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Adolescent Leisure-Time Activity and Problem Behavior: The Integration of Three Major Explanatory Theories as a New

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ADOLESCENT LEISURE-TIME ACTIVITY AND PROBLEM BEHAVIOR: THE INTEGRATION OF THREE MAJOR EXPLANATORY THEORIES AS A NEW PERSPECTIVE

by

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ABSTRACT

Adolescent Leisure-Time Activity and Problem Behavior: The Integration of Three Major Explanatory Theories as a New Perspective

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Adolescence has in recent decades gained attention as being salient for study of social trends. Increases in youth social problems are seen nationally, statewide, and locally. They include substance abuse, precocious sexual activity, related consequences of pregnancy and STDs, suicide and depression, truancy, running away, crime against property, and violent crime against persons.

This study integrates three major explanatory theories of adolescent behavior into a macro-synthesis. R. Jessor's Problem Behavior Theory emphasizes how problem behaviors do not occur singularly, nor do they justify unique prevention methods. T. Hirschi's Social Control Theory describes how adolescents with little or no attachment to their community are more likely to be involved in unconventional behaviors.

E. Werner's Resilience framework relates adult support and mentoring in childhood and adolescence with lower risk of problems later in life.

This study examines how one element of this synthesis, adolescents' social environment, relates with social problems, or more specifically, how adolescent use of leisure time relates to problem behavior. A stratified random sample of 450 mail-out questionnaires yielded a 40% (181) response rate. Factor analysis placed 27 of 28 problem behavior variables into five subscales. The subscales were then regressed onto 11 individual and sum-score variables from eight hypotheses about adolescent leisure-time use.

Altogether, four of the eight hypotheses were supported by the data, demonstrating relationships between how and with whom adolescents use their leisure time, and their proneness toward problem behaviors. Specifically, unsupervised leisure-time activities were positively related to problem behaviors, sharing 16% of the variance. Organized leisure-time activities were negatively related to problem behaviors, sharing 9% of the variance. Adolescents who spent more time with family members and less time with peers demonstrated fewer problem behaviors, sharing 19% of the variance. Also, adolescents who confide their personal problems to adults, not peers, showed a

lower tendency for problem behaviors, sharing 14% of the variance. The results support relationships between adolescent social environment, particularly leisure-time use, and problem behaviors. (190 pages)

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Gail B. Yost

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CHAPTER I

INTRODUCTION

Only during the last century has adolescence been acknowledged as a legitimate developmental stage of the life course (Graff, 1985). Adolescence is no longer labeled as either merely an extension of childhood or the early part of adulthood. Not unlike other mammal species, particularly primates, human adolescence is a distinct transition period during which youth change physically, mentally, and socially (Savin-Williams & Weisfeld, 1989).

Not only is adolescence a recently recognized stage of life, but the process of development has been influenced by technological advances (Troen, 1985). No longer are adolescents generally necessary to family economic survival as they were over a century ago (Graff, 1985). Youth are no longer apprenticed out to craftsmen to learn a trade (Enright, Lapsley, & Olsen, 1985). Most youth do not grow up on the family farm or participate in the family business as an integral part of the labor needed to continue the family lifestyle, nor is the adolescent expected to follow in his/her parent's footsteps. Youth are mandated in most states to remain in school until at least age 16, and encouraged to continue their schooling into college or vocational training so as to ensure their own career and economic success as adults (Mirel & Angus, 1985). American society discourages adolescents from early marriage and

family commitments. With life expectancy lengthened by modern medical technology and healthier lifestyles, adolescents are no longer compelled to mature socially before their early twenties, and thus they remain economically dependent on their parents until later in life (National Commission on Children, 1991, p. 222).

Today's adolescents face a world different from any other time in history (Cross & Kleinhesselink, 1985; National Commission on Children, 1991). They have more leisure time than ever before, more information to assimilate both in and out of school, more social complications and barriers, more technology, and more pressure to compete in a growing world economy. The youth of today find themselves less important, even burdensome, to the family economy compared to adolescents of a much earlier American society (Graff, 1985). As the family economic role of the adolescent has diminished, it can be argued that youth no longer understand their role in society, that society has legislated schooling in order to better control adolescents and fill an otherwise empty time in their lives (Lapsley, Enright, & Serlin, 1985). Adolescents are now left to find themselves and develop their identity under changing societal expectations (Harter, 1990) and fluid cultural stressors (Cross & Kleinhesselink, 1985). Adolescents have created for

themselves, with the help of mass media (Gilbert, 1985), their own subculture, including music, dress, values, language, etc. (Coleman, 1961). Our society can no longer interact and communicate with the youth of today using the methods and mindset of yesterday.

How our adolescents view the world, are perceived by their world, make an impact on and in turn are influenced by the world they inherit, depends in large part on the skills and resources that the "older" generation can help them to develop (Gecas & Seff, 1991; National Commission on Children, 1991, p. 222). With so many challenges and never-before-seen problems, what kind of support do adolescents need? What kind of support do members of the older generation need to give each other to secure the future through them? One answer may lie in the kind of leisure activities available to our youth (National Commission on Children, 1991; Moroney, 1987).

Following a discussion of trends in youth-related problems at the national, state, and local levels, information about how youth use their leisure time will be summarized. Chapter II will explore three theories (Problem Behavior Theory, Social Control Theory, and Resilience) using adolescent social environment as an influential factor. Then, a model integrating these three prominent theoretical perspectives will be presented to

offer a comprehensive explanation. By focusing on one piece of this model, the social environment, a potential preventative will be explored for research purposes: how adolescents use their leisure time, and how it relates to adolescent behavior problems.

Trends and Problems

Nationally there is an increase in many disturbing social ills among adolescents. Child abuse, substance abuse, precocious sexual activity and premarital pregnancy, sexually transmitted diseases, dropping out, illiteracy, running away, depression and suicide, and juvenile crime and violence are all epidemic (National Commission on Children, 1991). The Office of Juvenile Justice and Delinquency Prevention (1990) estimates that in 1989 alone, approximately 450,700 juveniles ran away from home. As many as one fifth of these represent "thrownaways" (Office of Juvenile Justice and Delinquency Prevention, 1990), with an estimated 127,100 already classified as such. The National Commission on Children (1991) cited current statistics for teen use of illegal substances (50%), premarital pregnancy, both births and abortions (500,000 each), and incarceration (92,000), as all having increased alarmingly within the last decade. No longer is a "traditional" life cycle common for our youth, with at

least half of all White and three fourths of all Black children living sometime in a single-mother household. Of the premarital births in this country, a majority are born to adolescents (60%). This includes 40% of all White babies and 90% of all Black babies born to teenage mothers. Of all these mother-only families, 43% live below the poverty guideline as established by the Office of Management and Budget in Washington, D.C. (National Commission on Children, 1991).

These are not the worst of the rising numbers of adolescents with problem behaviors. Currently, there are 23 cases in Utah of HIV+ for 18-year-olds and under (Utah Department of Health, 1993), with at least 2 cases in Cache County of 25-year-old males who contracted the virus in Cache Valley in their teens. In 1989, adolescent females under the age of 20 had 121 live births, one of them being under age 15, and another two fetal deaths (Utah Department of Health, 1992a). In that same year Cache County had five deaths for residents age 10-19, and another four for 20- to 25-year-olds.

For the year 1990, there were 40 induced abortions for 15- to 19-year-olds, and 1 for under 15, out of 48 in the tri-county Bear River District (Utah Department of Health, 1992b). For the 20- to 24 year-olds, there were another 44 abortions in Cache County out of 48 in the district.

The year 1990 saw a major increase of out-of-wedlock births from the decade before. The rate in 1980 was 6.9% of all Utah births being out-of-wedlock. But in 1990 13.5% of all Utah births were to unmarried women, an increase of 88.5% (Utah Department of Health, 1992c). Of these, 1% were to under 15-year-olds, 36.9% were to 15- to 19-year-olds, and 34.1% were to 20- to 24-year-olds. There were also 114.7 abortions to every 1,000 live births.

The health department keeps statistics on mortality, too. In 1991, there were 4 suicides for 10- to 14-year-olds, 24 for 15- to 19-year-olds, and 40 for 20- to 24-year-olds in Utah (Utah Department of Health, 1992d.) With homicides, the numbers are 5, 5, and 8, respectively. This year has exceeded the suicide numbers just in the public news reports for the Bear River District. Currently, Utah has a higher suicide rate than the national average for 15- to 19-year-olds. Nationally, the rate is 10.3, whereas Utah's rate is 16.9 per 100,000 (Utah Department of Health, 1992e).

Parents are overwhelmed trying to figure out how to prevent their adolescent children from becoming involved in any of these disturbing situations. But in the face of more dual-earner two-parent families, with one half of all marriages being dissolved sometime during a child's life, with recession, inflation, and the continuous fluctuations

in unemployment rates, parents are barely surviving themselves. What, then, can be done to offer support to those who are trying to rear children, especially adolescents, while parents are unavailable due to employment needs, or while struggling with their own personal problems?

Local Community - Current Status

Problems

Here in Utah, and specifically in Cache Valley, communities are not immune to the aforementioned problems with their youth. Recently, local school boards changed their "definition" of drop-out and the rate jumped from 6% to 10% due to new inclusion of those teens not returning for another year to finish school. The local newspaper documented the development of two teen gangs in Cache County (Howard, 1993) and the explosive increase in Utah youth as victims and perpetrators of abuse and sexual abuse ("More Children," 1993). In 1990, 1,598 investigated cases of child abuse (all forms) were validated in Utah for ages 13 through 18 (Utah Department of Family Services, 1991). Cache County has one of the highest reported rates in the state of Utah for all abuse cases. In one week of 1989, 8 of 21 arrests were juveniles, and the numbers are rising rapidly. In 1991 at least five cases of suicide were

documented in adjacent Box Elder County and there were at least twice as many attempts in Cache County. Last year alone in Cache County, there was a total of 3,000 referrals to Juvenile authorities, or 57.7 cases per week (Utah Juvenile Court, 1993). Of these, 334 were felonies (6.4 per week), including 41 life endangering, 4 against public order, and 289 property endangering. For misdemeanors, 43 were life endangering, 437 against public order, and 911 property endangering, a total of 1,391 or 26.8 per week. Other problems include 358 status offenses, 83 infractions, and 33 traffic reportable offenses, with miscellaneous reports filling the remainder of the 3,000 referrals.

The mental health of our local youth is at risk, too. Within the last 5 years, there were over 354 unduplicated patient cases of 12- to 18-year-olds served by the county mental health agency, not counting private therapist caseload (Bear River Mental Health, 1993). This total includes 58 varieties of diagnoses within 14 diagnostic categories. The categories most apparent for their preventability are 48 depressive, 5 mood disorder, 7 body dysfunction, 67 adjustment disorder, and 58 behavioral disorder.

Combine these numbers with the statistics of the next age group, 18- to 25-year-olds, also considered to be part of the adolescent stage of lifecourse by many social

scientists. The total number of patient cases is 489, with 89 varieties of diagnoses and 19 diagnostic categories. Again, the categories that are most salient to this paper include 98 depressive, 7 mood disorders, 11 body dysfunctions, 89 adjustment disorders, 81 behavioral disorders, 5 substance problems, and 80 anxiety and phobia cases.

Available Activities for Local Youth

Currently in the Cache Valley community there are some safe and affordable leisure activities for adolescents. Alliance for the Varied Arts (AVA) has dance and art programs for all ages, but they are sometimes costly and depend on older youth already having some skill, thus discouraging teen neophyte artists. The Logan City Community Recreation Center is open to the general public, but most of its activities are not geared for youth. Those that are youth-oriented are organized sports, which have a substantial price tag. First-run movies are almost prohibitive in cost to adolescents with limited spending money. The three local high schools have intermittent weekend dances, and weekly spectator sports activities during the regular nine-month school year, but in field interviews conducted with teens between 1990 and 1993, many local teens see these as either too structured, too

institutionalized, or too socially barring to friends from other schools, as well as the dances being offered too infrequently. As for private, non-profit community groups, Boy Scout, Girl Scout, and 4-H programs are available with weekly meetings, but are either church-based, are perceived as institutional, are single-interest, have high membership costs attached, or may be perceived as oriented toward a younger population. Like local church youth affiliations, these three nationally-based programs usually have meetings one afternoon or early evening per week, leaving the rest of the week unstructured. There are no other activities geared toward the adolescent during non-school hours. During the summer, when all three high schools are out of session, there is even less to do just when the weather is at its best to be active with friends and youth have more disposable time. This, of course, does not include recreational sports, which the valley has year round, but these also come with a price tag.

Considering that until recently, all of Cache County was designated rural and has a population of about 75,000, the growing numbers of social problems are of concern to human service workers in the community. Without prevention services established to intervene before adolescents become statistics in the system, the problems will likely grow faster than the population. Prevention may be possible via

support programs that work through community outreach entities without using personally intrusive means.

Community support not only needs to be offered to youth, but it needs to be perceived as existing, positive, and attractive. There may be certain types of support services in the form of recreational or leisure-time services that promote, or are at least related to, more prosocial behaviors. The converse may also be true, that certain types of leisure-time supports may actually lead to, or at least be related to, unconventional and antisocial behaviors. In order to obtain a better understanding of the lifestyle of today's adolescents, it might be helpful to review current research on leisure-time use and whether or not different leisure activities are related to problem behaviors.

Adolescent Use of Leisure Time

Although within the last 5 years there have been some sound studies on how youth use their free time (Agnew & Petersen, 1989; Garton & Pratt, 1991; Iso-Ahola & Crowley, 1991; Junger-Tas, 1992), there is yet a dearth of current data in the area of normal adolescent lifestyle outside of school and home. Considering how much our society values recreation and holds a rising concern over juvenile crime and adolescent health issues, it seems incongruous to omit

studying how adolescents choose to occupy their otherwise "spare" time (Riley, 1987).

More recently there have been several articles that include leisure-time use as a small part of correlation with health and/or delinquency issues, but not as a main effect. Stiffman, Chueh, and Earls (1992) suggested that social activities may be protective for adolescents against the multiple stressors they experience, with Hurrelmann (1990) agreeing that leisure-time activities act as social resources for preventive strategies. Galambos and Maggs (1991) looked at how the level of supervision given to adolescents after school, especially by gender, makes a difference in their level of participation in problem behaviors. The gender effect of involvement in problem behaviors was pronounced for those females without any adult supervision, but no salient difference was evident for males with or without supervision.

In 1988, Kulbok, Earls, and Montgomery used data from a national survey to examine interrelationships between high-risk behaviors, health-related behaviors, and social activities, including leisure activities. Although they found a large discrepancy in factor analysis and multidimensional scaling between health-promoting and health-endangering behaviors in adolescents, leisure-time activities did not load in either direction. This led

Kulbok et al. to suggest that group activity may have a buffer effect on problem behavior, perhaps acting as a mid-range category that allows adolescents to choose movement to one extreme of behavior or the other.

Prior to these studies, other studies had pointed more generally toward distal environmental factors as part of preventive planning for adolescents. Some discussed community support against drug abuse in general (Perry & Murray, 1985; Smith, Canter, & Robin, 1989; Ungerleider & Siegel, 1989), while others dealt with smoking (Chassin, Presson, & Sherman, 1990) or alcoholism (Milgram, 1993; Windle & Barnes, 1988) specifically. Riley (1987) found that parental and community monitoring and supervision moderate type of leisure-time activity. Jessor (1993), the foremost authority on adolescent problem behaviors, has come to realize the importance of neighborhood and community as factors that help to explain adolescent involvement in problem behavior.

There are yet others who discuss problem behavior in general, such as Bachman and Schulenberg's (1993) correlation to part-time work intensity, and Galambos and Maggs' (1991) study on after-school environments, whether supervised or unsupervised. There are some who only allude to social environment as relating to delinquency, like Biglan et al. (1990), noting how a community's supplement

to parent resources may buffer adolescent problem behaviors.

Ritter (1990) believes lack of social support leads to social incompetence, which in turn is strongly correlated with problem behavior, including and especially suicide risk. Silbereisen, Walper, and Albrecht (1990), out of Germany, have found that family income loss modifies the adolescent's social climate, thus the available leisure-time activities, channeling the adolescent into limited relationships with more deviant peers, thus elevating risk for problem behaviors. Smith and Kerns (1993) have suggested that better neighborhood monitoring may reduce sexual abuse on female youth, which then reduces their future risk for problem behaviors.

It is increasingly evident to various researchers that social environment factors beyond family and close peers have an impact on risk level for adolescent problem behavior. It is also clear that some of these scientists are promoting incorporation of lifestyle, particularly adolescent use of leisure time, as salient factors in their research (Agnew & Petersen, 1989; Galambos & Maggs, 1991; Iso-Ahola & Crowley, 1991; Junger-Tas, 1992).

If the implication within the Resilience literature has merit, that appropriate community factors may help to offset more proximal risk factors, then it is imperative to

explore this avenue. What an adolescent chooses to do with the leisure time at hand has a lot to do with what leisure activities are immediately available and accessible, as well as what is interesting or comfortable to do. Within any given community, rural or urban, there is a range of choices of activities, small or large. This range of choices, as well as the type of activities available, may influence the type and level of problem behaviors emitted by adolescents. Discovering how this influence works has promise for assisting in the development of strong prevention models.

The question that this piece of research addresses is about how adolescents' leisure-time use relates to their level of problem behavior. While the research was done at a local level, the literature review addresses trends that are seen on a broader basis for adolescents in general.

CHAPTER II

LITERATURE REVIEW

Problem Behavior Theory

According to Jessor, a seminal authority on adolescent problem behavior, when a youth displays one high-risk behavior, there is a strong probability that other high-risk behaviors will be found concomitantly or subsequently. In their 25 plus years of work on Problem Behavior Theory, Jessor and colleagues have continually refined and upgraded their methods for studying adolescent problem behavior.

As the work progressed, so did the knowledge derived therefrom. One of the earliest studies (Jessor & Jessor, 1977) began a new path toward what was later entitled Problem Behavior Theory (Donovan, Jessor, & Costa, 1988). Rather than look at each separate behavior as having a unique antecedent pathway (Clapper, 1990), caused by singular sources (Barnes & Farrell, 1992), each to be prevented or corrected by discrete solutions, Jessor described a <u>syndrome</u> of the propensity to manifest multiple problem behaviors. The syndrome specifies that multiple behaviors are symptoms of a common underlying behavioral mode.

Jessor has worked with several colleagues, using Problem Behavior Theory (PBT), or rather problem behavior

syndrome, holistically to explain and predict different types of problems. This work includes studying adolescent problem drinking (Jessor, 1985 & 1987), marijuana use (Jessor, Donovan, & Costa, 1986), risky driving (Jessor, 1986), precocious sexual activity (Jessor, Costa, Jessor, & Donovan, 1983), and value on health and related health behaviors as they both relate to risk-behaviors (Costa, Jessor, & Donovan, 1989; Donovan, Jessor, & Costa, 1991). Each separate study has enhanced awareness of how strong Jessor's theory is for prediction, and very likely for prevention, too.

Since that time, the theory has evolved into a highly sophisticated model, with causal factors added from three basic systems, Personality, Perceived Environment, and Behavior. Just recently Jessor and colleagues (Donovan, Jessor, & Costa, 1991) have incorporated Biology/Genetics and Social Environment. Each of these five systems contains both risk and protective factors. Each system is also interconnected with the other systems, which then are all related to Adolescent Risk Behaviors/Lifestyles, or the "syndrome" of problem behavior, or lack of it. The final connecting piece to the model is that of Health/Life-Compromising Outcomes subsequent to Lifestyles. Although comprehensive enough to encompass most possible factors that might help to determine adolescent behaviors, the

model is straightforward and facilitative to beginning researchers.

Another new feature of Problem Behavior Theory is the differentiation between being "at risk" for a negative behavioral trajectory and being "at risk" for health or social consequences due to those negative behaviors (Jessor, 1992, p. 387). Jessor also stated how the degree of risk needs to be treated conceptually as an outcome of the balance of risk and protection (p. 388). As Jessor expands his theory, the contextualism developing with it makes it appear more and more like the literature on resilient children, even to the point of Jessor wanting to pursue research on successful adolescent development (Jessor, 1993, p. 123).

But Jessor and colleagues are not the only behavioral scientists to use Problem Behavior Theory. Many have followed in their footsteps, or borrowed pieces from their model. Some have even retitled the concept. For instance, Rowe and Rodgers (1989) term the syndrome "d" for deviant. Jessor (1992) responded that most problem behavior is not really deviant, so much as an unconventional means of meeting developmental needs. Arnett and colleagues (Shaw, Wagner, Arnett, & Aber, 1992) have labeled the behavioral pattern "reckless behavior," to which Jessor (1992) replied sharply that reckless implies deliberate choice, rather

than seeking to meet psychosocial needs via problematic responses.

Several authors are clearly contextual in nature when explaining high-risk or problem behavior. Sameroff and Fiese (1990) described a "causal chain" (p. 123) that is embedded in an interpretive framework. Seifer and Sameroff (1987) explained differences in outcomes through use of mediation skills over the environment. Shilts (1991) not only linked peer relationships to substance use, but suggested a contextual influence via after-school activities and individual attitudes. Steinberg, Mounts, Lamborn, and Dornbusch (1991) asserted that parenting practice is not by itself the influence on adolescent behavior that many scientists have written about. They claimed that parenting is "moderated by the larger context in which a child lives" (p. 20). As Barber (1992) has noted, not all researchers agree on a single underlying syndrome as causing multiple problem behavior. Barber's work emphasized finding the different causes between internalized and externalized problems. Forehand, Neighbors, and Wierson (1991) also sought the sources to these two extreme behaviors, suggesting that gender and parental marital status create the main effects to the difference. Some authors believe in a difference between normal populations with risk factors versus

psychopathologic populations with a predisposition toward delinquency (Richters & Weintraub, 1991; Marohn, 1979).

Problem Behavior Theory has been successfully used by researchers to focus on particular behaviors. DiBlasio and Benda (1990) used a multivariate analysis to explain adolescent sexual behavior. Adolescent alcohol use was studied by Hays, Stacy, and DiMatteo (1987). Farrell, Danish and Howard (1992) found Problem Behavior Theory to be generalizable to urban minorities when explaining drug use.

As scientists working on any other framework are constantly trying to refine theory, Problem Behavior Theory is certainly no exception. Shaw et al. (1992) have disputed either a single-factor model, such as Problem Behavior Theory with its single underlying syndrome for unconventional behavior, or any multifactor model. Instead, they believe that a two-factor model fits the data better, allowing for gender differences, the two factors including: (a) drug use, drunk driving, shoplifting, promiscuous sexual activity, and other problem behaviors; and (b) high-speed, reckless driving and vandalism. McGee and Newcomb (1992) have attempted to take Jessor's theory one step further by suggesting Problem Behavior Theory as a stage theory that progresses by developmental age of the adolescent.

One way of improving the model may be to retain the basic premises, and to integrate with other comparable theories. Integration may bring some resolution to details otherwise overlooked. Besides any fusion of Problem Behavior Theory with Social Control Theory and/or Resilience, there is one other theory dealing with problem behaviors that might elucidate the "syndrome" described by Jessor and friends. A logical association would be to use Kandel's (Kandel, Yamaguchi, & Chen, 1992) Gateway Theory with Jessor's to synthesize a new dimension to Problem Behavior Theory. Gateway Theory is basically focused on progression in substance use, being a stage theory. Perhaps any deviant, delinquent, or problem behavior allows the "gate" to open for the adolescent to participate in similar behaviors. In other words, once over the threshold of the first discomfort of an unconventional act, realizing that no extreme consequence has come to pass after behaving unconventionally, maybe even feeling a little "rush" of excitement, stepping over that threshold successively becomes easier with each subsequent episode.

As with any behavior in general, as humans practice more, they become more comfortable in the context of the behavior as well as becoming more proficient at it, like learning to play a musical instrument or drive a car. It appears that for many antisocial acts, there is a

progression to the degree and depth of delinquency. This fits well into a generic gateway theory for any problem behavior, with proficiency and comfort levels partially explaining the variety of outcomes within what seems to be a homogeneous population.

Returning to the current explosion of research done on Problem Behavior Theory, probably the most notable new concept is the addition of the Social Environment System. With recognition of the significance of distal setting, the groundwork has been laid to explore factors that will increase the theory's explanatory power. It may be timely to look to how lifestyle, specifically the use of leisure time, may add risk or protection to channeling adolescents into delinquent acts.

Social Control Theory

Social Control Theory (SCT) has made some deep inroads into explaining delinquent behavior in adolescents. Originally developed by Hirschi (1969), others have since exploited its descriptive mechanism on how and why youth turn to delinquency.

Elliott, Huizinga, and Menard (1989) used Social Control Theory to elucidate on "The Etiology of Delinquency" (pp. 137-168). They explain how, when there is primary disorganization within the adolescent's

family, the disorganization weakens conventional bonds to family and society. Instead, role strain and disorganization help form delinquent bonds in order for the youth to meet developmental needs. This may also hold true for secondary disorganization within a community.

Elliott et al. (1989) made an argument for integrating Social Control Theory with elements of strain theory and social learning theory. They assert that the predictive power with such integration will be tremendous. Lopez, Redondo, and Martin (1989) also recommended an integration of Social Control Theory with Social Learning Theory. But a third framework, which they sought to unite with these two theories to better explain patterns of behavior, is Differential Association Theory.

Udry (1993) suggested the synthesis of a more encompassing framework by blending Biological Theory with Social Control Theory. He added some references to Problem Behavior Theory as well, which is considered a social learning theory. Each by itself, Biological Theory and Social Control Theory, is already quite powerful for explaining behavior. But Udry's Biosocial Model would increase explanatory utility by describing effects of the timing of puberty and hormonal effects, especially for males. He made the distinction between Social Control Theory and the Biosocial Model by noting the difference in

philosophies. The former assumes that humans are basically motivated toward deviance, having to explain why most humans are constrained into more conventional behaviors. The latter instead assumes that the deviant behavior is what needs to be explained (p. 5).

Although they do not overtly suggest integration, Lewis, Battistich, and Schaps (1990) promoted the uniting of Social Control Theory to other theories. Lewis et al. stated how socialization is both developmental and cumulative, and detail the four basic steps to poor socialization, with similarities to Elliott et al.'s (1989) description. Within that description, Lewis et al. concurrently referred to Jessor's and Hirschi's work, or Problem Behavior Theory and Social Control Theory, respectively. Soon after an additional reference is made to Werner's work on Resilience. This integration will be utilized further on within this dissertation.

Finally, Agnew and Petersen (1989) went into detail about the four social bonds that reduce the probability of delinquency. They are (a) attachment or affection to significant others who are authority figures; (b) commitment, the investment in conventional activities; (c) involvement or amount of time spent in conventional activities; and, finally, (d) belief, or the commitment to society's central value system (p. 333). For Agnew and

Petersen, all four of these bonds are covered by their hypotheses regarding leisure-time activities. They, too, integrate Social Control Theory with two other theories, Subculture Deviance Theory and Strain Theory. Subculture Deviance Theory states that certain leisure-time activities expose individuals to deviant influences, which foster value for delinquency. Strain Theory states that "adolescents...turn to delinquency when they cannot get what they want through legitimate channels" (p. 334).

It appears from the noted literature that Social Control Theory works well in cooperation with other prevalent theories, particularly Social Learning Theory, or to be more specific, Problem Behavior Theory, in explaining predilection for delinquent behaviors. Udry (1993) called this an integration of complementary theories (p. 1).

Resilience

Since the early decades of the twentieth century, social and behavioral scientists have studied human problems mainly from a deficit perspective (Shonkoff & Meisels, 1990; Weissbourd, 1987). Only more recently has problem behavior been viewed from a normative focus. With this new perspective on the normative behavioral processes, researchers are determining what mechanisms are involved in the findings regarding why humans develop normally or

"well" as opposed to problematic or "diseased" (Sameroff & Fiese, 1990). For several decades Werner has been studying the differences of two groups, those with problems as predicted from risk factors, versus those who developed normally despite their risk factors (Werner, 1986, 1989, 1990; Werner & Smith, 1982). This latter group Werner originally termed invincible, and later specified as resilient. Since then, and from studies contemporary and parallel to Werner's, the study of resilient children emerged, what Anthony (1978) has labeled as "a new scientific region to explore," himself now being a "risk researcher." The evolution of this type of research has not yet plateaued, as strategies and methodologies are still developing and improving to formulate a comprehensive conceptualization of resilience (Meisels & Wasik, 1990). Gilligan (1987) found that despite a call to formulate hypotheses involving interaction and relationships, much of the literature is still filled with static images isolating correlates and causes from one another. Authorities from various fields use different constructs to define risk and resiliency factors, operationalizing these concepts in less than congruent ways. Along with the varying constructs comes a variety of terms that may or may not conceptually fit together, terms such as: resiliency, stress-resistance, and invulnerability (Anthony, 1978); self-efficacy

(Bogenschneider, Small, & Riley, 1991); learned helplessness, and locus of control (Werner, 1990; Prothrow-Stith, 1991); and protective, shielding, buffering, and mediating. One point that most do agree on, however, is that risk and resiliency are not single-cause, unidirectional outcomes (Shonkoff & Meisels, 1990; Sameroff & Fiese, 1990; Werner, 1986).

Interactive Qualities of Resiliency and Vulnerability

As the conceptualization of resiliency has developed over the last two decades, the methods of study have also become more sophisticated. Research has shifted from single-case study to large panel studies. The retrospective and cross-sectional designs that Werner (1990) describes as suggestive of cause and effect have been replaced by the prospective, longitudinal panel studies performed by such names as Anthony, Garmezy, Rutter, and Werner, herself (1990). But more than change in research design is the increase in the variety of procedures, both observational and statistical in nature. Theoretical models have adapted and enlarged to incorporate the new perspectives being discovered.

The individual, next to social conditions, has probably been the most studied, especially regarding individual traits correlating with problem behavior. With

the current movement to search for factors that increase the resilience of an individual, much of the more current literature discusses those traits linked with resilient children at different age levels, within different settings, and across time. Often traits found early in life continue to materialize as the child grows (Werner & Smith, 1982), thus appearing to be more permanent or structural in nature. Various studies have uncovered similar findings of the individual characteristics that support the child, to avoid what the previous "deficit" literature describes as high-risk for ongoing problems (see Appendix A).

Often the buffering of risks is connected with routinely found individual traits, but each study may include a singular addition. Prothrow-Stith (1991) found locus of control highly important, but it must be paired with a belief in an "open future" (p. 56), or hope. Dugan (1989) saw acting-out behaviors as being a positive sign of overcoming powerlessness. Hauser, Vieyra, Jacobson, and Wertlieb (1989) found that along with internal locus of control via conformance and communality, sensitivity to others and strong curiosity about people, things, and ideas are all consequential traits for an individual. Herrenkohl, Egolf, and Herrenkohl (1991) found not only that a positive personality and ability to elicit positive

responses from the human environment around them are important as buffers for abused and neglected children, but also the ability to seek out a strong mentor, usually an adult, sometimes a peer, made the single-most difference in resilience versus vulnerability. The unique findings of these and other studies demonstrate how individual traits interact with both proximal and distal environment, and that interaction has more powerful implications for prediction of personal success than any single trait or environmental factor has.

One of the individual traits that assists in resiliency is androgyny (Demo & Acock, 1991; Werner, 1990). This finding suggests that perhaps there is a divergence in resiliency factors by gender when androgyny is not present or is not apparent. Several studies have actually found this idea to be strongly supported. Aside from problem behavior literature (Donovan & Jessor, 1985; Jessor, 1987; and Rowe & Rodgers, 1989; Gjerde, Block, & Block, 1991), which notes more acting-out behaviors in males than in females, gender appears to have differential effects to risk and resilience as well as to differentially affect the individual's surroundings. In Prothrow-Stith's (1991) book on adolescent violence, the notion of more acting-out behavior for males at high risk is strengthened when noting the tendency to join gangs to offset environmental

problems, while their female counterparts only comprise 10% of gang membership. It seems that boys are more prone to respond negatively to high risk, at least more overtly, than are girls. Call (1978) has suggested that the biological differences between males and females create "a constitutional basis for differences" (p. 168) for risk and resiliency, making boys more vulnerable than girls. Levitt, Selman, and Richmond (1991, p. 370) supported this idea with what they term a "biological predisposition." Werner's (Werner & Smith, 1982; Werner, 1986, 1989, 1990) longitudinal work with the birth cohort from 1955 on Kauai demonstrated this concept with higher infant and childhood mortality for boys as well as higher and more severe incidence of perinatal and later medical problems.

Thus far no study has combined these data into one comprehensive list with recommendations about a minimum level of needed factors to create enough buffering or resiliency to counteract any risks. For those individuals without such a minimum level, or without adequate personality traits with which most children appear to be born, does their future look hopeless when faced with too many risk factors? Is it possible to somehow teach the high-risk children important buffering skills, or to offer environmental buffers to offset the risk factors? Can there be found some factors within an adolescent's ecology

that can replace lacking buffer traits, or at least compensate for them? These are just some of the questions not yet adequately addressed in resiliency research.

Change in Risk Across Developmental Status

One of the first changes to come about in the resilience literature is an understanding of differential risk by developmental status. Werner's studies incorporated periodic follow-up of the entire cohort of 698 children born on Kauai in 1955 at birth and ages 1 year, 2, 10, 18, and 30 years (Werner & Smith, 1982; Werner, 1986; 1989; 1990). Periodic screening consisted of checking on health, family status, IQ and psychological wellness, and behavioral, school, and work functioning. It was obvious from this screening that those having problems at earlier ages, such as poor health conditions, difficulty with interpersonal situations, etc., were often not the same members having problems or with high-risk predictors at later ages. Haan (1989) concurred with change in status over the course of development for moral behavior. According to Haan, moral performance improves with age because ego skills and capabilities for resolving conflict also improve with age. Although it is probable that those who are delayed during one developmental stage will continue to lag behind throughout maturation, there is a

possibility for catching up on development later on. According to Meisels and Wasik (1990), children go in and out of high risk quite frequently throughout their lives, what is considered a roller coaster effect of development via changing psychosocial, emotional, physical, and intellectual needs over time.

Wertheim (1979) discussed how there are three types of time scales in the development of any organism. The first is short-term, dealing with the organism's most current or immediate circumstances, or the situational time scale. This is how the individual responds to current stimuli according to what is normative or expected for that status. The second, or mid range, scale deals with the ontogenetic frame of the individual, in other words, the personal history of previous interactions, responses, circumstances, etc. This ontogenetic perspective focuses on formal adaptation patterns. Like the first scale, the individual cannot be separated from the environment, but can be integrated into and interactive with the personal ecology. Shonkoff and Meisels (1990, p. 4) termed this "the essential transactional nature of the developmental process." The third and last time scale is the long-term scale, which links an organism to its own evolution, its "species-specific history" (Wertheim, 1979, p. 17). This is also termed the phylogenetic time frame, which includes

the establishment of transactions built on cultural patterns.

Whatever time frame or developmental perspective is used, it is clear that many of the risk factors and resiliency factors that come to bear on the individual come from within that individual via state of development. The individual is an integral part of the environment, and should not be envisioned as merely an organism being acted upon. It is apparently true that external factors differentially influence a child according to developmental stage. Whether using Piaget, Kohlberg, Erikson, or any other framework to determine cognitive, moral, psychosocial or biosocial stages, the child is also an actor according to age–or stage–appropriate responses. Along with accommodation to flux in the environment, the child also assimilates change into the personal schemata and changes the environment accordingly. It is the healthy balance of assimilation and accommodation that contributes to a child's individual resilience (Wertheim, 1979).

Change in Environment

Aside from individual development, there are many other factors that change over time. Family factors are in continuous flux, such as structure and processes, finances, residence, and level of crowding. Neighborhood and

friendship circles have rhythms of their own. Historical changes occur either locally or more globally, such as natural disasters, war, recession, political movements, medical discoveries, and educational and social trends.

Sameroff and Fiese (1990, p. 124) called the inclusion of all of the external factors the "environtype," something Anthony (1987) said is the milieu that generates the individuals coping processes—an interactionist perspective. Steinberg et al. (1991) concurred with Seifer and Sameroff (1987) that the environment interacts with the individual. This especially makes sense when the environment is separated into several levels, as done by Bogenschneider et al. (1991), Werner (1990), Meisels and Wasik (1990), and the National Commission on Children (1991) (see Appendix B for comparison).

As circumstances naturally change or are altered in any of the environmental settings, there are differential responses elicited from the individual. Anthony (1987, p.350) stated that "powerful environments also tend to affect the individual most during a rapid phase of growth" when the individual is probably most vulnerable. He called this the "developmental environment." There appears to be a strong consensus among both theorists and researchers that the environment cannot be considered as a distinct entity for risk and/or resilience, but has powerful

interactive effects with the individual and the individual's development (e.g., Bogenschneider et al., 1991; Anthony, 1987; Levitt et al., 1991; Werner, 1986, 1989, 1990; Wertheim, 1979).

One of the most noteworthy concepts of interaction between the individual and the environment is that of goodness-of-fit (Anthony, 1987; Parker & Zuckerman, 1990; Demos, 1989). Parker and Zuckerman have described goodness-of-fit as the most powerful predictor they found for determining risk of behavioral pathology in late childhood and early adulthood. Goodness-of-fit is defined as "the fit between the child's temperament and the parent's caretaking characteristics" (1990, p. 356), temperament being the "how" of behavior. Demos (1989) expanded on this notion by including the child's changing developmental capacities over time as well as individual characteristics. Also included are the caregiver's expectations and ability to adapt methods to the child's temperament and developmental phase, or at least be empathetic to the child's differences from the caregiver.

It is conceivable to expand this idea even further to goodness-of-fit between an individual and environmental factors. For instance, a highly demanding and dependent child would not fit well into an extremely deprived, poverty-stricken neighborhood with few opportunities to

escape in adulthood. The likelihood of the child having all demands met, whether for personal time, attention, privacy, work, and obtaining prized trendy personal possessions is greatly reduced in such an impoverished situation. A congenial, low-profile, autonomous, and resourceful child, on the other hand, would have a much better goodness-of-fit to this setting. Felsman (1989) used this individual/ecological concept of goodness-of-fit as a factor adding into an individual's adaptation--what may be called plasticity. Plasticity can have bidirectionality, that is, the environment on both proximal and distal levels (or micro and macro, respectively) may also be malleable to the needs of the individual. This happens, for example, when a community changes access to available social services and recreational facilities to fit those who need more personalized caregiving and outlets for self-expression, or with a neighborhood change from police patrol by car to pedestrian policing.

Mechanisms for Interaction

Several models have developed from different theorists and researchers to explain how the myriad individual, developmental, and environmental factors, for either risk or resilience, interact to influence the differential outcomes. Anthony (1978) described three dolls, one glass,

one plastic, and one steel, where each is struck by a hammer. The first doll shatters from the blow, the second is permanently damaged, and the third merely absorbs the blow without a mark. This is probably the most static or simplistic representation found in any recent resiliency literature.

Levitt et al. (1991) offered two unique models for problem behavior or risk-taking behavior within early adolescence. This model is basically concerned only with individual and developmental factors. Here environment only sways the individual as far as the amount of knowledge and personal meaning the adolescent has about the environment. Knowledge, personal meaning, and management skills all modify risk-taking behavior according to individual developmental level. Levitt et al. also designed a much more ecology-oriented model, along with the relative strengths of the various factor relationships. With this model, peers and family are just part of the sociocultural factors.

Bogenschneider et al. (1991), in adapting the Bronfenbrenner model, used concentric circles to demonstrate differences between proximal and distal influences on the youth. One should also note that influences can reciprocate from the youth and other levels outwardly as much as from outer levels to any inner levels,

including the youth. Anthony (1987) has given another model with similar concentric circles to the Bogenschneider et al. display. However, these circles are modeling how the buffering system works for a child to guard against overload on excitement from the environment.

Anthony (1987) described a continuum for vulnerability/invulnerability. He explained how susceptibility has continuity, unlike recent hypotheses about discontinuity in normal and abnormal development, that stages of change are artificially delineated when, in fact, there are no radical changes over time. The continuum would be a simple diagram, as shown in Figure 1. An individual would move back and forth on this continuum according to the balance or equilibration within the individual to assimilate and accommodate both stressors and buffers.

Stressors Buffers

Invulnerability <----------[-]----------> Vulnerability

The Individual

Figure 1. An interpretation of Anthony's model, 1987.

The description Luthar (1991) has given about the balance between vulnerability factors and compensatory factors would be quite similar to Anthony's, except that

Luthar includes protective factors as mediators between the two, but not as having a direct effect on the individual to assimilate and accommodate them. Demos (1989) also had a similar notion of balance, but a better diagram for her concept would probably be one of a seesaw effect where both resiliency and risk wax and wane differentially with contextual variables over time.

Dubow, Tisak, Causey, Hryshko, and Reid (1991) offered the idea that as social support and social problem-solving skills increase, so do improvements in behavioral and academic adjustment, although stressful life events do not appear to correlate in any way. Feldman, Rosenthal, Mont-Reynaud, Leung, and Lau (1991), on the other hand, found the strongest predictor of problem behavior was personal value for outward success within the family and by the individual.

Werner (1990) had a different perspective on mechanisms that increase risk or protection. Werner (p. 98) described Garmezy's hypothesis of three separate mechanisms, those of compensation, challenge, and immunization. The compensation idea adds stressor and individual traits together to predict outcome. However, challenge has the same potential to enhance competence as to impede it, as stressors can be overcome, thus adding to the strength of the individual and making a curvilinear

relationship between stress and competence. The concept of immunization is one that works only in the presence of stress, but has no effect without stress. Anthony (1987, p. 14) agreed with this notion when he stated, "Environment is important as long as the stress is there; remove the stress and the genetic endowment becomes the determining influence." These three mechanisms may operate either successively or simultaneously.

Finally, Herrenkohl et al. (1991) posed one more interactional model to demonstrate how the child is influenced by, and in turn influences, the personal environment. There is one addition to their diagram (Figure 2); instead of unidirectional lines from left to right, bidirectional lines between Environmental Characteristics and Child Characteristics, and between Parent Characters, Parenting Process, and Developmental Status are placed to enhance the ecological view of direct effects to and from each.

Even with the great variety and diversity of all the models of mechanisms for risk and resiliency, one theme is apparent. The individual is no longer seen as a passive on-looker, witness, bystander, victim--or any other label similar to these. The individual regulates the ecology as much as the reverse, more so as the person develops, ages, and makes sense of his/her unique personal world.

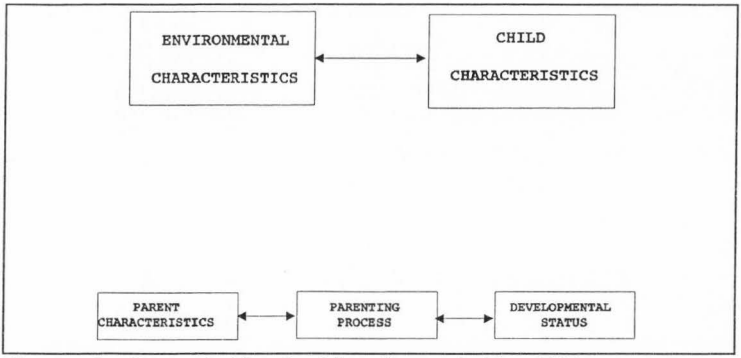

Figure 2. Herrenkohl, Egolf & Herrenkohl, 1991 (modified model).

As a kind of postscript to this section, one note should be made. Within the literature, almost every factor interacts and changes with every other factor. There is one area, however, that seems to have no differential effect, that of culture (ethnicity or race). Culture, regressed on individual, developmental, and family factors, was found to have no statistical or practical significance over several studies. Feldman et al.(1991) found no differences across cultures as to effects of family environments and values for adolescent misbehavior. The family environments and values were strong predictors, whereas cultural group contributed to the analyses insignificantly.

Werner (1990) found similar results with her multicultural cohort from Kauai. She described this as a universality of protective factors across cultures, even under extreme conditions. These protective factors include personal traits as well as family traits. Again, it must be remembered that Werner believes that protective factors may only be effective when risk factors are present, and may disappear as contributing to resiliency under more normative conditions.

Steinberg et al.(1991) hypothesized that parenting practices would be moderated by the larger context in which the child lives, specifically ethnicity. In fact, they found the opposite to hold. Parenting practices appear to have transcontextual validity in that they transcend ethnicity. Authoritative parenting was a strong predictor of resilience regardless of ethnicity, family structure, and socioeconomic status (SES). If this finding about caretaking can be generalized to other significant adults and nonfamily environments, together with the previously mentioned conclusions regarding culture, there is great potential for resiliency strategies within the scope of community services, particularly mentoring projects, as recommended by the National Commission on Children (1991).

Summary of the Resilience Framework

Unlike literature of the past, contemporary research is based on a wellness model as opposed to a deficit model. Notwithstanding discrepancies in jargon within the field of resiliency research, there is a growing body of data about what factors, both individual and ecological, assist the child in developing successfully into and through adulthood. Various models demonstrate the mechanisms by which the buffering factors function, especially as interactive effects with risk factors. Although some factors like low SES and parental divorce appear very powerful, almost to the point of hopelessness for the future of affected children, the knowledge that is being accumulated regarding ways to ameliorate high level of risk offers potential resolutions to children's problems. One of the most practical recommendations is development of community mentoring programs (National Commission on Children, 1991). With care and planning for the future, at-risk children can be guided to adulthood with positive results.

Integrating the Theories

Each of the three researched-based theories on Problem Behavior (PBT), Social Control (SCT), and Resilience appears to be separate and competing with the others as

explanatory for problems experienced and displayed by adolescents. When one compares these frameworks carefully, however, it becomes apparent that they are closely related to one another, even complementary.

1. SOCIAL CONTROL THEORY—The greater the bonds (internal forces) an individual has to his/her society, the greater the conventionality.

2. PROBLEM BEHAVIOR THEORY—The more conventional the attitudes of an individual, the less probability for displaying problem behaviors (which the society would try to control via external forces).

3. RESILIENCE—Personal and environmental buffer factors protect an individual from yielding to risk factors for behavioral problems.

Problem Behavior Theory (PBT), specifically the Social Environment System, now includes more distal components of an adolescent's surroundings. Neighborhood and community, with their respective beneficial supports and high-risk temptations, are salient factors in the equation for predicting an adolescent's propensity to emit problem behaviors. To some, these environmental factors may appear too distal to have much influence. According to Bronfenbrenner's (1989) ecological perspective, all segments of the setting are significant to an individual's development, both in the impact made by the environs as

well as the individual's reciprocating or regulating responses.

As for SCT, the basic premise is one of environmental influence on the adolescent. Unfortunately, the main focus of environment within this theory has been limited to study of family and peers. By considering the nature of the work performed by Agnew and Peterson (1989) and Junger-Tas (1992), the milieu in which adolescents interact with their parents and peers, especially the amount and type of leisure-time activity, has measurable impact on the level of delinquency of those adolescents.

Within the Resilience literature, it is obvious that distal ecological factors, such as neighborhood and community, are perceived as significant, as shown by Bogenschneider et al.'s (1991) treatment of Bronfenbrenner's work. They give specific attention to how neighborhood and community can offer buffers to an adolescent (Schinke, Orlandi, & Cole, 1992). Werner (1990) asserted that environmental protective factors work the same as constitutional (individual) protective factors, by the three different mechanisms of compensation, challenge, and immunization. The implication here is that environmental protections can act in place of lacking individual buffer factors.

Murphy (1989) implied that when an adolescent is found in a poor proximal environment, a community may offer supports that may assist in "creating equilibrium after disequilibrium," thus "mobilizing regenerative power" (p. 101) possessed by individuals, what Wiegerink and Comfort (1987) have called "salient roles played by extrafamilial social support networks" (p. 190). Steinberg et al. (1991) have gone so far as to state that "the effects of specific parenting practices on children's development may in fact be moderated by the larger context" (p. 20). Weiss (1987) also found "indirect supporting evidence...about the importance of formal and informal social support for positive...functioning" (p. 136).

Lewis et al. (1990) have previously taken the three noted theories and cojointly applied them to establish their socialization model, which they deem to be cumulative. While Hirschi's and Jessor's models are attributed with explaining "anti-social and health-compromising behaviors" (p. 39), Werner's data implying the preventive role of "supportive relationships with adults" (p. 40) (not necessarily within the family) explain the reduction to risk of maladjustment. This example of concurrent usage of all three major theories demonstrates how well PBT, SCT, and Resilience coordinate together.

As noted earlier, other authors have offered their own versions of integrated theory. Lopez et al. (1989) fused Social Control Theory with Differential Association Theory and Social Learning Theory. Udry (1993) had his Biosocial model comprised of Social Control theory with additive explanation from Biological Theory. In two separate instances, even Jessor has blended his Problem Behavior Theory with Resilience (1992 & 1993).

In fact, this coordination can be taken one step further to illustrate how these theories are all critical pieces to the same large puzzle regarding adolescent behavioral patterns. They not only work well as cooperative concepts, but integrating them can provide a formidable model. (See Figure 3.)

As this figure shows, each framework is interconnected with the other two. PBT is linked with SCT via the theme of conventionality/unconventionality. SCT is linked with Resilience by what may be considered equivalent or reflective concepts, those of social bonds/social supports. The social bonds of SCT cannot be developed without the existence of social supports about which the adolescent feels positively. And Resilience is connected with PBT by the measure of level of risk and buffer factors. All three deal with their respective constructs within the individual's proximal and distal contexts.

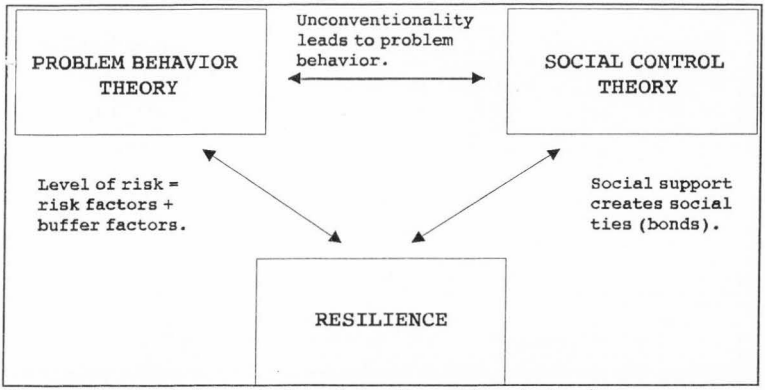

Figure 3. An integrated model of problem behavior.

To further enrich the illustration connecting all three frameworks, one more point will be added. The Resiliency literature emphasizes how buffer factors are only effective in the presence of risk factors. Perhaps this mechanism would be better explained by looking at it in a different perspective. The current concept of buffer/risk would have social scientists believe the implication that buffers are always present, standing by to come into play when needed, like guardians. It is submitted that, instead, risk factors, always being present, are only effective when there is a lack of buffering. This new perspective of buffers and risks, added to the integration of PBT, SCT, and Resilience, forms

a very powerful tool for devising dynamic prevention programs.

The material herein has underscored environmental factors, especially within neighborhood or community settings. This is due to the philosophy of our culture of noninvasive procedures to families, unless there are legal reasons for intrusion. Inasmuch as social scientists ethically cannot dictate to families how to rear their children, with the verdict still out on science's ability to affect individual internal resources (e.g., personality), the next line of defense for youth is at the neighborhood/community level (Bogenschneider et al., 1991). There are already many programs at the school level, with schools crying for help at the burden of performing social services while they are trying to also educate. And a majority of adolescent problem behaviors are exhibited out of school. Perhaps, then, it is time to explore the relationship of adolescents' problem behavior with their use of leisure time.

CHAPTER III

METHODOLOGY

Study Design

This study was conducted as an integrated replication and expansion of two previous studies. The Crider, Willits, and Funk (1985) Extension project in rural Pennsylvania on adolescent leisure time use, and the Agnew and Petersen (1989) research on delinquency, or problem behavior, correlated to leisure-time activity, were used as the bases for the present study. Many of the activity variables used by Crider et al. were condensed while a few others were added.

Only four of the original eight hypotheses tested by Agnew and Petersen, with modifications, were tested within this investigation. These are as follows:

Hypothesis 1 (Ha1)—There is a negative relationship between problem behaviors and amount of time spent in organized leisure time activities. (See Appendix C, Survey sections II. & IV. vs. section V. a.)

Hypothesis 2 (Ha2)—There is a positive relationship between problem behaviors and amount of time spent in unsupervised peer-oriented social activities. (See Appendix C, Survey sections II. & IV. vs. section V. a.)

Hypothesis 3 (Ha3)—There is a negative relationship between problem behaviors and amount of time spent in personal interest activities, hobbies, and passive entertainment. (See Appendix C, Survey sections II. & IV. vs. section V.a.)

Hypothesis 4 (Ha4)—There is a negative relationship between problem behaviors and amount of time spent with family members, with the strongest being with parents, next with siblings, and then with extended family. (See Appendix C, Survey sections II. & IV. vs. section V.c.)

Also, to extend the type of knowledge gained by the two previous studies, four additional hypotheses were tested about perceived community support for leisure time activities. Resilience studies indicate that social support from the adult environment, even the more proximal settings of neighborhood and community, are linked with fewer high-risk behaviors. Social Control Theory relates feelings of bonding to the community and willingness to help others with lower unconventional behaviors.

Hypothesis 5 (Ha5)—There is a positive relationship between problem behaviors and the perceived lack of accessible and available community leisure-time activities. (Appendix C, Survey sections II. & IV. vs. section V.b.)

Hypothesis 6 (Ha6)—There is a negative relationship between problem behaviors and the willingness of an

adolescent to use an adult for a confidant. (Appendix C, Survey sections II. & IV. vs. section III.)

Hypothesis 7 (Ha7)—There is a negative relationship between problem behaviors and number of other-oriented vs. self-oriented reasons for participating in leisure-time activities. (Appendix C, Survey sections II. & IV. vs. section V.d.)

Hypothesis 8 (Ha8)—There is a positive relationship between problem behaviors and number of barriers to leisure-time activities that are perceived to be large problems. (Appendix C, Survey sections II. & IV. vs. section V.e.)

These last four hypotheses examine Social Control Theory and Problem Behavior Theory tied to Resilience, by testing the kind of community (environmental) support perceived by the adolescent to be available, the kind of support being accessed, and whether or not the adolescent feels tied to the community and others.

Sample

Stratification was used in selecting a random sample of high school students, both male and female, from the three area high schools in both the county and city school districts in northern Utah. The strata were the three grades, 10th, 11th, and 12th, in each of the three high

schools involved, from which 50 names were randomly selected for participation. The two schools in the county, the northern school and the southern school, have about 1,450 and 1,400 students enrolled, respectively. The central school in the city has about 1,150 enrolled in the three grades surveyed, although there are an additional 440 or more 9th-grade students, who were not sampled, also housed at the same facility. In this way stratification was done by both school and grade, thereby sampling 150 from each high school, as well as 150 from each grade level. The questionnaire was coded for both grade and school from responding students.

Procedures

Because the questionnaire was directly mailed to the parents of each prospective participant via information obtained from the tri-high school student directory, no active consent was sought from parents. A letter of introduction (Appendix D) was enclosed with each survey, which included instructions for completion, the promise of anonymity, and a request to the parents to honor confidentiality by allowing the respondent privacy of answers. Passive consent was assumed when the forms were filled out and returned by mail in the enclosed self-addressed stamped envelope.

Data were collected during late-February to mid-March, 1994. Each questionnaire was mailed out with a premium enclosed, a coupon for a free video rental at a nearby store.

Response Rates

Three weeks after mailing out 450 surveys, 182 (40.4%) replies were returned by mail. None was received in the drop boxes that were available in the two county high schools and at the video/book store that donated the free video rental coupons. One survey was unusable, with irrelevant demographic information being superimposed on the school and grade predetermined in the stratifying of the sample. Another packet was returned as undeliverable, with the forwarding address order having expired. Return rates were neither equal among schools, nor among grade levels. The central school had the lowest return rate, with only 48 (26.5%), whereas the north county school had 64 (35.4%) and the south county school had 69 (38.1%). Response rates by grade level were as follows: 12th graders at 51 (28.2%), and 11th and 10th graders at 68 (37.6%) and 62 (34.3%), respectively. Return rates by gender were close, with 95 (52.5%) male and 86 (47.5%) female.

Frequencies for variables pertinent to this study are found in Appendix E. These tables include: Frequency of

Substance Use (Table E-1); Frequency of Problem Behavior (Table E-2); Leisure-time Activities, by type (Tables E-3); Time Spent with Family Members (Table E-4); Reasons for Not Participating More (Table E-5); Type of Confidant (Table E-6); Reasons for Participation (Table E-7); and, finally, Perception of Barriers as a Big Problem (Table E-8).

Measurement

Demographics

The questionnaire (see Appendix C) was composed of five separate sections. Section I was composed of four demographic questions, one question each on gender, parental marital status, grade average obtained in school, and educational aspirations. These were merely for having some demographics that may relate to a general profile of the respondents.

It was thought that due to the very low numbers of minorities in this geographic area, identification by ethnicity would compromise anonymity, as it would be quite easy to distinguish an individual subject identified as a minority. Therefore, ethnicity was not included in the demographic questions.

Substance Use

The next section (II) included 10 questions. Each item asked about the frequency of use of a different illegal substance (including tobacco and alcohol products, which are illegal for anyone under age 21), and at what age the subject began using the substance, if at all. The six choices for responses on frequency of use included never, have used but not using now, 2-3 times a year, 1-3 times a month, 1-2 times a week, and every day. These questions were modified from other questionnaires currently being distributed in several states around the country by the U.S.D.A. Extension network.

Friends

Section III had two items on personal issues. The first item asked about the person to whom the subject is most likely to go for dialogue about having a personal problem, and offered 10 possible responses, from family members and friends, to teachers and clergy, to there is no one to confide in. The second item inquired about whether or not the subject has a steady boyfriend/girlfriend, and if so, how many hours per week are spent with that person. These questions were derived from several Extension surveys.

Behavior

The fourth section (IV) was an 18-item scale on behavior. It used a five-choice format, asking about the frequency of delinquent type of behaviors, such as theft, fighting, arson, etc., for the first 14 items. The next three questions asked about the frequency of being sent to the principal's office, parents being called to school, and being suspended from school, all within the last year. The final item asked the frequency of cutting classes over the past 4 weeks. Frequency choices included never, one time, two times, three times, and more than four times. The references for these questions included the Agnew and Petersen (1989) article and U.S.D.A. Extension surveys.

Leisure Time

The fifth and final section (V) had several subsections, all inquiring after the pattern of use of the subject's leisure time. The first question simply asked the opinion of the respondent as to whether or not there are enough things for a teenager to do in the community. The next part listed 18 different categories of activities, such as indoor or outdoor sports, clubs or youth groups, TV or reading, home or arcade video games, working for pay or voluntarily, and other. (See Appendix C for complete list.) After responding to this set with five choices as

to number of hours weekly involved in the listed activity (from 1 hour or less to more than 10 hours), the subject was asked to return to the items and list all the activities s/he wishes to spend more time doing. An additional question asked the reason for not participating in those preferred activities more often, with eleven possible responses, including "Other reason, _____." for the last choice.

In the next subsection, there were nine items with three choices each as to the persons with whom the subject spends leisure time, choosing from "Frequently," "Occasionally," or "Never or Almost Never" for each person or group of persons named. Sample items were "boys and girls together," "one boy," "one girl," "parents," and "alone."

The following subsection gave 20 reasons for engaging in the chosen leisure activities, from having fun or hanging around, to helping others or self-improvement, to going with the crowd or escape from problems. Each of the 20 reasons had three choices, from very important, to somewhat important, to not important.

The last subsection of the leisure-time section listed 13 barriers for not participating more in desirable activities, from lack of transportation and high costs, to limits to certain groups or times, to time barriers or

boring, with the thirteenth barrier being "Other, _____." Again, there were three choices per reason, including a big problem, somewhat of a problem, and not a problem.

These questions were mostly taken from Crider et al.'s (1985) study regarding rural adolescents' use of leisure time, with some modifications. Also used for reference was the Agnew and Petersen study from 1989.

Data Analysis

Initially, the Problem Behavior Scales found in section II, questions 5 through 14, and section IV, questions 17 through 34, were factor analyzed simultaneously to identify subscales of problem behaviors (Table 1, shown later). The five subscales were tested for reliability (Table 2, shown later), then were employed to examine the hypotheses. To demonstrate validity of using the five factors as subscales, the subscales were each separately correlated with the individual and sum score variables from each of the hypotheses with either Pearson product-moment correlations or Point Biserial correlations (Table 3, shown later). Then the subscales were combined for use in multiple regressions on the individual and sum score variables as noted in the hypotheses (Table 4, shown later). Also, frequencies were analyzed by gender, grade level (age), and location, with some collapsing of response

choices to better compare differences. The results are discussed in the following chapter.

CHAPTER IV

RESULTS

This chapter will present results obtained from analysis of survey responses. The first section will provide results from the factor analysis and the reliabilities on the subscales formulated from these findings in relation to the eight hypotheses presented within this paper. Next, hypotheses testing is presented. Finally, the raw data are introduced as aggregate response rates to the myriad of items in the questionnaire, presented by gender, location, and grade level. Discussion about these results follows in the concluding chapter.

Factor Analysis and Reliability

In order to better manage analyzing the many variables in the data, especially to see whether particular problem behaviors are more related to one another, the use of factor analysis was the most obvious choice. Factors could be useful in both multiple regression and individual correlations to test the hypotheses. The first statistical procedure was the factor analysis. Because the hypotheses are based on the assumption of a "problem behavior syndrome," or the notion that various problem behaviors are related to one another, an oblique rotation was employed. As the variable "forced sex" had zero variance, it was

excluded from the analysis. In the initial analysis, seven factors appeared, explaining a cumulative variance of 72.3%. One factor loaded with a single variable while two other factors had only two variables each.

In the original factor analysis, 5 of the 27 problem behavior variables did not load more strongly on one factor than another, so dropping these variables was contemplated. These include use of inhalants, other drugs, marijuana, vandalism, and shoplifting. Because 2 of these had notably higher incidence, marijuana and shoplifting, interitem reliability coefficients were run to determine the salience of all 5 of the variables to their respective subscales. In each instance, the alpha was reduced considerably when variables were deleted, and 3 of them lowered the alpha substantially when deleted. Thus, it was decided to retain all 5 variables within the subscales developed from the factor analysis.

In order to obtain the optimum conditions of simple factor structure, and factor invariance, the factor analysis was forced to five factors that accounted for 62.1% of the cumulative variance. Table 1 shows the factor loadings greater than or equal to .40 for all variables, and clusters them into the most appropriate subscales.

Once the factors were defined via the statistical analysis, the variables comprising each factor were added

Table 1

Factor Analysis of Problem Behaviors

Problem Behavior	Factor 1 Status	Factor 2 Incorri-gible	Factor 3 Hostile	Factor 4 Thrillseek	Factor 5 Intimidate
use of beer/wine	.81			-.59	
smoking	.77	.49		-.44	
sent to office	.72				.47
hard liquor	.71		.60	-.56	
chewing tobacco	.68				
suspended or expelled	.66				
parents called	.60				.46
cutting classes	.56				
arson		.82			
arrest		.82			
threaten w/weapon		.82			
running away		.73			
vandalizing property		.58	.45	-.46	.49
use of inhalants		.48			
harm w/weapon			.92		
use of steroids			.88		
use of marijuana	.43		.69	-.64	
break & enter			.66		
use of LSD				-.87	
use of cocaine				-.75	
theft under $50			.51	-.61	
shoplifting	.53			-.56	
theft over $50				-.56	
use other drugs				-.48	.42
theft of vehicle					.72
harm w/body					.65
threaten w/body					.61

together, without any weighting, to form each respective subscales. Reliability alphas were then calculated to show the strength of each subscale. For the leisure-time activities (companion preferences, perceived barriers, reasons to participate, reason to not participate, and type of confidants), sum scores were calculated to use in the hypothesis testing against the subscales. Creating sum

scores is consistent with how Crider et al. (1985) and Agnew and Petersen (1989) measured their data. Thus, it was deemed reliable for this study, and alphas were not calculated for these composite variables.

In Table 2, Factor 1, named Status, includes eight variables describing problems mainly associated with teens being under legal age. This subscale, with an alpha of .84, includes smoking and chewing tobacco, using beer/wine and hard liquor, and school offenses (sent to the principal's office, parents called to school, being suspended or expelled, and cutting classes).

Factor 2, labeled Incorrigible, has six variables clustering together. This subscale includes two variables about damaging property (arson and vandalism), using a weapon for threatening others, running away, use of inhalants, and getting arrested (for any reason). The alpha for Incorrigible is .76.

The third subscale, Hostile, has four somewhat diverse variables. The first two variables load rather high, weapon with a loading of .92, and steroid loading at .88, most likely due to each having few responses. On the other hand, marijuana loaded on Factor 3 at .69, and breaking-in at .66, due to each having a higher response rate, thus

Table 2

Interitem Reliability for Subscales

Subscale Name (Factor #)	**Alpha**
Status (1)	.84
Incorrigible (2)	.76
Hostile (3)	.70
Thrillseek (4)	.71
Intimidate (5)	.54

more diffused responses. Hostile yielded an alpha of .70, rather strong for such diverse loadings.

With Factor 4, entitled Thrillseek, there is also a wide range of loadings, but less of a gap between any two variables than in the previous factor. As with the first two variables on Factor 3 loading higher than the others, LSD and cocaine loaded onto Factor 4 at -.87 and -.75, respectively. Theft valued under $50, shoplifting, and theft valued over $50 all loaded comparably within this subscale, as did use of other drugs, such as amphetamines, etc. The use of these drugs appears to covary with small property theft. The alpha for Thrillseek is .71.

Finally, the last three variables, auto theft, use of body to hurt others, and threat of use of body, loaded together to make the last subscale, called Intimidate. As well as having fewer variables load onto it, Factor 5 has variables with more similar factor loadings than prior factors, with loadings of .72, .65, and .61, respectively. Intimidate, with only three factors, still produced an alpha of .54, notably, but justifiably, lower than the other four factors.

Validity

The test of validity of any measure is, of course, whether or not it is measuring what it intends to measure. There is obvious face validity in the different sections of the survey, measuring frequency of time spent in various leisure-time activities, preferences for particular activities, reasons for not participating in preferred activities, type of companions during activity, etc. The foundation of this survey is derived from several versions of a similar survey developed by U.S.D.A. Extension used in at least four states, as well as the study by Agnew and Petersen (1989). Convergent relationships are demonstrated by the five subscales showing similar strength and direction on the same hypotheses (see Table 3), evidence supporting construct validity.

Table 3

Correlations: 5 Subscales to Sum Scores

Hypothesis & Sum Score Variable	Status (Factor 1)	Incorrigible (Factor 2)	Hostile (Factor 3)	Thrillseek (Factor 4)	Intimidate (Factor 5)
Ha1 - Organized leisure-time activities	-.16*	-.13	.05	-.20**	.05
Ha2 - Unsupervised leisure-time activities	.38**	.20**	.12	.13	.16**
Ha3 - Passive leisure-time activities	-.13	-.02	.04	-.02	-.07
Ha4 - Spend time with parents	-.40**	-.31**	-.20**	-.29**	-.22**
Ha4 - Spend time with siblings	-.39**	-.19*	-.30**	-.29**	-.15
Ha4 - Spend time with extended family	-.21**	-.13	-.22**	-.19**	-.10
Ha5 - Why not participate more	-.15	.02	-.03	-.02	.13
Ha6 - Type of confidant	-.35**	-.22**	-.25**	-.18*	-.18*
Ha7 - Other-oriented reasons for participation	-.29**	-.22**	-.14	-.15*	-.16*
Ha7 - Self-oriented reasons for participation	-.12	-.08	.02	-.12	-.01
Ha8 - Barrier as a big problem	.08	.11	.04	.16*	.03

*$p < .05$; **$p < .01$.

For instance, the assumption is that time spent with family members would have a negative relationship with problem behaviors, and that this would hold most strongly for time spent with parents, then the next strength would

be with siblings, with the least strength being with extended family. All five problem behavior subscales were negatively related to these three independent variables, and the only instance the comparative magnitude did not hold was with hostile being lower on time spent with parents. In fact, time spent with parents had all subscales correlate significantly, with a range of $\underline{r}$ = -.20 to $\underline{r}$ = -.40, or 4% to 16% of the explained variance. Time spent with siblings correlated significantly with four of the subscales, from $\underline{r}$ = -.19 to $\underline{r}$ = -.39, excluding Intimidate. Time spent with extended family correlated with three subscales significantly, including Status, Hostile, and Thrillseek, with $\underline{r}$s at -.21, -.22, and -.19, respectively.

Another case in point is found in relating the existence of an adult confidant with problem behaviors. All five of the subscales are negative within the Point Biserial Correlation, from $\underline{r}$ = -.18 to $\underline{r}$ = -.35, or from 3% to 12% of the variance. The five subscales are, too, holding to the hypothesized relationship of positively correlating with unsupervised leisure-time activity, the highest at $\underline{r}$ = .38 (Status) and the least at $\underline{r}$ = .12 (Hostile). These examples illustrate convergent validity of the measures employed and discriminant relations between variables relevant to this study.

Hypothesis Testing

In order to test the eight hypotheses, multiple regressions were performed using all five problem behavior subscales cumulatively to support the individual correlations of the subscales with the independent variables, which are noted within the hypotheses. Although multiple regression is usually used to predict covariation of an dependent with many independent variables, it was herein used with many dependent variables predicting one independent variable. Because this study is cross-sectional in nature, thus the independent and dependent variables are virtually interchangeable, reversing the order for statistical analysis is justifiable. Table 4 presents the coefficients for the multiple regressions.

Hypothesis 1 proposed that there is a negative relationship between organized leisure-time activities and problem behavior. When all subscales were combined in the multiple regression, the cumulative coefficient was $\underline{R}$ = .30, $\underline{p} < .01$, or $\underline{R}^2 = .09$, supporting Ha1. From a table in Kraemer and Thiemann (1987), the power was found at .95 with $\underline{p} < .01$ in a two-tailed test, demonstrating great strength in this test. In the individual correlations, three of the subscales, namely Status, Incorrigible, and Thrillseek, were negatively related with organized leisure-time activities, although Hostile and Intimidate washed out

Table 4

Multiple Regressions

Variable (Hypothesis #)	R	R^2	*Significance (p)*
organized leisure-time activity (Ha1)	.30	.09	< .01
unsupervised leisure-time activity (Ha2)	.40	.16	< .01
passive leisure-time activity (Ha3)	.19	.03	> .05
spend time with parents (Ha4)	.44	.19	< .01
spend time with siblings (Ha4)	.44	.19	< .01
spend time with extended family (Ha4)	.27	.07	< .05
why not participate more (Ha5)	.25	.06	< .05
type of confidant (Ha6)	.37	.14	< .01
other-oriented reason for participation (Ha7)	.31	.10	< .01
self-oriented reason for participation (Ha7)	.20	.04	> .05
barrier as a big problem (Ha8)	.19	.04	> .05

with very low positive coefficients. Because the multiple regression was strong enough to offset the two latter

Pearson correlations, with Ha1, the null hypothesis was rejected.

Hypothesis 2, positively relating unsupervised activities to problem behavior, yielded even stronger support. The multiple regression produced a strong R = .40, $p < .01$, or R^2 = .16. There were positive relationships with each of the individual factors, especially Status at r^2 = .14, Incorrigible at r^2 = .04, and Intimidate at r^2 = .03. With Ha2 supported, the null hypothesis was rejected.

Hypothesis 3 stated that there would be a negative relationship between passive leisure-time activities and problem behaviors. For the hypothesis testing, the multiple regression was disappointing, with R = .19, $p > .05$, or R^2 = .04. The power was relatively low here, found at .50. Even more, there were negative relationships with four of the subscales, only Hostile having a small positive relationship, with no statistical significance. The data failed to support Ha3, thus the null hypothesis here was not rejected.

With the correlations for Hypothesis 4, the strongest relations were found for any of the hypotheses, especially with the multiple regression. For both time spent with parents and time spent with siblings, R = .44, $p < .01$, or R^2 = .19. Time spent with extended family yielded a weaker

relationship (R = .27, p < .05, or R^2 = .07). The power for each of these was strong, with that for parents and siblings each found at .99, and the power for kin found at .90. Therefore, the null hypothesis here was rejected, and Ha4 was retained.

The magnitude of the Rs for Hypothesis 4 is meted out in the Pearson correlations as well. All five of the factors correlated negatively with time spent with parents, time spent with siblings, and time spent with extended family. The five subscales were all found at the p < .01 significance level with time spent with parents, with none being any lower than Intimidate at r^2 = .05, or 5% of the explained variance, and the highest being Status at r^2 = .16, or 16% of the explained variance. As for the relationship with time spent with siblings, four of the subscales were found to be significant, with Status again netting the most explained variance of r^2 = .15, or 15%. Intimidate explained 2% of the variance and was not significant with time spent with siblings. Both Intimidate and Incorrigible had no relationship with time spent with extended family, the other three subscales all being significant at p < .01 levels. The strongest relationship with time spent with extended family was with Hostile, explaining 5% of the variance.

With Hypothesis 5, reasons for not participating in activities (survey question 54) correlating with problem behavior, only two of the five Pearson correlations showed positive relations. The multiple regression, however, did not mirror this weakness, with $R = .25$, $p < .05$, or $R^2 = .06$. The power was moderate at approximately .75. Perhaps because the reasons are not distinguished between types of activities, whether organized, passive, or unsupervised, the question is too generalized to find consistent support. Due to the inconsistency between the individual correlations and the multiple regression, noting the difficulty with the way the question was asked, the null hypothesis here was not rejected.

For Hypothesis 6, the multiple regression was found to be supportive, with $R = .37$, $p < .01$, or almost 14% of the explained variance. The power here was strong at .99. The Point Biserial Correlation rendered on the dichotomy of adult versus nonadult confidants also strongly supported Ha6, which stated that there is a negative relationship between having an adult confidant and problem behavior. All five problem behavior subscales had negative relations, and all were statistically significant. With Ha6 being supported, the null hypothesis could be rejected.

While perusing the survey data as they were being keypunched into the database, it occurred to the author

that perhaps stronger relations may have been found if confiding in brother/sister (siblings) were taken out of the nonadult sum score and added into the adult sum score, because in Hypothesis 4, those spending more time with siblings tended to be less involved in problem behaviors, not more so. In fact, this surprisingly was found to be so. Below, in Table 5, are found Pearson correlation coefficients when the variable of siblings as confidants was left with nonadults, then taken out of the correlation, then added to adults as confidants. The magnitude of the correlation increased more when siblings are placed with adults, and dropped considerably when left out altogether. This suggests that there may be different types of relationships of adolescents to their siblings, each type relationship covarying differently with problem behaviors.

Some of the same problems of overgeneralization with the questions of Hypothesis 5, where there was no specification of which activities were less accessible, might be found for Hypothesis 7 as well. Hypothesis 7 asks about reasons for participation (survey questions 64-83), distinguishing only between other-oriented and self-oriented reasons, but not specifying reasons matched to particular activities. The multiple regression for the

Table 5

Point Biserial Correlations: Confidant with Subscales

Subscale (Factor #)	Sibs with nonadults	Sibs removed from correlation	Sibs with adults
Status (1)	-.35**	-.20**	-.40**
Incorrigible (2)	-.22**	-.13	-.25**
Hostile (3)	-.25**	-.18*	-.30**
Thrillseek (4)	-.18*	-.14	-.23**
Intimidate (5)	-.18*	-.17*	-.24**

*$p < .05$; **$p < .01$.

first half of the hypothesis does show strength, with $R = .31$, $p < .01$, or $R^2 = .10$. The power here was strong, at .97. Although all five of the problem behavior subscales produced negative relationships with other-oriented reasons for participation, as hypothesized, two of those were weak, sharing only 2.6 % of the explained variance for Intimidate and 2.3% for Thrillseek. Hostile produced a very weak correlation. The multiple regression for the second half of Hypothesis 7 is $R = .20$, $p > .05$, or $R^2 = .04$. The power here was consistently weak, at approximately .58. Also, four of five of the problem behavior subscales do have negative relationships with self-oriented reasons for participation; however none with any significance. Obviously, although the first half of the alternative hypothesis yielded strong support, this part of the hypothesis was rejected; thus the null hypothesis was not rejected.

Lastly, the multiple regression for Hypothesis 8, which postulated that there is a positive correlation of perceived large barriers to participation in leisure-time activities with problem behavior, failed to support the hypothesis (R = .19, p > .05). The power was also weak at .50. When Pearson correlations were generated for Ha8, all five of the problem behavior subscales yielded a positive correlation with these perceived barriers. However, only one, Thrillseek at r^2 = .26, was statistically significant, and the remaining four subscales had very weak relationships of between .1% to 1% of the shared variance with no statistical significance. Thus, without the statistical significance, the null hypothesis here cannot be rejected, while Hypothesis 8 was rejected, even though the data were found to have the predicted positive relationship.

Summary of Findings

In conclusion, four of the eight hypotheses were supported by the data collected. The other four hypotheses were not supported by significant statistical findings, but there were some indications that changing the way the questions were asked may give stronger data than were seen here. In all, three of the hypotheses borrowed from Agnew and Petersen (1989), for which they had already found

statistical support, were also upheld here. These included organized leisure-time activities being negatively related, unsupervised leisure-time activities being positively related, and time spent with family members being negatively related to problem behavior. The hypothesis original to this study that was supported is Ha6, that of having an adult confidant being negatively related to problem behavior.

As this research is cross-sectional in nature, it is unclear whether these decisions about leisure-time use somehow mitigate adolescents' choices about involvement in unconventional behaviors, or that the lack of problem behaviors leads an adolescent to choose to be more involved with family, adults, and organized recreation, or that some third reason, such as particular personality traits, may influence both. Because not all of the hypotheses were supported statistically, many questions remain as to how strong the linkage is between an adolescent's social environment and any tendencies toward unconventional acts. The four rejected alternative hypotheses may still have merit if operationalized differently. The fifth hypothesis concerning why participation did not occur in liked activities had support from the multiple regression, but not the individual correlations. The seventh hypothesis about why certain activities were chosen for participation

was half (other-oriented reasons) supported by both the multiple regression, while the second half (self-oriented reasons) was not. Both the third and eighth hypotheses had weak numbers for all statistics, but had leanings in proposed directions, indicating that these two hypotheses need to be stated differently and tested more efficiently in the future.

There is a clear connection between use of leisure time and behavior problems, even within cross-sectional research. It is also clear that pursuing more in-depth research on this topic may lead to rich information about adolescent lifestyle choices.

Frequencies

Gender

As discussed in Chapter II, gender differences have been found in the problem behavior literature (Jessor & Jessor, 1977). This study is no exception, and, in fact, although many differences are almost negligible, there are some major distinctions between the genders.

For instance, within the drug-use behaviors (see Table E-9), there is little difference between male and female frequency of use with cigarettes, inhalants, beer and wine, hard liquor, marijuana, cocaine, LSD, and steroids. However, chewing tobacco is used almost three times more by

males than by females, reflecting the societal mores of chewing tobacco being masculine. In the opposite direction, use of other drugs, such as pills, is herein reportedly used 8.5 times more by females than by males. Use of pills is commonly permitted, even approved of, by the culture for women, such use often leading to abuse, whereas misuse of prescription medications and over-the-counter pills is not usually found to be a problem in men.

Another large disparity between genders is found when comparing three of the four school-related problems, specifically those that deal with how schools address problem behaviors (see Table E-10). Compared to females, males have more than 1.6 times the incidence of being sent to the office, about 1.4 times the incidence of parents being called to school, and more than 1.8 times the incidence of being suspended or expelled. Yet, the rate of cutting classes is not significantly more, merely 50.5% for males and 50.3% for females. The only other large discrepancy in problem behaviors that is found between males and females is use of the body to hurt others, again culturally to be expected since males commonly have more violent, acting-out behaviors (Prothrow-Stith, 1991).

As for leisure-time activities, there are many differences to be noted (see Table E-12). Foremost is the collective dissimilarity within the three sports variables,

outdoor and indoor sports participation (both being supervised activities) and watching live sports. Compared to females, at least 3 hours or more per week males play outdoor and indoor sports more each, the differences being 13.1 and 15.8 percentage points, respectively, and watch live sports 9.8 percentage points more. Males also have a much higher incidence of watching TV more than females (24.2% difference), which is likely to include sports shows.

Males are more likely than females to have some sort of employment, paid or voluntary (55.8% to 45.9%). There is a higher rate of playing computer games at home by males (12.8% to 6.0%), of males participating in school clubs (16.5% to 13.1%), and for males to be "cruising" (27.4% to 20.9%). Perhaps these higher levels of activities for males partly account for the differences in perceptions between the genders of how available activities are in the community (Table E-11). For males, 48 out of 95 (50.5%) respondents specified either that activities were "Extremely limited (nothing to do)" or were "Limited (not much to do)," whereas for females they answered in these two categories 56 out of 86 times (65.1%).

Antithetically, females are more likely than males to be found participating in youth groups more than 3 hours per week outside of the school setting (18.8% to 8.6%), and

to be involved in music/drama (35.4% to 19.6%). Females also reported reading more in their leisure time (38.4% to 29.5%) and more participation in other activities not specifically listed within the questionnaire.

The remainder of the surveyed activities was either listed too infrequently to be used in comparisons, or involvement in them showed no significant difference between the genders. The former include martial arts, arcade games, and board games. The areas of little difference are "Hanging Out with Friends" (males at 82.1%, females at 79.1%) and having a hobby (males at 35.5%, females at 36.0%).

As for reasons for participating or not, or barriers to participation, it is not so much the differences between the genders that are notable as are the points on which they agree. For example, in Table E-15, collapsing the categories of "Somewhat Important" and "Very Important," the top four reasons for participation for males are 1) "To have fun, enjoy myself" (98.9%); 2 and 3) (tied) "To relax or relieve tension" and "To be with my friends" (97.9%); and 4) "To keep physically fit." The top four reasons for females are 1 and 2) (tied) "To have fun, enjoy myself," and "To be with my friends" (98.8%); 3) "To relax or relieve tension;" and 4) "To keep physically fit." The remainder of the rankings is not in agreement; however,

both genders agree on the lowest priority (20), which is "To go with the crowd," males responding at 45.3% and females responding at 41.2%. Also, it should be noted that two categories are almost reciprocal in ranking, with "To gain prestige; make me important" ranked as 15 with 66.3% and "To do something for my community" ranked as 19 with 51.6% for males. Females ranked these as 14 for "To do something for my community" (69.0%) and 19 for "To gain prestige; make me important" (55.5%).

A similar phenomenon happens with barriers to participation, found in Table E-16. For males, the first four rankings, in order, are 1) "cost is too high" (82.1%); 2) "use [of facilities] is limited to certain times" (74.5%); 3) "don't have necessary equipment" (69.5%); and 4) "too much school work" (68.4%). The first four rankings for females are 1) "too much school work" (85.7%); 2) "cost is too high" (84.7%); 3) "use is limited to certain times" (82.4%); and 4) "don't have necessary equipment" (74.1%). The three lowest rankings out of 13 categories for males are 11) "lack of transportation" (52.6%); 12) "parents limit participation" (48.4%); and 13) "not enough leaders or advisors" (41.1%). For females, the three lowest ranked categories are 11) "not enough leaders" (43.5%); 12) "chores interfere with free time" (41.2%); and 13) "parents limit participation" (35.9%).

In the section asking why the subjects do not participate more often in activities that they like (Table E-13), out of 11 answers to be circled the top 2 are, again, the same for both genders. For males, they are 1) "It cost too much to do it" (51.6%); and 2) "I had too many other activities" (46.3%). The rankings are flipped for females, ranked as: 1) "I had too many other activities" (50.5%); and 2) "It cost too much to do it" (43.0%). The lowest ranking, "I didn't like the leader," is also the same for both genders, with 4.2% for males and 8.1% for females.

In the category of types of companions with whom the subjects spend their leisure time (Table E-14) came a couple of odd findings. Again, the two possible responses of "Occasionally" and "Frequently" were collapsed to make it easier to analyze. The highest ranked response by both genders is "members of my extended family," males responding 83 out of 95 times, or 87.4%, and females responding 80 out of 85 times, or 94.1%.

The lowest ranking for males is spending time with "two or more boys together," while the lowest ranking for females is spending time with "two or more girls together." There is a large percentage of males spending time with either "two or more girls together," at 71.3% or "one girl," at 71.3%, with similar percentages for females

spending time with either "two or more boys together," at 72.9%, or "one boy," at 75.0%. Obviously, there is less congregating with same-sex companions than with opposite-sex companions. Spending time with "parents" was ranked sixth for males, at 69.5%, and fifth for females, at 59.3%.

One last point to note is that spending time "alone" is second for males, at 81.1%, and fourth for females, at 66.3%. Apparently, having private time is important and common for both genders, more important even than spending time with immediate family members. According to Erikson's theory of psychosocial development, gaining identity by severing ties with family is to be expected, and is meted out in this study.

Location

There are some very notable differences between the three high schools included in this study. This is especially true with regards to the third high school, located in the south part of the county, having the highest reported incidence of both problem behaviors and substance abuse. In the substance use section (Table E-17), 7 out of 10 categories are highest for the southern school. In the other 3 categories, the central high school has the highest rates, and in fact, is second in report rates for the other 7 categories.

Within the Problem Behavior section (Table E-18), the southern high school has the highest incidence in 12 out of the 17 active categories (having no responses at all to question 25). Of the remaining 5 categories, this school is second in report rates. One of the more interesting points is the report on arrests. Although rates of alcohol use (27.5% for beer and wine and 37.7% for hard liquor) and other substance use (up to 17.4%) are high at the southern school, as well as the range of theft rates being substantial (between 4.3% for theft over $50 and 30.4% for shoplifting), arrests for this school are reported at only 10.1%. The other two schools are similar in how few arrests there are compared to reported incidents of criminal behavior.

Another interesting note is how the perceptions of available activities differ among the three schools. For the southern high school, 48 out of 69 (69.6%) respondents perceive the availability to be either "extremely limited" (nothing to do) or "limited" (not much to do), whereas both the central school (24 out of 48) and the northern school (33 out of 65) have around a 50% response rate to this question.

For those responses regarding use of leisure time (Table E-20), the only extreme difference between the southern high school and the other two schools is with the

category of "cruising," which comes under the unsupervised activities hypothesis. However, it might be important to note also that the other schools often have higher rates for both supervised and passive leisure-time use.

When matching location with reasons why the subjects do not participate more in preferred activities (Table E-21), there is little agreement among the three schools. The item "It cost too much to do it" is high on the list for all three, but it ranks second (tied with "It interfered with my school work") for both the central high school (23 out of 48, or 47.9%) and the northern high school (27 out of 64, or 42.2%), and is first for the southern high school (36 out of 69, or 52.2%). The subjects from the central high school (at 24 out of 48, or 50%) and the northern high school (at 36 out of 64, or 56.3%) responded most often to having too many other activities. For the southern school, having too many other activities tied for second at 39.1% with interfering with school work.

Again collapsing "Somewhat Important" with "Very Important" for the "Reasons for Participation" section (Table E-23), there is strong agreement for the most cited reasons as well as the least cited reason. Both northern and southern schools have a three-way tie for the first ranking; in fact, the northern high school respondents

marked each of these top three at 100% (having fun, relaxing, and being with friends),while southern high school subjects marked each of them at 97.1%. The central high subjects also marked "to have fun" at 100%, ranked "to be with friends" second with 97.9%, and marked "to make new friends" third at 93.6%. The lowest ranked by all three locations, aside from "Other," is "to get away from problems."

In the section questioning respondents about the perceived barriers to participation in liked activities (Table E-24), the three schools have some closely ranked categories. With "Somewhat of a Problem" and "A Big Problem" are collapsed together, the top-ranked barrier for the northern high school (at 57 out of 64, or 89.1%) and for the southern high school (at 56 out of 68, or 82.4%) is "cost is too high", and is third for the central high school (at 37 out of 48, or 68.8%). The first one for the central high school is "use is limited to certain times" (at 41 out of 48, or 85.4%), where it is third for the northern high school and fifth for the southern high school.

Lastly, there are a few surprises when cross-tabulating different types of companionship by location (Table E-22). When collapsing the responses of "Frequently" with those of "Occasionally," the most

frequent response within each school is spending time with "members of...extended family," as indicated in the analysis of gender differences. However, the southern high school students cited spending time with siblings and with parents as the next two rankings (each at 50 out of 69, or 72.5%). The central high school responded more often to spending time with "one boy" (at 38 out of 48, or 79.2%). The northern high school responded with spending time "alone" ranked as second (at 52 out of 64, or 81.3%) and spending time with siblings as third (at 40 out of 63, or 62.5%). There is also no agreement for the least cited response.

Grade Level

Although grade level does not specifically equate with age of the respondents, there is an implication here that each succeeding grade has an average age one year older than the preceding grade. There may be some who have been retained in prior years, or who started school older than the minimum age level, or even some who may have promoted to upper grades sooner than their peers, but this is true for each grade; thus it is presumed that all of these possibilities average out for each. It must be remembered that even with the implicitness of 1-year intervals in age, however, these are still cross-sectional data and no

explicit knowledge of development, thus change in habits, may be assumed herein.

The "Alcohol and Other Drug Use" section is a case in point. With certain substances, it is evident that use is higher with older respondents. By not knowing whether or not the subjects used the same amount, or more, or less, in prior times to the year before the data were collected, it is not possible to definitely state that usage has increased over time. An educated guess can be made to that effect, with some assurance from drug-use statistics it is a sound estimate.

For instance, by collapsing all items concerning any usage within the last year, both items on tobacco use as well as both items on alcohol use show greater usage with each age interval. (See Table E-25.) "Smoking Tobacco" is marked 12 out of 62 times, or 19.4%, by 10th graders, is marked 14 out of 68 times, or 20.6%, by 11th graders, and is marked 18 out of 50 times, or 36.7%, by 12th graders. "Chewing Tobacco" has 4 out of 62 responses for 10th graders (6.5%), 5 out of 68 responses for 11th graders (7.4%), and 9 out of 50 responses for 12th graders (18.0%). For use of beer or wine, responses are 13 out of 62 (21.0%), 17 out of 68 (25.0%), and 18 out of 50 (36.0%), respectively, for 10th, 11th, and 12th graders. Within the last year, liquor was reportedly used by 8 out of 61

(13.1%) 10th graders, 11 out of 68 (16.2%) 11th graders, and 15 out of 49 (30.6%) 12th graders.

Marijuana use is similar in increased numbers correlating to increased age, with 4 out of 62 (6.5%) responses from 10th graders, 7 out of 68 (10.3%) from 11th graders, and 10 out of 50 from 12th graders. But the remainder of the other substance categories often has small numbers per cell, making the data hard to analyze for any distinct trends. The low numbers could be due to many reasons, including their being more taboo, or they are more difficult to obtain, or more costly. There may even be an underreport of usage because admitting to using drugs that are legal once one becomes of age may be less frightening, but then many also reported using marijuana, which is perceived by many to be relatively harmless, but is still illegal.

The "Problem Behavior" section (Table E-26) shows differently than substance use. Again, all items showing any participation within the last year were collapsed to better analyze the data. For the most part, problem behaviors were lower for the older respondents than the younger ones. In some cases, the item had a decrease in frequency with each higher grade level. These items include threatening with a weapon, threatening with the body, stealing a car, being sent to the office, and parents

being called to school. Some of the other problems had a higher level for 11th graders than 10th graders, then a drop in frequency for 12th graders. These problems include shoplifting, theft under $50, theft over $50, breaking and entering for illegal purposes, using a weapon to hurt someone, being arrested, running away from home, vandalism, and being suspended or expelled from school.

The item that differed from the rest of the problem behavior list is skipping class. First, because it was a more common behavior among adolescents, it was asked about the last 4 weeks preceding receipt of the questionnaire, rather than the last year. Second, in answering this question, respondents displayed little hesitancy in responding, noted by the high frequency for each age level. Even subjects who reported no other activity in either substance use or problem behaviors would often respond positively to this item. Third, the frequency made a giant leap between 11th grade and 12th grade, from 46.2% to 64.7%. Overall, about 50% of all subjects cut classes at least once within the last 4 weeks, and many of them more often than that.

There is a small positive relationship by grade level in the perceptions of respondents that the community does not have enough activities available for them (Table E-27). With 10th graders, 32 out of 62, or 51.6%, find either that

activities are "Extremely limited (nothing to do)" or are "Limited (not much to do)." For 11th graders, this ratio remains about the same, to 35 out of 68, or 51.5%. However, a big surprise comes from the high school seniors. Although some may expect that older students, who usually have better access to transportation and more privileges given to them as they mature, would be busier and perceive more opportunities available to them, this did not happen. For 12th graders the percentage of negative perceptions has a high frequency, at 72.5%, or 37 out of 51 respondents.

Perhaps looking at the participation in leisure-time activities (Table E-26) will underscore this enigma. The older subjects report more participation in many highly social activities, such as school clubs, youth groups, music and drama, and holding a job. As expected, due to greater access to transportation as older students are of age for a driver's license, many of them having their own vehicle, there is a higher percentage of 12th graders (31.4%, or 16 out of 51) who report cruising regularly, as opposed to 10th graders (14 out of 62, or 22.6%) and 11th graders (14 out of 68, or 20.6%). The 12th graders also hang out with their friends more often, specified by 45 out of 51, or 88.2%. Of the 10th graders, 46 out of 62 report hanging out, or 74.2%, and for 11th graders this frequency rises to 80.9%, or 55 out of 68.

When listing preferred activities (bottom of Survey Section V. a.), those in which the subjects would like to participate more, 35 out of 51 (68.6%) of 12th graders indicated that they would like to have more time to hang out with their friends, the second highest preference for them of all the choices available next to a desire to play more outdoor sports. One might have expected this preference to drop for 12th graders as they prepare to enter the adult world.

With leisure-time activities by grade level (Table E-28), the frequencies were collapsed to include responses of those who spend 3 hours or more per week in each category. The most frequent response of all the choices was, not surprisingly, hanging out with friends. This includes 46 out of 62, or 74.2%, for 10th graders, 55 out of 68, or 80.9%, for 11th graders, and 45 out of 51, or 88.2%, for 12th graders. Again, what was somewhat surprising, however, is that, although 12th graders are busier with more adult involvements, such as work (31 out of 50, or 62.0%) and studying (29 out of 51, or 56.9%), they also have a higher incidence of being with their friends than either 10th or 11th graders. In fact, for both 11th and 12th graders, work is the second most frequent activity reported. For 10th graders this is not the case, probably due to labor laws heavily restricting hiring persons under

16 years of age, making most high school sophomores less desirable to hire because of all the red tape attached to doing so.

Among the sports categories, it is clear that adolescents from each grade level are highly involved in these organized and supervised programs. For the 10th graders, participating more than 3 hours per week in outdoor activities is third in rank (36 out of 62, or 58,1%), behind, first, hanging out (74.2%) and watching TV (71.0%). Indoor sports ranks next after studying, at 27 out of 62, or 43.5%. Watching live sports ranks eighth for sophomores, with 18 out of 61, or 29.5%.

For the 11th graders, the rate of work (42 out of 68, or 61.8%) is, as with the 12th graders, second in rank to hanging out with friends. Third, however, is indoor sports, with 37 out of 67 (55.2%) reporting participation of three or more hours per week. Outdoor sports ranks sixth for 11th graders, with 34 out of 67, or 50.7%, and watching live sports comes in tenth place, with 14 out of 67, or 20.9%. Again, it should be remembered that it is unclear how many hours of TV watching is spent watching sports on television. One other note is that "cruising (in a car)" has a lower rate for 11th graders (20.6%) than for 10th graders (22.6%), then jumps for 12th graders (31.4%), with each grade level reporting this category low in

ranking; that is, tied for 9th for 10th graders, ranked 11th for 11th graders, and ranked 10th for 12th graders.

As for the reasons why subjects do not participate more in preferred activities (Table E-29), there are some noticeable differences by grade level, thus differences by age group. For instance, 11th graders rank high cost of activities (38 out of 68, or 55.9%) as the number one reason, whereas it second for both 10th graders (26 out of 62, or 41.9%) and 12th graders (22 out of 51, or 43.1%). The first choice for 10th graders is transportation problems (33 out of 62, or 53.2%), in keeping with the inability to obtain a driver's license for most of this age group. The primary reason for less participation in preferred activities for 12th graders is having too many other activities (32 out of 51, or 62.7%). For all three grades, the least reported reason for less participation is not liking the leaders of the preferred activities.

In the section questioning reasons for participation (Table E-31), "Somewhat Important" and "Very Important" responses were tabulated together. At the top of the rankings for each grade is having fun. For 10th graders, tied with three other categories (being with friends, relaxing, and keeping physically fit) for highest rate of response is having fun (61 out of 62, or 98.4%), while for 11th graders it is tied for highest rate with being with

friends (66 out of 67, or 98.5%) and is the highest for 12th graders at 100% response rate. Being with friends is tied for second ranking with relaxing for 12th graders, at 50 out of 51, or 98.0%, and is third ranking for juniors at 63 out of 67, or 94.0%. All three grades responded least to going with the crowd.

Barriers to participation (Table E-32) are similar in responses to reasons for not participating. The top three responses for 10th graders are 1) no transportation, at 54 out of 62, or 87.1%; 2) cost is too high, at 50 out of 62, or 80.6%; and 3) too much school work, at 47 out of 61, or 70.5%. For 11th graders, the three most frequent responses are 1) cost is too high, at 58 out of 67, or 86.6%; 2) use is limited to certain times, at 54 out of 67, or 80.6%; and 3) too much school work, at 52 out of 67, or 77.6%. The three highest frequencies for 12th graders are 1) cost is too high, at 42 out of 51, or 82.4%; 2) no equipment, at 41 out of 51, or 80.4%; and 3) use is limited to certain times, at 40 out of 51, or 78.4%. For 10th graders, parents limiting participation is ranked 9th at 32 out of 62, or 52.6%. But for 11th graders, "parents limit participation" is tied for 12th at 27 out of 67, or 40.3%, and for 12th graders it is 13th at 17 out of 51, or 33.3%.

As expected from results in previous comparisons of gender and location, spending time with extended family is

the highest ranked response in the companion section (Table E-30) when collapsing responses to both "Frequently" and "Occasionally." For 10th graders the rate is 93.5% (58 out of 62), for 11th graders it is 88.2% (60 out of 68), and for 12th graders it is 90.0% (45 out of 50). But the second ranking for both 10th and 11th graders is spending time alone (77.4% and 72.1%, respectively), whereas spending time with siblings is second for 12th graders (43 out of 51, or 84.3%). The remainder of responses in this section has little correlation between age groups with respect to rankings. The older students appear to spend more of their time with family members than do younger students.

CHAPTER V

CONCLUSIONS

The study examined one element of an integrated model of three contemporary theories explaining adolescent involvement in unconventional behavior. Studying the social environment of adolescents is a logical outcome from blending Problem Behavior Theory, Social Control Theory, and Resilience as a metamodel for explaining behavioral risks. This study has looked particularly at how use of leisure time relates to adolescent problem behavior, as defined in eight hypotheses.

Summary

Respondents were identified in a stratified random sample of 450 10th, 11th, and 12th graders in three high schools. A six-page questionnaire was mailed to the parents of the subjects in order to solicit their cooperation as well as their passive consent. Within 3 weeks, 181 replies were received.

Differences by Gender, Location, and Grade Level

The gender differences regarding substance use such as higher use of chewing tobacco by males and more frequency of use of "Other Drugs," especially pills, by females, mirror national trends. Alcohol and tobacco use, in

general, may be lower than national averages, but are still alarming for the cultural taboos on these substances. For high-school students, the more unusual, exotic, and expensive drugs are very low in use, thus far.

It is interesting to note that within the "Other Behaviors" section there are few major differences between the problem behavior of males versus females. In most instances where differences were evident, they had more to do with how the schools disparately handled the genders, whether the students were sent to the office, their parents were called, or they were suspended or expelled, all three occurring more often for the males than the females. Both genders cut classes about equally in frequency. The only other large variation was within the question of using any part of the body to hurt another person, but as the question did not distinguish where the incidents of interpersonal violence occurred (whether at school or elsewhere), it is unknown whether the physical violence may account for the differences in reported school-related problems. Perhaps there are other behaviors that the questionnaire did not address that are involved in the school disciplinary processes. Or, it may well be that the perception by school authority figures is one of higher threat from males than from females; therefore, female offenses are not dealt with as forcefully, or are dealt

with in a sexually discriminating manner, a point noted by Gibbons (1976, p. 177) concerning the juvenile justice system.

It is also interesting to see how both male and female adolescents rated the importance of reasons to participate or not in leisure-time activities, and what they perceived as barriers to that participation. That the top four barriers for both genders include "use (of facilities) is limited to certain times" and "cost is too high" indicates that there are ways the community can make organized and supervised activities more available and accessible to the local youth.

It appears that there is some discrepancy between genders, not only for type of activities in which they are involved and interested, but perhaps also in gender stereotypes. For instance, females work less than males, participate less in sports, which often is emphasized more for males, have less access to transportation, and are more involved in the arts for extracurricular activities. Females also spend less time with computer games, which are more often created for the male consumer, and participate more in passive activities, such as reading, board games, and studying. One of the more fascinating notes is that males report spending more time with females, whether one-on-one or in groups, and females report spending more time

with males. The biggest surprise comes from both genders that the companionship most often reported is with extended family.

There are certainly differences in both drug use and problem behaviors by location. With few exceptions, especially within the more frequent responses to drug-use and problem behaviors, the southern high school has large dissimilarities from the other two schools. It is difficult to say it is a problem distinguished by rural area, as the high school in the north end of the county is just as rural in population density, and the central high school is much more urban. The answer probably lies more in the variations in perceptions, whether they are reality or merely perspective, that there are not enough available activities for youth in the community. Hypothesis 8 does show a positive correlation with these two issues, but there is only one factor that shows any statistical significance. Of course, the southern high school had a higher number of returned questionnaires, which could account for more reports of problems, but comparisons herein are made by rates of reports, not merely frequencies. It is also possible that there is a cohort effect within these schools, and one drug or unconventional behavior is simply more trendy in one area than another. Or it could be that value systems are different from one

location to another, and that parents living in one area of the valley are more or less strict, or monitor their children better than the other areas.

The southern school does not have great differences in leisure-time use compared to the other high schools, but does report less studying, less participation in hobbies, and slightly more cruising in a car. These disparities, by themselves, are not enough to account for the differences in problem behaviors. But added with availability differences and those reasons for not participating of high costs and transportation problems, they may factor well enough together to lay a foundation of more involvement in unconventional behaviors for this location.

The differences by age group, or, more accurately, by grade level, are mostly what developmentalists would expect. Noting that use of substances and involvement in problem behaviors are only within the last year and not cumulative over a lifetime, it still is evident that older students are more likely to exhibit certain problem behaviors than younger students. Older students are more likely to take liberty in cutting classes, and they have less chance of getting into trouble with school officials. They also have less need to run away as they can anticipate being more autonomous within the near future. They probably have more available funds to buy drugs, and have

more access to transportation, whether their own, their parents', or their friends'. They are more likely to get arrested for criminal activity, as such activity is seen by law enforcement as more permanent and threatening behavioral patterns for older youth than for younger. They are more practiced at not getting caught for shoplifting and petty theft, and probably have better strategies for hiding this kind of behavior. They are more likely to have acceptance of alcohol and tobacco use by parents, authority figures, and peers when older, as they are given more privileges of choice.

Again, older students have better access to transportation and more funds to be involved in preferred activities. But older students have more time constraints due to work, perhaps more family responsibilities, and more need to prepare for living on their own within the near future. Participating in various leisure-time activities still is desirable as a means to being with friends and having fun, reasons that do not diminish with age. Even more than 10th or 11th graders, the 12th graders appear to want to escape from problems, they want prestige more from participation, and they are less concerned with participation to learn skills for the future, having perhaps already acquired those skills that they perceive as being needed.

It is obvious how age differences create different barriers to participation in preferred activities. There is less concern with lack of leaders for activities by the 12th graders, more chores that interfere with participation, and also more work responsibilities. Fewer barriers also come from transportation and activities being limited to adults, as they may have achieved enough adult status for participation already.

One area that may surprise some researchers is that older adolescents reported spending more time overall with family members, not only extended family, but parents and siblings as well. Although they may be more independent in choosing their companionship, it may be this very fact of independence that affords more choice for family companionship. With fewer issues of autonomy, older students do not have to prove their autonomy by spending less time with family members.

Reviewing the Testing of the Hypotheses

Regression analyses and Pearson product-moment correlations were calculated for seven of the eight hypotheses, and a Point Biserial correlation was used for Ha6 regarding the dichotomy of adult versus nonadult confidants. Table 2 displays the correlation coefficients

for each of the correlations. Basically, four of the eight hypotheses were supported statistically.

In addition to the multiple regression, it was decided to add support to the use of the five developed problem behavior subscales via testing the hypotheses through correlations. Because this study is cross-sectional in nature, thus having no temporal ordering of variables, doing multiple regressions using the subscales, normally the dependent variables, as a complex of predictors of the variables from the eight hypotheses, normally the independent variables, may be viewed as appropriate. Table 4 displays the $\underline{R}$ and $\underline{R}^2$ for each of these regressions, as well as the statistical significance levels. While some of the regressions explain only 3.5% (Hypothesis 3 about passive leisure-time activities and Hypothesis 8 about perceptions of barriers as a big problem) or 4% (Hypothesis 7 about other-oriented reasons vs. self-oriented reasons for participation in leisure-time activities) of the variance, others are as high as 19% (Hypothesis 4 about spending time with family members). Even with the lower percentages of explained variance, the numbers may be large enough to make a decisive difference between an adolescent's conventional and unconventional behavioral patterns when including other contributing factors. This alone has potential for preventive purposes.

Discussion

It is clear from the factor analysis that various problem behaviors are interconnected, as purported by Jessor (1985, 1987, 1992, 1993). The evidence is also supportive of four of the eight hypotheses as presented above, some more strongly than others. How does one interpret the collected data and subsequent statistics for expansion of the knowledge-base about today's adolescents?

To begin with, there is now a foundation upon which to build concerning types of activities that correlate with both problem behaviors and their antitheses. Just as with the Agnew and Petersen (1989) study, all three of the comparable hypotheses, Ha1, Ha2, and Ha3, provide empirical evidence that organized and passive activities are negatively related, and unsupervised activities are positively related to problem behaviors. Social Control Theory (Hirschi, 1969) would interject how adult supervision and involvement in conventional youth activities are positively related to more social ties and less delinquent behavior, while Resiliency (Werner, 1990) explains how having adult mentors with positive support to individual adolescents has a negative correlation with risk. Problem Behavior Theory (Jessor, 1992; 1993) serves to remind the reader that social environment is a major

factor in predicting level of risk both for and from problem behaviors.

The fourth hypothesis regarding time spent with family members not only obtained all relationship directions as predicted, but four of the problem behavior subscales related negatively most strongly with spending time with parents, then with siblings, then with extended family, as predicted. Social Control Theory (Hirschi, 1969) plays a major role here, too, by explaining how positive family ties are linked with fewer problem behaviors. Resiliency (Anthony, 1987) calls this a buffer factor in explaining high-risk behavior. Again, Jessor's model, Problem Behavior Theory, has always included family environment as a salient factor in high risk behavior of adolescents (Donovan et al., 1991).

It has previously been suggested why the fifth and seventh hypotheses were not fully supported by the data. The questions regarding barriers to participation and reasons for participating may, indeed, have been so generalized about both conventional and unconventional activities that on many of the individual correlations, the significance is washed out. For Ha7, perhaps the sum scores used for other-oriented reasons and self-oriented reasons do not have construct validity. Or, it may well be that these two hypotheses are ill-considered and that there

is no real relationship between reasons for or barriers interfering with participation in certain leisure-time activities; thus there would be no relationship between participation, or lack thereof, and unconventional and socially unacceptable behaviors.

The relation of the five subscales with type of confidant produced relatively strong correlation coefficients. As predicted by all three frameworks used for theoretical basis in this study, the closer the relationship is for a youth with an adult, the less likely an adolescent is to be participating in delinquent acts (Agnew & Petersen, 1989; Hirschi, 1969; Jessor, 1992, 1993; Demos, 1989). The adult does not necessarily have to be kin to serve as a confidant, yet the prediction holds.

The multiple regressions in conjunction with Pearson correlations for four of the eight hypotheses ground a portion of the theory presented in empirical data. Although the other four hypotheses were not fully supported by the immediate data, they cannot be altogether ruled out as useful concepts for future research. The fact that the four sustained hypotheses, namely organized leisure-time activities, unsupervised leisure-time activities, time spent with family members, and having adult confidants, corroborates choices surrounding adolescent leisure use as having defined relationships with adolescent problem

behaviors. This gives credibility to using the three theories in an integrated synthesis, or at least the social environment portion of the synthesis, as previously explained in the rationale for formulating the synthesis and the hypotheses. Although some items on the questionnaire are obviously more associated with one of the theories than the others, it would be difficult to completely separate results as only being supportive of one over another theory.

For instance, the strength of the relationship between unsupervised activities and problem behaviors plainly has its underpinnings in Social Control Theory, yet basis is found in Resilience, where lack of adult mentors is strongly tied with higher levels of risk. There is also linkage with Problem Behavior Theory and how more time spent with peers is related to more unconventional behaviors.

Another example is seen with time spent with family members. All three frameworks have a component relating family strength with lower risk for problems, or problem behavior. Using Social Control Theory, Hirschi (1969) explains this as attachment or affection to significant others who are authority figures. In the Resilience framework, Werner (1990) attributes time spent with family as offering social supports necessary for reduced risk,

greater invulnerability. With Problem Behavior Theory, Jessor (1993) emphasizes how family interaction assists in meeting an adolescent's developmental needs, and thus reduces the likelihood of youth trying to meet needs via inappropriate means.

Whatever the explanation within the individual theories, there is harmony about amount of time spent with family members covarying with prosocial behavioral patterns. All three theorists would agree that the fewer the social supports, or social ties, or positive social avenues for meeting developmental needs, the more prone an adolescent is toward risks of problem behavior. The terminology may be somewhat divergent (either different terms with the same or a similar meaning, or the same term with a different meanings), but the frameworks are basically saying the same things from different perspectives. And such divergence in vocabulary is common within the three unique perspectives, so is to be expected during the initial stages of integrating and synthesizing into a larger paradigm.

Thus, the larger question now is not so much evidence of support for the three theories, but foundation for continuing to pursue studying the expanded paradigm. Is there justification for maintaining use of the synthesis as a basis for research on adolescent problem behavior? Can

such research lead to better explanation, accurate prediction, and effective prevention?

Jessor may be able to answer the questions at hand. One component of Problem Behavior Theory chastises existing prevention programs as being too one-track minded, targeting isolated behavior problems with narrowly focused solutions. According to Jessor, to broaden the search for connection, and eventually causation, of risky behaviors, may extend the understanding of why, how, and when adolescents will socially misbehave, as well as expand the depth of the programs used for prevention. The synthesis proposed herein fulfills the charge for this search.

The present research is, of course, in the rudimentary stages of using an integrative approach to study the pressing problems of adolescent unconventionality. Some of the questions used to operationalize the hypotheses need refinement and more focus. The value of the activities was not measured well, nor was the nature of relationships with family members, other adults, or friends and peers. Merely having relationships with family members or other adults does not necessarily connote healthy relationships, nor should being close to friends and peers mean deviant acts. The way that use of siblings as confidants swayed the data in the Point Biserial correlation is an example of problems with measurement. But these concerns can be alleviated

with prospective research built with greater resources, such as more time, money, and persons involved.

Do these results support the integration of the three theories into one? It is believed so, especially in light of breaking ground into studying the adolescent social environment, one of the main components binding the theories together. Do the data support one theory more than another? The nature of the study design began more from questions around Social Control Theory (Agnew and Petersen, 1989) and Problem Behavior Theory (Jessor, 1991; 1992) than Resilience (Werner, 1989). All three would benefit more from longitudinal designs, but Resilience most of all needs such a design for clear support from data.

The design did attempt to link certain choices about leisure-time activities to more socially acceptable behavior as well as any activities that related to unconventional behaviors. Therefore, although the design might have favored two of the theories more than the third, the data upon which a decision for retaining or rejecting hypotheses can be made support the three theories equally. Case in point: The concept of perceived barriers to participation is definitely more grounded in Social Control Theory (the involvement in conventional activities component) and Problem Behavior Theory (the Perceived Environment component). But the eighth hypothesis was not

retained. Instead, all four of the retained hypotheses included some type of connection to adult supervision or ties (or lack thereof). All three theories, and the integrated model, emphasize the need for adult monitoring and/or mentoring.

The National Commission on Children (1991) has made strong recommendations about the need for adult mentors in the lives of our youth. The National Commission on Children has recommended neighborhood centers where youth who cannot receive needed support through home and family may receive such mentoring services. The integrated model would incorporate such service as a source of study for supportive data. This study, though only at the beginning of where the agenda may lead, evidently supports the marriage of three major explanatory theories.

Limitations

It is important to remember that while 40% of the stratified random sample responded to the mail-out survey, there is still 60% of the sample that did not reply. It is unknown how the remaining 60% of the chosen random sample would have responded to the questionnaire as there was no follow-up performed. For some of them, it may have been the parents who chose to not allow participation in the study. For others, it may be hating to fill out forms,

lack of concern, or fear of discovery that kept them from responding. Moreover, local adolescents may have values and perceptions dissimilar to youth elsewhere due to cultural or geographical differences; thus it is difficult to predict if the remaining 60% would be any different from the respondents, as Social Control Theory would suggest, or are similar, just less responsive. Thus, even those local youth who are more attached to the community may be more or less prone to return the questionnaires than generally found in the U.S.

Generalizability is an issue of concern. First, only 40% of the stratified random sample was heard from. Second, the population of Cache Valley may be very different than in other areas of Utah or the United States, especially considering the existence of a predominant religion with a correspondingly highly embedded subculture. The two alternative high schools in the area that house the higher risk students were not surveyed at all, truncating the general sampling of the local adolescent population. Also, part of the sample is from the rural part of the county, while part is from an urban area that more resembles the suburbs. In addition, the respondents were more likely to live in an intact family than is common in the rest of the country.

Regardless of the local culture, it is evident that many of the youth of Cache Valley are involved in high risk behaviors, both drug-related and criminal. Recently, over one half of the respondents have been involved in two or more problem behaviors. While most of these are relatively mild, appearing somewhat normative for the local population, such as cutting classes regularly, some adolescents are involved in violence, theft, and property damage. Because this was a cross-sectional study, it is impossible to know if these are developing habits, escalating behaviors, or merely experimental exploration on the part of the youth. Whichever, the nature of some of the problems is serious enough to warrant further study.

Perhaps the nonrespondents are involved less in problem behaviors from the known sample, or perhaps the opposite is true, that the nonrespondents have a higher incidence of problem behaviors. In fact, it is more likely the latter than the former, as there may be many who still feel too unsafe to respond truthfully about involvement in illegal activities. Others may simply be unconcerned about responding, thinking that it would not make a real difference anyway. Those who are more connected to the community and less involved in problem behaviors, according to Social Control Theory (Hirschi, 1969), not only have nothing to hide, but are, in the first place, more likely

to want to help their community in planning for youth needs. Thus, it can be speculated that, if anything, the frequencies of involvement in problem behaviors may be underrepresented in this research. This study, however, is a beginning.

As to the honesty in reporting by those who have responded, it is unlikely that reporting of problem behaviors is less than truthful. It would be fruitless to lie about such involvement, and may even subject the respondent to punishment and ostracism if a family member should accidently or surreptitiously discover the information reported on the questionnaire. Again, it is more likely that participation in risky behavior is underreported due to fear of discovery, than it is likely to be over- or falsely reported.

Some of the questions were discovered to be too ambiguous to be useful for interpretation, namely those items that surveyed reasons of why or why not participate in the listed activities. Also, other questions on a variety of problem behaviors and related issues were not asked in order to raise the response rate and optimize the available funds by reducing the amount of paper, printing, postage, and time spent in handling the surveys. Questions on sexual activity certainly have utility within all three of the theoretical frameworks.

Some of the variables had very few responses, confining estimates to be based on small numbers in the instances of steroid use, cocaine use, use of a weapon for either threat or direct personal harm, and arson, each having four or fewer cases. On the other hand, specific trends could be seen with problem behaviors such as smoking, use of beer and wine, shoplifting, using the body for personal harm to others, and, especially, cutting classes. The small numbers in the former list and the large incidence in the latter list are probably highly indicative of the current local trends toward problem behaviors.

Using only those names and addresses that could be correlated with phone numbers is also problematic. Those without phones, or without listed telephone numbers, may be quite diverse from the sample taken. Because direct contact with or about respondents within the school setting was bypassed, the mailing list was derived from a directory several months old. Any new students having moved in since the publication of the tri-high school directory were left out of the sample, as were any drop-outs or adolescents somehow not connected with the three main high schools. Move-ins may have less involvement in problem behaviors due to their newness to the locale, or they may have brought many problem behaviors, even drugs, with them and be a very

different group from the sample. Those adolescents who, for one reason or another, are not attached to any of the three sampled schools may differ greatly from the subjects. There is no way to tell until these categories of teens are sampled, but according to Agnew and Petersen (1989), youth who are disenfranchised from normal social systems are more likely to have antisocial behaviors.

One more limitation is the dilemma of where to appropriately place the use of siblings as confidants. The item may need to be dichotomized between older and younger siblings, or between siblings who are close in age versus far apart in age, or perhaps between those siblings who have a close relationship with the respondents and those who do not. This question needs to be studied further.

Recommendations

While not every hypothesis is supported, and those that are do not all have consistency across the five problem behavior subscales, a foundation has been laid to begin longitudinal work on the relation of an adolescent's leisure environment with his or her unconventional behaviors. In order to make this type of study more generalizable as a true random sample, a follow-up component could be incorporated in the study design. Telephone calls could be made to the parents requesting

their cooperation, or reminder postcards could be sent to all subjects in the study. Phoning could also be done as follow-up merely to ask nonrespondents about certain differences, such as hating to fill out forms, GPA, marital status of parents, even parental support.

The ambiguous questions about participation motives might be broken down to relate to specific leisure-time activities, or at least types of activities, such as supervised or unsupervised. The item about siblings as confidants could distinguish between older and younger siblings, or same-sex siblings, or those siblings who share a close relationship with the subjects. By the same token, a distinction could be made as to whether the siblings are also involved in any problem behaviors, and any correlation this may have with the involvement in problem behaviors of the respondents could be measured.

This study is preliminary work for future cause-and-effect research, which may assist with planning prevention and intervention programs, hopefully for the near future. Policy makers as well as scientists should be encouraged to become involved in such worthy efforts, if not for humanitarian purposes, then at least for cost-effectiveness of funds going into youth health services and corrections programs.

It is recommended that research be initiated to include a larger range of problem behaviors in relation to adolescent leisure-time use. This obviously needs to be extended to longitudinal work, and needs to be done frequently in order to stay current with new cohorts and the trends they bring with them. This work should include questions on sexual activity, which was set aside for this study due to concern over response rate.

The strongest recommendation is to make every attempt to reach most of a community's adolescents through the formalized institutions, those which have the greatest access to them, the schools. Community leaders with concerns about teen problems could assist in convincing local school boards of the imperative nature of this type of research. Methods need to be devised to reach the underground population of youth, especially the drop-outs and youth "at large" in a community, those who are not counted as drop-outs yet have not finished school. These are important individuals for researchers to contact for answers to what youth of today need for support in their social environment.

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APPENDICES

APPENDIX A

Protective Individual Traits as Found by Author

TRAIT	Anthony (1987)	Bogen-schneider et al. (1991)	Demo & Acock (1991)	Demos (1989)	Dugan (1989)	Feleman (1989)	Ojarde et al. (1991)	Reuser et al. (1989)	Herrenkohl et al. (1991)	Luthar (1991)	Prothrow-Stith (1991)	Werner (1990)
Active					X	X						X
Adaptive				X		X						
Affection												X
Alert												X
Ambition						X						
Androgyny			X									X
Assertive						X						X
Cheerful										X		X
Competent	X			X								
Concentration		X										
Cooperative												X
Curious								X				
Eat, sleep well												X
Elicit support	X						X		X			
Empathy								X				X
Impulse control		X										
Industry						X						
Internal locus		X	X					X		X	X	X
Optimistic		X		X					X		X	X
Persistent		X		X								
Social skills		X								X		X
Varied interest				X								
Varied strategy	X	X		X								

APPENDIX B

Environment Found as a Factor in Resilience, by Author

Environmental notation	Anthony (1987)	Bogenschneider (1991)	Meisels & Wasik (1990)	Nat'l Com. on Child. (1991)
Environtype				
Milieu for ind'l coping	XXXXXXXXXX			
Interacts w/ parenting process				
Several levels of ecology interact		3 levels	3 levels	4 levels

Environmental Notation	Sameroff & Fiese (1990)	Seifer & Sameroff (1987)	Steinberg et al. (1991)	Werner (1990)
Environtype	XXXXXXXXXX			
Milieu for ind'l coping		XXXXXXXXXX		
Interacts w/ parenting process			XXXXXXXXXX	
Several levels of ecology interact				3 levels

APPENDIX C

The Utah Teen Survey

We would like to know what you do and feel. Your answers are very important to us. Please be completely honest in your answers. Your answers will be anonymous. Your parents will NOT see them. You will not be identified. Do not put your name on this questionnaire.

When you have completed answering all the questions, you may either mail this questionnaire for free in the enclosed reply envelope, or drop it off in the drop box at the video counter of The Book Table, or in your high school attendance office.

If you are uncertain about some questions, give your best answer from what you think you understand about the question.

You will probably be able to complete this survey in about 30 minutes. Please answer each question carefully. **THANK YOU FOR HELPING US LEARN MORE ABOUT YOU AND UTAH'S OTHER TEENAGERS!**

I. ABOUT YOURSELF

Please check the answer that best describes you.

1. What is your sex?

   ____ 1) Male
   ____ 2) Female

2. What is the current marital status of your parents? Mark only ONE.

   ____ 1) Married
   ____ 2) Remarried
   ____ 3) Divorced
   ____ 4) Separated
   ____ 5) Widowed (One of your parents died)
   ____ 6) They never married
   ____ 7) Not married but living together

3. As of your last report card, what is your grade point average (GPA)?

   Example: 3.33 (a B+ average) or 2.67 (a B- average).

   Please write in the number of the grade point average.

   _____

4. How far do you plan to go in school?

   ____ 1) I would like to quit school as soon as I can.
   ____ 2) I plan to finish high school, then stop.
   ____ 3) I plan to go to trade (vocational) school when I graduate.
   ____ 4) I plan to go to college.
   ____ 5) I plan to get an additional degree after college (for example, become a doctor or lawyer).

II. ALCOHOL AND OTHER DRUG USE

Please circle a number for each item.

		Never have used	Have used but not using now	2-3 times a year	1-3 times a month	1-2 times a week	Every Day	If used, at what age I first started
5.	Smoking Tobacco (cigarettes)	1)	2)	3)	4)	5)	6)	_____ yrs.
6.	Chewing Tobacco or Snuff	1)	2)	3)	4)	5)	6)	_____ yrs.
7.	Inhalants, (paint thinner, glue, nitrous oxide)	1)	2)	3)	4)	5)	6)	_____ yrs.
8.	Beer/Wine	1)	2)	3)	4)	5)	6)	_____ yrs.
9.	Hard Liquor	1)	2)	3)	4)	5)	6)	_____ yrs.
10.	Marijuana	1)	2)	3)	4)	5)	6)	_____ yrs.
11.	Cocaine	1)	2)	3)	4)	5)	6)	_____ yrs.
12.	LSD	1)	2)	3)	4)	5)	6)	_____ yrs.
13.	Other Drugs (uppers, downers, "ludes", valium)	1)	2)	3)	4)	5)	6)	_____ yrs.
14.	Steroids	1)	2)	3)	4)	5)	6)	_____ yrs.

III. PERSONAL ISSUES AND PROBLEMS

15. If you were having a personal problem and needed someone to talk to, to which one of the following people would you MOST likely go?
MARK ONLY ONE

_____ 1) Teacher or coach
_____ 2) Employer/boss
_____ 3) School counselor
_____ 4) Parent or stepparent
_____ 5) Religious leader
_____ 6) Brother/sister
_____ 7) Grandparent or other adult relative
_____ 8) Adult friend
_____ 9) One of my friends
_____ 10) There is no one to confide in

16. Do you have a steady boyfriend or girlfriend? If so, how much time do you spend with this person?

_____ 1) No, I don't have a steady boyfriend or girlfriend.
_____ 2) Yes, I do. I spend about 1-5 hours with him/her each week.
_____ 3) Yes, I do. I spend about 5-10 hours with him/her each week.
_____ 4) Yes, I do. I spend about 10-20 hours with him/her each week.
_____ 5) Yes, I do. I spend more than 20 hours each week with him/her.

IV. OTHER BEHAVIORS Please let us know how much you have been involved in the following activities. Please circle one number for each item. During the **past year** have you:

		Never	One time	Two times	Three times	More than four times
17.	Taken something from a store on purpose without paying for it (shoplifting)?	1)	2)	3)	4)	5)
18.	Stolen anything worth less than $50.00 (other than from a store)?	1)	2)	3)	4)	5)
19.	Stolen anything worth more than $50.00 (other than from a store)?	1)	2)	3)	4)	5)
20.	Broken into another person's house or business to do something illegal?	1)	2)	3)	4)	5)
21.	Used any weapons (e.g., a gun, club or knife) on another person to hurt them?	1)	2)	3)	4)	5)
22.	Used any part of your body (e.g. fists or feet) to hurt another person?	1)	2)	3)	4)	5)
23.	Used any weapon to frighten or hurt someone so they would give you money or something you wanted?	1)	2)	3)	4)	5)
24.	Used any part of your body to frighten or hurt someone so that they would give you something you wanted?	1)	2)	3)	4)	5)
25.	Used force or threats to make another person have sex with you?	1)	2)	3)	4)	5)
26.	Taken an automobile, truck, bus or motorcycle without the owner's permission?	1)	2)	3)	4)	5)
27.	Been arrested?	1)	2)	3)	4)	5)
28.	Run away from home?	1)	2)	3)	4)	5)
29.	Purposely set fire to public or private property?	1)	2)	3)	4)	5)
30.	Purposely damaged or destroyed public or private property that didn't belong to you?	1)	2)	3)	4)	5)
31.	During the **past year**, how many times have you been sent to the principal's office at school?	1)	2)	3)	4)	5)
32.	During the **past year**, how many times have you gotten into trouble at school and your parents were called?	1)	2)	3)	4)	5)
33.	During the **past year**, how many times have you been suspended or expelled from school?	1)	2)	3)	4)	5)
34.	During the last **four weeks**, how many times have you missed school because you skipped or "cut"?	1)	2)	3)	4)	5)

V. 35. As far as you are concerned, is the number of things for teenagers to do in your community: (Mark only ONE.)

____ 1) Extremely limited (nothing to do)
____ 2) Limited (not much to do)
____ 3) Barely enough to do
____ 4) Mostly enough to do
____ 5) Plenty to do

V.a. **LEISURE-TIME ACTIVITY QUESTIONS**

For the following activities, choose the answer which most accurately describes how much time you spend on that activity:

		1 hour or less weekly	Between 1 to 3 hours weekly	Between 3 to 5 hours weekly	Between 5 to 10 hours weekly	More than 10 hours weekly
36.	Outdoor Sports	1)	2)	3)	4)	5)
37.	Indoor Sports	1)	2)	3)	4)	5)
38.	School Clubs	1)	2)	3)	4)	5)
39.	Youth Groups	1)	2)	3)	4)	5)
40.	Music/Drama	1)	2)	3)	4)	5)
41.	Studying	1)	2)	3)	4)	5)
42.	Hanging Out With Friends	1)	2)	3)	4)	5)
43.	Reading	1)	2)	3)	4)	5)
44.	Playing Board Games	1)	2)	3)	4)	5)
45.	Cruising (in a car)	1)	2)	3)	4)	5)
46.	Watching Live Sports	1)	2)	3)	4)	5)
47.	Watching TV	1)	2)	3)	4)	5)
48.	Working on a Hobby	1)	2)	3)	4)	5)
49.	Martial Arts	1)	2)	3)	4)	5)
50.	Playing Home Computer Games	1)	2)	3)	4)	5)
51.	Playing Arcade Games	1)	2)	3)	4)	5)
52.	Working, Volunteer or Paid	1)	2)	3)	4)	5)
53.	Other, Please Specify: _____	1)	2)	3)	4)	5)

Now, go back and look at the activities, numbered 36 - 53. Which of these activities would you like to spend more time doing? Please list by number: ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___.

V.b.

54. If there are activities you'd like to do more often, why don't you? (Circle all that apply)

1) No local place to do it.
2) I didn't have the needed skills.
3) It cost too much to do it.
4) Transportation was a problem.
5) I had too many other activities.
6) My parents didn't approve
7) My friends didn't do it.
8) It interfered with my school work.
9) I didn't like the leader.
10) Meeting time was inconvenient.
11) Other reason, _____.

V.c. Below is a list of different types of companions with whom people might spend their leisure or free time. Please indicate how often you spend your leisure time with the persons named.

		Frequently	Occasionally	Never or Almost Never
55.	boys and girls together	1)	2)	3)
56.	two or more boys together	1)	2)	3)
57.	two or more girls together	1)	2)	3)
58.	one boy	1)	2)	3)
59.	one girl	1)	2)	3)
60.	parents	1)	2)	3)
61.	brothers & sisters	1)	2)	3)
62.	members of my extended family (aunts, uncles, cousins, grandparents)	1)	2)	3)
63.	alone	1)	2)	3)

V.d. People have different reasons for participating in leisure activities. Below is a list of possible reasons. Please indicate how important each of the reasons is to you in choosing what you do in your leisure time. Choose one rating for each reason.

		Not Important	Somewhat Important	Very Important
64.	Just to spend time.	1)	2)	3)
65.	To have fun, enjoy myself.	1)	2)	3)
66.	To learn how to get along with people.	1)	2)	3)
67.	To help other people.	1)	2)	3)
68.	To relax or relieve tension.	1)	2)	3)
69.	To prepare for a future job.	1)	2)	3)
70.	To be with my friends.	1)	2)	3)
71.	To learn skills for the future.	1)	2)	3)
72.	To please my parents.	1)	2)	3)
73.	To make new friends.	1)	2)	3)
74.	To create something useful/attractive.	1)	2)	3)
75.	To do something for my community.	1)	2)	3)
76.	To gain prestige; make me important.	1)	2)	3)
77.	To get out of the house.	1)	2)	3)
78.	To help me be a better person.	1)	2)	3)
79.	To keep physically fit.	1)	2)	3)
80.	To try new things.	1)	2)	3)
81.	To go with the crowd.	1)	2)	3)
82.	To get away from problems.	1)	2)	3)
83.	Other, _____.	1)	2)	3)

V.e. Sometimes a community has a facility or opportunities for recreation, but the use of these by people your age is limited because of barriers or restrictions. Indicate how much of a problem each of the following is in restricting the use of available opportunities by people your age.

		Not A Problem	Somewhat of a Problem	A Big Problem
84.	lack of transportation	1)	2)	3)
85.	cost is too high	1)	2)	3)
86.	don't have necessary equipment	1)	2)	3)
87.	use is limited for mostly adults	1)	2)	3)
88.	use is limited to certain groups	1)	2)	3)
89.	use is limited to certain times	1)	2)	3)
90.	not enough leaders or advisors	1)	2)	3)
91.	not interesting to young people	1)	2)	3)
92.	too much school work	1)	2)	3)
93.	chores interfere with free time	1)	2)	3)
94.	job interfere with free time	1)	2)	3)
95.	parents limit participation	1)	2)	3)
96.	Other, _____	1)	2)	3)

Again, thank you for your time and efforts on behalf of the teens of Utah.

APPENDIX D

Letter of Introduction to Parents

February 13, 1994

Dear Parent(s),

I am a doctoral candidate in the Dept. of Family & Human Development, College of Family Life, working along with Dr. Randall Jones in the area of adolescence. I have been working for many years on community issues, and for more than five years on youth problems. Currently, I am completing my degree at USU by gathering information on how local teenagers use their leisure time, and how leisure activities might relate to behavioral problems. Your assistance is vital to this work, and will greatly benefit local elected officials and community agencies, which in turn will benefit your family and others in Cache Valley.

Enclosed is a six-page questionnaire which will take your teenager approximately 30-45 minutes to complete. These questions request information on problems in which teens might be involved, and how they spend their time out of school. Attached is a coupon for a free video rental at The Book Table, generously donated by John Needham as incentive for your teen's participation.

We are asking you to please hand this questionnaire to your teenager, thereby giving permission for it to be completed and returned in the enclosed self-addressed, stamped envelope. We are also asking that you honor the promise of anonymity and confidentiality to your teen, so that we might receive the most honest and accurate information possible. This data, after being collected and computerized, will be analyzed and reported to several elected bodies as well as some health and human service agencies, which then can better plan for future youth needs. Rather than develop plans and programs based on conjecture, you have an opportunity to help your community plan for future youth needs based on real behavioral patterns and personal needs of our local teens.

Your cooperation in this Utah Teen Survey is greatly appreciated. Just think, you finally have a way of giving direct assistance to your community by allowing your teen to complete the questionnaire.

We thank you in advance for your assistance with this very important project.

Gail B. Yost, M.Ed

Randall Jones, Ph.D.

APPENDIX E

STATISTICAL TABLES

Table E-1

Frequency of Substance Use (n = 181)

Substance	Never have used (%)	Not using now (%)	2-3 Times per year (%)	1-3 Times per month (%)	1-2 Times per week (%)	Daily	Missing cases (%)
Smoking	136 (75.1)	23 (12.7)	0 (0)	5 (2.8)	4 (2.2)	12 (6.6)	1 (.6)
Chewing	162 (89.5)	13 (7.2)	1 (.6)	1 (.6)	1 (.6)	2 (1.1)	1 (.6)
Inhalant	171 (94.5)	8 (4.4)	1 (.6)	0 (0)	0 (0)	0 (0)	1 (.6)
Beer/wine	132 (72.9)	21 (11.6)	8 (4.4)	16 (8.8)	2 (1.1)	1 (.6)	1 (.6)
Liquor	144 (79.6)	10 (5.5)	13 (7.2)	9 (5.0)	1 (.6)	1 (.6)	3 (1.7)
Marijuana	159 (87.8)	10 (5.5)	4 (2.2)	5 (2.8)	1 (.6)	1 (.6)	1 (.6)
Cocaine	177 (97.8)	2 (1.1)	1 (.6)	0 (0)	0 (0)	0 (0)	1 (.6)
LSD	175 (96.7)	3 (1.7)	2 (1.1)	0 (0)	0 (0)	0 (0)	1 (.6)
Other drug	171 (94.5)	6 (3.3)	3 (1.7)	0 (0)	0 (0)	0 (0)	1 (.6)
Steroid	178 (98.3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (.6)	2 (1.1)

Table E-2

Frequency of Problem Behavior (n = 181)

Problem Behavior	Never (%)	1 Time (%)	2 Times (%)	3 Times (%)	4+ Times (%)	Missing cases (%)
Shoplift	139 (76.8)	19 (10.5)	8 (4.4)	2 (1.1)	13 (7.2)	0 (0)
Theft <$50	155 (85.6)	10 (5.5)	4 (2.2)	2 (1.1)	9 (5.0)	1 (.6)
Theft >$50	171 (94.5)	5 (2.8)	2 (1.1)	0 (0)	2 (1.1)	1 (.6)
Breaking in	171 (94.5)	5 (2.8)	1 (.6)	3 (1.7)	1 (.6)	0 (0)
Hurt w/weapon	179 (98.9)	1 (.6)	1 (.6)	0 (0)	0 (0)	0 (0)
Hurt w/body	112 (61.9)	21 (11.6)	20 (11.0)	9 (5.0)	19 (10.5)	0 (0)
Threat w/weapon	180 (99.4)	0 (0)	0 (0)	0 (0)	1 (.6)	0 (0)
Threat w/body	168 (93.4)	6 (3.3)	4 (2.2)	1 (.6)	2 (1.1)	0 (0)
Vehicle theft	163 (90.1)	8 (4.4)	5 (2.8)	3 (1.7)	2 (1.1)	0 (0)
Been arrested	167 (92.3)	12 (6.6)	1 (.6)	1 (.6)	0 (0)	0 (0)
Run away	164 (90.6)	9 (5.0)	4 (2.2)	2 (1.1)	2 (1.1)	0 (0)
Arson	177 (97.8)	2 (1.1)	0 (0)	0 (0)	2 (1.1)	0 (0)
Vandalize	157 (86.7)	13 (7.2)	3 (1.7)	2 (1.1)	6 (3.3)	0 (0)
School office	150 (82.9)	16 (8.8)	6 (3.3)	3 (1.7)	6 (3.3)	0 (0)
Parents called	152 (84.0)	21 (11.6)	5 (2.8)	1 (.6)	1 (.6)	1 (.6)
Suspended	175 (96.7)	6 (3.3)	0 (0)	0 (0)	0 (0)	0 (0)
Cut classes	90 (49.7)	25 (13.8)	16 (8.8)	11 (6.1)	39 (21.5)	0 (0)

Table E-3

Leisure-Time Activities (n = 181)

Type of activity	1 Hour or less weekly (%)	1 to 3 hours weekly (%)	3 to 5 hours weekly (%)	5 to 10 hours weekly (%)	10 or more hours weekly (%)	Missing cases (%)
Organized leisure-time activities						
Outdoor sports	45 (24.9)	36 (19.9)	40 (22.1)	25 (13.8)	34 (18.8)	1 (.6)
Indoor sports	41 (22.7)	53 (29.3)	33 (18.2)	25 (13.8)	28 (15.5)	1 (.6)
School clubs	125 (69.1)	24 (13.3)	13 (7.2)	4 (2.2)	9 (5.0)	6 (3.3)
Youth groups	89 (49.2)	65 (35.9)	17 (9.4)	4 (2.2)	3 (1.7)	3 (1.7)
Music/drama	113 (62.4)	14 (7.7)	5 (2.8)	21 (11.6)	21 (11.6)	7 (3.9)
Martial arts	161 (89.0)	9 (5.0)	3 (1.7)	4 (2.2)	1 (.6)	3 (1.7)
Working, paid or not	64 (35.4)	24 (13.3)	24 (13.3)	23 (12.7)	45 (24.9)	1 (.6)
Unsupervised leisure-time activities						
Hang out with friends	10 (5.5)	25 (13.8)	43 (23.8)	48 (26.5)	55 (30.4)	0 (0)
Cruising	98 (54.2)	39 (21.5)	21 (11.6)	14 (7.7)	9 (5.0)	0 (0)
Watch sports	87 (48.1)	47 (26.0)	35 (19.3)	5 (2.8)	5 (2.8)	2 (1.1)
Arcade games	167 (92.3)	11 (6.1)	0 (0)	1 (.6)	0 (0)	2 (1.1)
Passive leisure-time activities						
Studying	30 (16.6)	54 (29.8)	38 (21.0)	36 (19.9)	23 (12.7)	0 (0)
Reading	57 (31.5)	63 (34.8)	37 (20.4)	16 (8.8)	8 (4.4)	0 (0)
Board games	161 (89.0)	12 (6.6)	37 (1.7)	1 (.6)	0 (0)	4 (2.2)
Watching TV	32 (17.7)	40 (22.1)	51 (28.2)	36 (19.9)	20 (11.0)	2 (1.1)
Working on hobby	53 (29.3)	62 (34.3)	34 (18.8)	19 (10.5)	11 (6.1)	2 (1.1)
Computer games	140 (77.3)	21 (11.6)	13 (7.2)	2 (1.1)	2 (1.1)	3 (1.7)

Table E-4

Time Spent with Family Members (n = 181)

Family member	Frequently (%)	Occasion-ally (%)	Almost never (%)	Missing cases (%)
Parents	64 (35.4)	87 (48.1)	30 (16.6)	0 (0)
Brothers & sisters	60 (33.1)	86 (47.5)	35 (19.3)	0 (0)
Extended family	17 (9.4)	94 (51.9)	69 (38.1)	1 (.6)

Table E-5

Reasons for Not Participating More (n = 181)

Why not participate more	# Cases (%)
No local place to do it	53 (29.3)
Didn't have skills	23 (12.7)
Cost too much to do it	85 (47.0)
Transportation problem	58 (32.0)
Too many activities	86 (47.5)
Parents didn't approve	24 (13.3)
Friends didn't do it	23 (12.7)
Interfered w/school work	61 (33.7)
Didn't like the leader	12 (6.6)
Inconvenient times	37 (20.4)
Other reasons	49 (27.1)
Range of Sum Scores	0 - 11

Table E-6

Type of Confidant (n = 181)

People as confidants	# Cases (%)
Teacher or coach	1 (.6)
Employer/boss	0 (0)
School counselor	1 (.6)
Parent or stepparent	61 (33.7)
Religious leader	6 (3.3)
Grandparent, other adult relative	1 (.6)
Adult friend	6 (3.3)
Total adult	76 (43.0)
Brother/sister	15 (8.3)
One of my friends	81 (44.8)
No one to confide in	4 (2.2)
Total nonadult	100 (55.2)
Missing cases	5 (2.8)

Table E-7

Reasons for Participation (n = 181)

Reason for participation	Not important (%)	Somewhat important (%)	Very important (%)	Missing cases (%)
Other-oriented reasons				
Learn how to get along	26 (14.4)	88 (48.6)	66 (36.5)	1 (.6)
Do something for community	72 (39.8)	93 (51.4)	14 (7.7)	2 (1.1)
Self-oriented reasons				
Have fun, enjoy myself	2 (1.1)	23 (12.7)	155 (85.6)	1 (.6)
Relax or relieve tension	6 (3.3)	65 (35.9)	109 (60.2)	1 (.6)
Learn skills for the future	27 (14.9)	81 (44.8)	71 (39.2)	2 (1.1)
Gain prestige, be important	70 (38.7)	76 (42.0)	34 (18.8)	1 (.6)
Help me be a better person	15 (8.3)	76 (42.0)	89 (49.2)	1 (.6)
Keep physically fit	10 (5.5)	57 (31.5)	113 (62.4)	1 (.6)
Get away from problems	37 (20.4)	90 (49.7)	53 (29.3)	1 (.6)

Table E-8

Perception of Barriers as a Big Problem (n = 181)

Barriers to leisure-time activity	Not a problem (%)	Somewhat of a problem (%)	A big problem (%)	Missing cases (%)
Lack of transportation	74 (40.9)	79 (43.6)	27 (14.9)	1 (.6)
Cost is too high	30 (16.6)	107 (59.1)	43 (23.8)	1 (.6)
Didn't have equipment	51 (28.2)	94 (51.9)	35 (19.3)	1 (.6)
Use limited for mostly adults	72 (39.8)	76 (42.0)	32 (17.7)	1 (.6)
Use limited to certain groups	67 (37.0)	82 (45.3)	30 (16.6)	2 (1.1)
Use limited to certain times	39 (21.5)	104 (57.5)	36 (19.9)	2 (1.1)
Not enough leaders	104 (57.5)	53 (29.3)	23 (12.7)	1 (.6)
Not interesting to youth	63 (34.8)	85 (47.0)	29 (16.0)	4 (2.2)
Too much school work	42 (23.2)	88 (48.6)	49 (27.1)	2 (1.1)
Chores interfere	93 (51.4)	68 (37.6)	19 (10.5)	1 (.6)
Job interferes w/ free time	75 (41.4)	68 (37.6)	35 (19.3)	3 (1.7)
Parents limit participation	104 (57.5)	57 (31.5)	19 (10.5)	1 (.6)
Other barrier, as specified	4 (2.2)	3 (1.7)	6 (3.3)	168 (92.8)

Table E-9

Substance Use by Gender (n = 181)

Substance	Male Used at least once (%)	Female Used at least once (%)
Smoking	24/94 (25.5)	20/86 (23.3)
Chewing	15/95 (15.8)	3/85 (3.5)
Inhalants	5/95 (5.3)	4/85 (4.7)
Beer/wine	26/95 (27.4)	22/85 (25.9)
Liquor	18/95 (18.9)	16/83 (19.3)
Marijuana	10/95 (10.5)	11/85 (12.9)
Cocaine	1/95 (1.1)	2/85 (2.4)
LSD	2/95 (2.1)	3/85 (3.5)
Other drugs	1/95 (1.1)	8/85 (9.4)
Steroids	1/94 (1.1)	0/85 (0)

Table E-10

Problem Behavior by Gender (n = 181)(Within last year)

Problem Behavior	Male Done at least once (%)	Female Done at least once (%)
Shoplift	24/95 (25.3)	18/86 (20.9)
Theft <$50	15/95 (15.8)	10/85 (11.8)
Theft >$50	4/94 (4.3)	5/86 (5.8)
Breaking in	7/95 (7.4)	3/86 (3.5)
Hurt with weapon	1/95 (1.1)	1/86 (1.2)
Hurt with body	45/95 (47.4)	24/86 (27.9)
Threat with weapon	1/95 (1.1)	0/86 (0)
Threat with body	7/95 (7.4)	6/86 (7.0)
Vehicle theft	10/95 (10.5)	8/86 (9.3)
Been arrested	8/95 (8.4)	6/86 (7.0)
Run away	9/95 (9.5)	8/86 (9.3)
Arson	3/95 (3.2)	1/86 (1.2)
Vandalize	14/95 (14.7)	10/86 (11.6)
School office	20/95 (21.1)	11/86 (12.8)
Parents called	17/94 (18.1)	11/86 (12.8)
Suspended	4/95 (4.2)	2/86 (2.3)
Cut classes (within last 4 weeks)	48/95 (50.5)	43/86 (50.0)

Table E-11

Availability of Activities by Gender (n = 181)

Available activities	Male (%)	Female (%)	Category total
Extremely limited	10/95 (10.5)	17/86 (19.8)	27/181 (14.9)
Not much to do	38/95 (40.0)	39/86 (45.3)	77/181 (42.5)
Barely enough to do	20/95 (21.1)	9/86 (10.5)	29/181 (16.0)
Mostly enough to do	10/95 (10.5)	13/86 (15.1)	23/181 (12.7)
Plenty to do	17/95 (17.9)	8/86 (9.3)	25/181 (13.8)
Gender total	95/181 (52.5)	86/181 (47.5)	181

Table E-12

Leisure Activity by Gender (n = 181)

Activity	Male >3 hours/week (%)	Female >3 hours/week (%)
Outdoor sports	64/94 (68.1)	35/86 (40.7)
Indoor sports	52/94 (55.3)	34/86 (39.5)
School clubs	15/91 (16.5)	11/84 (13.1)
Youth groups	8/93 (8.6)	16/85 (18.8)
Music/drama	18/92 (19.6)	29/82 (35.4)
Studying	55/95 (57.9)	52/86 (60.5)
Hanging out	78/95 (82.1)	68/86 (79.1)
Reading	28/95 (29.5)	33/86 (38.4)
Board games	1/94 (1.1)	3/83 (3.6)
Cruising	26/95 (27.4)	18/86 (20.9)
Watching live sports	28/94 (29.8)	17/85 (20.0)
Watching TV	67/94 (71.3)	40/85 (47.1)
Hobby	33/93 (35.5)	31/86 (36.0)
Martial arts	5/94 (5.3)	3/84 (3.6)
Home computer games	12/94 (12.8)	5/84 (6.0)
Arcade games	1/95 (1.1)	0/84 (0)
Work, paid or volunteer	53/95 (55.8)	39/85 (45.9)
Other activity	13/21 (60.2)	14/21 (66.7)

Table E-13

Why Not Participate by Gender (n = 181)

Why not participate	Male Frequency (%)	Female Frequency (%)
No local place to do it	30/95 (31.6)	23/86 (26.7)
Didn't have needed skills	8/95 (8.4)	14/86 (16.3)
Cost too much	49/95 (51.6)	37/86 (43.0)
Transportation problems	31/95 (32.6)	26/86 (30.2)
Too many other activities	44/95 (46.3)	43/86 (50.0)
Parents didn't approve	15/95 (15.8)	9/86 (10.5)
Friends didn't do it	9/95 (9.5)	14/86 (16.3)
Interfered with school work	26/95 (27.4)	35/86 (40.7)
Didn't like the leader	4/95 (4.2)	7/86 (8.1)
Inconvenient meeting time	17/95 (17.9)	21/86 (24.4)
Other reason	23/95 (24.2)	26/86 (30.2)

Table E-14

Companion Type by Gender (n = 181)

Companion type	Male Frequently or occasionally (%)	Female Frequently or occasionally (%)
Boys & girls	44/95 (46.3)	44/85 (51.8)
2+ Boys	23/95 (24.2)	62/85 (72.9)
2+ Girls	67/94 (71.3)	26/86 (30.2)
1 Boy	49/94 (52.1)	63/84 (75.0)
1 Girl	67/94 (71.3)	30/84 (35.7)
Parents	66/95 (69.5)	51/86 (59.3)
Siblings	70/95 (73.7)	50/86 (58.14)
Extended kin	83/95 (87.4)	80/85 (94.1)
Alone	77/95 (81.1)	57/86 (66.3)

Table E-15

Reasons to Participate by Gender (n = 181)

Reasons to participate	Male Somewhat & very important (%)	Female Somewhat & very important (%)
Just to spend time	56/92 (60.9)	49/83 (59.0)
Have fun	94/95 (98.9)	84/85 (98.8)
Get along with others	78/95 (82.1)	76/85 (89.4)
Help others	77/94 (81.9)	79/85 (92.9)
Relax	93/95 (97.9)	81/85 (95.3)
Prepare for future job	79/95 (83.2)	72/85 (84.7)
Be with friends	93/95 (97.9)	84/85 (98.8)
Learn skills for future	81/94 (86.2)	71/85 (83.5)
Please parents	57/95 (60.0)	55/85 (64.7)
Make new friends	86/95 (90.5)	77/83 (92.8)
Make something useful	61/94 (64.9)	57/84 (67.9)
Serve community	49/95 (51.6)	58/84 (69.0)
Gain prestige	63/95 (66.3)	47/85 (55.3)
Get out	77/95 (81.1)	65/84 (77.4)
Be a better person	86/95 (90.5)	79/85 (92.9)
Physical fitness	90/95 (94.7)	80/85 (94.1)
Try new things	87/95 (91.6)	78/85 (91.8)
Go with crowd	43/95 (45.3)	35/85 (41.2)
Escape problems	74/95 (77.9)	69/85 (81.2)
Other reasons	7/10 (70.0)	5/8 (62.5)

Table E-16

Barriers to Participation by Gender (n = 181)

Barriers to participation	Male Somewhat of & a big problem (%)	Female Somewhat of & a big problem (%)
No transportation	50/95 (52.6)	56/85 (65.9)
High cost	78/95 (82.1)	72/85 (84.7)
No equipment	66/95 (69.5)	63/85 (74.1)
Use for adults	53/95 (55.8)	55/85 (64.7)
Use for certain groups	58/95 (61.1)	54/84 (64.3)
Use for certain times	70/94 (74.5)	70/85 (82.4)
Not enough leaders	39/95 (41.1)	37/85 (43.5)
Not interesting	54/94 (57.4)	60/85 (70.6)
Too much school work	65/95 (68.4)	72.84 (85.7)
Chores interfere	52/95 (54.7)	35/85 (41.2)
Job interferes	58/95 (61.1)	45/85 (52.9)
Limits by parents	46/95 (48.4)	30/85 (35.9)
Other barriers	4/6 (66.7)	5/7 (71.4)

Table E-17

Substance Use by Location (n = 181)

Substance	North High Used at least once (%)	Central High Used at least once (%)	South High Used at least once (%)
Smoking	9/64 (14.1)	9/47 (19.1)	26/69 (37.7)
Chewing	3/63 (4.8)	3/48 (6.3)	12/69 (17.4)
Inhalants	0/63 (0)	2/48 (4.2)	7/69 (10.1)
Beer/wine	10/63 (15.9)	12/48 (25.0)	26/69 (37.7)
Liquor	6/62 (9.7)	9/47 (19.1)	19/69 (27.5)
Marijuana	2/63 (3.2)	7/48 (14.6)	12/69 (17.4)
Cocaine	0/63 (0)	2/48 (4.20	1/69 (1.4)
LSD	0/63 (0)	3/48 (6.3)	2/69 (2.9)
Other drugs	0/63 (0)	2/48 (4.2)	7/69 (10.1)
Steroids	0/63 (0)	1/48 (2.1)	0/69 (0)

Table E-18

Problem Behavior by Location (n = 181) (Within last year)

Problem behavior	North High Done at least once (%)	Central High Done at least once (%)	South High Done at least once (%)
Shoplift	13/64 (20.3)	8/48 (16.7)	21/69 (30.4)
Theft <$50	9/64 (14.1)	8/47 (17.0)	8/69 (11.6)
Theft >$50	4/63 (6.3)	2/48 (4.2)	3/69 (4.3)
Breaking in	3/64 (4.7)	2/48 (4.2)	5/69 (7.2)
Hurt with weapon	0/64 (0)	2/48 (4.2)	0/69 (0)
Hurt with body	20/64 (31.3)	16/48 (33.3)	33/69 (47.8)
Threat with weapon	0/64 (0)	0/48 (0)	1/69 (1.4)
Threat with body	3/64 (4.7)	4/48 (8.3)	6/69 (8.7)
Vehicle theft	5/64 (7.8)	4/48 (8.3)	9/69 (13.0)
Been arrested	4/64 (6.3)	3/48 (6.3)	7/69 (10.1)
Run away	5/64 (7.8)	1/48 (2.1)	11/69 (15.9)
Arson	0/64 (0)	0/48 (0)	4/69 (5.8)
Vandalize	5/64 (7.8)	8/48 (16.7)	11/69 (15.9)
School office	4/64 (6.3)	7/48 (14.6)	20/69 (29.0)
Parents called	5/64 (7.8)	11/48 (22.9)	12/68 (17.6)
Suspended	1/64 (1.6)	1/48 (2.1)	4/69 (5.8)
Cut classes (within last 4 weeks)	30/64 (46.9)	17/48 (35.4)	44/69 (63.8)

Table E-19

Availability of Activities by Location (n = 181)

Available activities	North High (%)	Central High (%)	South High (%)	Category total
Extremely limited	9/64 (14.1)	2/48 (4.2)	16/69 (23.2)	27/181 (14.9)
Not much to do	23/64 (35.9)	22/48 (45.8)	32/69 (47.0)	77/181 (42.5)
Barely enough to do	13/64 (20.3)	8/48 (16.7)	8/69 (11.6)	29/181 (16.0)
Mostly enough to do	8/64 (12.5)	9/48 (18.8)	6/69 (8.7)	23/181 (12.7)
Plenty to do	11/64 (17.2)	7/48 (14.6)	7/69 (10.1)	25/181 (13.8)
School total	64/181 (35.4)	48/181 (26.5)	69/181 (38.1)	181

Table E-20

Leisure Activity by Location (n = 181)

Activity	North High >3 hours/week (%)	Central High >3 hours/week (%)	South High >3 hours/week (%)
Outdoor sports	36/63 (57.1)	21/48 (43.8)	42/69 (60.9)
Indoor sports	27/63 (42.9)	26/48 (54.2)	33/69 (47.8)
School clubs	11/60 (18.3)	5/47 (10.6)	10/68 (14.7)
Youth groups	15/61 (24.6)	2/48 (4.2)	7/69 (10.1)
Music/drama	14/61 (23.0)	18/46 (39.1)	15/67 (22.4)
Studying	33/64 (51.6)	34/48 (70.8)	30/69 (43.5)
Hanging out	48/64 (75.0)	42/48 (87.5)	56/69 (81.2)
Reading	18/64 (28.1)	19/48 (39.6)	24/69 (34.8)
Board games	2/61 (3.3)	0/48 (0)	2/68 (2.9)
Cruising	14/64 (21.9)	11/48 (22.9)	19/69 (27.5)
Watching live sports	17/62 (27.4)	11/48 (22.9)	17/69 (24.6)
Watching TV	35/64 (54.7)	30/47 (85.7)	42/68 (61.8)
Hobby	26/62 (41.9)	20/48 (41.7)	18/69 (26.1)
Martial arts	3/61 (4.9)	2/48 (4.2)	3/69 (4.3)
Home computer games	4/61 (6.6)	7/48 (14.6)	6/69 (8.7)
Arcade games	0/62 (0)	0/48 (0)	1/69 (1.4)
Work, paid or volunteer	31/63 (49.2)	25/48 (52.1)	36/69 (52.2)
Other activity	7/12 (58.3)	9/12 (75.0)	11/18 (61.1)

Table E-21

Why Not Participate by Location (n = 181)

Why not participate	North High Frequency (%)	Central High Frequency (%)	South High Frequency (%)
No local place to do it	22/64 (34.4)	11/48 (22.9)	20/69 (29.0)
Didn't have needed skills	8/64 (12.5)	6/48 (12.5)	8/69 (11.6)
Cost too much	27/64 (42.2)	23/48 (47.9)	36/69 (52.2)
Transportation problems	21/64 (32.8)	9/48 (18.8)	27/69 (39.1)
Too many other activities	36/64 (56.3)	24/48 (50.0)	27/69 (39.1)
Parents didn't approve	6/64 (9.4)	6/48 (12.5)	12/69 (17.4)
Friends didn't do it	8/64 (12.5)	7/48 (14.6)	8/69 (11.6)
Interfered with school work	24/64 (37.5)	23/48 (47.9)	14/69 (20.3)
Didn't like leader	7/64 (10.9)	3/48 (6.3)	1/69 (1.4)
Inconvenient Meeting time	12/64 (18.8)	17/48 (35.4)	9/69 (13.0)
Other reason	16/64 (25.0)	10/48 (20.8)	23/69 (33.3)

Table E-22

Companion Type by Location (n = 181)

Companion type	North High Frequently or occasionally (%)	Central High Frequently or occasionally (%)	South High Frequently or occasionally (%)
Boys & girls	37/63 (58.7)	16/48 (33.3)	35/69 (50.7)
2+ Boys	32/63 (50.8)	21/48 (43.8)	32/69 (46.4)
2+ Girls	31/64 (48.4)	21/48 (43.8)	40/68 (58.8)
1 Boy	37/62 (59.7)	38/48 (79.2)	27/69 (53.6)
1 Girl	31/62 (50.0)	26/48 (54.2)	41/68 (60.3)
Parents	38/64 (59.4)	30/48 (62.5)	50/69 (72.5)
Siblings	40/64 (62.5)	30/48 (62.5)	50/69 (72.5)
Extended kin	54/63 (85.3)	46/48 (95.8)	63/69 (91.3)
Alone	52/64 (81.3)	33/48 (68.8)	49/69 (71.0)

Table E-23

Reasons to Participate by Location (n = 181)

Reasons to participate	North High Somewhat & very important (%)	Central High Somewhat & very important (%)	South High Somewhat & very important (%)
Just to spend time	34/62 (54.8)	30/46 (65.2)	41/67 (61.2)
Have fun	64/64 (100)	48/48 (100)	66/68 (97.1)
Get along with others	59/64 (92.2)	38/48 (79.2)	57/68 (83.8)
Help others	58/64 (90.6)	42/48 (87.5)	56/67 (83.6)
Relax	64/64 (100)	44/48 (91.7)	66/68 (97.1)
Prepare for future job	55/64 (85.9)	36/48 (75.0)	60/68 (88.2)
Be with friends	64/64 (100)	47/48 (97.9)	66/68 (97.1)
Learn skills for future	54/63 (85.7)	39/48 (81.3)	59/67 (88.1)
Please parents	43/64 (67.2)	33/48 (68.8)	36/68 (52.9)
Make new friends	61/64 (95.3)	44/47 (93.6)	58/67 (86.6)
Make something useful	47/64 (73.4)	27/47 (57.4)	44/67 (65.7)
Serve community	39/64 (60.9)	28/48 (58.3)	40/67 (59.7)
Gain prestige	39/64 (60.9)	30/48 (62.5)	41/68 (60.3)
Get out	46/63 (73.0)	38/48 (79.2)	58/68 (85.3)
Be a better person	59/64 (92.2)	43/48 (89.6)	63/68 (92.6)
Physical fitness	61/64 (95.3)	44/48 (91.7)	65/68 (95.6)
Try new things	59/64 (92.2)	43/48 (89.6)	63/68 (92.6)
Go with crowd	25/64 (39.1)	24/48 (50.0)	29/68 (42.6)
Escape problems	46/64 (71.9)	37/48 (77.1)	60/68 (88.2)
Other reasons	2/4 (50.0)	3/6 (50.0)	7/8 (87.5)

Table E-24

Barriers to Participation by Location (n = 181)

Barriers to participation	North High Somewhat of & a big problem (%)	Central High Somewhat of & a big problem (%)	South High Somewhat of & a big problem (%)
No transportation	41/64 (64.1)	27/48 (56.3)	38/68 (48.5)
High cost	57/64 (89.1)	37/48 (77.1)	56/68 (82.4)
No equipment	45/64 (70.30	33/48 (68.8)	51/68 (75.0)
Use for adults	35/64 (54.7)	33/48 (68.8)	40/68 (58.8)
Use for certain groups	39/63 (61.9)	31/48 (64.6)	42/68 (61.8)
Use for certain times	50/63 (79.4)	41/48 (85.4)	48/68 (70.6)
Not enough leaders	60/64 (46.9)	24/48 (50.0)	22/68 (32.4)
Not interesting	43/63 (68.3)	35/48 (72.9)	36/66 (54.5)
Too much school work	51/64 (79.7)	40/48 (83.3)	46/67 (68.7)
Chores interfere	30/64 (46.9)	26/48 (54.2)	31/68 (45.6)
Job interferes	35/64 (54.7)	30/47 (63.8)	38/67 (56.7)
Limits by parents	25/64 (39.1)	21/48 (43.8)	30/68 (44.1)
Other barriers	3/4 (75.0)	2/4 (50.0)	4/5 (80.0)

Table E-25

Substance Use by Grade (n = 181)

Substance	10th grade Used at least once (%)	11th grade Used at least once (%)	12th grade Used at least once (%)
Smoking	12/62 (19.4)	14/68 (20.6)	18/50 (36.0)
Chewing	4/62 (6.5)	5/68 (7.4)	9/50 (18.0)
Inhalants	4/62 (6.5)	1/68 (1.5)	4/50 (8.0)
Beer/wine	13/62 (21.0)	17/68 (25.0)	18/50 (36.0)
Liquor	8/61 (13.1)	11/68 (16.2)	15/49 (30.6)
Marijuana	4/62 (6.5)	7/68 (10.3)	10/50 (20.0)
Cocaine	0/62 (0)	2/68 (2.9)	1/50 (2.0)
LSD	1/62 (1.6)	1/68 (1.5)	3/50 (6.0)
Other drugs	5/62 (8.1)	2/68 (2.9)	2/50 (4.0)
Steroids	0/61 (0)	1/68 (1.5)	0/50 (0)

Table E-26

Problem Behavior by Grade (n = 181) (Within last year)

Problem behavior	10th grade Done at least once	11th grade Done at least once	12th grade Done at least once
Shoplift	13/63 (21.0)	15/68 (22.1)	14/51 (27.5)
Theft <$50	6/62 (9.7)	10/67 (14.9)	9/51 (17.6)
Theft >$50	2/62 (3.2)	6/67 (9.0)	1/51 (2.0)
Breaking in	3/63 (4.8)	5/68 (7.4)	2/51 (3.9)
Hurt with weapon	0/62 (0)	2/68 (2.9)	0/51 (0)
Hurt with body	25/62 (40.3)	25/68 (36.8)	19/51 (37.3)
Threat with weapon	0/62 (0)	0/68 (0)	1/51 (2.0)
Threat with body	7/62 (11.3)	4/68 (5.9)	2/51 (3.9)
Vehicle theft	7/62 (11.3)	6/68 (8.8)	5/51 (9.8)
Been arrested	3/63 (4.8)	6/68 (8.8)	5/51 (9.8)
Run away	5/62 (8.1)	7/68 (10.3)	5/51 (9.8)
Arson	2/62 (3.2)	1/68 (1.5)	1/51 (2.0)
Vandalize	9/62 (14.5)	11.68 (16.2)	4/51 (7.8)
School office	18/62 (29.0)	6/68 (8.8)	7/51 (13.7)
Parents called	12/61 (19.7)	11/68 (16.2)	5/51 (9.8)
Suspended	1/62 (1.6)	3/68 (4.4)	2/52 (3.9)
Cut classes (within last 4 weeks)	27/62 (43.5)	31/68 (46.2)	33/51 (64.7)

Table E-27

Availability of Activities by Grade (n = 181)

Available activities	10th grade	11th grade	12th grade	Category total
Extremely limited	7/62 (11.3)	7/68 (10.3)	13/51 (25.5)	27/181 (14.9)
Not much to do	25/62 (40.3)	28/68 (41.2)	24/51 (47.1)	77/181 (42.5)
Barely enough to do	13/62 (21.0)	11/68 (16.2)	5/51 (9.8)	29/181 (16.0)
Mostly enough to do	12/62 (19.4)	7/68 (10.3)	4/51 (7.8)	23/181 (12.7)
Plenty to do	5/62 (8.1)	15/68 (22.1)	5/51 (9.8)	25/181 (13.8)
Grade total	62/181 (34.3)	68/181 (37.6)	51/181 (28.2)	181

Table E-28

Leisure Activity by Grade (n = 181)

Activity	10th grade >3 hours/week (%)	11th grade >3 hours/week (%)	12th grade >3 hours/week (%)
Outdoor sports	36/62 (58.1)	34/67 (50.7)	29/51 (56.9)
Indoor sports	27/62 (43.5)	37/67 (55.2)	22/51 (43.1)
School clubs	6/62 (9.7)	10.65 (15.4)	10/50 (20.0)
Youth groups	6/61 (9.8)	9/66 (13.6)	9/51 (17.6)
Music/drama	11/58 (19.0)	19/66 (28.8)	17/50 (34.0)
Studying	32/62 (51.6)	36/68 (52.9)	29/50 (58.0)
Hanging out	46/62 (74.2)	55/68 (80.9)	45/51 (88.2)
Reading	14/62 (22.6)	29/68 (42.6)	18/51 (35.3)
Board games	2/59 (3.4)	1/67 (1.5)	1/51 (2.0)
Cruising	14/62 (22.6)	14/68 (20.6)	16/51 (31.4)
Watching live sports	18/61 (29.5)	14/67 (20.9)	13/51 (25.5)
Watching TV	44/62 (71.0)	36/67 (53.7)	27/50 (54.0)
Hobby	25/62 (40.3)	20/66 (30.3)	19/51 (37.3)
Martial arts	4/61 (6.6)	3/67 (4.5)	1/50 (2.0)
Home computer games	7/61 (11.5)	4/67 (6.0)	6/50 (12.0)
Arcade games	1/61 (1.6)	0/68 (0)	0/50 (0)
Work, paid or volunteer	19/62 (30.6)	42/68 (61.8)	31/50 (62.0)
Other activity	10/13 (76.9)	11/19 (57.9)	6/10 (60.0)

Table E-29

Why Not Participate by Grade (n = 181)

Why not participate	10th grade Frequency (%)	11th grade Frequency (%)	12th grade Frequency (%)
No local place to do it	19/62 (30.6)	19/68 (27.9)	15/51 (29.4)
Didn't have needed skills	8/62 (12.9)	9/68 (13.2)	5/51 (9.8)
Cost too much	26/62 (41.9)	38/68 (55.9)	22/51 (43.1)
Transportation problems	33/62 (53.2)	17/68 (25.0)	7/51 (13.7)
Too many other activities	24/62 (38.7)	31/68 (45.6)	32/51 (62.7)
Parents didn't approve	9/62 (14.5)	11/68 (16.2)	4/51 (7.8)
Friends didn't do it	9/62 (14.5)	6/68 (8.8)	8/51 (15.7)
Interfered with school work	21/62 (33.9)	26/68 (38.2)	14/51 (27.5)
Didn't like leader	5/62 (8.1)	3/68 (4.4)	3/51 (5.9)
Inconvenient meeting time	14/62 (22.6)	16/68 (23.5)	8/51 (15.7)
Other reason	12/62 (19.4)	22/68 (32.4)	15/51 (29.4)

Table E-30

Companion Type by Grade (n = 181)

Companion type	10th grade Frequently or occasionally (%)	11th grade Frequently or occasionally (%)	12th grade Frequently or occasionally (%)
Boys & girls	36/62 (58.1)	26/68 (38.2)	26/50 (52.0)
2+ Boys	37/62 (59.7)	27/68 (39.7)	21/50 (42.0)
2+ Girls	30/62 (48.4)	39/67 (58.2)	23/51 (45.1)
1 Boy	40/61 (65.6)	43/67 (64.2)	29/51 (56.9)
1 Girl	35/62 (56.5)	37/66 (56.1)	26/50 (52.0)
Parents	37/62 (59.7)	41/68 (60.3)	40/51 (78.4)
Siblings	38/62 (61.3)	38/68 (88.2)	43/51 (84.3)
Extended kin	58/62 (93.5)	60/68 (88.2)	45/50 (90.0)
Alone	48/62 (77.4)	49/68 (72.1)	37/51 (72.5)

Table E-31

Reasons to Participate by Grade (n = 181)

Reasons to participate	10th grade Somewhat & very important (%)	11th grade Somewhat & very important (%)	12th grade Somewhat & very important (%)
Just to spend time	33/60 (55.0)	39/64 (60.9)	33/51 (64.7)
Have fun	61/62 (98.4)	66/67 (98.5)	51/51 (100)
Get along with others	58/62 (93.5)	54/67 (80.6)	42/51 (82.4)
Help others	58/62 (93.5)	56/66 (84.8)	42/51 (82.4)
Relax	61/62 (98.4)	63/67 (94.0)	50/51 (98.0)
Prepare for future job	54/62 (87.1)	56/67 (83.6)	41/51 (80.40
Be with friends	61/62 (98.4)	66/67 (98.5)	50/51 (98.0)
Learn skills for future	55/62 (88.7)	57/67 (85.1)	40/50 (80.0)
Please parents	39/62 (62.9)	44/67 (65.7)	29/51 (56.9)
Make new friends	56/61 (91.8)	60/66 (90.9)	47/51 (92.2)
Make something useful	42/62 (67.7)	44/67 (65.7)	32/49 (65.3)
Serve community	41/62 (66.1)	35/67 (52.2)	31/50 (62.0)
Gain prestige	39/62 (62.9)	37/67 (55.2)	34/51 (66.7)
Get out	50/62 (80.6)	50/66 (75.8)	42/51 (82.4)
Be a better person	56/62 (90.3)	60/67 (89.60	49/51 (96.1)
Physical fitness	61/62 (98.4)	62/67 (92.5)	47/51 (92.2)
Try new things	58/62 (93.5)	59/67 (88.0)	48/51 (94.1)
Go with crowd	29/62 (46.8)	25/67 (37.3)	24/51 (47.1)
Escape problems	50/62 (80.6)	48/67 (71.6)	45/51 (88.2)
Other reasons	4/6 (66.7)	4/7 (57.1)	4/5 (80.0)

Table E-32

Barriers to Participation by Grade (n = 181)

Barriers to participation	10th grade Somewhat of & a big problem (%)	11th grade Somewhat of & a big problem (%)	12th grade Somewhat of & a big problem (%)
No transportation	54/62 (87.1)	32/67 (47.8)	20/51 (39.2)
High cost	50/62 (80.6)	58/67 (86.6)	42/51 (82.4)
No equipment	44/62 (71.0)	44/67 (65.7)	41/51 (80.4)
Use for adults	38/62 (61.3)	43/67 (64.2)	27/51 (52.9)
Use for certain groups	34/62 (54.8)	51/67 (76.1)	27/50 (54.0)
Use for certain times	46/61 (75.4)	54/67 (80.6)	40/51 (78.4)
Not enough leaders	29/62 (46.8)	27/67 (40.3)	20/51 (39.2)
Not interesting	43/61 (70.5)	38/65 (58.5)	33/51 (64.7)
Too much school work	47/61 (77.0)	52/67 (77.6)	38/51 (74.5)
Chores interfere	26/62 (41.90	31/67(46.3)	30/51 (58.8)
Job interferes	29/62 (46.8)	41/66 (62.1)	33/50 (66.0)
Limits by parents	32/62 (51.6)	27/67 (40.3)	17/51 (33.3)
Other barriers	0/3 (0)	5/6 (83.3)	4/4 (100)

VITA

GAIL YOST

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CAREER OBJECTIVE:
Professional Position in Human Services/Human Resources/Education

EDUCATION AND TRAINING:
Doctoral Candidate, Currently at Utah State University,
Family & Human Development, Finalizing Disseration Revisions

Master of Education, Utah State University, June, 1984
Master Resource Teacher Program, Instructional Technology

Bachelor of Arts, University of South Florida, December, 1972
Educable Mentally Retarded, Special Education

Child Abuse Prevention, NCPCA & UCPCA,
National & State Conferences & Training

Assertiveness Training, Phoenix Institute,
Beginning through Advanced, Including Training for Trainers

Other Training, Children's Issues, Women's Issues, Communication Skills.

ADMINISTRATIVE SKILLS:
Recruitment & supervision of support staff & volunteers. Development & implementation of client programs. Development of program budgets, policies & procedures. Oversight of client programs & individual cases. Coordination with colleagues, other departments, agencies, & councils. Writing proposals, grants, periodic reports, & published articles. Development, organization, adaptation, & appropriate utilization of available resources.

COMMUNICATION/PUBLIC RELATIONS/TECHNICAL SKILLS:
Advocacy on behalf of client issues. Composition of newsletters, articles, & press releases to further program effectiveness. Presentations to news media & large groups about programs & issues. Outreach to low-income participants. Oversight of donation drives; computer literacy & use of office equipment.

CERTIFICATIONS:

Utah Teacher Certificate, Intellectually Handicapped, K-12.

Utah Teacher Certificate, Media Specialist.

Certification for Assertiveness Trainers, Phoenix Institute.

WORK EXPERIENCE:

Behaviorist, Logan Regional Hospital:

Trained overweight patients in new healthy lifestyle techniques; counseled with patients; designed individualized health plans with patients;instructed patients in related interpersonal issues; designed projects surrounding weight, health, & personal issues, including year-round curriculum for support group.

Human Services Specialist, Bear River Association of Governments:

Counseled, provided effective services to & advocated for low-income families; trained small & large groups to assist with self-sufficiency; compiled list of & referred to appropriate community resources; developed resource systems & instructional media presentations; developed computer programs for data processing & project implementation; oversight of on-going & seasonal projects; prepared budgets, reports, charts, & promotional materials; coordinated with community & state agencies; sat on local & state coordinating councils & boards.

Director, The Growing Place, Logan City Schools:

Performed outreach to community; purchased, catalogued, & prepared parenting materials for check-out; guided patrons to appropriate parenting materials & referred to community resources; facilitated parenting workshops & classes; developed catalogue systems; used various instructional & office equipment; supervised paid & volunteer support staff.

Special Tutor, Logan High Resource Room, Logan City Schools:

Instruction to individuals & small groups of special need students in areas of English, spelling, reading, mathematics, U.S. Constitution, history, biology, etc.; coordinated with other teachers; prepared bulletin boards & displays; conducted large class instruction, as needed.

HONORS & AWARDS:

Research Vice Presidential Fellowship, (2nd Top Award, College of Family Life) Dept. of Family & Human Development, Utah State University, 1993-94.

Presidential Fellowship, (Top Award, College of Family Life) Dept. of Family & Human Development, Utah State University, 1991-92.

Phi Upsilon Omicron National Honor Society, USU Chapter, 1991.

Child Advocate Certificate of Appreciation, Utah Chapter for the Prevention of Child Abuse, 1991.

Golden Gazelle Award, (for Outstanding Advocacy of & for Women) USU Women's Center, 1989.

Phi Kappa Phi National Honor Society, USU Chapter, 1984.

COMMUNITY ACTIVITIES:

Northern District Director, Utah Federation of Business & Professional Women, 1995-96

State Seminar Director, Utah Federation of Business & Professional Women, 1994-95.

State Finance Chair, Utah Federation of Business & Professional Women, 1993-94.

Active Member, Bridgerland Business & Professional Women, 31/2 years.

First Vice President, Logan Business & Professional Women; member for 3/1/2 years.

Administrative Vice President, Boys & Girls Club of Cache Valley Board of Trustees, 1995-97; member for 1 year.

Active Member, 4-H Teen Council, Cache County 4-H, 3 years.

Chair, Tri-County Child Abuse Prevention Program, 14 months; member for 10 years; founding member of local CAP Team.

Chair, County Youth Advocacy Groups; member for 3 1/2 years; founding member.

Director, United Way tutoring organization; founding member; 11 years.

Active Member, Cache 2010 Planning Council, Human Services Subcommittee, 2 1/2 years.

Member, Cache Community Health Council, 8 years.

Member, various community boards & advocacy groups.

Active Member, political party activities, including Vice Chair & Acting Chair of Voting District, campaigns, etc.

Active Member, organized church, including various teaching & administrative positions, & other activities.

PUBLICATIONS:

Schvaneveldt, J. & Yost, G. B. (pending). The Interaction of Animal Pets and Human Actors in the Family System. Submitted for publication to Developmental Psychology.

Yost, G. (1991). Teens Need Protection & Opportunity, Salt Lake Tribune.

Crossman, S., Mathias, M. F., Yost, G. (1986). Long Term Effectiveness of Educational Intervention of Change in Assertiveness, Well-Being," co-authored by Sharyn Crossman, Marc F. Mathias & Gail Yost. Paper presented at the National Council on Family Relations annual conference, Dearborn, Michigan, November, 1986.

PERSONAL:

Ethical, creative, energetic, committed, work with humor.

FUTURE GOALS:

Work with families; helping to solve community problems.

REFERENCES:

Randall Jones, Ph.D., Assistant Professor, Dept. of Family & Human Development, USU; 1-801-797-1553.

Brenda Branyan Broadbent, Ph.D., Retired Professor, Instructional Technology, USU; 1-702-459-8840.

Kris Saunders, Utah State University Extension Specialist, Cache County; 1-801-752-6263.