



A comparative study of adolescent behaviors in rural communities
by Penny Whitcanack Carpenter

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Education
Montana State University

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Abstract:

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A COMPARATIVE STUDY OF ADOLESCENT
BEHAVIORS IN RURAL COMMUNITIES

by

Penny Whitcanack Carpenter

A thesis submitted in partial fulfillment
of the requirements for the degree

of

Master of Education

MONTANA STATE UNIVERSITY
Bozeman, Montana

June 1990

N378
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APPROVAL

of a thesis submitted by

Penny Whitcanack Carpenter

This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style and consistency, and is ready for submission to the College of Graduate Studies.

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June 5, 1990
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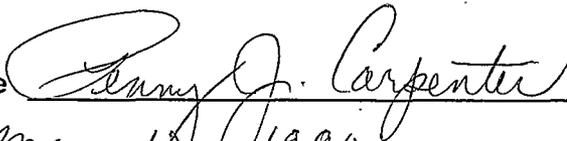
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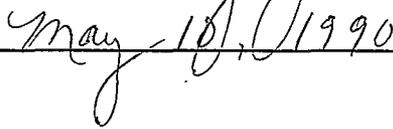
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ACKNOWLEDGEMENT

The author would like to thank her committee chairman, Dr. Michael Waldo, and committee members, Dr. Janis Bullock and Dr. Richard Horswill, for their time and effort put forth to assist with the completion of this project. Without their guidance this thesis would not have been completed. The author would also like to thank Dr. Gary Conti for his assistance with the statistical part of this work.

Thanks also go to the School Districts in Gardiner, West Yellowstone, Clyde Park and Wilsall for their permission to conduct this research in their schools and to the adolescents who participated.

Special appreciation is given to the author's husband, Clark, her son Paul, and daughter Kim for their support, understanding and love throughout the process.

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CHAPTER 1

INTRODUCTION

The developmental period of adolescence is a prevalent topic in the literature. Much has been studied and written about this period of life in this past century. Various aspects of teen-age life have been studied. In particular, the social influence of other teens on teenagers' behavior has been examined. Style of dress, hairstyles, musical interests, speech, language use, activities, and values are among the socially relevant characteristics that teenagers appear to learn, in part, by exposure to peer models (Kelly & Hansen, 1987). Hurlock (1973) noted that adolescents are oriented to peer groups and are likely to imitate the conduct of their age mates. Hurlock also proposes that "characteristics of the peer group in which a teenager seeks acceptance determine the specific social behaviors that will be reinforced by members of that group" (p. 138).

Albert Bandura's (1977) social-learning theory emphasizes that behavior is a function of the environment. In his theory, modeling or observational learning is extremely important. Gross and Levin (1987) say one need only look at the dress styles, language, and ideology of most teenagers

to see the influence of peer models. Television and movies often present attractive models being rewarded for abusive drinking, smoking, reckless driving, and drug abuse. Many of the undesirable behaviors may be learned from adolescent peer models who engage in maladaptive behaviors.

Individual behaviors that are problematic for teens, such as alcohol and drug use, have been the subjects of countless research studies. Each of the behaviors have been researched individually for many years (Delisle, 1986; Hall, 1986; Jessor & Jessor, 1977; Jones & Hartman, 1985; Lester, 1987; Robinson, Killen, Taylor, Telch, Byrson, Saylor, Maron, Maccoby, & Farquhar, 1987; Romeo, 1981; Shaffer, 1986; Swift, Bushnell, Hanson & Logemann, 1986). Most studies have examined only one problematic behavior. There is a need for more studies of the relationship between problematic behaviors to promote further understanding of this phenomenon.

Recently the idea of looking at self-destructive behaviors conjointly is emerging in the literature. Researchers (Donovan, Jessor & Costa, 1988) are starting to explore how self-destructive behaviors are interrelated, that is, how being involved in one behavior has an association with being involved in others. A number of programs have been created to prevent negative adolescent behaviors like drug use ("Just Say No", "Drug-free schools"), smoking ("Tobacco free by 2000"), drinking and driving ("Students Against Drunk Driving"), and others. The more traditional approaches to

prevention of single negative behaviors are now being challenged. New approaches in prevention programs are developing such as assertiveness training and self-esteem building, and are being employed to try to prevent a wide range of negative behaviors. These programs are intended to replace specific educational programs against just one behavior such as smoking (Horan & Straus, 1987).

Donovan and Jessor (1985) called for further research in the area of "understanding the organization of the interrelations between problem behaviors among adolescents" (p. 893). Behaviors that are negative and viewed as self-destructive may be correlated for several reasons. For example, they may be correlated because they are seen by youth as a means of achieving valued goals, or because they are learned together and expectations are that they continue to be performed together (Donovan & Jessor, 1985).

Sarvela, Takeshita and McClendon (1986) studied the influence of older teenagers on junior high age youth regarding the use of marijuana in a rural Northern Michigan community. A total of 181 students were selected for the study. They completed anonymous questionnaires of fifty-five questions on drug knowledge, personal drug use, peer drug use, introduction to drug use, health beliefs, general experiences with alcohol, and demographic characteristics. The researchers found that peer use of substances is a significant predictor of personal substance use and that introduction to use was

more frequently a result of older youth initiation (offering, coaxing, or cajoling). The correlation ($r=.92$) between peer and personal marijuana use among the 7th graders of this study may indicate that early adolescence is a period in time where very powerful peer pressure is present. The researchers (Sarvela, Takeshita, & McClendon, 1987), state:

an almost perfect positive correlation indicates that peer pressure is overriding many other determinants of drug use such as familial variables, religion and health beliefs. The intense need to belong is clearly demonstrated by this relationship. (p. 36)

Horan and Straus (1987) state that of all the psychosocial correlates of substance use, the most convincing are the relationships between an individual's use and the behavior of peers, older siblings, and parents. They believe that modeling and social reinforcement play a role in the initiation of substance use for adolescents. Generally the peer models are older youth (including older siblings of same age friends) that younger adolescents want to "go along with to belong" (Horan & Straus, 1987, p. 315).

This study examined the social influence teenagers have on each other regarding self-destructive behaviors in small rural communities. The interrelatedness of self-destructive behaviors was also examined.

It was beyond the scope of this project to study the many other variables which potentially influence adolescent development and behavior such as family stress, divorce, repeated moves during childhood, traumatic events, child abuse and illnesses or injuries. It is necessary though to recognize that these concerns and other uncontrollable variables exist which could contribute to adolescent development of problematic behaviors. Certainly there is a strong potential that negative behaviors modeled by adolescents are first observed by watching adults, including their parents. Also, this project does not discount the large numbers of adolescents who do not choose behaviors that are self-destructive. Many youth grow and develop through adolescence imitating positive choices of behavior.

Statement of the Problem

The purpose of this study was to compare self-destructive behaviors (smoking, marijuana & alcohol abuse, eating disorders, sexual activity), and level-of-happiness in two communities where teens are regularly influenced by older youth coming in from other towns and states for employment (Gardiner/West Yellowstone), to students in two communities without outsiders' influence (Clyde Park/Wilsall).

Law enforcement statistics from both Gardiner and West Yellowstone reveal a pattern of increased alcohol and drug related disturbances and activity during the tourist season. Resident officers, Deputy Gary Tanascu from Gardiner and

Patrolman James Tannehill from West Yellowstone (personal communications, March, 1990) state that a large portion of youth involved in illegal activities (alcohol and drug use) during this time are not residents of the communities. Local youth are also part of the increased activity and are often found with the non-resident offenders at house parties, keggars, and other late night gatherings where drugs and alcohol are involved.

Through comparing these communities, social influence on self-destructive behaviors was assessed. A second purpose of this study was to examine the relationship between different self-destructive behaviors.

Importance of this Study

This project was intended to generate evidence regarding the influence of social learning on adolescents' self-destructive behaviors. It was also intended to demonstrate the interrelatedness of the self-destructive behaviors. The results of the study also improved the level of community awareness regarding involvement of local teenagers in self-destructive behaviors. Increased awareness can promote community efforts towards preventative programs and assist communities with planning for needed counseling services. The needs-assessment survey taken by this investigator previously demonstrated that self-destructive behaviors of local youth is a concern for both youth and adults in each of the four communities studied.

Operational Definitions

There are seven major concepts in this study that will be defined below. The concepts are community, adolescence, self-destructive behaviors, syndrome of self-destructive behaviors, non-resident-youth influence, alcohol and chemical abuse, and social influence.

Community. A group of people living in specific locality, sharing government (mayor, council) and having a common cultural and historical background. For the purpose of this study, communities are identified by the schools students' attend. For example, students attending Gardiner High School are considered to be members of the Gardiner community.

Adolescence. The transitional period between puberty and adulthood in human development, extending mainly over the teen years, ages 12 through 19. This study included students in grades 9 through 12 with ages ranging from thirteen to nineteen.

Self-destructive behaviors. Behaviors that are harmful, injurious, or destructive to oneself: for the purpose of this study these were measured by six scales. The names of the scales and abbreviations of their names follow: smoking (SMOKE), alcohol abuse (ALCO), marijuana abuse (DRUG), promiscuous sexual activity with repeated potential exposures to sexually transmitted diseases and pregnancies (SEX), and the detrimental eating habits of anorexia and bulimia (EAT).

Level-of-happiness. For the purpose of this study the students' level-of-happiness was measured by the FEEL scale on the survey.

Syndrome" of self-destructive behaviors. For the purpose of this study behaviors that are interrelated, linked, or associated with one another were referred to as a syndrome of behaviors. The behaviors listed above were studied to see if they constitute a syndrome.

Non-resident youth influence. Non-resident youth of the specific area, whose presence in the community is for seasonal employment. They are youth who come from other areas in Montana and from other states. Some have been identified by law enforcement as engaging in higher levels of self-destructive behaviors than local youth and who interact socially with some of the local youth influencing them to engage in self-destructive behaviors.

Alcohol and chemical abuse. The use of beer, other alcoholic substances, and marijuana by underage youth frequently and often to the point of intoxication.

Social influence. For the purpose of this study this was the degree, as measured by their self-report, that students were influenced by adolescents who are not permanent residents of their community to participate in self-destructive behaviors.

CHAPTER 2

LITERATURE REVIEW

This section will review literature on adolescents and adolescent self-destructive behavior. It will include the impact of social influence on adolescents' behavior. Also included will be literature on how harmful behaviors are related to one another. The review will first cover adolescent development to present the numerous and varied concerns of this age group. This will be followed by an examination of cognitive-developmental theory, psychosocial theory, and social learning theory, which all provide perspectives for understanding the processes occurring during the adolescent period of growth. Finally, research on self-destructive behavior, (i.e. suicide, eating disorders, substance abuse, and sexual activity), and studies done on how these behaviors may be related to form a "syndrome" of self-destructive adolescent behavior will be examined.

Adolescent Development

This section will discuss various areas of adolescent development including physical development, definitions of adolescence, common views of struggles during this time, and transitions and conformity concerns for teens. These will be

reviewed to assist with understanding the complexity of adolescent growth and associated behaviors.

The scientific study of adolescence began as the 20th century opened, and firmly established the growing layperson's perception of adolescence as a special stage of development occurring between childhood and adulthood (Van Hasselt & Hersen, 1987). Twenty years ago there was just one specialty journal serving as a publication outlet for research on adolescence; today there are five, (Adolescence, Journal of Adolescence, Journal of Early Adolescence, Journal of Adolescence and Youth, and Youth and Society).

The physical changes associated with puberty include alterations in body size, shape and physical strength. Capacity for sexual reproduction is also reached. Secondary sex characteristics appear including breast development in girls, voice changes and facial hair in boys, and the growth of pubic and axillary hair in both. The sequence of these changes is the same for all adolescents, but the timing and continuity of the changes varies greatly. Early and late maturation, growth spurts, and the less desirable afflictions of adolescence (acne, voice-breaking, and painful menstruation) all contribute to psychological effects on self-concept and feelings of acceptance (Sprinthall & Collins, 1988).

Rogers (1981) characterized adolescence as a period of rapid physical and psychological change accompanied by specific developmental tasks such as separation from parents,

the desire for independence, development of ego, development of self, acceptance of one's own body, sex role development, development of a system of values, and the achievement of some degree of economic status.

Social psychological perspectives have made influential contributions to the study of adolescence. Notable authors in this area include G. Stanley Hall, Sigmund Freud, Margaret Mead and Kurt Lewin (Sprinthall & Collins, 1988). Lewin (cited in Sprinthall & Collins, 1988) describes adolescents as "marginal" persons (p.15). Since they don't belong to either the child or the adult social groups, Lewin sees them "facing ambiguous expectations and unclear rights and privileges" (p. 15). This period of non-belonging contributes to the difficulties adolescents experience. Authority and control conflicts and influences of social and cultural affiliation may also contribute to difficulties for the adolescent (Klimek & Anderson, 1988).

Adolescence does not appear to be an unfavorable period for everyone. Offer, Ostrov, Howard, and Atkinson (1988) conducted a longitudinal study of 376 boys and challenged the historical belief that adolescence is "inevitably a period of storm and stress" (p. 119). They found only a small percentage (13%) of subjects with continuous significant behavior problems.

Diamond and Diamond (1986) describe adolescence as the "social transition phase between childhood and adulthood"

(p. 5). Individuals are acquiring education, training and experience to equip them for economic and social independence and future contributions to society.

Conformity seems to be high in early adolescence. This may also be related to social acceptance. The struggle to be accepted by their peers often includes partaking in group activities or behaviors that normally would not be chosen. Heightened conformity to peers is often seen as a problem, particularly when peer behavior conflicts with parental standards. Modeling behaviors of peers or persons teens look up to is considered a strong factor in perpetuating self-destructive behaviors (Van Hasselt & Hersen, 1987).

Theoretical Approaches

This section will address three theories of human development that contribute to understanding adolescence: Piaget's cognitive-developmental theory, Erikson's psychosocial theory, and Bandura's social learning theory. Piaget's and Erikson's theories are included here to better describe the complexity of adolescent development. Bandura's theory is included to provide support for the concept of social influence on adolescent behavior that is the focus of this study.

Cognitive-developmental Theory

Jean Piaget's (Salkind, 1981) most outstanding contributions to the understanding of cognitive development were his models of the process that occurs at each of four sequen-

tial interrelated stages of cognitive growth. The stages are the sensorimotor stage (lasting from birth through age two), the preoperational stage (lasting from two to age seven), the concrete operational stage (lasting from age seven to twelve) and the formal operational stage, (lasting from age twelve through adulthood).

It is the description of the formal operational stage that is of interest when discussing adolescent behavior. Salkind (1981) suggests that teenagers in the formal operational stage think that others see them the same way they see themselves. They function at a level of adolescent egocentrism and perceive themselves as being on center-stage. They value friendships highly and as such are more often influenced by friends than family.

A study by Hammes and Duryea (1986) offers evidence that adolescents' cognitive abilities are related to their involvement in adaptive behavior. These researchers looked specifically at the issue of cognitive development and the dynamics of decision-making among adolescents. Their findings suggested that adolescents with increased ability for abstract thinking made more health-promoting decisions than adolescents with more concrete thinking styles. The researchers indicated that this was due to the abstract thinkers' ability to consider if-then type statements and consequences. Hammes and Duryea feel it is imperative for curriculum planners to

promote strategies that will enhance student's ability to think abstractly.

Psychosocial Theory

Erik Erikson (Salkind, 1981) was a student of Sigmund Freud and extended Freudian theory to include an emphasis on the ego as a central component in psychological development. Erikson's psycho-social theory focused on the entire life span and was divided into eight sequential stages. The first four stages are: oral-sensory, muscular-anal, locomotor-genital, and latency. The fifth is adolescence and the last three are young adulthood, adulthood and maturity. "According to Erikson, psychological development results from the interaction between maturational processes, or biological needs, and the societal demands and social forces encountered in everyday life" (Salkind, 1981, p. 108).

The fifth stage of development proposed by Erikson's theory is adolescence and entails a crisis of identity versus role confusion (Erikson, 1968). Adolescents are struggling with new roles as well as with their concern about how others perceive them. The inability to come to resolution of this struggle with a sense of self, or lack of establishing a role, can lead to role confusion. Erikson believed that the forming of cliques and adopting "in" clothing, speech and behavior are defense mechanisms against role confusion. A common compensa-

tion for role confusion is overidentification with "heroes, cliques and crowds" (Erikson, 1968, p. 262).

Jones and Hartmann (1985) examined Erikson's ideas by studying 2612 seventh through twelfth graders. The researchers examined the relationship of ego identity (the struggle within themselves as to who they are), self-esteem and substance use during adolescence. The researchers stated that the association between psychosocial maturity and socially unacceptable behavior has been ignored completely. They said that Erikson did not address the possibility of different effects coming from conflicting societal expectations. Jones and Hartman predicted that:

substance use, a behavior that: 1) is socially acceptable in some, but not all social contexts; 2) distorts perception of experience (the primary ingredient of identity); and, 3) is increasingly evident within our society; is a potential component of "normal" ego identity development. (p. 5)

In other words, the researchers are saying that today, substance use is an experience that is potentially a component of normal ego identity development and self-esteem in adolescents. Two instruments were used to gather data. One was developed to assess the extent of alcohol and drug use. The other was to assess ego identity (the Extended Version of the Objective Measure of Ego Identity Status, by Grotevant and Adams, cited in Jones & Hartman, 1985). The validity and

reliability of the first instrument were not described. The researchers stated the following about the second: "initial estimates of reliability (internal consistency, test-retest) and validity (content, factorial, discriminant, and concurrent) are impressive" (Jones & Hartman, 1985, p.7). Multiple analysis of variance and separate univariate analyses of covariance (ANCOVA) were used to analyze data for each of the eight subscales of the Extended Version of the Objective Measure of Ego Identity Status tool. The researchers concluded that:

the findings from this study provide direct support for Erikson's contention that ego identity is affected by experience, but raise a number of questions regarding both qualitative and quantitative aspects of substance use experience. (p. 10)

The sample for the study was appropriate as it included only adolescents, however sample selection was not mentioned. Percentages were given for race, gender and grade level for the participants but no other information was given. Ethical issues for the research were not addressed. The ideas presented in this study (Jones & Hartman, 1985) regarding adolescent identity and self-esteem support Erikson's psychosocial theory of development. The literature reviewed above suggests that adolescence is a time of trying to understand themselves; a time to achieve an identity and grow to adulthood. Erikson's psychosocial theory includes concepts

that suggest social forces play significant parts in human development.

Social Learning Theory

Albert Bandura's (Salkind, 1981) social learning theory applies to all periods of life. The theory assumes that "significant learning takes place through the process of imitation or modeling" (Salkind, 1981, p. 169). This assumption is crucial to understanding the development of self-destructive behaviors among adolescents. Bandura has presented the viewpoint that the experiences of others are important. An important difference between the traditional Stimulus-Response view of imitation and the social learning theory view is that within social learning theory, certain classes of behavior can be learned "without the benefit of direct experience" (Salkind, 1981, p. 169). Salkind states that vicarious or indirect reinforcement is as effective as direct reinforcement for facilitating and promoting imitation. He also states that research on vicarious learning has shown how the effects of watching behaviors are "very powerful influences on development" (Salkind, 1981, p. 178). Bandura (1977) states, in his book, Social learning theory, that:

people are neither driven by inner forces nor buffeted by environmental stimuli. Rather, psychological functioning is explained in terms of a continuous reciprocal interaction of personal

and environmental determinants. (p. 11)

Research studies have supported social learning theory related to adolescence. Openshaw, Thomas, and Rollins (1983) conducted a study to clarify the independent contribution of social learning and symbolic interaction theories on adolescent self-esteem. "Symbolic interaction posits that the child's self esteem is a function of the parent's reflected appraisal of the child's inherent worth, which occurs during the course of parent-child interaction" (Openshaw, et al., 1983, p.317). Research by Gecas, Calonico and Thomas, 1974 (cited in Openshaw, et al., 1983) has suggested that both of these are viable explanations for self-esteem development, but did not address the contribution of each independently. The sample consisted of 368 adolescents and their parents from predominantly large, middle class families. The tool used to collect the data was self-report questionnaires administered by two investigators in the homes of the subjects. They reported that in some of their dyad comparisons, "social learning variables were found to have greater relative effect when compared to symbolic interaction variables" (Openshaw, et al., 1983, p. 327). They also reported that adolescent self-esteem may be more a function of social interaction with significant others (siblings, cousins, aunts, and uncles), and peers, than of modeling the parents' self-esteem. The researchers conclude that a theoretical framework somewhere between the two theories studied could be constructed to

account for observed variation of adolescent self-esteem development. This study was attempting to show support for social learning theory explanations of adolescent development.

Social learning influence on adolescents in areas other than self-esteem development have also been researched. A study by Akers, Krohn, Lanza-Kaduce, and Radosevich (1979) was done as a specific test of the social learning theory on deviant behavior in adolescents. The researchers looked at adolescent drinking and drug behavior to see if the behaviors could be explained by social learning theory. They concluded there was evidence supporting social learning theory explanations of the behavior of students in their study. The independent variables were the following measures of social learning concepts: imitation, differential association, definitions, and differential reinforcement. The researchers explain that social behavior is acquired both through direct conditioning and through imitation or modeling of others' behavior. Differential association is engaging in interaction and identifying with some groups of peers as opposed to other groups of peers. Differential reinforcement is when behavior is strengthened through reward and avoidance of punishment or weakened by aversive stimuli and loss of reward. Evaluative definitions of the behavior as good or bad are norms and attitudes that people learn in interaction with significant groups in their lives. Dependent variables were the frequency-of-use scales for marijuana and alcohol.

Data were analyzed through multiple regression technique. The findings stated "the results of the regression analyses show strong support for the social learning theory of adolescent alcohol and drug behavior" (Akers, et.al., 1979, p. 642).

The Akers et al. (1979) study had a number of strengths. The introduction was well referenced and the problem statement was clear. The literature review for their study was comprehensive for social learning theory and adolescent drug and alcohol behavior. The methodology section included discussions on sampling and procedure, and reliability and validity for the self-report questionnaire technique. A thorough discussion of ethical considerations and steps taken to protect the rights of respondents and of the school districts was included. The researchers state that social learning theory is supported for adolescent drinking and drug behavior. This research project on social influence related to self-destructive behaviors (including drinking and drug use) demonstrated additional support for social learning theory.

From the studies cited above it can be concluded that various theories of human development encompass different viewpoints of growth. The three theories reviewed in relation to adolescence shed light on the complicated nature of this stage of growth.

Self-destructive Behaviors

This section will review each of four self-destructive behaviors separately (smoking, depression/suicide, eating disorders, substance abuse and sexual activity), which will be the focus of this study.

Depression/suicide

Citing a study done by Tishler, McKenry and Morgan in 1981, Delisle (1986) reported that an estimated thirteen adolescents per day end their own lives. There has been a 250% increase in suicides among young people since 1964 (Delisle, 1986). In this article, Delisle discussed suicide among gifted adolescents. He contends, based on the findings of current research, that gifted youth are especially susceptible to suicide attempts. According to Delisle, investigators suggest that the perception of failure among gifted students may be far different than among average students. Thus a "B" may be an equivalent to failure for some above average youth. This self-induced perfectionism, as well as societal expectations, may be causes of stress levels with which they are unable to cope. Citing a study by Shneidman in 1972, Delisle (1986) states "the stress of living up to expectations that the teenager perceives as unattainable overrides the desire to go on, and life becomes barren" (p.559). The choice made to end their life may be made following exposure to the idea via television shows, media

coverage of suicides or suicides of acquaintances thus indicating social influence as a factor.

Rosenkrantz (1978) wrote about the psychodynamics of suicide in youth. The act of suicide may be a sudden impulsive reaction to a stressful situation, but more often it is the result of the ego identity issue of adolescence. Ego-identity-issue refers to the struggle that teens have in discovering and accepting their identity. The impact that peers have on each other is a part of this struggle. Broken relationships and lost loves are other forms of social phenomena that are related to adolescent depression and suicide. Rosenkrantz (1978) states that the "most significant precipitating event in adolescent suicide seems to be this element of loss, such as death, desertion or separation" (p. 210). Therefore, the loss of a significant person or persons in the adolescent's life may produce a predisposition toward suicide.

Lester (1987) explored the subcultural theory of teenage suicide through a case study. He stated, "A subculture has its own customs, values, and attitudes within the larger culture. Subcultures are critically dependent upon the social pressures exerted by others, both directly and indirectly" (p. 318). Five teenagers were involved in the suicidal subculture studied in this article. Three of these teenagers took their own lives within two weeks of one another and subsequently generated suicidal preoccupation in their peers. As this

research points out, social pressures are related to suicidal behavior and the influence of others needs to be studied more.

Developmental level in relation to suicide has also been addressed in the literature. Children and adolescents are on different levels developmentally and respond differently. Hawton (1982) has suggested that children have multiple social support systems (close friends, teachers, relatives) that remain strong. However, the increasing self-consciousness of the older adolescent and the drive for individuation weakens those support systems of earlier childhood and increases their vulnerability to suicide. Shaffer (1986) suggested that desperation is "the critical construct for the contemplation or enactment of suicide" (p. 394). The feeling of despair may be the result of choosing between various abstract life alternatives and concluding that none are satisfactory. Shaffer states that if this is true, then the ability to make this choice falls into the category of hypothesis setting and testing which are mental activities that characterize the developmental stage of formal operations. Hypothesis setting and testing develop only in adolescence. Adolescence is the developmental age that exhibits more suicidal gestures than younger, or pre-operational children (Shaffer, 1986). This study provided information about the level of happiness among rural adolescents chosen for this project. No specific assessment of despair was attained but a general question

regarding how things are most of the time for the students was included.

The studies cited above lead us to conclude that suicide is a serious problem for adolescents. The results of these studies suggest that suicide arises from various areas of concern for teenagers.

Eating Disorders

Anorexia nervosa and bulimia are two adolescent self-destructive behaviors that are often discussed in the literature. Anorexia is an eating disorder that involves an intense fear of gaining weight or becoming fat (even though the individual may be underweight), and a distorted body image. One study (Swift, Bushnell, Hanson & Logemann, 1984) of thirty hospitalized anorexic female adolescents stressed that anorexia is one of the most fatal of psychiatric disorders. Swift et al. reviewed a study that documented a "startling high mortality rate of 19%" (p. 832). The researchers stated that the "anorexia self-image is notably deviant from that of the normal adolescent population" (p. 826). According to Swift et al. (1984), four of the common characteristics of teen anorexics in this study were warped body image, distressing affect, insecurity in social relationships and a sense of sexual inadequacy. The results of research done by Swift et al. (1984) illustrated the profile of the 30 anorexics as notably deviant in comparison to normal

subjects. The anorexics scored very low on three scales which gauge the psychological self. These three scales were: Impulse Control, Emotional Tone, and Body and Self-Image. For the anorexic subjects, the most distorted scores were found in the areas of social relationships and sexual attitudes.

Psychoanalytic theory (Romeo, 1984) suggests that sexual pressures inherent in adolescent development trigger the onset of anorexia nervosa at puberty. Romeo states that the youngster who develops anorexia emerges from the latency stage of development with a weak and immature ego which is overwhelmed by the developmental tasks of adolescence. The developing ego is affected by social influence of peers and the resulting sexual pressures may be associated with the onset of the disease. Romeo (1984) states that two of the major symptoms of anorexia nervosa, the cessation of menstruation and weight loss to childlike body proportions, "suggest that a sexual conflict is the central issue in anorexia" (p. 551). This research suggests there is a positive correlation between anorexia and sexual pressures.

Sprinthall and Collins (1988) cited Hilda Bruch (1973), in her book, Eating disorders, two possible associations for anorexia nervosa. These associations were sociocultural pressures for thinness and perfectionism in the home. The messages portrayed via media related to being thin and successful are powerful for young adolescent females. Bruch believes vulnerable adolescents come to believe that weight

control is equal to self-control and will lead to beauty and success. She also states that perceived demands from parents and related family emotional stress leads to the adolescent constantly striving for achievement "at all costs" (Sprinthall & Collins, 1988, p. 405) which may include being thin.

Bulimia is an eating disorder that involves eating large quantities of food and then purging, usually by forced vomiting. Carter and Duncan (1984) state that in their study, the prevalence of bulimia within a normal population they sampled was 13%. The researchers conducted a survey study of 421 female high school students from a single high school. They found that the vomiters in their study had higher levels of somatic symptoms, anxiety, social dysfunction and depression than did the nonvomiters. From the studies cited above it can be concluded that the various eating disorders are significant problems for a number of adolescents.

Substance Abuse

The following studies will review literature on substance abuse to promote understanding of this adolescent self-destructive behavior.

In a study (Robinson, Killen, Taylor, Telch, Byrson, Saylor, Maron, Maccoby & Farquhar, 1987) of 1,447 tenth graders, the researchers found that an increased level of substance use (alcohol & marijuana) by both boys and girls was most strongly predicted by the use of marijuana by friends.

The researchers state that the syndrome of problem behavior theory suggests that a tendency toward problem behaviors can be accounted for by the interaction of psychological, social environmental, behavioral, and physical variables. These were the independent variables in this study. The dependent variable was the level of substance use.

According to Robinson et al. (1987) the social environmental variable was the influence on the subjects by surrounding peers. The behavioral variable was the degree of subject involvement in problem behaviors and in socially approved behaviors.

The hypothesis tested by Robinson et al. (1987) was that "social influences represent the strongest predictor in involvement in adolescent substance use" (p. 2072). Regressions were performed separately for boys and girls. The variable accounting for 39% of the variance in level of substance abuse for boys and 44% of the variance in level of substance abuse for girls was the perceived use of marijuana by friends. Of the four categories of independent variables, the social environmental variables accounted for the largest percentage of the variance in level of substance abuse for both sexes. The findings support the hypothesis that social environmental factors exert the most profound influence on substance use involvement. The researchers believe that substance use is part of a syndrome of adolescent problem behaviors: all destructive behaviors and risk-taking be-

haviors in the study correlated significantly with level of substance use. In this research, adolescents most often cited social factors as their reasons for using alcohol and marijuana.

Halebsky (1987) reviewed studies done on adolescent substance use in relation to parental and peer influence. Adolescent use of drugs and alcohol was positively correlated to parents and peers use of drugs and alcohol. Halebsky believes his reviews of studies on peer and parental influence provides support for the concept of social influence on adolescent behavior related to drug and alcohol involvement.

According to Blau, Gillespie, Felner and Evans (1988) the greater portion of adolescent research has been done in urban settings. The researchers state one source that has previously been neglected is a rural population. They believe it is important to identify what predisposes adolescents to abuse substances and what influences them to start. They also suggest studying use of drugs and alcohol in a variety of populations and settings. Their study included 263 students from a rural school system in Alabama. The study was conducted to provide evidence of the relationships between self-esteem, depression, anxiety and drug abuse. The researchers found that for the students in their study, the relationships suggest the possibility that low self-esteem and high levels of depression and anxiety can be predispositions to drug use. They also found that children apparently develop opinions and

feelings about drugs and alcohol at a very early age and that the willingness to use drugs greatly increases as children approach adolescence.

Blau et al. (1988) believe that problems with self-esteem, depression, and anxiety are related to the development of pro-drug attitudes and drug use. The researchers state that it is important to examine environmental and biological factors as well.

Sexual Activity

Sexually active young people are vulnerable to pregnancy, sexually transmitted diseases (STDs), and feelings of inadequacy and exploitation (Gordon & Gilgun, 1987). "More than 1 million girls become pregnant each year, and about 600,000 give birth" (p. 155). Gordon and Gilgun state that half or more of these pregnancies result in induced and spontaneous abortions. Herpes, chlamydia, gonorrhea and other STDs are rampant among sexually active adolescents. Some of these diseases are very serious and can cause sterility or complications with pregnancies. Gordon and Gilgun cited a study done by Phillips (1984) as indicating that for gonorrhea, the second highest incidence rate among all groups is in the 15-to-19-year-old group.

Gordon and Gilgun (1987) reviewed literature in the area of heterosexual behavior among adolescents. They concluded that teenage sexual activity has been substantially increas-

