted of scales designed to measure dieting, body mass, body dissatisfaction, appearance overvaluation, perceived pressure to be thin, modeling of eating disturbances, depressive symptoms, anxiety symptoms, anger, self-esteem, emotional eating, social support, and binge eating. Researchers examined self-esteem using RSES, reporting an initial alpha of .87 and a test-retest reliability of .74 (Stice et al., 2002). Social support was measured using items from the Network of Relationships Inventory. This scale measured perceived social support from parents and peers. Initial alphas were reported at .85 and .90 for the parent and peer support scales respectively.

Researchers employed logistic regression to test the relationships between each predictor and onset of binge eating. Low self-esteem and low perceived social support from peers, but not from parents, predicted binge eating onset ( $r = -.22$ ,  $p < .01$ ;  $r = -.17$ ,  $p < .05$ , respectively), a predictor of future obesity in adolescents (Stice et al., 2002).

Some limitations existed within this study. Participants were predominantly Caucasian and, using parental educational status as a proxy for socioeconomic status, the majority was from privileged families. Furthermore, binge-eating behaviors prior to the

study were not addressed. Therefore, it is difficult to know whether this behavior was a consequence of low self-esteem and lack of social support. Yet, despite these limitations, this research supported the link between low self-esteem, perceived low peer social support and obesity.

*Pregnancy.* Adolescent pregnancy has been a major concern of health and school officials. Ramifications included health risks to the adolescent mother and child, low educational achievement, and an increased likelihood for reliance on welfare (National Center for Health Statistics, 2000). Research focused on the causes of adolescent pregnancy in an attempt to better understand precipitating factors. Davies et al. (2003) examined the prevalence and correlates of wanting to become pregnant by looking at psychosocial measures that tested depression, low self-esteem, low perceived family support, history of pregnancy, and traditional beliefs about a woman's role. Four hundred sixty-two sexually active, non-pregnant, low-income African American females in Birmingham, Alabama were sampled from two adolescent medicine clinics, four health department clinics, and five high school health classes. Participants ranged in age from 14 to 18 years and were participating in a HIV prevention program at that time.

Davies et al. (2003) administered RSES to assess self-esteem and a subscale designed by Zimet and colleagues to measure perceived family support. Participants completed the scales in a group setting followed by an individual interview with a trained African-American female medical or public health student in her twenties. The follow-up interview was performed to provide consistency and validity to the self-reported data.

Prevalence ratios were performed to determine the odds of desiring pregnancy based upon self-esteem and perceived family support. Results indicated that adolescents

who reported some desire to become pregnant were more likely to have low self-esteem and perceived low family social support than their counterparts who reported no desire to become pregnant ( $PR = 2.18, p = .01$ ;  $PR = 1.89, p = .001$ ; Davies et al., 2003).

Limitations of this study were: (a) participants were obtained from a study addressing an HIV prevention program, which may influence their self-report of self-esteem and perceived family social support; (b) participants were paid an honorarium for participation; and (c) the sample consisted of low-income African-American females who were socioeconomically disadvantaged, factors which may contribute to feelings of low self-esteem and low perceived family social support. Since the study design was cross-sectional, causality could not be determined. However, despite these limitations, researchers demonstrated a link between low self-esteem, low perceived social support, and a desire to become pregnant (Davies et al., 2003)).

*Violence.* Violence has become increasingly more common among adolescents (Ellickson, & McGuigan, 2000). Nearly 40% of adolescents reported engaging in physical violence within the previous year (National Center for Health Statistics, 2000). Researchers became increasingly more interested in determining risk factors associated with youth violence. Ellickson and McGuigan conducted a longitudinal study over 5 years to identify early predictors of adolescent violence and to determine if those predictors varied by gender and across different types and levels of violence.

Four thousand three hundred ninety participants from thirty middle- and junior high schools in California and Oregon were followed from seventh through twelfth grade. Subjects were participants in the RAND Adolescent Panel Study, an annual examination of health compromising behaviors of adolescents. The sample consisted of students from

urban, suburban, and rural schools, several with minority populations exceeding 50% and many below the state median income level. Caucasian participants comprised 71% of the sample, 9% were Asian, 9% were Hispanic, and 8% were African American. By twelfth grade, 10% had dropped out of high school (Ellickson & McGuigan, 2000).

Participants in seventh grade were given a self-report questionnaire to complete which addressed the following domains: school bonds, family bonds, other problem behaviors, exposure to deviant social influences, personality and attitudes, school and neighborhood context, and sociodemographic data. The questionnaire was re-administered in twelfth grade. Violence was measured within three distinct categories: relational violence, described as persistent hitting; predatory violence; and overall violence. Zero-order correlations were used to determine the relationship between violence and all predictors. Results demonstrated that each domain related in some way to all three types of violence (zero-order correlation range .07 - .21,  $p < .05$ ). However, multivariate analysis reduced the number of significant predictors. Low self-esteem, though, remained a significant predictor of both relational and predatory violence. Additionally, doing poorly in school, having weak school bonds, being male, and early deviant behavior also were consistent predictors of violence (Ellickson & McGuigan, 2000).

*Suicide.* According to the Centers for Disease Control (2001), suicide rates have increased dramatically over the past four decades. Fifteen percent of youth surveyed by the Center for Disease Control reported seriously contemplating suicide to the extent that they had an extensive plan prepared. As a result, many researchers have examined potential risk factors associated with adolescent suicide. Kelly et al. (2001) conducted

such research to examine risk factors associated with adolescent suicide ideation and attempt. They studied four hundred eighty-two adolescents to determine what risk factors predicted suicidal ideation and attempts. Participants included in the sample all had at least one mental health diagnosis: major depression, post traumatic stress disorder, attention deficit hyperactivity disorder, alcohol abuse disorder, and/or conduct disorder. Participants consisted of slightly more than one-half female (53%), ranged in age from 12 to 19, and came from high socioeconomic backgrounds.

Participants were given a self-report questionnaire that included items assessing suicidal behavior, substance use, mental disorders, interpersonal relationship functioning, intelligence, and academic achievement. To ensure consistency with responses, trained researchers then interviewed participants. Psychosocial variables related to interpersonal relationship functioning were assessed using several instruments. Self-esteem was measured using the self-esteem subscale of the Interpersonal Support Evaluation (ISE) questionnaire ( $\alpha = .65$ ) and social support was measured using a composite score from the remaining three subscales of the ISE ( $\alpha = .82$ ; Kelly et al., 2001).

The researchers chose to analyze male and female participant's data separately, citing previous literature supporting the existence of differences between genders (Kelly et al., 2001). Unadjusted odds ratios (OR) demonstrated the predictive value of specific risk factors. The researchers reported that low self-esteem in females predicted both suicidal ideation and attempts ( $OR = 1.7, p < .001$ ;  $OR = 1.4, p < .05$ ), however, no predictive value was found with males. Social support was not found to be a statistically significant predictor for suicidal ideation or attempts in either the male or the female sample.

Based upon Kelly et al. (2001) findings, adolescent females with low self-esteem might be at risk for suicidal ideation and attempts. Although one could argue the generalizability of this study in light of the participants all having at least one diagnosed mental health disorder, the results might apply to the general female adolescent population, given the number of teens without access to mental health diagnostic and treatment services.

*Multiple Health Behaviors.* Researchers have examined self-esteem within the context of multiple health compromising behaviors. McGee and Williams (2000) engaged in a longitudinal study to assess whether low self-esteem predicted health-compromising behaviors in middle adolescence. Researchers examined 959 New Zealand children born between April 1972 and March 1973, at ages 9, 11, 13, and 15. Self-esteem was measured at ages 9, 11, and 13, followed by an examination of health compromising behaviors at age fifteen. McGee and Williams measured both global and academic self-esteem using two separate scales, RSES and the Self-Perception Abilities Scale. Health-compromising behaviors assessed included cigarette smoking, alcohol, marijuana use, problem eating disorders, suicidal ideation, and early sexual activity. These behaviors were measured by oral interviews with the participants and written self-responses to questions taken from the Diagnostic Interview Schedule for Children.

Chi-square analysis determined the extent of the health compromising behavior with decreasing levels of self-esteem. Results indicated that, as global self-esteem decreased, as measured by RSES at ages 11 and 13, an increase in the prevalence of problem eating, early intercourse, and suicidal ideation was seen at age 15 ( $\chi^2 = 4.89$ ,

4.68, 5.83 respectively;  $p < .05$ ; McGee & Williams, 2000). No relationship was noted between low academic self-esteem and health compromising behaviors.

Researchers utilized logistic regression models to control for gender, socioeconomic status, harsh parent-child interaction history, and dysfunctional family status with academic self-esteem to assess the prevalence of health compromising behaviors in the face of holding these variables constant. Results, calculated in ORs with 95% Confidence Intervals suggested that, after holding gender, dysfunctional family status, and academic self-esteem constant, a significant linear trend still remained between suicidal ideation, problem eating and low global self-esteem at 15 years of age (OR = 1.40, 2.84; McGee & Williams, 2000).

Although predictive trends were discovered linking low global self-esteem with problem eating, suicidal ideation, and early sexual intercourse, the relationship could not be labeled as causal. However, McGee and Williams' (2000) research clearly supported findings previously presented (Stice et al., 2002; Kelly et al., 2001; Davies et al., 2003).

Yarcheski et al. (2003) examined the relationship between positive health practices in adolescents with social support and self-esteem. Positive health practices collectively included exercise, nutrition, safety, less substance abuse, relaxation, and health promotion. These variables were measured by the original and revised versions of the Personal Lifestyle Questionnaire. Social support and self-esteem were measured using the PRQ85 and RSES respectively.

The convenience sample included 148 seventh and eighth grade students, aged 12 to 14, from a large urban middle school in a working middle class neighborhood. The



sample comprised of 70 boys and 78 girls, 77% of whom were Caucasian and the remaining 23% were Black, Hispanic, and Asian (Yarcheski et al., 2003).

Pearson correlations were performed to ascertain the relationship between self-esteem, social support, and positive health practices. The correlations between self-esteem, social support and positive health practices were both found to be moderate and statistically significant ( $r_{SE} = .44, p < .01$ ;  $r_{SS} = .59, p < .01$ ; Yarcheski, Mahon, & Yarcheski, 2003). While these results supported the link between these variables, researchers did not expand their analysis to include the relationship between self-esteem, social support and each of the specifically identified positive health practices. Further research should be conducted to determine these relationships to add validity to these findings and to assist in the development of specific intervention programs.

*Summary.* The research reviewed thus far suggested a link between low self-esteem and lack of social support with health compromising behaviors. Adolescents with low self-esteem and/or social support were at risk for eating disorders, obesity, suicidal ideation, early sexual encounters, pregnancy, and drug and alcohol use. Intervention strategies designed to address these issues were of paramount importance. Support groups have been used in many different populations as a successful intervention strategy. In the following section, the background and theory of support groups will be reviewed with specific emphasis on the adolescent population.

### *Support Groups*

The term, *support groups*, has been used in the literature to describe effective intervention strategies for dealing with a myriad of health and psychosocial issues. However, it is important to make a clear distinction regarding the definition of support

groups” within the context of this research. Before doing so, however, a brief discussion of various types of support groups will be presented.

Several different types of support groups exist. These include group therapy, group counseling, personal-growth groups, T-groups, structured groups, and self-help groups (Corey & Corey, 1992).

Group therapy has been in existence since post World War II (Corey & Corey, 1992). Characterized by group participation in therapeutic sessions, generally of extended duration, its goal has been to alleviate specific psychosocial problems. The leader is a trained mental healthcare professional who employs specific clinical practices to promote change.

Group counseling is generally limited to dealing with a specific problem, such as divorce or smoking cessation. Members participate for resolving a specific issue. These participants do not need intensive psychological counseling, merely an improvement in interpersonal skills that is conducive to exploration in a group context (Corey & Corey, 1992).

Personal-growth groups differ from group counseling in that they deal with more developmental issues, such as the transition from high school to college. While the focus is still on interpersonal skills, the model places emphasis on developing strategies to deal with everyday issues confronted by individuals within the same developmental stage (Corey & Corey, 1992).

T-groups generally refer to training groups found in institutions, including businesses. Their focus is on human relations and learning how to function with a given

organization. These groups are task oriented and emphasize the resolution of specific organizational and leadership problems (Corey & Corey, 1992).

Structured groups provide a structured environment to resolve specific issues and are often centered on specific themes (e.g., assertiveness training). Participants are given tasks and assignments to complete outside of the group that focus on the specific theme of the group. Upon completion of the group, participants are often assessed as to their level of progress, usually in the form of a questionnaire or interview (Corey & Corey, 1992).

Finally, self-help groups focus on the lived experience of members related to a specific area of concern (e.g., weight loss). Mental health professionals are typically not involved in these types of groups, as the members are generally psychologically fit (e.g., Alcoholics Anonymous, Weight Watchers; Corey & Corey, 1992).

Support groups, as defined in this study, comprise aspects of both self-help groups and group therapy; however, support groups encompass other attributes as well. Support groups utilize trained facilitators instead of mental health professionals to impart information as well as guide the group process. Characteristics of support groups include: having a specific, selected closed membership rather than a rotating, open membership; a fixed duration of participation; and, providing an environment conducive to disclosure and sense of belonging (Helgeson & Gottlieb, 2000).

The number of participants in a support group varies depending upon the topics to be addressed, the developmental stage of members, and the type of group (Corey & Corey, 1992). The literature suggested that support groups for adolescents should range in size from eight to 12 participants (Connor, 1995; Corey & Corey; Gance, 1995). The

frequency and duration of the support group was also dependent on similar factors (e.g., age of participants, topics to be addressed). While there was no evidence to sustain a specific duration for support groups, the trend in research studies was from eight to 12 weeks. Corey and Corey recommend more frequent meetings of shorter duration when dealing with children and adolescents.

*Support Group Theories.* Several theories underlie the effectiveness of support groups. Helgeson & Gottlieb (2000) divided these theories into several categories. Theories included the provision of emotional support by peers, therapeutic effectiveness of expressing feelings, the helper-therapy principle, and the opportunity for social comparison.

According to Helgeson & Gottlieb (2000), support group peers were theoretically able to understand and share in those experiences that were addressed within a homogenous support group more so than the individual's outside peer group. For example, a participant in a support group for children of alcoholics was more likely to understand and appreciate those experiences of another group member than that member's outside peer group. This shared experience led to the validation and acceptance of one's feelings as normal. It also contributed to a feeling of belonging, thus reducing social isolation and stigma.

Helgeson & Gottlieb (2000) further posited that the expression of feelings, especially negative feelings, was theoretically therapeutic. Sharing feelings and experiences led to emotional support from the group, which participants often were unable to get from outside peer group members. Emotional support was essential in

dealing with difficult or traumatic events. It provided the individual with support needed to deal with the stressors at hand.

The helper-theory principle posited that an individual's feeling of self-worth and self-esteem increased as he or she was able to help another person with his or her problems (Helgeson & Gottlieb, 2000). By assisting another with his or her problem, the perceived stress occurring within the helper became more manageable and realistic. The helper benefited by increasing his or her self-esteem and the group benefited from the experiential knowledge given by the helper.

Finally, the opportunity for providing social comparison theoretically contributed to the effectiveness of support groups. Similar to Rosenberg's description of social comparison (Rosenberg, 1965), this theory asserted that participation in support groups provided the opportunity for individuals to judge themselves based upon comparing themselves to others, in this case to peer support group members. Participation in support groups allowed for several types of comparisons: lateral, upward, and downward. Lateral comparisons were provided when support groups members heard shared experiences from group members. This contributed to normalizing their own experience; someone else in the group has gone through a similar challenge so their own experience was not viewed as unique. Upward comparisons occurred when a participant heard how another peer group member had successfully handled a stressor better than the participant had him/herself. This provides a positive role model for the participant; here was an example of how the stressor was effectively managed. Downward comparisons were actually positive experiences that enhance self-esteem. This type of comparison occurred when participants compared themselves to a peer group member who as *worse-off* than they

weare, resulting in the realization that their particular stressor might not be as troublesome as first perceived.

*Support Groups in Practice.* A review of the literature showed support groups had been studied in a variety of populations with many different foci. For example, Gance (1995) studied the effectiveness of school-based support groups in a high school setting for adolescents with addictive parents. Using a qualitative design, Gance examined the processes and benefits of a school-based structured support group from the perspective of the participants and co-facilitators. Twenty-one subjects were interviewed upon completion of the support group. Results of the study demonstrated several benefits of participating in the support groups, including increased coping strategies, improved resilience, improved school performance, better relationships with family and friends, and an increased knowledge of substance abuse and its effect on the family.

Connor (1995) examined peer counselees in a high school support group setting. Using a multi-trial, comparison group design, peer counselees were evaluated on measures of depression, stress, adolescent-parent communication, truancy, and peer relationships over the course of a 10-week support group program. Group A consisted of 20 students who participated in one of four support groups designed to address depression and stress; Group B consisted of 23 students who participated in one of four support groups designed to address adolescent-parent communication skills; Group C consisted of a matched-control group to be used for comparison purposes. Group C was matched with a student in Groups A and B based upon gender, ethnicity, grade level, and grade point average. Data were gathered using the Behavior Rating Profile-2, the Reynolds Adolescent Depression Scale, and truant absence frequencies. Data, analyzed

using analysis of variance, demonstrated that both Groups A and B experienced significantly more positive perceptions of peers; Group A showed a reduction in truant absences; and, Group B exhibited significant improvements in the perception of home and family.

Wassef and Mason (1996) studied the effectiveness of school-based support groups. Two hundred fifty students between the ages of 14 and 19 participated in volunteer-facilitated peer support groups in a Southwestern high school (total school population = 1,500 students). The majority of participants were Caucasian (69%), followed by African American (12%) and Asian (2%).

At the beginning of the academic year, all students were given information regarding the support groups offered at school. Students who were interested self-referred to their counselors for an evaluation of their needs. Counselors interviewed students to determine their level of emotional distress or behavioral problems, to determine whether they would benefit from participation in support groups, and identify the group that would be most appropriate. While students had input into which group they felt would be most appropriate, ultimately, it was the counselor's decision. However, as the researchers noted, there was very little disagreement between the student and counselor's perceptions of the most appropriate group (Wassef & Mason, 1996). Ten different support groups were available: (a) *Recovery/sobriety support* for students who have previously used alcohol and/or drugs and now choose to remain sober, (b) *concerned persons* for students who are dealing with a friend or relative who uses alcohol and/or drugs, (c) *family change* for students dealing with divorce and/or remarriage, (d) *grief* for students dealing with the death of a loved one, (e) *sharing* for students needing to discuss concerns related to

family, school, peers, self-image, and coping skills, (f) *metamorphosis* for students who have been abused in the past, (g) *body awareness* for students concerned about their body image, (h) *teen parent* for students dealing with being both a student and a parent, (i) *depression* for students who report feeling depressed, and (j) *winners* for students dealing with minority issues.

Each support group met for one 50-minute class period each week for the entire Fall semester. At the end of the Fall semester, students who wished to continue participation in the Spring semester were allowed to do so, space permitting, while other students who had been identified during the Fall semester as needing to participate in support groups were placed in previously existing groups at the beginning of the Spring semester. Each support group consisted of eight to 12 students and was facilitated by one volunteer staff member and one volunteer community member. Facilitators had previously received a two-day training session that addressed the need for facilitators to assume a non-directive role (Wassef & Mason, 1996).

At the end of the Fall and Spring semesters, students were given a Self-Assessment Questionnaire to evaluate the effectiveness of the support groups. Participants anonymously completed the questionnaire and mailed it to one of the researchers upon completion of the support group participation. The instrument was designed by the researchers specifically for this program and demonstrated acceptable internal consistency ( $\alpha = 0.85$ ; Wassef & Mason, 1996). The Self-Assessment Questionnaire consisted of questions pertaining to changes in three domains; school, interpersonal, and internal. Additionally, questions specific to overall acceptability of the program, history of substance use, dropping out of school, whether participation in the



group resulted in a need for participants to seek outside mental health assistance, and reasons why support group meetings were missed were included.

Of the 250 participants, the researchers received 131 completed questionnaires. Data analysis consisted of calculating the percentages and rotated factor matrix analysis (Wassef & Mason, 1996). The effects on school, interpersonal, and internal domains were reported. Two-thirds of students reported positive effects on all items, except for physical health, more often than no effect. Positive effects were most pronounced in finding new ways to deal with problems (78%), followed by the ability to provide support to friends (76%), an increase in perceived self-esteem (76%), the ability to communicate and express feelings (74%), and the ability to have supportive relationships (71%). Rotated factor matrix analysis was performed excluding data from questionnaires in which three or more questions were left unanswered. Analysis demonstrated that finding new ways to deal with problems, the ability to provide support to friends, and an increase in perceived self-esteem accounted for 56% of the total variance.

Analysis of program acceptability showed that the majority of participants (70%) indicated they planned to participate in the in-school support groups the following school year. Additionally, nearly 95% of participants stated they would recommend the program to their friends. Based upon the results from the questionnaire, fewer than 30% were initially comfortable in participating in the support groups; however, upon completion, nearly 95% indicated they were comfortable in participating in the groups (Wassef & Mason, 1996).

Results pertaining to the effects on drug and alcohol use and dropping out of school were equally significant. Of those participants who reported using drugs and/or

alcohol, 25% reported that participation in support groups had helped them stop their use, and one-third indicated it had helped them decrease their consumption. Those who reported no change in behavior (25%) indicated that their awareness of the problem increased. Nearly 60% of students who indicated they had considered dropping out of school reported that participation in support groups had encouraged them to stay (Wassef & Mason, 1996).

Participants clearly were interested in participating regularly in the group. Fewer than 4% reported missing group, all of whom dropped out because the outside issues they were concerned with resolved on their own and they felt they did not need further assistance. Regarding the need for outside professional mental health assistance, only 19% indicated they had sought such care after participation in support groups (Wassef & Mason, 1996).

Results from this study were encouraging and provided support in theorizing that in-school support groups would be viewed as beneficial by the participants. However, upon examination, certain limitations are evident. First, since participants completed the instrument anonymously after both the Fall and Spring semesters, it was difficult to determine if respondents participated in one or two semesters of support groups, which may have influenced responses. Second, no data was collected or analyzed related to the facilitators. Whether or not there was consistency in the way each group was facilitated and potential differences between the knowledge and level of expertise of each facilitator was not addressed. Third, since data collection was anonymous, it was unknown how many students received outside professional assistance, which may influence the participant's perceptions of the efficacy of participation with in-school support groups.

Fourth, since data pertaining to improvements in school attendance and schoolwork were self-reported, it was impossible to determine if these reports were accurate. The collection of attendance data and grade point averages would have provided validity to the self-report of improvement. Finally, due to the anonymity of responses, it was unknown whether differences existed between gender, age, grade level, and ethnicity.

Despite limitations, however, these three studies provided a foundation for the progression of research in the area of in-school support groups. Results were promising and corroborated previous studies examining the efficacy of support groups. However, as the authors pointed out, further research is needed.

Based upon previous research, evidence suggested that in-school support groups provided at least some assistance for adolescents dealing with various psychosocial concerns. However, since the adolescent population was considered a vulnerable population and due to the potentially emotional and sensitive issues often explored in support groups, it is important to address the ethical and legal issues when conducting adolescent research of this nature.

#### *Ethical and Legal Issues in Adolescent Research*

Within the realm of research, adolescents have been categorized as a vulnerable population. As such, research with this group requires special considerations with respect to ethical and legal issues. The purpose of this section is to describe pertinent ethical principles and current legal issues when teen are involved.

*Ethical principles.* The American Nurses Association (ANA; 2001) delineated specific ethical guidelines for the nursing profession. These guidelines were based on four ethical principles to ensure the safety and well-being of both patients and research

participants. These principles included respect for persons, beneficence, non-maleficence, and justice. Their application to research will be addressed in the following paragraphs.

The ethical principle of respect for persons held that the nurse treat all individuals as autonomous and able to make informed decisions (Findholt & Robrecht, 2002). This was the fundamental ethical principle that guided nursing practice (Aroskar, 2001). Respect for persons involved two major elements. First, respect for persons included ensuring autonomy in decision-making. Within the context of the research proposed herein, this would involve the researcher not using coercive methods to gain participants. Autonomy included the rights of the participant to decide whether to participate in the research study and to be given unbiased information needed to make an informed decision (Dickey & Deatrick, 2000). Additionally within this principle, the researcher must assess the participants' capacity for self-determination. In other words, the researcher must honor the participants' decision as long as it represents an informed choice (Findholt & Robrecht, 2002).

The principles of beneficence and non-maleficence held that the nurse would do good while doing no harm (Aroskar, 2001). Within a research context, the researcher must weigh the risks versus benefits to the participant and community at large. Ultimately, the goal was to increase the benefits of participation and reduce the risks.

Justice centers on the fair distribution of burdens and benefits, or services experienced by an individual (Rew, Taylor-Seehafer, & Thomas, 2000). This principle required research participants to be treated in a fair and equitable manner. However, as Rew, Taylor-Seehafer and Thomas asserted, "Justice is reflected in the limited exposure of a vulnerable population, such as . . . adolescents, to risks related to situations that may

not benefit them directly” (p.134). As such, it was incumbent upon the researcher to ensure that research within this population be equitable. Likewise, justice was served when this population was not excluded from potentially beneficial research, such as adolescent support groups.

While the aforementioned ethical principles were designed to protect research participants, a quandary occurred when they were compared with legal mandates affecting adolescent autonomy. Frequently, ethical and legal principles within this population were at odds. The following is a discussion of pertinent adolescent legal issues that affect the autonomous participation of teens in research.

*Adolescent rights to make health care decisions.* Historically, off-spring have been considered chattel (Dickey, Kiefner & Beidler, 2002) and therefore possessed no rights. In the late 19<sup>th</sup> century, legislators, under pressure from the women and children’s movement, implemented the *age of majority*, either 18 or 21 years of age. Legally, however, those individuals under the age of majority were deemed unable to make decisions about serious matters (e.g., health care) despite the 14<sup>th</sup> Amendment of the United States Constitution, which entitled fundamental rights to all people, including minors (Brown & Simpson, 2000). However, in the 1960s, constitutional protection for certain minor rights began to appear (Rew et al., 2000). Minors could consent for treatment of certain medical conditions (e.g., pregnancy, sexually transmitted disease treatment, drug and alcohol disorders, mental health issues), a trend that continues today.

The advancement of legal rights for adolescents continued into the 1980s. Seminal work by Weithorn and Campbell (1982) found that adolescents at the age of 14 do not differ in their decision making process from 18- or 21-year-olds. Furthermore,

they found that when adolescents of average or above average intelligence were given sufficient information, they were capable of making choices in line with those of an adult. As a result of a landmark case involving a 17-year-old receiving treatment without parental consent from a licensed physician for osteopathic problems, subsequently developing into a herniated disc, the Tennessee Supreme Court formally adopted the *Rule of Seven* in 1987 (Cohn, Gelfman, & Schwab, 2001). The Rule of Seven, also known as the mature minor doctrine, in conjunction with the emancipated minor concept, further expanded the legal rights of minors.

However, a recent study by Hapern-Felsher and Cauffman (2001) did find differences between adolescent and adult decision-making abilities. Results from their study demonstrated that adults were more competent in their decision-making skills. Furthermore, the researchers suggested the findings supported changes in informed consent policies that limit the ability of adolescents to make any decisions, specifically related to research and health care issues. In contrast, Maradiegue (2003) found that minors 14-years and older had the capacity to make informed decisions. At present, courts continue to adopt the mature minor doctrine when making decisions regarding adolescent rights.

The mature minor doctrine held several key concepts (Cohn et al, 2001). First, underlying the doctrine was the acknowledgement that minors matured at different rates. With that in mind, the doctrine stated, "Under the age of seven, there is no capacity to consent; between the ages of seven and fourteen there is a rebuttable presumption of no capacity; and over fourteen, there is a rebuttable presumption of capacity" (p. 234). This doctrine did not replace the requirement of parental consent per se; however, it allowed

for the health care practitioner to treat a minor based upon his or her professional judgment that the minor could give informed consent. This was usually based upon the minor's level of maturity, intelligence, and ability to make reasonable decisions (Rew et al., 2000). Using the mature minor doctrine was especially important when parental involvement was problematic and no other exceptions applied, such as emancipation. The mature minor doctrine could usually be applied when the following conditions were met; the minor was at least 15-years-old, the treatment was for the benefit of the minor and no one else, the health care provider deemed the treatment necessary, the minor could give informed consent, and the treatment did not involve high-risk procedures (Cohn et al., 2001).

The Southern California High School chosen for this study has followed the principles of the mature minor rule, thereby allowing adolescents over the age of 14-years to participate in school-based support groups without parental permission, although parental permission is preferred. The issue of parental permission specific to this research proposal is discussed in more detail in Chapter 3.

Emancipated minors are entitled to consent for any treatment without parental notification. Emancipated minors include those minors who are married, in the active military, have a child of their own, or are living apart from their parents and are financially independent (Rew et al., 2000). Additionally, courts may grant emancipation to minors in certain situations, such as abuse or neglect. The process of emancipation effectively terminates all parental rights, negating the need for parental consent. Emancipated minors, therefore, are granted all legal rights entitled to adults.

*Minor's participation in research.* While it is clear that minors can make important health care decisions, they do not have the right, in most instances, to decide whether to participate in research studies without parental consent (Rew et al., 2000). Although the Code of Federal Regulations, 45 CFR Part 46.408 (U.S. Department of Health and Human Services, 1998) "allows institutional review boards (IRBs) to waive parental consent in those studies of adolescents that do not pose more than minimal risk" (Rew et al., p. 132), many IRBs are hesitant to do so. This is problematic as the continued practice of requiring parental consent often precludes adolescents from participating in research designed to enhance their well-being and to improve their access to health care, leading to under-representation of this vulnerable population in research.

The National Commission for the Protection of Human Subjects of Biomedical Behavioral Research (1978) asserted that adolescents should be entitled to participate in research studies that focused on areas for which they were legally able to make health care decisions (e.g., pregnancy, STDs, drug and alcohol abuse, mental health services). However, much debate has continued between legal experts, the lay population, and health care practitioners as to whether this was ethical (Dickey & Deatruck, 2000).

In viewing the adolescent as an autonomous individual, the researcher acknowledges his or her right to privacy. Here again the conflict arises. The requirement of parental consent is in direct conflict with ensuring the adolescent's right to privacy. Merely asking a parent to sign a consent form for their teen to participate in a school-based support group study violates the adolescent's confidentiality. This puts the adolescent in the predicament of either disclosing personal information or lying to the parent. Clearly, the researcher does not desire this ethical outcome.



The principles of beneficence and non-maleficence are also difficult to achieve when dealing with the adolescent population. Requiring an adolescent to obtain parental consent may ultimately do more harm than good. As the previous example illustrated, adolescents might be forced to disclose information that could lead to conflict between the parent and adolescent, such as verbal ridicule or even abuse. Again, to a lesser extent, such requirements might result in the adolescent being unable to receive the benefits of participation in the study.

*Summary.* Involving adolescents in research requires a delicate balance, weighing both the ethical and legal principles mandated by practice and law. The researcher must ensure the protection of participants, while adhering to relevant laws. As long as there is discrepancy between these principles, the debate regarding parental consent will continue and adolescents will not be able to reap the benefits of research unless their parents are informed.

## Chapter 3

*Methodology*

The purpose of this chapter is to describe in detail the design and methods chosen to conduct this research. This section will begin by addressing the specific research design implemented, including the sample, recruitment procedures, and measurement instruments. Next, a discussion of descriptive and inferential statistics used to analyze the data will be explained. Lastly, issues related to human subjects protection will be discussed, including risks, risk management procedures, potential benefits, risk/benefit ratio, and expense to subjects.

*Design*

An interrupted time series design was used to conduct this investigation. According to Polit and Hungler (1995), interrupted time series designs allow the same group to be compared over time by examining the differences in the data series before and after the intervention to determine whether the independent variable caused the dependent variable to change. Interrupted time series designs also help minimize the effects of maturation and regression to the mean, both are threats to internal validity, by considering multiple observations before and after treatment. Standardized measures were administered at four separate time points, identified as T1, T2, T3, and T4: 1 week prior to the beginning of the 10-week support group (T1); immediately following the completion of week 4 (T2); immediately following the completion of week 8 (T3); and 2 weeks after the completion of the 10-week support group (T4; see *Measures* section).

### *Sample Population*

The sample was obtained at a Southern California High School in the South Bay area of San Diego County. The sample consisted of high school students in grades 9 through 12 who were selected to participate in the school-based support groups (see recruitment procedures) and who met the inclusion criteria. Inclusion criteria included being selected to participate in the school-based support group, a commitment to attend the support group each week for one hour per week for 10 weeks, and the ability to provide assent and obtain parental consent to participate in this research.

Historically, the students at this Southern California High School who participate in support groups have not been required by the school to provide signed parental consent forms to participate. However, parental consent forms were given to the students and then the students were asked to have their parents sign the consent. The purpose of this was to encourage the students to discuss their participation in support groups with their parents. However, if students were unable to obtain consent, they were still allowed to participate in support groups.

Typically, between 100 and 130 students participated in support groups each semester; approximately 95% (i.e., between 100 and 123) return a signed parental permission slip prior to the start of support groups each semester lending support to the feasibility of this study.

### *Sample Size*

To determine the minimum sample size required for this study, it was necessary to select the desired power and effect size. Power reflected the probability that the statistical test would result in rejecting the null hypothesis when it was false (Munro, 2001). Cohen

(1987) recommended a power of .80 for behavioral sciences. The power of a test was influenced by the effect size. Effect size represented the difference between the groups or the strength of the relationship between variables. The larger the effect size, the greater the power of the test. The number of independent variables measured also influenced the effect size. The more variables compared to subjects, the smaller the effect size would be as demonstrated by the following formula (Munro):

$$R^2 = 1 - \frac{(1 - R^2)(n - 1)}{n - k - 1}$$

where:

$R^2$  = effect size

$n$  = sample size

$k$  = number of independent variables

Behavioral science research generally utilizes a moderate effect size (0.5). Munro (2001) suggested that the effect size should be based upon previous studies, if possible. For the purposes of this research, the level of significance ( $\alpha$ ) was set at .05, the power at .80, and the desired effect size at .50. Using sample size tables provided by Hinkle, Oliver, and Hinkle (1983) for a two-tailed test (non-directional hypothesis), the minimum number of participants needed for this study was 34.

### *Recruitment Procedure*

Since the purpose of this research was to evaluate the efficacy of a 10-week support group intervention already in place, recruitment procedures consisted of two phases; the schools' recruitment of participants for the school-based support groups and the researchers' recruitment of these students for the purposes of this research study.

The schools' counselors conducted the first phase of recruitment. This process took place each semester prior to the beginning of support groups. The researcher had no

influence in this process as subjects for the study were gathered from the pool of students selected to participate in the support groups.

School counselors presented an overview of the support groups and their purpose to all English classes. The counselors selected English classes since it was the one high school course that every student in each grade was required to take. This allowed for adequate representation. Once the counselors completed their presentation to the students, students were given a confidential self-referral form to complete immediately following the presentation. All students in each class were asked to complete the referral form to maintain privacy and confidentiality. The self-referral form listed a variety of issues such as stress, family concerns, gay and lesbian issues, and relationship issues. Students checked those areas they were interested in and signed their name. There was a selection listed as *not interested* that students checked if they were not interested in participating in a support group. After checking an issue box, students then signed their name. Having all students complete the self-referral form reduced the chance individuals would be singled out. The counselors then collected all referral forms individually. The counseling staff screened the forms to determine students who were interested in support groups. The counselors interviewed those who checked an interest to determine if they were a candidate to participate in the support groups. This determination was made by the counselors based upon the students' desire and the counselors' evaluation of the appropriateness of participation. As determined by the counselors, inclusion criteria consisted of the students' desire to participate in one of the support groups being offered and an agreement between the student and counselor as to what group would be most appropriate (e.g., if they expressed concerns regarding issues with their parents, they

were placed into the family support group; if they expressed sexuality issues, they were placed into the gay/lesbian/transgender support group). Counselors excluded students from participation in support groups if they were receiving professional counseling from a licensed practitioner outside of the school setting or if they had attendance problems (e.g., excessive unexcused absences from school). If the counselor determined that a student's need was beyond that which participation could be of assistance, then the counselor immediately contacted the student's parent(s) and referred the student to outside professional services. Again, the researcher was not involved in this process.

For the purposes of this research and after the counselors determined which students were eligible to participate in a support group, they informed the students that a research project related to support group participation was going to be conducted during the semester. The counselors asked each individual student privately whether he or she was interested in learning more about the study. The counselors then informed those students who expressed interest that their name would be given to the researcher and that the researcher would contact them within one week. The counselors informed students who did not express interest that their lack of interest would in no way affect their participation in support groups or their ability to receive health services by the school nurse, who was also the principal investigator in this study.

Once the initial screening process was completed, the second phase of recruitment began. Using the list of names given by the counselors, the researcher contacted each student privately in person to discuss the purpose of the research proposed therein. Students were informed that their names would remain confidential and that only the researcher would know who had chosen to participate in the research study. Students

were given full verbal and written disclosure regarding the intent of the research.

Additionally, the school nurse assured students that their decision to decline or participate in the study would not affect their participation in support groups or their ability to receive health services. Since students were allowed to participate in support groups without parental consent in this school setting, the researcher informed students that their parents would need to be notified only if they decide to participate in the study. If students agreed to participate, then the student assent form (Appendix A) was obtained before the parental consent form (Appendix B) was distributed. Discussion of additional measures to protect human subjects follows in a later section.

Once assent was given, the researcher contacted the parent(s) via telephone. Each parent was informed of the details of the research study and given an opportunity to ask questions. Each parent was notified that the parental consent form would be sent home that evening with the student and that it needed to be signed and returned the following day. If the consent form was not returned the following day, the researcher contacted the parent by telephone to request that the signed consent form be returned the following day. If after the second attempt the consent form was not returned, the participant was excluded from the study.

Upon return of the signed consent form, students were individually administered the measurement tools (T1) in the presence of the researcher in the school health office. Directions for completion of the tools were clearly written at the top of each instrument (Appendices C, D, and E). This process took place one week prior to the beginning of the support group sessions (T1), again after four weeks of support group participation (T2),

after eight weeks of participation (T3), and finally two weeks after support groups concluded (T4).

### *Measures*

A questionnaire containing demographic data (Appendix C), RSES (Appendix D), and the PRQ85 Part II (Appendix E) were utilized in this study. The demographic data sheet was only administered once, at T1, whereas the RSES and PRQ85 were administered again at T2, T3, and T4. The following is a brief description of each tool.

The demographic data sheet, created by the researcher, consisted of the following information: name, date of birth, gender, and ethnicity.

### *RSES*

Self-esteem, defined as that which was attained by an individual based upon a constant evaluation and re-evaluation of social interactions resulting in either approval or disapproval of one's attitude, actions, or behaviors, was assessed by a 10-item scale called the RSES (Rosenberg et al., 1989). This scale consisted of 10 questions designed to measure self-esteem. Responses to statements were made on a four-point Likert scale from *strongly agree* to *strongly disagree*. *Positive* and *negative* items were alternated in an attempt to reduce the effect of respondent set. Scoring for items representing low self-esteem was done in reverse order so that, in each case, the scores went from less to more self-esteem. The higher the total score, the higher the respondent's self-esteem. Possible scores range from 4 to 40.

The RSES was originally developed using a sample of 5,024 high school juniors and seniors from 10 randomly selected schools in New York State (Rosenberg, 1965). Rosenberg reported reliability of 0.92 with test-retest correlations of 0.85 and 0.88 over



two weeks, and face validity. Since its inception, the RSES has been utilized frequently to measure self-esteem in the adolescent population (Davies et al., 2003; McGhee & Williams, 2000; Rosenberg et al., 1989), with reported reliabilities ranging from 0.76 to 0.89 (Mahon & Yarcheski, 1992; Moore, Lafflin, & Weiss, 1996; Yarcheski, Mahon & Yarcheski, 1997, 2001). Additionally, Stice et al. (2002) reported a test-retest reliability of 0.86 and “convergent validity with self-esteem assessed by structured interviews, observer ratings, clinician ratings, and peer ratings” (p. 134). For the present sample of adolescents, an alpha coefficient of .91 was obtained.

The RSES was chosen for this study for several reasons. First, it was originally based upon Rosenberg’s theory of self-esteem and measured a person’s general sense of self worth and self acceptance resulting from a continuous evaluation and re-evaluation of one’s social interactions. Second, it was developed and tested in the adolescent population. Third, the RSES had well-established reliability and validity within the adolescent population. Finally, it was short and straightforward in its delivery, which was conducive to adolescent administration.

#### *The PRQ85*

The PRQ85 was a two-part instrument designed by Weinert and Brandt (n.d.) in the late 1970’s as part of their doctoral research. Part I included questions relating to the respondent’s satisfaction with resources. Part II measured the level of perceived support reported by the respondent. For the purposes of this research, only Part II was administered since the level of perceived support that was of interest in this study.

The PRQ85 was theoretically based in Weiss’ (1974) work on social support, previously discussed in Chapter 1. Part II was a 25-item questionnaire scored on a seven

point Likert scale. Scores range from 25 to 75, with higher scores reflecting higher levels of perceived support.

While the majority of studies using the PRQ85 had been in adult populations (Weinert & Brandt, n.d.), several studies reported reliabilities ranging from 0.89 to 0.92 (Yarcheski & Mahon, 1999; Yarcheski, Mahon & Yarcheski, 1992, 2001; Yarcheski et al., 1994) when used in the adolescent population. Furthermore, Yarcheski et al. (1992) established construct validity using theoretically relevant variables. An alpha coefficient of .95 was obtained in this sample.

The PRQ85 was selected for use in this study for the following reasons. First, the PRQ85 Part II measured the level of perceived support based upon the theoretical constructs developed by Weiss (1974). Second, it had been used in the adolescent population with satisfactory reliability. Finally, as with the RSES, the PRQ85 was relatively short and straightforward, allowing it to be completed within a reasonable amount of time.

#### *Data Analysis*

Descriptive and multivariate statistics were used to analyze the data. The statistical package for the Social Sciences (SPSS Version 11.5) was used to perform the analysis of data. All participants who met the delimitations of the study sample and who completed the required questionnaires were included in the analysis of the data.

Descriptive statistics were used to summarize the demographic variables of age, gender, race/ethnicity to identify central tendency and percentages of key variables. Multiple analysis of variance (MANOVA) was used to examine change over time for the dependent variables of self-esteem and perceived social support with the covariates of

age, race/ethnicity, and gender. MANOVA was the appropriate statistical test since the aim was to examine the means of two or more groups with two or more dependent variables. Scheffé was used as the Post Hoc test to determine where the significant differences were. Paired sample *t*-tests were used to compare the relationship between self-esteem and perceived social support and between genders. Linear regression analysis was performed on correlated variables to determine predictive value. Linear regression analysis was a valuable statistical tool, enabling the researcher to develop a predictive equation. While typically interval level data were needed for this test, accurate results could also be obtained using ordinal data, provided the assumptions for the test were met. These assumptions included a representative sample, a normal distribution of the variables that were being correlated, homoscedasticity, and a linear relationship between the variables being tested (Munro, 2001). Specifically related to this research, frequencies demonstrated the sample was representative of the student population at this Southern California High School. Data were plotted on a histogram, which revealed a normal distribution and homoscedasticity of both the RSES and PRQ85 and a scatterplot revealed that a linear relationship existed between the RSES and PRQ85. Paired sample *t*-test was used to compare the relationship between self-esteem and perceived social support.

### *Human Subjects*

Approval for this study was obtained from the University of San Diego's Institutional Review Board (Appendix F) and the Sweetwater Union High School District (Appendix G). Written informed assent/consent was obtained from each participant and each participant's parent/legal guardian.

### *Potential Risks*

Although the potential risks to participants were low, they still deserved attention. Identified potential risks included missed class time (one hour per week for the duration of the 10 week support group), being labeled as being in a support group, and exposing oneself emotionally in a group of peers with subsequent fear of rejection. Additionally, since the principal investigator and school nurse were one and the same person, there was a potential risk that participants in the study might have had difficulty separating the researcher from her school nurse role. The inability of students to distinguish between the principal investigator's two roles may have led to students feeling that they had to participate in the study for fear of not being able to receive school nursing services in the future. Likewise, participants might not have answered the questionnaires truthfully, instead answering the questions in a more socially desirable and acceptable fashion for fear of being judged. Furthermore, since the school nurse was a collaborative member of the faculty, students might have feared information divulged in the questionnaires would be shared with their teachers and administrators.

### *Risk Management Procedures*

Several risk management procedures were used in order to ensure protection of human subjects. Confidentiality was of utmost importance and was applied by ensuring all students in each class completed the initial survey, even if they were not interested in participating in a support group. Assent was obtained at the time of the individual interview. An *oath of confidentiality* was implemented at the start of each group session. Only the staff members involved in the support group program knew the students participating in support groups. Only the researcher knew which students were

participating in the research study. All forms relating to the research study were kept in a locked cabinet at the home office of the researcher. Support group participants were given a generic period excuse for each class missed due to participation in the support group and research study. Informed consent was obtained from the parents prior to student participation in support groups. Although the literature suggested that, for a study such as this one, the requirement for parental consent could be waived by the IRBs (Rew et al., 2000; U.S. Department of Health and Human Services, 1998), the researcher felt that as a beginning researcher it was important to obtain parental consent to ensure protection of human subjects. Additionally, the University of San Diego's Institutional Review Board required researchers to obtain parental consent when conducting research involving minors.

Due to the personal nature of support groups, risk management involving emotional and behavioral issues arising due to participation in support groups was crucial. Additionally, measures were put into place to protect potential participants in the event their parent(s) became upset after hearing that their student enrolled in a support group at school. The school psychologist and school counselors were available for support and intervention as needed during school hours for both students and their families. Referrals to outside agencies were available by school personnel (psychologist, counselor, nurse), but were not needed. Had the need arisen, students would have been referred to their private health care provider if they were insured. For students who lacked insurance, the school nurse would have provided referrals to community agencies that provided low cost or no cost mental health services. Additionally, the school nurse

would have referred the student and family to Medi-Cal and/or Healthy Families to secure insurance for future needs.

Finally, all participants were informed that their agreement whether to participate in this study would in no way influence their support group experience, their school experience, compromise their confidentiality, or affect their ability to receive health services from the school nurse.

#### *Potential Benefits*

Potential benefits to participants might include participating in a support group and obtaining social support from peers in dealing with their issues. No other benefits were anticipated.

#### *Risk/Benefit Ratio*

Examining the risk and benefits of participation, it was the researcher's opinion that the benefits outweighed the risks.

#### *Expense to Subjects*

The cost to the participants included being out of class one period per week for 10 weeks and the additional amount of time required to complete the demographic data, RSES, and PRQ85.

#### *Anticipated Study Limitations*

Certain limitations were inherent in this proposed study. First, data was not collected on the support group facilitators. It was assumed that all facilitators had equivalent preparation since all facilitators were required to participate in standardized training through the San Diego County Office of Education prior to facilitating support groups. Second, students might not have self-reported questionnaire responses accurately

or honestly, leaning more toward answering in a socially desirable way. Third, although the sample size met the minimum number required to give a power of .80 and moderate effect size (.50; Hinkle et al., 1983), a larger sample size would have allowed for a smaller effect size, thus detecting more subtle effects on the dependent variables that might result in statistically significant findings.

## CHAPTER 4

## Results

The purpose of this study was to examine the efficacy of a 10-week support group in a high school setting on adolescent self-esteem and social support. The hypothesis tested was: Students who participate in a 10-week support group will report a change in their self-esteem and perceived social support.

*Study Sample*

Upon completion of the initial screening process by the school counselors, all 80 students who were interested in support groups agreed to be interviewed by the principal investigator (PI) for possible participation in this study. Within one week of receiving the list of names, the PI contacted each student. Of the 80 students, 20 elected not to participate in support groups and 18 chose not to participate in this study, leaving a remaining sample size of 42. However, as the study progressed, five additional participants dropped out of the study; three due to a change in schools, two electing to opt out of the study while continuing to participate in the support groups. Data were analyzed using the final sample size of 37.

The majority of participants in this study were female and Hispanic. Ages ranged from 14 to 19 years of age ( $M = 16.12$ ,  $SD = 1.418$ ) and were evenly distributed. (see Table 1). For the purposes of analysis, 19-year olds were regrouped into the 18 year-old category, resulting in an 18+ group, while African-Americans, Asians, Pacific-Islanders, and American-Indians were grouped into the *Other* category.



Table 1

*Sample Demographics*

Characteristic	n	Percent (%)
<b>Age in Years</b>		
14	6	16.2
15	10	27.0
16	6	16.2
17	9	24.3
18	5	13.5
19	1	2.8
<b>Race/Ethnicity</b>		
Caucasian	11	29.7
Hispanic	16	43.2
African American	3	8.1
Asian/Pacific Islander	5	14
American Indian	2	5
<b>Gender</b>		
Male	8	21.6
Female	29	78.4

Reliabilities for the RSES and PRQ85 with this sample were calculated using a Cronbach's alpha coefficient. Cronbach's alpha is a measure of internal consistency of the instrument. The reliability of RSES found in this sample was .91, which is consistent with previously reported reliabilities (Mahon & Yarcheski, 1992; Moore et al., 1996; Yarcheski, Mahon et al., 1997, 2001). Similarly, the reliability of the PRQ85 found in this sample was .95, which is consistent with previously reported reliabilities (Yarcheski & Mahon; Yarcheski, Mahon et al., 1992, 2001; Yarcheski, Scoloveno et al., 1994; see Table 2).

Table 2

*Instrument Reliabilities*

Scale	M	SD	Range	Alpha Coefficient	Minimum Score	Maximum Score
RSES	30.33	5.885	24	.91	16	40
PRQ85	135.32	26.949	144	.95	31	175

*Specific Aim #1*

MANOVA was used to examine any whether there were significant differences in RSES scores across the four time points. Wilks' Lambda was reported as it was the test statistic preferred for MANOVA (French, Poulsen, & Yu, 2002). Analysis of the data revealed no significant difference in self-esteem over time due to participation in support groups ( $F [6, 144] = .411, p = .871$ ) with the mean RSES increasing from 2.93 at T1 to 3.13 at T4. There was no significant difference in RSES between genders ( $F [6, 144] = .252, p = .958$ ) over time, nor was there a difference between Hispanic and Caucasian students over time ( $F [12, 144] = .162, p = .999$ ). MANOVA tests are often followed by

univariate tests to find individual differences for each dependent variable (MANOVA, 2004). Tests of between-subjects effects at the univariate level were performed, which confirmed significant differences existed within gender, age, and ethnicity and self-esteem (see Table 3).

Table 3

*Tests of Between Subject Effects: Self-esteem*

Variable	F	Sig.
Gender	10.127	.002
Age	5.897	.000
Ethnicity	14.437	.000
Adj. $r^2 = .408$		

Scheffé was used post hoc to determine where the differences occurred with respect to age and ethnicity. Scheffé was chosen over Bonferroni as the post hoc test for several reasons; it is more conservative and allows for any type of comparison post hoc, whereas the Bonferroni method is only appropriate when comparisons are made a priori (Larget, 2001). Analysis demonstrated that 17 year-olds reported lower self-esteem than 18 and 14 year-olds, while 15 year olds reported lower self-esteem than 14 year-olds ( $F = 3.788, p < .01$ ). Analysis also revealed that Caucasians reported lower self-esteem than Hispanics or Others ( $F = 10.907, p < .001$ ; see Table 4).

Table 4

*Self-esteem by Age and Ethnicity (Scheffé)*

Age/Ethnicity	Subset 1	Subset 2	Subset 3
17	27.82		
15	29.57	29.57	
16	29.83	29.83	29.83
18+		32.50	32.50
14			33.79
Caucasian	27.60		
Other		30.83	
Hispanic		32.02	

A *t*-test for independent samples was used to determine significant differences in self-esteem between genders. While male participants scored higher than females on the RSES ( $M_m = 31.82$ ,  $M_f = 29.91$ ), *t*-tests revealed no significant differences between male and female participants ( $t = 1.685$ ,  $p > .05$ )

*Specific Aim #2*

MANOVA was used to examine whether there were significant differences in PRQ85 scores across the four time points. Analysis of the data revealed no significant difference in perceived social support over time due to participation in support groups ( $F = .411$ ,  $p > .871$ ) with the mean PRQ85 increasing from 5.31 at T1 to 5.40 at T4. There was no significant difference in PRQ85 scores between genders ( $F = .235$ ,  $p = .872$ ) nor between Hispanics and Caucasians ( $F = .230$ ,  $p = .966$ ). Again, tests of between-subjects

effects at the univariate level were performed. Scheffé was used post hoc to determine where the differences occurred with respect to age and ethnicity. Analysis demonstrated that 17 year-olds reported lower perceived social support than 14 year-olds and 15 year-olds reported lower perceived social support than 14 year-olds ( $F = 6.297, p < .001$ ). Analysis also revealed that Caucasians reported lower perceived social support than Hispanics or Others ( $F = 9.373, p < .001$ ; see Table 5).

Table 5

*Social Support by Age and Ethnicity (Scheffé)*

Age/Ethnicity	Subset 1	Subset 2
17	125.34	
15	127.95	
18+	138.12	138.12
14		154.71
Caucasian	123.06	
Hispanic		140.56
Other		141.08

A *t*-test for independent samples was used to determine differences in social support between genders. While females scored higher than males ( $M_f = 136.13, M_m = 132.36$ ) the difference was not statistically significant ( $t = -.710, p > .05$ ).

### Specific Aim #3

A paired *t*-test was used to compare the relationship between self-esteem and perceived social support. Analysis of the data revealed a correlation between self-esteem and perceived social support ( $r = .619, p < .001$ ). Linear regression was used to determine the type of correlation. Analysis demonstrated that self-esteem and perceived social support are moderately positively correlated ( $\text{adj. } r^2 = .38, p < .001$ ).

## CHAPTER 5

## Discussion of Findings

The purpose of the research study was to examine the efficacy of support groups on adolescent self-esteem and social support. Literature suggested that adolescents with low self-esteem and social support were at an increased risk of participation in health compromising behaviors (e.g., suicide, violence, unprotected sex, drug and alcohol abuse; CDC, 2001; Davies et al., 2003; Ellickson & McGuigan, 2000; Kelly et al., 2001; National Center for Health Statistics, 2000; Stice et al., 1999). Developmentally, the period during adolescence was crucial to the development of self-esteem and social support (Erickson, 1968; Neinstein et al., 1996). The U.S. Department of Health and Human Services (2000) suggested schools were an appropriate place to implement intervention strategies.

This research project was conducted at an urban, Southwestern high school. The total population of the school was 2,437; 52% were Hispanic, 39% were Caucasian, 5% were Asian, and the remaining 4% consisted of African-American, American-Indian, and Middle-Eastern students. The sample of 37 participants was obtained from students who were selected by the schools' counselors to participate in a 10-week support group. Informed assent and parental consent was obtained. Participants completed two questionnaires, the RSES and the PRQ 85 Part II, on four separate occasions; 1 week prior to the start of support groups, after Week 4, after Week 8, and 2 weeks after the conclusion of support groups. Three specific aims were examined over time:

1. Was there any significant difference in self-esteem over time for students who participated in support groups?

2. Was there any significant difference in social support over time for students who participated in support groups?
3. Was there a relationship between self-esteem and social support?

MANOVA was used to assess if participation influenced the participants self-esteem and social support over time. *T*-tests were conducted to determine if a correlation existed between self-esteem and social support.

Results from this study do not support the researchers' hypotheses; instead results suggest there is no relationship between participation in support groups and a change in self-esteem or perceived social support ( $F [6, 144] = .411, p = .871$ ). Examination of the data reveal possible reasons why participation in support groups elicits no change in either self-esteem or perceived social support. When univariate analysis examining differences within each dependent variable is performed and a Scheffé is done post hoc examining the effect of age on self-esteem (RSES), the data reveal that, while 17 year-olds report the lowest self-esteem of all age groups, the mean self-esteem report was 27.82 out of a possible high score of 40, representing 70% of the total score. Furthermore, 14 year-olds, scoring the highest on self-esteem ( $M_{14} = 33.79$ ), represented 84% of the total score. The difference in means between other age groups was not statistically significant. Additionally, analysis of the RSES data demonstrates that Caucasians report the lowest self-esteem ( $M_C = 27.60$ ; 69%) compared to Hispanics who report the highest levels of self-esteem ( $M_H = 32.02$ ; 80%), representing a difference of 11%. The difference in means between Hispanic and Other is not statistically significant. Likewise, the researcher found no statistical difference between male and female participants. As a result, it is possible to infer that participants, regardless of gender, age,



or ethnic background, overall had moderate-to-high levels of self-esteem thereby reducing the margin of possible improvement. This suggests that participants with moderate-to-high levels of self-esteem may not benefit from participation in support groups.

Analysis of the PRQ85 data demonstrates similar findings. Seventeen year-olds report the lowest perceived social support ( $M_{17} = 125.34$ ; 72%) compared to 14 year-olds ( $M_{14} = 154.71$ ; 88%); a difference of 16%. The difference in means between the remaining age groups are not statistically significant. Caucasians report the lowest perceived social support ( $M_C = 123.06$ ; 70%) compared to Others ( $M_O = 141.08$ ; 81%); a difference of only 11%. The difference in means between Others and Hispanic is not statistically significant. Likewise, the difference in means between males and females is not statistically significant. Based upon this data, it can be surmised that all participants experience a moderate-to-high level of perceived social support overall leaving less margin for improvement. As a result, participation in support groups may not have benefited these participants.

These findings do not support previous research examining self-esteem and social support with respect to gender, age, and ethnic differences. Baldwin and Hoffmann (2002) conducted a longitudinal study examining changes in self-esteem during adolescence. A sample of 762 participants (i.e., 51% female, 49% male) was followed over a period of 7 years. RSES was used to measure changes in reported self-esteem. A hierarchical linear model was used to perform a growth-curve analysis of self-esteem over time. Results demonstrated that mean self-esteem among females increased until age 12, then dropped until age 17, compared with the mean self-esteem of males that

increased until age 14, decreased slightly until age 16, then continued increasing. Results also suggested that overall, females reported lower self-esteem than males.

Research by Chubb and Fertman (1997) also suggested that female adolescents have lower reported self-esteem than their male counterparts. Chubb and Fertman conducted a longitudinal study examining changes in reported self-esteem using RSES. A sample of 174 ninth graders (i.e., 57% female, 43% male) was followed for four years. Two-way analysis of variance (ANOVA) was used to analyze the data. Findings demonstrated that female self-esteem was consistently lower than male self-esteem and was statistically significant ( $F [1, 170] = 10.76; p = .0013$ ). These findings built upon previous research conducted by Block and Robins (1993) who also found that adolescent males tended to report higher self-esteem than their female counterparts.

Previous research examining differences between ethnic groups also did not support the findings from this current study. Rhee, Chang, and Rhee (2003) compared self-esteem in two ethnic groups, Asian and Caucasian. One hundred-eighty-nine students, 52.4% Asian and 47.6% Caucasian, were administered RSES. Researchers found that Asians reported significantly lower self-esteem than their Caucasian counterparts did ( $t = 5.9; p < .01$ ). Likewise, Carlson, Uppal, and Prosser (2000) examined 898 female students in grades sixth through eighth (i.e., 51% Hispanic, 25% African American, 24% Caucasian). Data were gathered and analyzed using RSES. ANOVA revealed significant differences in self-esteem between the ethnic groups ( $F [2, 892] = 19.91, p < .001$ ). Post hoc tests demonstrated that Hispanic females reported significantly lower levels of self-esteem than their African-American and Caucasian counterparts did.

Discrepancies between the results obtained from the current investigation and previous research may be attributed to several factors (e.g., sample size, time of testing, differences between group facilitators, duration of support groups). Sample sizes in previous research studies were significantly larger than the sample size used herein, thus were large enough to detect smaller, yet significant differences. Although the sample size used for this study was sufficient given the desired alpha, power, and effect size set forth a priori, it appears that a larger sample size could detect smaller yet significant differences.

This study was conducted during the Spring 2004 semester, between the end of February 2004 and the beginning of June 2004. Several scheduling issues may have influenced participants' responses. First, due to the period and scheduling of support groups, the second data collection point (T2) was given the week immediately following a 2-week spring vacation, which may have influenced responses on the RSES and PRQ85. Second, the third data collection point (T3) fell 1 week prior to the school-wide California Assessment Tool-6 (CAT-6). This exam, mandated by the State of California, is administered on the same dates annually at schools statewide with no leeway given to individual schools or districts. Each year, the administration and teachers at this Southwestern high school place a great deal of pressure on students to excel on this exam since the scores reflect how well the educators are performing. The increased pressure and stress placed on students may have influenced participants' reporting on the RSES and PRQ85. Finally, the last data collection point (T4) was given 1 week prior to the start of final exams. Final exams are often a busy and stressful time for all students, with students being tested on the culmination of knowledge from the Spring semester. Many

times, final exams carry significant weight in relation to the student's overall grade. As a result, students are under pressure to perform. Again, this may have influenced responses by participants. Previous research, combined with the results of this study, suggest that the Fall semester may be a more appropriate time to offer and research the effects of support groups on self-esteem and perceived social support. Wasef and Mason (1996) examined the effectiveness of support groups that were offered in the Fall semester, however, students who wished to could continue in the Spring semester as well. While their data suggested that participants experienced improved self-esteem and perceived social support, it was difficult to determine if the results were based on groups being offered in the Fall, or if results were influenced by continued participation in the Spring, since it is unknown how many continued for both semesters. Unfortunately, the authors did not address this issue. Wasef and Mason also used a considerably larger sample size as compared to this study (i.e., 131 participants between the ages of 14 and 19 versus 37 participants in this study). Although statistically, the minimum required sample size for this study was 34, considering  $\alpha = .05$ , power = .80 ( $\beta = .20$ ), effect size = .5 (Hinkle et al., 1983), a larger sample size would have allowed for a smaller effect size and thus better detection of significant differences (Munro, 2001).

Group facilitators may have also influenced the results of this study. While all facilitators had previously attended the same training session offered by San Diego County Office of Education, some may have had previous experience with support groups. Although data were not collected on the facilitators, the PI is aware that facilitators were teachers and counselors at this Southwestern high school. Some of the counselors were also licensed Marriage, Family, and Child Counselors (MFCC) and had

a private counseling practice. The different levels of experience between facilitators might have influenced the outcome.

Since all facilitator were required to attend the support-group training program through the San Diego County Office of Education prior to facilitating support groups, it possible that the training given facilitators was ineffective. Research has not been done to evaluate the effectiveness of this training.

Although previous research and literature suggested that a 10-week support group meeting weekly for 50 minutes was sufficient to produce results (Connor, 1995; Corey & Corey, 1992; Wasef & Mason, 1996), the results from this study combined with the minimal previous research examining this specific topic suggested a longer duration might be needed to elicit positive outcomes.

Although the hypothesis was not proven, valuable information is obtained by performing a MANOVA on the data after removing time as a factor. Several trends are identified. First, the data shows that 17 year-olds have the lowest self-esteem and perceived social support, while 14 year olds have the highest self-esteem. This suggests that 17 year-olds, who are seniors, are at the end of their secondary school career preparing for their future. They are often concerned about college and/or careers, along with leaving behind familiar people and places. The group of friends they have relied upon may be changing. They may be moving away from home and their family for the first time. This is a critical time as referent others (e.g., friends, family, co-workers, peer groups) are important in the continued development of the self-concept (Kaiser, 1990) and ultimately the self-esteem (Rosenberg, 1965). As Rosenberg suggested, the interaction of cultural, social, familial, and interpersonal processes affect self-esteem. As

seniors approach the end of their secondary school career, these interactions may become less certain, resulting in a decrease in self-esteem and perceived social support.

Juxtaposed are the 14 year-olds who report the highest level of self-esteem and perceived social support. According to Erikson (1968), the major psychosocial goal to master during adolescence is identity development, which occurs between the ages of 12 and 18. Neinstein et al. (1996) identified early adolescence between 10 and 13 years of age, with middle adolescence considered between 14 and 17 years of age. Development was a fluid process; transitioning to middle adolescence did not necessarily occur for all children at exactly the age of 14. As such, some children who were chronologically 14 years of age might be developmentally still in early adolescence, exhibiting characteristics and behaviors of an early adolescent. Interestingly, according to Neinstein, Juliani, and Shapiro, early adolescents still depended heavily on their parents and looked to them as their primary referent others, although they were beginning to branch out towards their peer group. This suggested that perhaps 14 year-olds in this sample received the positive responses needed toward the building of a healthy self, a component of self-esteem (Rosenberg, 1965).

Differences in the levels of self-esteem and social support between 14 and 17 year olds in this study may be the result of developmental processes. Between these ages, individuals are beginning to cope with "the pressures and possibilities associated with becoming an adolescent" (Block & Robbins, 1993, p. 919), such as the increased cognitive demands being placed upon them academically, the exposure to illicit drug use and sexual activity, and the development of different and deeper peer relationships.

Results from this investigation suggest that 17 year olds in this sample may not be equipped to deal successfully with this transition.

Finally, analysis of the data suggests self-esteem and perceived social support are moderately positively correlated (adj.  $r^2 = .38$ ,  $p < .001$ ). These findings support previous literature correlating self-esteem and perceived social support (Davies et al., 2003; Stice, Presnell et al., 2002; Yarcheski & Mahon, 1989; Yarcheski, Mahon, et al., 2003).

### *Conclusions and Recommendations*

Results from this study suggest that participation in support groups does not influence adolescent self-esteem or perceived social support. Based upon these findings, it may not be beneficial to continue to provide support group services to adolescents during school hours for the following reasons: (a) students miss one hour of classroom instruction per week to participate; (b) school districts must pay for facilitators (e.g., teachers, counselors) to attend the training (i.e., approximately \$150 per person) in addition to paying for substitute coverage; (c) teachers are out of their classroom once per week to co-facilitate support groups, which may disrupt the learning process for the class; and, (d) counselors are unavailable to students during the times they are co-facilitating support groups. The high cost benefit ratio suggests support groups are not an effective way of meeting the self-esteem and social support needs of adolescents. However, this conclusion may be premature due to the lack of available research examining this topic. Further research is needed in order to make an informed decision.

Results also suggest that 17 year-olds and Caucasians experience lower self-esteem and social support than 14 year-olds and Hispanics and Others. This suggests that intervention strategies targeting improvement of self-esteem and social support should be

directed towards 17 year-old Caucasians. However, previous research suggested that intervention strategies should be aimed at middle-school students (i.e., ages 11 to 14; Baldwin & Hoffmann, 2002) and ethnic minorities (Carlson et al., 2000; Rhee et al., 2003). Clearly, further research is needed to make an informed decision regarding when to implement intervention strategies.

### *Strengths and Limitations of Study*

Strengths of this study include examining variables that had been poorly researched previously, a sound theoretical framework that guided the research, and appropriate statistical analyses. Potential limitations include a small sample size, the sample was taken from one school located in a predominantly upper-middle class neighborhood, the lack of data collection regarding the background and experience of facilitators, and the principal investigator also being the school nurse, which may have influenced participants' reporting on self-esteem and social support.

### *Implications for Further Research*

Results from this study should be considered in conjunction with previous research. Due to the minimal amount of research specifically addressing these variables, further research is strongly recommended before school districts implement any changes. For example, to improve the generalizability of these results, this study should be conducted at several different schools with varying populations (e.g., different socioeconomic and ethnic groups). Additionally, a larger sample size, which would be easily obtained using several schools, would provide a greater effect size and highlight more subtle changes in self-esteem and social support. Sampling across different districts would provide generalizability of findings in addition to providing valuable information



regarding the overall effectiveness of the training program. Future research should also include collecting information regarding the level of experience of the facilitators (e.g., are they licensed counselors, how many times have they previously co-facilitated support groups, how long has it been since they received the training?).

Conducting future research during the Fall semester may illuminate differences in the variables studied due to differences in school and vacation scheduling. Research examining participation in support groups during both the Fall and Spring semesters may provide data that demonstrates changes in self-esteem and social support due to continuous participation during both semesters.

Future research should examine pre-existing levels of self-esteem and social support. The sample should include, where possible, students who score low on self-esteem and social support prior to beginning support group participation. Furthermore, a sample with an equal ratio of male to female students would allow for analysis of differences between genders.

#### *Implications for Nursing Practice and Education*

Results from this study contribute to the advance of nursing science by building upon the theoretical relationship between self-esteem and social support. Furthermore, results enlighten the practice of nursing by highlighting differences in self-esteem and social support within age groups, genders, and ethnicities, thereby informing future intervention strategies. Specifically, school nurses may use these results to raise community, school, and administrator's level of awareness regarding the need for appropriate and effective intervention strategies aimed at improving self-esteem and social support among adolescents based upon differences in age, gender, and ethnicity.

These results, in combination with previous research, illuminate the need to develop alternative intervention strategies and, perhaps, to begin such strategies at an earlier age (i.e., in middle school when the students are between 11 and 14 years of age). School nursing credential programs should include teaching intervention strategies focusing on self-esteem and social support to future school nurses. Finally, results provide nurse scientists with a foundation from which to expand further research addressing the effects of support group participation on self-esteem and social support.

### *Summary*

Self-esteem and social support are critical variables in adolescent development. Failure to develop a strong self-esteem and sense of social support result in increased risk in participating in health compromising behaviors. Minimal research links support group participation with increased self-esteem and social support. Nurses must be leaders in the realm of this research so they can continue to promote healthy behaviors and reduce risk for those in their care. School nurses are at the forefront working to improve health among students. Researching and implementing effective intervention strategies aimed at improving self-esteem and social support are critical in developing and promoting healthy lifestyles and a successful transition into adulthood.

## References

- American Nurses Association (2001). *Code of ethics for nurses*. Retrieved October 16, 2003, from <http://www.nursingworld.org/ethics/code/ethicscode150htm>.
- Aroskar, M. A. (2001). Exploring ethical challenges in school health. In N.C. Schwab & M.E. Gelfman (Eds.) *Legal issues in school health*. North Branch, MN: Sunrise River Press.
- Baldwin, S. A., & Hoffmann, J. P. (2002). The dynamics of self-esteem: A growth curve analysis. *Journal of Youth and Adolescence*, 31, 101-114.
- Block, J. & Robins, R. W. (1993). A longitudinal study of consistency and change in self-esteem from early adolescence to early adulthood. *Child Development*, 64, 909-923.
- Blumer, H. (1969). *Symbolic interactionism: Perspectives and method*. Englewood Cliffs, NJ: Prentice Hall.
- Brown, G. W., Bifulco, A., Veiel, H., & Andrews, B. (1990). Self-esteem and depression. II. Social correlated of self-esteem. *Social Psychiatry and Psychiatric Epidemiology*, 25, 225-234.
- Brown, E. J., & Simpson, E. M. (2000). Comprehensive STD/HIV prevention education targeting US adolescents: Review of an ethical dilemma and proposed ethical framework. *Nursing Ethics*, 7(4), 339-350.
- Carlson, C., Uppal, S., & Prosser, E. C. (2000). Ethnic differences in processes contributing to the self-esteem of early adolescent girls. *Journal of Early Adolescence*, 20(1), 44-67.

- Centers for Disease Control (2001). *Youth risk behavior surveillance report*. Retrieved November, 25, 2002, from <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5104a1>.
- Centers for Disease Control (1991). *Youth risk behavior surveillance report*. Retrieved November 21, 2003, from <http://www.cdc.gov/yrbss>
- Charon, J. M. (1998). *Symbolic interactionism: An introduction, an interpretation, an integration*. Englewood Cliffs, NJ: Prentice Hall.
- Chubb, N. H., & Fertman, C. I. (1997). Adolescent self-esteem and locus of control: A longitudinal study of gender and age differences. *Adolescence*, 32, 113-130.
- Cohen, J. (1987). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum.
- Cohn, S. D., Gelfman, M. H. B., & Schwab, N. C. (2001). Adolescent issues and rights of minors. In N.C. Schwab & M.H.B. Gelfman (Eds.), *Legal issues in school health services*. North Branch, MN: Sunrise River.
- Conner, W. M. (1995). Participation in high school peer-facilitated support groups: Impact on peer counselees. *Dissertation Abstracts International*, 55(10-A), 3136.
- Coopersmith, S. (1967). *The antecedents of self-esteem*. San Francisco: W.H. Freeman.
- Corey, M. S. & Corey, G. (1992). *Groups: Process and practice* (4<sup>th</sup> ed.). Belmont, CA: Brooks/Cole.
- Davies, S. L., DiClemente, R. J., Wingood, G. M., Harrington, K. F., Crosby, R. A. & Sionean, C. (2003). Pregnancy desire among disadvantaged African American adolescent females. *American Journal of Health Behavior*, 27(1), 55-62.

- Demo, D. H. (2001). Self-esteem of children and adolescents. In T.J. Owens, S. Stryker, & N. Goodman (Eds.), *Extending self-esteem theory and research: Sociological and psychological currents*. New York: Cambridge.
- Dickey, S. B., & Deatrick, J. (2000). Autonomy and decision making for health promotion in adolescence. *Pediatric Nursing*, 26(5), 461-468.
- Dickey, S. B., Kiefner, J., & Beidler, S. M. (2002). Consent and confidentiality issues among school-age children and adolescents. *The Journal of School Nursing*, 18(3), 179-186.
- Dirkson, S. R. (2000). Predicting well-being among breast cancer survivors. *Journal of Advanced Nursing*, 32(4), 937-43.
- Ellickson, P. L., & McGuigan, K. A. (2000). Early predictors of adolescent violence. *American Journal of Public Health*, 90(4), 566-573.
- Elliot, G. C. (2001). The self as social product and social force. In T.J. Owens, S. Stryker, & N. Goodman (Eds.), *Extending self-esteem theory and research: Sociological and psychological currents*. New York: Cambridge.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Findholt, N., & Robrecht, L. C. (2002). Legal and ethical considerations in research with sexually active adolescents: The requirement to report statutory rape. *Perspectives on Sexual and Reproductive Health*, 34(5), 259-264.
- French, A., Poulson, J., & Yu, A. (2002). *Multivariate analysis of variance*. Retrieved July 22, 2004, from <http://online.sfsu.edu/~efc/classes/biol710/manova/manovanew.htm>

- Gance, C. (1995). *An illuminative evaluation of school-based support groups for adolescents with an addictive parent*. University of Colorado Health Sciences Center.
- Halpern-Felsher, B. L., & Cauffman, E. (2001). Costs and benefits of a decision: Decision-making competence in adolescents and adults. *Journal of Applied Developmental Psychology*, 22(3), 257-273.
- Han, K., Lee, P., Lee, S., & Park, E. (2003). Factors influencing quality of life in people with chronic illness in Korea. *Journal of Nursing Scholarship*, 35(2), 139-144.
- Helgeson, V. S., & Gottlieb, B. H. (2000). Support groups. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social support measurement and Intervention*. New York: Oxford.
- Hinkle, D. E., Oliver, J. D., & Hinkle C. A. (1983). How large should the sample part be? A question with no simple answer. Or . . . *Educational and Psychological Measurement*, 43, 1051-1060.
- Kaiser, S. B. (1990). *The social psychology of clothing: Symbolic appearances in context* (2<sup>nd</sup> ed.). New York: Macmillan.
- Kelly, T. M., Lynch, K. G., Donovan, J. E., & Clark, D. B. (2001). Alcohol use disorders and risk factor interactions for adolescent suicidal ideation and attempts. *Suicide and Life-Threatening Behavior*, 31(2), 181-193.
- King, G., Stewart, D., King, S., & Law, M. (2000). Organizational characteristics and issues affecting the longevity of self-help groups for parents of children with special needs. *Qualitative Health Research*, 10(2), 225-241.

- Larget, B. (2001). *Introduction to biostatistics*. Retrieved July 23, 2004, from <http://www.mathcs.duq.edu/larget/math225/notes18.html>.
- Mahon, N. E., & Yarcheski, A. (1992). Alternate explanations of loneliness in adolescents. *Nursing Research*, 41, 151-156.
- MANOVA (2004). *MANOVA*. Retrieved August 15, 2004, from <http://www.richmond.edu/~pli/psy538/MANOVA/>.
- Maradiegue, A. (2003). Minor's rights versus parental rights: Review of legal issues in adolescent health care. *Journal of Midwifery and Women's Health*, 48(3), 170-177.
- McGhee, R., & Williams, S. (2000). Does low self-esteem predict health compromising behaviors among adolescents? *Journal of Adolescence*, 23(5), 569-582.
- Mead, G. H. (1934). *Mind, self, and society*. Charles W. Morris, Ed. Chicago: University of Chicago.
- Meleis, A. I. (1997). *Theoretical nursing: Development and progress* (3<sup>rd</sup> ed.). Philadelphia: Lippincott.
- Moore, S., Lafflin, M., & Weiss, D. (1996). The role of cultural norms in the self-esteem and drug use relationship. *Adolescence*, 31, 523-532.
- Mruk, C. (1995). *Self-esteem: Research, theory, and practice*. New York: Springer.
- Munro, B. H. (2001). *Statistical methods for health care research* (4<sup>th</sup> ed.). Philadelphia: Lippincott, Williams, & Wilkins.
- National Center for Health Statistics (2000). *Adolescent health highlights*. Retrieved November 25, 2002, from <http://www.cdc.gov/nchs/data/hus/hus00.pdf>.

National Commission for the Protection of Human Subjects of Biomedical Research.

(1978). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research*. Washington DC: U.S. Government Printing Office.

Neinstein, L. S., Juliani, M. A., & Shapiro, J. (1996). Psychosocial development in normal adolescents. In L. S. Neinstein, *Adolescent healthcare: A practical approach* (3<sup>rd</sup> ed.). Baltimore: Williams & Wilkins.

Pedro, L. W. (2001). Quality of life for long-term survivors of cancer: Influencing variables. *Cancer Nursing*, 24(1), 1-11.

Polit, D. F., & Hungler, B. P. (1995). *Nursing research: Principles and methods* (5<sup>th</sup> ed.). Philadelphia: Lippincott.

Rew, L., Taylor-Seehafer, M., & Thomas, N. (2000). Without parental consent: Conducting research with homeless adolescents. *Journal of the Society of Pediatric Nurses*, 5(3), 131-138.

Rhee, S., Chang, J., & Rhee, J. (2003). Acculturation, communication patterns, and self-esteem among Asian and Caucasian American adolescents. *Adolescence*, 38, 749-767.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton.

Rosenberg, M., Schooler, C., & Schoenbach, C. (1989). Self-esteem and adolescent problems: Modeling reciprocal effects. *American Sociological Review*, 54(6), 1004-1018.



- San Diego County Office of Education (n.d.). *Ready to learn training manual for comprehensive student assistance programs*. San Diego, CA: San Diego County Office of Education.
- Stice, E., Cameron, R., Killen, J. D., Hayward, C., & Taylor, C. B. (1999). Naturalistic weight reduction efforts prospectively predict growth in relative weight and onset of obesity among female adolescents. *Journal of Consulting and Clinical Psychology*, 64, 967-974.
- Stice, E., Presnell, K. & Spangler, D. (2002). Risk factors for binge eating onset in adolescent girls: A 2-year prospective investigation. *Healthy Psychology*, 21(2), 131-138.
- U.S. Department of Health and Human Services (1998). *Code of federal regulations* (45 CFR 46, Rev. ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services (2000). *Healthy people 2010: Understanding and improving health* (2<sup>nd</sup> ed.). Washington, DC: U.S. Government Printing Office.
- Wassef, A., & Mason, G. (1996). In search of effective programs to address students' emotional distress and behavioral problems Part III: Student assessment of school-based support groups. *Adolescence*, 31(121), 1-16.
- Weinert, C. & Brandt, P. (n.d.). *PRQ85*. Retrieved September 20, 2003, from <http://www.montana.edu/cweinert/instruments/PRQ85/PRQ85.html>.
- Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others: Joining, molding, conforming, helping, loving*. Englewood Cliffs, NJ: Prentice-Hall.

- Weithorn, L. A., & Campbell, S. B. (1982). The competency of children and adolescents to make informed treatment decisions. *Child Development, 53*, 1589-1598.
- Yarcheski, A., & Mahon, N. E. (1989). A causal model of positive health practices: The relationship between approach and replication. *Nursing Research, 38*(2), 88-93.
- Yarcheski, A., & Mahon, N.,E. (1999). The moderator-mediator role of social support in early adolescents. *Western Journal of Nursing Research, 21*, 685-698
- Yarcheski, A., Mahon, N. E., & Yarcheski, T. J. (1992). Validation of the PRQ85 Social support measure for adolescents. *Nursing Research, 41*, 332-337.
- Yarcheski, A., Mahon, N. E., & Yarcheski, T. J. (1997). Alternate models of positive health practices in adolescents. *Nursing Research, 46*, 85-92.
- Yarcheski, T. J., Mahon, N. E., & Yarcheski, A. (2001). Social support and well-being in early adolescents: The role of mediating variables. *Clinical Nursing Research, 10*(2), 163-181.
- Yarcheski, T. J., Mahon, N. E., & Yarcheski, A. (2003). Social support, self-esteem, and positive health practices of early adolescents. *Psychological Reports, 92*, 99-103.
- Yarcheski, A., Scolovno, M. A., & Mahon, N. E. (1994). Social support and well-being in adolescents: The mediating role of hopefulness. *Nursing Research, 43*, 288-292.

## APPENDIX A

### ASSENT FORM FOR ADOLESCENT PARTICIPANTS

I have been asked to take part in the research study examining the effects of participating in a support group on self-esteem and social support. The researcher has explained the study to me in detail.

I understand that I will be asked to complete three questionnaires; one asking information about me (such as my birthdate and gender), one asking me to answer questions about my self-esteem, and one asking me about the social support I receive. I understand that these questionnaires will be given to me to complete on four separate occasions; before I begin participating in support group in March 2004, after four weeks of support group meetings, after eight weeks of support group meetings, and again two weeks after support groups have finished, in June 2004.

I understand that the researcher is from the University of San Diego and will use this research as part of her doctoral dissertation. I also understand that the researcher is the school nurse, but that this project is being conducted within her student role.

I know that I can withdraw from this research study at any time and without penalty. I also know that my continued participation in the support group will not be affected in any way regardless of whether or not I choose to participate, or continue participation, in this study. I also know that my school standing will not be affected, nor will my ability to access health services from the school nurse, regardless of whether or not I choose to participate, or withdraw from the study.

I understand that all information, including my name, gender, birthdate, ethnicity, and answers to the questions asked of me will remain in complete confidence, with only the researcher having access to that information. I also understand that all information will remain in a locked cabinet until the conclusion of the study, at which time all information will be destroyed.

I understand that the information I provide will be used in the researcher's dissertation, but that no identifying information will be given. I know if I have any questions at any time, I can contact the researcher, Julia Smith at (619) 980-3959, or her committee chair, Dr. Susan Instone (619) 260-4575, to have them answered.

I understand that if I am not satisfied with the way this study is performed I may discuss my complaints with Julia Smith or Dr. Susan Instone. If I have any concerns related to this study, I should contact the University of San Diego Associate Provost for research, Dr. Donald J. McGraw at (619) 260-4600.

**I have read and understand this form and agree to participate in the research study.**

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Birth

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

## APPENDIX B

### PARENTAL CONSENT FORM

Your child has been asked to participate in a research study investigating the effects of participation in a school-based support group on adolescent self-esteem and social support. As part of the study, your child will be asked to complete a set of three questionnaires on four separate occasions; once before support groups begin in March 2004, after four weeks of support group participation, after eight weeks of support group participation, and again two weeks after support groups have finished in June 2004. The first questionnaire will ask for information including your child's name, date of birth, gender, and ethnic background. The second questionnaire involves your child answering ten questions regarding his/her self-esteem (how he/she feels about him/herself) by circling the response which most closely mirrors his/her feelings. Finally, the third questionnaire will ask your child 25 questions regarding his/her perception of social support (friends and relatives who provide support), again, by circling the response which most closely mirrors his/her feelings. Approximately 15 minutes will be required to complete all three questionnaires.

There are no known medical risks associated with participation in this study. However, there is a possibility that your child may experience some uncomfortable feelings in responding to the questionnaires.

Although your child will not directly benefit from participating in this study, the information obtained may help school personnel better understand the relationship between self-esteem, social support, and participation in school-based support groups. This may assist schools in better providing services to adolescents.

Your child's participation in this study is completely voluntary. If, at any time, your child chooses to either not participate, or withdraw from participation, your child's continued participation in the support group, his/her school standing, and his/her ability to access health services from the school nurse will not be affected.

All information obtained during the course of this research will be use for research purposes only, including publication, and will be kept completely confidential. Data will be reported collectively and no identifying information will be reported. Only the primary investigator, Julia A. Smith, will have access to this information. All data will be kept in a locked cabinet and destroyed upon completion of this study.

If, at any time, you have questions regarding this research, you may contact the primary investigator, Julia A. Smith (619) 980-3959, or her dissertation chair, Dr. Susan Instone, at the University of San Diego (619) 260-4575.

I understand that if I am not satisfied with the way this study is performed I may discuss my complaints with Julia Smith or Dr. Susan Instone. If I have any concerns related to

this study, I should contact the University of San Diego Associate Provost for research, Dr. Donald J. McGraw, at (619) 260-4600.

I, \_\_\_\_\_, the parent/guardian of \_\_\_\_\_, whose date of birth is \_\_\_\_\_, agree to allow him/her to participate in the research study examining the effects of participation in support groups on adolescent self-esteem and social support. **I have read and understand this form and have legal authority to consent to participation for my minor child.**

\_\_\_\_\_  
Name of parent/guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

APPENDIX C  
DEMOGRAPHIC DATA SHEET

NAME (please print): \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Gender (please circle):    Male    Female

Ethnic Background (please circle):

White   African-American   Hispanic   Asian  
Pacific-Islander   American-Indian

## APPENDIX D

## ROSENBERG'S SELF-ESTEEM SCALE

INSTRUCTIONS: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. On the whole, I am satisfied with myself.	SA	A	D	SD
2. At times I think I am no good at all.	SA	A	D	SD
3. I feel that I have a number of good qualities.	SA	A	D	SD
4. I am able to do things as well as other people.	SA	A	D	SD
5. I feel I do not have much to be proud of.	SA	A	D	SD
6. I certainly feel useless at times.	SA	A	D	SD
7. I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8. I wish I could have more respect for myself.	SA	A	D	SD
9. All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10. I take a positive attitude toward myself.	SA	A	D	SD



## APPENDIX E

## PRQ85 PART II QUESTIONNAIRE

Instructions: Below are some statements with which some people agree and others disagree. Please read each statement and CIRCLE the response most appropriate for you. There is no right or wrong answer.

## KEY:

1 = strongly disagree

2 = disagree

3 = somewhat disagree

4 = neutral

5 = somewhat agree

6 = agree

7 = strongly agree

1. There is someone I feel close to who makes me feel secure.	1	2	3	4	5	6	7
2. I belong to a group in which I feel important.	1	2	3	4	5	6	7
3. People let me know that I do well at my work.	1	2	3	4	5	6	7
4. I can't count on my friends and relatives to help me with my problems.	1	2	3	4	5	6	7
5. I have enough contact with the person who makes me feel special.	1	2	3	4	5	6	7
6. I spend time with others who have the same interests I do.	1	2	3	4	5	6	7
7. There is little opportunity in my life to be giving and caring to another person.	1	2	3	4	5	6	7
8. Others let me know that they enjoy working with me.	1	2	3	4	5	6	7

## KEY:

- 1 = strongly disagree  
 2 = disagree  
 3 = somewhat disagree  
 4 = neutral  
 5 = somewhat agree  
 6 = agree  
 7 = strongly agree

9. There are people who are available if I needed help over an extended period of time.	1	2	3	4	5	6	7
10. There is no one to talk to about how I am feeling.	1	2	3	4	5	6	7
11. Among my group of friends we do favors for each other.	1	2	3	4	5	6	7
12. I have the opportunity to encourage others to develop their interests and skills.	1	2	3	4	5	6	7
13. My family lets me know that I am important for keeping the family running.	1	2	3	4	5	6	7
14. I have relatives or friends that will help me out even if I can't pay them back.	1	2	3	4	5	6	7
15. When I am upset there is someone I can be with who lets me be myself.	1	2	3	4	5	6	7
16. I feel no one has the same problems as I.	1	2	3	4	5	6	7
17. I enjoy doing little "extra" things that make another person's life more pleasant.	1	2	3	4	5	6	7
18. I know that others appreciate me as a person.	1	2	3	4	5	6	7

KEY:

1 = strongly disagree

2 = disagree

3 = somewhat disagree

4 = neutral

5 = somewhat agree

6 = agree

7 = strongly agree

19. There is someone who loves and cares about me.	1	2	3	4	5	6	7
20. I have people to share social events and fun activities with.	1	2	3	4	5	6	7
21. I am responsible for helping provide for another person's needs.	1	2	3	4	5	6	7
22. If I need advice there is someone who would assist me to work out a plan for dealing with the situation.	1	2	3	4	5	6	7
23. I have a sense of being needed by another person.	1	2	3	4	5	6	7
24. People think that I'm not as good a friend as I should be.	1	2	3	4	5	6	7
25. If I got sick, there is someone to give me advice about caring for myself.	1	2	3	4	5	6	7