# IMPACT ASSESSMENT OF THE NEVADA 4-H PROGRAM: AN EXAMINATION OF PUBLIC SCHOOL STUDENTS' PERCEPTIONS AND BEHAVIOR

A Record of Study

by

### STEVEN RICHARD LEWIS

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

### DOCTOR OF EDUCATION

December 2007

Major Subject: Agricultural Education

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Approved by:

Co-Chairs of Committee,	Tim H. Murphy
	Matt Baker
Committee Members,	Scott Cummings
	David Doerfert
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#### ABSTRACT

Impact Assessment of the Nevada 4-H Program:

An Examination of Public School Students' Perceptions and Behavior. (December 2007)

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A 4-H impact evaluation study, conducted in Montana, Idaho, Colorado, and Utah, was replicated in the Nevada public schools. The purpose was to measure the impact of the 4-H experience on the lives of Nevada youth, and to provide impact data for accountability and improvement for University of Nevada Cooperative Extension 4-H Programs. The 1,492 respondents were; 47.6% male and 52.4% female; 34.6% 5<sup>th</sup> grade, 28.1% 7<sup>th</sup> grade, and 37.3% 9<sup>th</sup> grade; 63.1% urban and 36.9% rural; and 11.7% 4-H and 88.3% non 4-H youth. Eight youth development constructs were measured including; extracurricular activity involvement; school leadership positions held; close relationship with adults; caring for others; amount of negative behavior; personal identity; positive identity; and self-confidence, character and empowerment. ANOVA for constructs by independent variables, age groups gender, 4-H participation, and population density revealed that 4-H participation significantly contributed to the variance in extracurricular activity involvement (p = .000), school leadership positions held (p = .025), caring for others (p = .000), and self-confidence, character and empowerment (p = .004).

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"A life isn't significant except for its impact on other lives." Jackie Robinson

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### CHAPTER I

### INTRODUCTION

4-H has a rich history of helping youth grow into productive citizens. Through participation in 4-H, youth learn life skills that they can further shape and use as adults. Coordinated by the Land Grant College and Cooperative Extension systems, the 4-H program is funded by federal, state, and county dollars. Accountability of these funds is of paramount importance to ensure continued support. Furthermore, 4-H programming must be evaluated to determine how it impacts youth and in what ways it needs to improve.

4-H originated with boys and girls clubs to extend agricultural education to young people and ultimately to their parents (Howard, et al., 2001). Record keeping was used to document the learning and activities of youth. For much of the 4-H history, it was simply assumed that the youth development program was effective in helping youth avoid at-risk behaviors (Singletary & Smith, 2004). This level of accountability was deemed adequate for nearly 100 years, until conveying program worth through anecdotal success stories became seen as an unreliable method of program evaluation (Goodwin, Carroll & Oliver, 2005b). Within the past couple of decades, Cooperative Extension systems have increasingly

This dissertation follows the style of Journal of Agricultural Education.

recognized the need to discover more quantifiably defensible impact information (Gruidi & Hustedde, 2003; Karr et al., 2001; Seevers, Dormody & Clason, 1995; Scholl & Lago, 1994; Boyd, Herring & Briers, 1992).

The numerous and varied approaches utilized suggest that no one measurement strategy to assess the impact of youth development programs has been commonly accepted. Adoption and replication of quantitative impact measurement approaches has been slow. Nevertheless, 4-H impact measurement is the responsibility of Cooperative Extension systems, and demands for quantitative measures of programmatic impact continue to escalate.

### Importance of Study

The need to measure youth development more accurately and efficiently as a result of 4-H programming remains critically important to Cooperative Extension nationwide. The impact of 4-H in Nevada on educational, emotional, and social skill development requires further investigation. More specifically, the effects of organized out-of-school activities on at-risk behavior of Nevada youth remain unsubstantiated to a large extent. Additionally, differences in the effectiveness of 4-H programming between the urban and rural sectors of Nevada are not well known.

Membership recruitment and retention in 4-H has become more challenging as the program competes for participation against growing numbers of organized youth activities. Today, youth can choose from a wide array of athletic programs, church functions, leadership opportunities, and organized school activities. Cooperative Extension has the ability and responsibility to document the impact it has on developing life skills in youth. Positive results may be used to promote future 4-H participation.

For these reasons, replication of a study in Montana in 2000, in Idaho in 2002, and in Colorado and Utah in 2005, was conducted. Goodwin, Carroll, and Oliver (2005b) reported that the replication of this study in other states and the compilation of additional data will lend strength to programmatic assessment and planning for 4-H in the Western states and nationwide. The difference between urban and rural 4-H youth development was a variable not explored in the previous studies. This comparison may also promote better understanding of youth development impact by demographic setting and be of significant influence in program planning.

### Statement of Problem

Cooperative Extension is charged to be accountable to its publics. One of the six purposes of the Government Performance and Results Act of 1993 is that federal agencies are to be held accountable for achieving program results. Extension program coordinators, managers, and administrators strive to justify the value of educational programming, including 4-H efforts.

One of the goals of The National 4-H Strategic Plan (2001) is to "collect national impact and accountability data that fully demonstrates the impact of 4-H on youth, their families, and communities" (p. 13). 4-H program managers and administrators are continually searching for improved methods of determining impact. Therein lays the problem. Efforts to measure 4-H impact are numerous, and impact measurement strategies vary in focus and approach. Collection and synthesis of existing 4-H impact

data is difficult at best. Replication of one instrument over time and across states is needed to establish consistency and bolster accountability.

### Purpose of the Study

The purpose of the study is three-fold:

- To replicate a 4-H impact study conducted in Montana, Idaho, Utah, and Colorado and contribute additional data from another western state.
- 2) To measure impacts of the 4-H experience on the lives of Nevada youth.
- To provide impact data for accountability and improvement of University of Nevada Cooperative Extension's 4-H youth development programming.
   Specifically, the study addressed the following research questions:
- What is a description of study participants based upon: a) extracurricular activity involvement, b) leadership positions held, c) close relationships with adults, d) caring for others, e) amount of negative behavior, f) personal identity, g) positive identity, h) self-confidence, character, and personal empowerment, and i) demographic characteristics and personolgical attributes?
- 2) How do the subjects differ in terms of; extracurricular activity involvement; leadership positions held; close relationships with adults; caring for others; amount of negative behavior; personal identity; positive identity; self-confidence, character, and personal empowerment; based upon age, gender, 4-H participation, and population density?
- 3) How does involvement in 4-H programming influence youth?

#### CHAPTER II

#### **REVIEW OF LITERATURE**

Youth development is a process that includes support and opportunities that promote positive outcomes for young people (National Research Council and Institute of Medicine, 2002). Benson and Saito (2000) purport youth development as an approach moving toward positive developmental processes, opportunities, and experiences. Youth development prepares individuals to become healthy, happy, and productive members of our communities. Through youth development programs such as 4-H, youth become better prepared to meet the roles and responsibilities of adulthood. Youth development programs exist in a variety of structures, age groups, and subject matter areas.

#### 4-H Youth Development

4-H youth development has been defined for the Cooperative Extension System, addresses the recommendation of the National 4-H Strategic Plan (2001) and approved by the National 4-H Leadership Trust. These definitions include the following (National 4-H Council, 2002, p5):

<u>Youth development</u> is the natural process of developing one's capacities. While it naturally occurs through each youth's daily experiences with people, places, and possibilities, it is far too important to be left to chance.

<u>Positive youth development</u> occurs from an intentional process that promotes positive outcomes for young people by providing opportunities, relationships and the support to fully participate. Youth development takes place in families, peer groups, schools, neighborhoods, and communities. <u>4-H Youth Development Programs</u> provide just such opportunities, relationships, and support for youth to help them acquire the life skills necessary to meet the challenges of adolescence and adulthood. 4-H Youth Development uses experiential, research-based educational opportunities that help youth become competent, caring, confident, connected, and contributing citizens of character.

These definitions provide a solid description of 4-H youth development as it is understood today. They help us comprehend the basis for which 4-H was created and continues to thrive. According to Astroth (2003), 4-H youth development consists of four dimensions and these may be considered foundational to the theoretical framework of 4-H. The dimensions include; *Experience, Philosophical approach, Multitude of programs and delivery methods*, and *Field of Scholarship*. The *Experience* dimension is best described in detail by Kolb's experiential learning model (Figure 1). Experiential education and reflective thinking can be linked back to the ideas of John Dewey. The first phase of Kolb's model is Experience the activity; perform or to do it. Share the results, the reactions, and the observations, is the second phase. Sharing is followed by Process, by discussing, looking at the experience, and analyzing and reflecting. Generalization is next, which is to connect the experience to real world examples. Finally, Apply is the application of what was learned to a similar or different situation or practice.



Figure 1. Experiential learning model (Utah 4-H Volunteer Handbook, 2002, p. 20).

In Astroth's description of *Experience* dimension, he refers to the Six C's; competence, character, caring, confidence, connections, and contributions (Pittman, 1996; Villarruel, et al., 2003; ECOP, 1985; U.S. Department of Health and Human Services, 1997). *Experience* is embedded in the four H's which include, head, heart, hands, health and forty-seven developmental skills that have been associated to the four H's and used by Extension professionals in measuring impact of experiential programming (Barkman & Machtmes, 2000).

Astroth (2003) describes the second dimension, the *Philosophical* approach, as both experiential and developmental. The *Philosophical* dimension blends programming that is age and developmental stage specific, and incorporates community engagement. 4-H is grounded in sociology and child development but the programs have a variety of complexions and delivered in a variety of ways.

Astroth's third dimension of 4-H youth development is *Multitude of programs and delivery methods*. Given its program variety and delivery dexterity, 4-H programming must include three critical elements; opportunities to practice service for others, a positive connection with the future, and strong links between families, schools, and broader community resources.

The fourth dimension of 4-H youth development, according to Astroth, is that it is a *Field of multi-disciplinary scholarship*. 4-H youth development offers professionals a wealth of scholastic opportunity and must be considered an abundantly rigorous discipline relevant to all youth. Lerner and Simon (1998) outline the theoretical and empirical bases for promoting positive youth development and discuss the vast amounts of scholarly work needed to apply to developmental science and ultimately improve the lives of young people.

Positive youth development is a systems approach that took root in the 1980's. Rather than focusing attention on a single problem behavior, professionals started to recognize the need to address all factors that promote youth development (Catalano, et al. 1998). When evaluated, prevention approaches that targeted deficits in young lives, were failing to show positive impact on youth drug use, delinquent behaviors, school failure, and pregnancy (Mitchell, et al., 1997). Researchers and practitioners found that an adolescent's environment including community services, employment and educational opportunities, and family resources were critical factors that shape an individual's ability to navigate their social settings and make appropriate decisions.

Bronfenbrenner and Morris (1998) describe a detailed model of child development. In the center is the child. The child affects and is affected by all that surrounds him. Family environment is the most important influence as that is where most time is spent and most emotions are generated. Other significant and meaningful influences include extended family, education programs, health care settings, and other community learning sites. "Child development takes place through processes of progressively more complex interaction between an active child and the persons, objects, and symbols in its immediate environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time" (Bronfenbrenner & Morris, 1998, p. 996). Bronfenbrenner and Morris' work provides well accepted fundamental concepts for human development and serves as foundational principles in the ecology of child development.

Child development the basic science, is foundational to the applied science of positive youth development. The 6C's are foundational to positive youth development. Attention to youth assets and desirable characteristics rather than deficits precipitated the creation of the 5C's, later to be known as the 6C's. Initially the 5C's of positive youth development were provided by Roth and Brooks-Gunn (2003) and Eccles and Gootman (2002). These were developed to conceptualize positive youth development and integrate all characteristic indicators. Working definitions of the 5C's are as follows:

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- Competence Positive view of one's actions in domain specific areas including social, academic, cognitive, and vocational. Social competence pertains to interpersonal skills (e.g., conflict resolution). Cognitive competence pertains to cognitive abilities (e.g., decision making). School grades, attendance, and test scores are part of academic competence. Vocational competence involves work habits and career choice explorations.
- Confidence An internal sense of overall positive self-worth and selfefficiency; one's global self-regard, as opposed to domain specific beliefs.
- Connection Positive bonds with people and institutions that are reflected in bidirectional exchanges between the individual and peers, family, school, and community in which both parties contribute to the relationship.
- Character Respect for societal and cultural rules, possession of standards for correct behaviors, a sense of right and wrong (morality), and integrity.

Caring and

Compassion A sense of sympathy and empathy for others.

The sixth C, contribution, was added to make practical use of the original five and increase clarity to the positive youth development framework (Lerner, et al., 2005).

Contribution Giving back to the world and participating in activities that reflect engagement with the world around oneself such as: being a leader in a group, helping friends and neighbors, participation in school government, sports, and religious youth groups and volunteering in the community.

Community Service and Civic Engagement

Positive youth development programs help youth learn the importance of caring for others, caring for community, and building social responsibility. It is no accident that 4-H programs across the nation concentrate on community service. 4-H community service projects are of many types. Community service may include assisting families in need with food and clothing, organizing town cleanup, presentations to community decision makers, and other beneficial work. The value of these experiences is realized when youth appreciate how their contributions make a positive difference in the lives of others.

Community service encompasses many types of activities but they might not be created equal. Stafford, Boyd, and Lindner (2003) discovered community service projects needed to include a reflection component to increase youth perception of higher gains in leadership life skills. The authors found that a reflection component immediately following the community service activity had a most significant impact on participating youth. This procedure transforms simple community service into service learning. Personal leadership and perceived contribution to the community is substantially enhanced with reflection. A study conducted in Virginia (Hairston, 2004) examined what youth learned by participating in a community service project that included a reflection component. They gleaned altruism, the importance of helping others and the community. They also learned new skills and information, significance of teamwork, more community service project ideas, resources to assist with project implementation, and ineffective experiences. This study described how community service benefits youth and substantiated the premise that service projects can maximize educational growth and development.

Community service projects involving youth are, in essence, community youth development. Pittman (1996) contends that community and youth development are inextricably related. Youth development must be a product of family, neighbors, and community. Pittman writes that society wants young people to grow up and be good citizens, good parents, and good neighbors. She claims youth problem prevention and treatment models are not enough, vocational and academic competence are not enough, and programs, services and professionals are not enough to grow youth into good productive adults.

Community youth development can take a specific focus in the area of community leadership and civic engagement. Community service projects that build on civic engagement may include such activities as; honoring public servants, contacting elected officials, serving on town boards, and staying aware of public issues. Pennington and Edwards (2006) collected perceptions of former 4-H key club members in Oklahoma. They found that 4-H involvement had a major impact on their civic engagement life skills, while other sources of giving life skills had less impact.

Respondents indicated these were civic engagement life skills acquired through the 4-H program. Results of this study prompted recommendations to expand 4-H "giving" life skills programming by offering it to the maximum number of 4-H youth possible. The results also showed that the civic engagement experience 4-H provided, transferred to participants later in life and as adults they were engaged in their communities. People that begin their life volunteering are twice as likely to volunteer later in life as adults.

#### **Risk Behavior**

Community service that promotes civic engagement benefits communities and the youth involved. Organized activities that involve youth in projects where they feel a sense contribution can significantly reduce risk behavior.

Youth risk behavior has been monitored by the Centers for Disease Control and Prevention (CDC) via the Youth Risk Behavior Surveillance System (YRBSS). Since 1991, the CDC has administered biennial assessments of 9-12 grade students across the United States to determine the incidence of high-priority health risk behaviors. At present, these risk behaviors include those that contribute to unintentional injuries; those contributing to violence; alcohol and other drug use; sexual behaviors contributing to pregnancy, STDs, and HIV infection; dietary behaviors; inadequate physical activity; being overweight and weight control issues; and other health-related topics. YRBSS results are used by states to establish school health program goals, redirect school health curricula, and support new policies and legislation. The general trend from 1991 though 2005 was a decrease in youth risk behavior. Specific behaviors however, vary across cities and states, and youth continue to practice behaviors that contribute to morbidity and mortality (Morbidity and Mortality Weekly Report, 2006).

In Nevada, the 2005 Youth Risk Behavior Survey administered a 78-item instrument to over 10,000 public school students in grades six through twelve (Nevada Department of Education, 2006). Results indicated significant changes and progress in injury and violence-related behaviors, use of tobacco, alcohol, and other drugs, and sexual behaviors. Areas of increasing risk included amount of exercise and dietary behaviors. The Youth Risk Behavior Survey is strictly focused on youth behaviors affecting health and potential physical injury. This assessment does not cover subjects such as personal identity, relationships with parents and other adults, leadership activities, or self-perceived character, confidence and empowerment. Speculation of causes related to the observed behavior changed, is not offered.

Risk behaviors of seventh through twelfth graders were studied by Mancini and Huebner (2004). More time spent in structured time-use activities, closer relationship with parents/guardians, greater school success, and more attachment to school were associated to lower risk behavior. Risk behavior in this study included substance abuse, sexual activity and delinquency. Strong predictors of risk behavior were factors such as being older, being male, and having only one good friend. Structured time was defined as extracurricular activities during the school week but not related to sports, non-school related clubs, spiritual activities, school or community based sports teams, and volunteer work. The authors hypothesized structured time-use to be a very important factor in 14

reducing risk behavior. They found several protective factors in addition to structured time-use, positively influenced risk behavior.

The National Research Council and Institute of Medicine (2004) recommended that communities offer a wide array of developmental programs. Programs should offer a rich diversity of assets recognized to facilitate effective youth development – including, physical, intellectual, psychological, emotional, and social development. According to their research, communities that offer a diverse selection of programs reduce youth risk behavior and increase rates of positive development.

Diverse youth development programming appeals to the various interests of youth today. To attract is to potentially involve, and once youth get involved in structured activities outside of school, many positive outcomes are possible. Participation in structured extracurricular activities has been found to be of benefit to youth in several ways, as summarized by Fredericks and Eccles (2006):

- Less time to engage in problematic behaviors (Mahoney & Stattin, 2000; Osgood et al., 1996).
- An opportunity for youth to explore their identity (Eccles & Barber, 1999; Larson, 2000).
- 3) Links youth to supportive adults outside of school (McLaughlin, 2000).
- Facilitates membership or participation in a prosocial peer group (Eccles & Barber, 1999)

In a study of 2,701 youth in grades 7 through 12, Mancini and Hueber (2004) found several significant relationships between structured time-use and risk behavior

patterns. Participation in school related, non-sport activities, in school related clubs, volunteer work, spiritual activities, and community and school-based sports, constituted structured time-use. They found that participation in structured time-use, school success, and being female, related to less risk behavior. Time spent in structure time-use activities was found to be one of the most highly predictive factors in positive thriving behaviors in youth. Scales et al. (2000) investigated the contribution of developmental assets on a sample of approximately 6,000 middle and high school youth. Indicators of thriving youth behavior included, leadership, school success, valuing diversity, helping others, physical health, overcoming adversity, and delayed gratification.

The influence of extracurricular, structured time-use activities has been clearly shown to be correlated to lower levels of youth risk behavior. Some differences have also been found in risky behavior of youth between rural and urban settings. Springer, Selwyn, and Kelder (2006) reported that in El Salvador urban youth were significantly more likely to exhibit risk behavior than rural youth. Specifically, differences were found in substance abuse, aggressive behaviors, depression, and suicidal tendencies. No significant difference was found between urban and rural youth in sexual behavior.

In contrast to these results, rural youth were found to partake in particular risk behaviors more than their urban counterparts. A California study (Heck et al., 2004) reported that rural 12-17 years olds were more likely to smoke cigarettes, consume alcohol, and ride in a car with a driver who had consumed alcohol, than same-aged urban youth. However, the study indicated that urban youth were more than twice as likely to drop out of school as rural youth. The study concluded that in California rural youth face unique challenges, such as fewer community services, fewer job opportunities, and fewer school resources than urban youth.

A study examining tobacco use in urban and rural youth revealed further conflicting results. Monitoring the future data from 1976 to 1992 revealed that urban black females smoked least often and rural white males smoked most often (Sarvela, Cronk, & Isberner, 1997). These data represented high school senior smoking rates over a wide range of socio-demographic groups.

There appears to be no consistent trend in risk behavior between rural and urban youth. In some cases, urban youth exhibit more risk behaviors, while in other cases rural youth are more at risk. Perkins, LaGreca, and Mullis (2002) found that urban and rural youths exhibit the same problem behaviors, and they share the same concerns.

A variable that stands out to be much more conclusive on influencing at-risk behavior is out-of-school activities. The National League of Cities' Institute for Youth, Education, and Families (Ouellette, 2000), reported that eight million young people, ages 5 to 14, go home after school to an empty house. Juvenile crime triples within the first hour after school adjourns. This after-school period between 2 and 8 p.m., is the period of highest juvenile crime, including teenage sexual activity, drug use, and automobile accidents. The National League of Cities also reports that youth not involved in afterschool activities are more likely to drink alcohol and smoke cigarettes and are three times more likely to experiment with drugs than youth involved with organized activities. Structured after-school programs can provide a safe environment, one in which youth can participate in activities that are fun and constructive. Clearly, when youth are engaged in recreational and expanded learning opportunities, they are less likely to participate in risky behaviors. The 4-H program is one of many out-of-school activities that offer safe and fun learning environments for youth. Many impact assessments have been conducted that suggest involvement in 4-H reduces risk behaviors and, in most cases, serves to further develop youth.

#### 4-H Program Assessments

A variety of assessment approaches have been implemented to measure impacts of the 4-H program on youth development. Survey instrument designs include those that collect information directly from youth (Cantrell, Heinsohn, & Doebler, 1989; Boyd, Herring, & Briers, 1992; Astroth & Haynes, 2001; Goodwin, et al., 2005a; and Goodwin, Carroll, & Oliver, 2005b), swine project members (Gamon, & Dehegedus-Hetzel, 1994), parents and leaders (Boleman, Cummings, & Briers, 2004; Singletary & Smith, 2004), alumni (Ladewig & Thomas, 1987; Fox, Schroeder, & Lodl, 2003), recent animal science project alumni (Ward, 1996), and senior 4-H and FFA members (Seevers, Dormody, & Clason, 1995).

In the fall of 2000, Astroth and Haynes developed a 74-question instrument and surveyed 2,500 students representing 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grades in 21 counties and 50 Montana schools. Survey questions originating from New York and Arizona 4-H questionnaires were used as well as questions from the Search Institute, used by permission. Final survey changes were made as a result of three pilot tests. The survey results indicated that youth were involved in 285 different out-of-school activities and that these activities served as a protective factor from risky behaviors. According to

Taylor and Flaherty (2001, p. 1), "how kids spend their time outside of school can make a substantial difference." The researchers also found that youth that were involved as 4-H members for a year or more exceeded their peers in risk behavior avoidance, including those who were involved in other organized out-of-school activities. Additionally, 4-H experienced youth were more likely to give time or money to charity, help the poor or sick, get A's in school, assume leadership roles in schools and community, and be looked up to as role models than other kids.

This same study, replicated in Idaho, supported the Montana findings. Goodwin et al. (2005a) found that youth involved in 4-H were more likely to do better in school, take on more leadership roles, help others, and be less likely to engage in risky behaviors such as drinking alcohol, shoplifting, smoking cigarettes, experimenting with drugs, and damaging property than were non 4-H members. The researchers also concluded that the findings supported Boyd et al. (1992) in that 4-H does more than teach skills related to project subject matter, it also teaches youth valuable life skills.

The Montana Out-of-School Time / 4-H Youth Development Impact Study was then replicated in Colorado (Goodwin, Carroll, & Oliver, 2005b). The instrument was trimmed down to 65 questions by removing some of the redundant questions. The findings supported those found in studies conducted by Astroth and Haynes (2002) and Goodwin et al. (2005a). "Youth who are active in general, and in 4-H Youth Development programs in particular, are less likely to engage in at-risk behaviors and more likely to demonstrate positive characteristics, behaviors, and a world view" (Goodwin, Carroll & Oliver 2005b, p. 25). The authors encouraged other states to replicate the study and to aggregate the data so that a stronger case can be made in the name of 4-H youth development effectiveness.

In 2005, Tubbs conducted the study in Utah, the fourth western state to administer the survey instrument in public schools. Similar to the results found in previous studies, Utah's 4-H youth had higher self confidence, empowerment and personal identity. 4-H youth were more likely to volunteer in class to lead activities, hold elected leadership positions, have higher grades, set goals, have good written record keeping skills, and be involved in service projects, than Non 4-H youth. Tubb's research, however, did not reveal any extensive differences in risk behavior between 9<sup>th</sup> grade 4-H youth and non 4-H youth, as found in the Idaho and Montana studies.

In Nevada, Singletary and Smith (2004) conducted a statewide assessment of 4-H impact. This study used a survey of adult 4-H leaders and parents. The purpose was to determine how well the 4-H program develops youth in the areas of life skills, program management goals and teaching tools, and parent and leader skills. This was an assessment in the eyes of the 4-H adult participant and provides some benchmark for future impact comparison. The results provided Nevada with data that may be used in to improve programming and may useful to compare with other western States if replicated.

### Linking Research with Youth Development

There has been some speculation that the advancement in the practice of youth development needs to be based more on research. This concern stems from the limited amount of research done on critical youth development questions. The majority of

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research and associated research funding has been concentrated on youth health such as the Youth Risk Behavior studies conducted the Center for Disease Control and Prevention. The obstacles, as purported by Hamilton and Hamilton (2007), is "the vitality and efficacy of youth development practices requires stronger links between research and practice" (p. 1). Evaluation research is most often used to validate youth development programs. Unfortunately, programs are evaluated as implemented in a unique fashion and replication of that implementation approach is often not possible. In fact, implementations of packaged programs typically take-on a different application to meet the local conditions and resources. These different applications, in most instances, are not comparable to the original program evaluated. Hamilton and Hamilton (2007) recommend that when fairly precise replication is not possible "we need to consider how to base practices in evidence, not just programs" (p. 2).

Eccles and Gootman (2002) have summarized sources of youth development evidence they call features. The seven features include:

- physical and psychological safety
- appropriate structure, supportive relationships
- opportunity to belong
- positive social norms
- support for efficacy and mattering
- opportunities for skill building
- integration of family, school and community efforts

Once these features are legitimized and deemed important by program designers, it is their responsibility to build experiences that operationalize these features in the program. This entails planning to design real life experiences that accentuate the feature characteristics. For example, Eccles and Gootman (2002) state that efficacy relates to an individual's awareness of getting things done and to act on one's own. Mattering is the second half of that feature that's translates to one making a meaningful contribution valued by others. It is their contention that youth development program designers consciously build these seven features into programs to ensure a growth experience.

Michigan State University Extension has seemly adapted the youth development feature-based approach to 4-H programming (Michigan State University Extension, 2007). In the Guiding Principles for Positive Youth Development, seven principles have been developed and matched to head, heart, hands, and health. The principles are described by a statement, and elements of effective practice outline how each principle can be operationalized. Elements of effective practice may be used as indicators of evidence of positive youth development. Michigan's positive youth development principles are as follows:

### Head

1) Youth are actively engaged in their own development

2) Youth are considered participants rather than recipients in the learning process

3) Youth develop skills that help them succeed

### Heart

4) Youth develop positive relationships with adults and peers

5) Youth recognize, understand and appreciate multiculturalism Hands

6) Youth grow and contribute as active citizens through service and leadership Health

7) Youth are physically and emotionally safe

4-H youth development prepares youth to be productive adults. 4-H is successful because the program is based on solid youth development science. The theoretical framework described is foundational to the design of 4-H programming. This chapter has presented the National 4-H Council's definitions of youth development, Kolb's Experiential Learning Model, and summarized the 6 C's and the 4 H's. Community service and civic engagement were discussed and explanation was given as to how youth involvement in volunteerism and service learning leads to community engagement later in life. Risk behavior is a concern of youth development professionals. More research is necessary to obtain a better understanding of not only why youth practice negative behavior but how to reduce the incidence. Many impact evaluation approaches of 4-H programming have been conducted and all are critical to program continuance and improvement. 4-H programs can be improved when research findings are applied to the practice of youth development.
#### CHAPTER III

#### METHODS AND PROCEDURES

The primary purpose of this study was to measure impacts of 4-H experience on the lives of Nevada youth. The secondary purpose was to replicate 4-H impact evaluation research projects conducted in Montana, Idaho, Utah, and Colorado; contributing data from another western state. Finally, the study is intended to provide impact data for accountability reporting and the improvement of University of Nevada Cooperative Extension's 4-H youth development programming. Three research questions were addressed to accomplish the purposes:

1) What is a description of study participants based upon: a) extracurricular activity involvement, b) leadership positions held, c) close relationships with adults, d) caring for others, e) amount of negative behavior, f) personal identity, g) positive identity, h) self-confidence, character, and personal empowerment, and i) demographic characteristics and personolgical attributes?

2) How do the subjects differ in terms of; extracurricular activity involvement; leadership positions held; close relationships with adults; caring for others; amount of negative behavior; personal identity; positive identity; self-confidence, character, and personal empowerment; based upon age, gender, 4-H participation, and population density?

3) How does involvement in 4-H programming influence youth?

This chapter addresses how these objectives were approached. The following pages contain descriptions of the research design, population and sampling, instrument

development and testing, data collection, and data analysis procedures. A summary of the research methods utilized concludes the chapter.

## Research Design

This correlational, casual comparative study was designed using Dillman's (2007) Tailored Design Method (TDM). The in-person, in-class written survey approach was the same used in previous studies (Astroth & Haynes, 2001; Goodwin et al., 2005; Goodwin, Carroll, & Oliver, 2005; Tubbs, 2005), however, TDM principles were applied to this study to enhance response rate. Specifically, Dillman's recommendation regarding the order of survey questions, and the visual layout were incorporated into the study.

Human subjects' approval (Appendix A) was obtained through the University of Nevada, Reno following a full review by the Institutional Review Board (IRB). Documentation including the IRB approval letter from University of Nevada and the study description were forwarded to Texas A&M, meeting research proposal requirements under the reciprocity agreements.

Previous studies in Montana, Idaho, Utah, and Colorado, randomly selected counties within Cooperative Extension regions. School districts were then randomly selected within those counties and all 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grade students in those counties were surveyed. In this study, Nevada schools were selected in a different manner. Rather than selecting schools within Extension region, schools were identified by urban or rural setting. Nevada is known as an urban state. Selfa (2004) differentiates rural from urban at the population mark of 100,000. Communities with a population of less than 100,000

are rural; those over 100,000 are considered urban. Fully 83% of the population of Nevada is located in Washoe and Clark Counties, the only two Nevada counties with populations over 100,000. Additionally, Nevada consists of only 17 counties, is fewer than other western states. School districts in Nevada are defined by county boundaries; thus, there are only 17 school districts within the State.

Therefore, stratified random sampling was employed with urban and rural as the two strata. Two school districts were grouped in the urban category, and 15 in the rural category (Table 1). Research Randomizer (2006) was used to randomly prioritize school districts in the urban and rural counties of Nevada. School districts were contacted and asked to participate in the study in this random order.

Access into schools, and securing participation in the study were anticipated to be a serious challenge increasing Dillman's "coverage error" (2007). The State Superintendent of Schools, Nevada Department of Education, informed district superintendents that in the spring of 2007 the Centers for Disease Control and Prevention would be administering their biennial risk behavior survey to all schools across the nation. The State Superintendent was not particularly optimistic about schools welcoming another risk behavior survey. For that reason, the principal investigator requested the State Superintendent provide a letter of support to be included in the initial contact with each school district, and he was kind enough to do so. A copy of the letter is available as Appendix B.

Table 1				
Nevada Urban and Ru	ural Counties/S	School Districts		
Rural Counties/School Districts Urban Counties/School Districts				
Carson City	Lincoln	Clark		
Churchill	Lyon	Washoe		
Douglas	Mineral			
Elko	Nye			
Esmeralda	Pershing			
Eureka	Story			
Humboldt	White Pine			
Lander				

An e-mail was sent to Nevada Extension Educators and 4-H affiliated faculty and staff informing them of the study. They were simply made aware of the research, not asked to assist.

# Population and Sampling

The sampling population for the study consisted of 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grade students, enrolled in Nevada public schools. Table 2 shows the total population of rural and urban 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grade students. The sampling unit was Nevada public elementary, middle, and high schools. The number of public schools in Nevada are shown in Table 3. Schools that include 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> grade students are referred to as elementary, middle, and high schools, respectively.

Table 2

Rural and Urban Nevada Public School 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> Grade Student Populations, 2006-2007

Grade	Rural Schools	Urban Schools	Total Population
5 <sup>th</sup>	4,157	28,940	33,097
7 <sup>th</sup>	4,276	29,429	33,705
9 <sup>th</sup>	5,255	36,042	41,297

<u>Schools, 2006-2007</u>			
School	Rural Schools	Urban Schools	Total Schools
Elementary	88	264	352
Middle	56	73	129
High	43	89	132

Table 3Number of Rural and Urban Nevada Public Elementary, Middle and HighSchools, 2006-2007

The ethnic/race composition of Nevada public school students in grades kindergarten through twelfth are referenced by the Nevada Department of Education (2006) and described in Table 4. The largest race population represented is White at 44.5%, followed by Hispanic 35.2%, Black 11.0%, Asian or Pacific Islander 7.6%, and American Indian or Alaskan Native 1.6%.

Table 4			
Nevada Public Schools Enrol	llment of K-12 in 2007 b	y Race/Ethnicity	
Race/Ethnicity	n	%	
American Indian	6,800	1.6	
Asian/Pacific Islander	32,406	7.6	
Hispanic	150,314	35.2	
Black	47,053	11.0	
White	189,863	44.5	
Total	426,436	100.0	

## Instrument Development and Testing

The instrument consisted of 67 questions. The survey format included yes-no,

multiple choice, level of agreement, fill-in-the blank, and short essay questions.

The Search Institute (1997) granted permission for use of the questions they

authored that had been used in the previous studies.

Pilot testing of the instrument was conducted in one sixth and one eighth grade class in Douglas County. Sixth and eighth grade students were selected because they represented the age groups straddling the center most grade level used in the study. The pilot test sample consisted of 24 sixth grade students and 30 eighth grade students. The pilot test resulted in r = .892, Cronbach's alpha coefficient with demographic variables excluded.

A Spanish version of the instrument was then produced for students with a preference for that language.

The instrument was designed to collect various types of student information as follows: Extracurricular activity involvement during the school week included various types of activities such as, drama, art, dance, choir, sports teams, school clubs, outside clubs, spiritual activities, 4-H or hanging out with friends. Risky or negative behavior included shoplifting, smoking cigarettes, and cheating on a test. Personal identity information included information such as meeting and greeting new people, level of comfort in new situations, and care about other people's feelings. Positive identity information included level of self satisfaction and control over life circumstances. Self confidence, character, and personal empowerment information included self perceived ability in record keeping, managing money, giving speeches, and setting goals. Close relationship with parents/guardian and other adults information included having good length conversations with adults and being willing to talk to adults about topics such as drugs, sex, and alcohol. Information of school leadership positions held included election to a school office or service on a school committee. Information on caring for others included helping other people not as fortunate or in need of assistance. General demographics information included age, grades earned, gender, and race/ethnicity. 4-H membership information included current 4-H membership status and the impact of 4-H on those with 4-H experience.

The survey was divided into seven sections:

- Section one (Question 1) was designed to gather extracurricular activity.
- Section two (Questions 2-11) was designed to determine the way students perceived themselves regarding their person identity.
- Sections three (Questions 12-18) and four (Questions 19-22 and 24-27) was designed for students to assess their levels of social competency.
- Section five (Questions 28-43) was designed for students to indicate their feeling of self confidence, character and personal empowerment.
- Section six (Question 44) was designed to assess amount of negative behavior.
- Section seven (Questions 23, and 45-47) was designed to determine students' care for others.
- Seven eight (Questions 48-55) was designed to assess demographics.
- Section seven (Questions 56-67) was designed for students currently or
  previously involved in the 4-H program to identify ways in which the program
  impacted their lives. Students with no 4-H experience were instructed not to
  answer these final questions. The instrument is available in Appendix E.

#### Data Collection Methods

Washoe County was randomly selected to represent the urban component. A research review was required by Washoe County School District policy. Following District approval (Appendix C), an e-mail from the District Office was sent to all principals informing them of the research approval, and to expect contact from the researcher to discuss participation in the study.

All Washoe County elementary, middle and high schools (Nevada Department of Education, 2006) were randomly ordered. It was determined that there are four times as many elementary schools as middle and high schools in Washoe County. In an attempt to sample equal numbers of students in each grade level; four elementary schools were randomly selected for each middle and high school in the urban portion of the State.

Urban school principals were contacted by mail. This initial contact included a cover letter (Appendix D), copy of the questionnaire (Appendix E), Washoe County School District research approval, and letter of support from the State Superintendent of Schools (Appendix B). The cover letter informed them to expect a telephone call from the principal investigator to confirm their participation. Contact by U.S. mail was not an effective means of communicating with the urban school principals. When contacted by telephone, very few principals indicated they had received the survey information, nor many were familiar with the study. In many instances, principals were also difficult to contact by telephone. E-mail correspondence was the communication method found to be the most efficient.

The e-mail correspondence consisted of a brief cover letter and attachments including the questionnaire and Letter of Cooperation (Appendix F). The Letter of Cooperation was intended to confirm participation by the school (indicated by the principal's signature), determine the number of English and Spanish instruments needed, and identify the approximate date the questionnaires would be administered.

Once principal approval was secured, the specified number of surveys, parent opt-out consent letters in English (Appendix G) and Spanish (Appendix H), survey instructions (Appendix I), tracking forms (Appendix J), and prepaid return envelopes were mailed to the school. The tracking forms included county, school name, grade level, teacher's or proctor's name, date survey was given, number of questionnaires attached, and comments. The instructions specified that parent opt-out letters were to be sent home via the students at least three days prior to administering the questionnaire. The return envelopes were coded as a backup protocol to identify the school in the event the tracking form was not enclosed with the completed questionnaires.

Fifty-six urban elementary school principals were contacted to participate in the study (Table 5). Participation confirmation was received from 11 principals. Participation is described in Table 5. Those principals that indicated no interest to participating, replied but never committed one way or another, or failed to reply were marked as "decline." Every school that confirmed participation returned some questionnaires. The principals over-estimated the number of questionnaires needed, often by a significant amount. Of the 950 questionnaires requested, only 318 were returned, for a 33% response rate.

District/	<u>nemary School</u>	Surveys	Surveys	
Schools		Requested	Returned	Return
Contacted	Participation	English/Spanish	English/Spanish	Rate
Washoe	*	•	•	
Allen	Confirm	90 / 15	16 / 0	15%
Beck	Decline*			
Bennett	Decline			
Booth	Confirm	50 / 50	35 / 0	35%
Brown	Decline			
Cannan	Decline			
Caughlin Ranch	Decline			
Corbett	Decline			
Desert Heights	Confirm	60 / 0	9 / 0	15%
Diedrichsen	Confirm	70 / 0	3 / 0	4%
Dodson	Decline			
Donner Springs	Decline			
Double Diamond	Confirm	100 / 25	92 / 0	74%
Drake	Decline			
Duncan	Decline			
Dunn	Decline			
Elmcrest	Confirm	60 / 0	26 / 0	43%
Gomm	Confirm	75 / 0	54 / 0	72%
Greenbrae	Decline			
Hall	Decline			
Hidden Valley	Decline			
Huffaker	Decline			
Huntsberger	Decline			
Hunter Lake	Decline			
Incline	Decline			
Juniper	Decline			
Lemmon Valley	Decline			
Lenz	Decline			
Lincoln Park	Decline			
Loder	Decline			
Mathews	Confirm	75 / 35	10 / 0	9%
Maxwell	Decline			
Mitchell	Confirm	50 / 0	12 / 0	24%
Moss	Decline			
Mount Rose	Decline			
Palmer	Decline			
Peavine	Decline			
Pleasant Valley	Decline			

Table 5Urban Nevada Elementary School Contact and Participation

Table 5 continued

	Surveys	Surveys	
	Requested	Returned	Return
Participation	English/Spanish	English/Spanish	Rate
Decline			
Confirm	120 / 0	16 / 0	13%
Decline			
Confirm	75 / 0	45 / 0	60%
Decline			
Decline			
Decline			
	825 / 125	318 / 0	33%
	Participation Decline Decline Decline Decline Confirm Decline Decline Decline Decline Decline Decline Decline Decline Decline Decline Decline Decline Decline Decline Decline	Surveys RequestedParticipationEnglish/SpanishDeclineEnglish/SpanishDeclineDeclineDecline120 / 0DeclineDeclineDeclineDeclineDeclineDeclineDeclineDeclineDeclineDeclineDecline75 / 0DeclineDeclineDecline825 / 125	Surveys RequestedSurveys ReturnedParticipationEnglish/SpanishEnglish/SpanishDeclineEnglish/SpanishEnglish/SpanishDeclineDeclineEnglish/SpanishDeclineDeclineIf a constraint of a constraint o

\* Decline = Principal declined participation, never confirmed or did not reply

Thirteen urban middle school principals were contacted to participate (Table 6). Two schools confirmed participation. These middle schools principals requested 815 English and Spanish surveys, and returned a total of 197 surveys, for a response rate of 24%.

Eleven urban high school principals were contacted to participate in the study (Table 7). Three principals confirmed participation and eight declined. A 46% response rate was achieved (427 completed instruments were returned, 934 were requested).

Orban Nevada Mide	ale school Conia	сі апа ғапістраноп		
District/		Surveys	Surveys	
Schools		Requested	Returned	Return
Contacted	Participation	English/Spanish	English/Spanish	Rate
Washoe				
Billinghurst	Confirm	320 / 25	0 / 0	0
Clayton	Decline*			
Cold Springs	Decline			
Dilworth	Decline			
Incline	Decline			
Mendive	Decline			
O'Brien	Decline			
Pine	Confirm	450 / 20	187 / 10	42%
Shaw	Decline			
Sparks	Decline			
Swope	Decline			
Traner	Decline			
Vaughn	Decline			
Total		770 / 45	187 / 10	24%
* Doolino - Princip	al dealined partic	pination nover confir	mad or did not ranky	

Urban Nevada Middle School Contact and Participation

\* Decline = Principal declined participation, never confirmed or did not reply

Table 7

Table 6

Urban Nevada High School Contact and Participation

District/		Surveys	Surveys	
Schools		Requested	Returned	Return
Contacted	Participation	English/Spanish	English/Spanish	Rate
Washoe				
Damonte Ranch	Decline*			
Galena	Decline			
Hug	Decline			
Incline	Decline			
McQueen	Confirm	210 / 0	166 / 0	79%
North Valleys	Decline			
Reed	Decline			
Reno	Decline			
Spanish Springs	Confirm	264 / 20	56 / 0	20%
Sparks	Decline			
Wooster	Confirm	400 / 40	205 / 0	46%
Total		874 / 60	427 / 0	46%

\* Decline = Principal declined participation, never confirmed or did not reply

Superintendents in the rural districts were contacted by e-mail with a cover letter, the University of Nevada IRB approval, the letter of support from the Nevada State Superintendent of Schools, and the survey instrument. If no e-mail or telephone response was received within seven days, a follow-up phone call was made to the district superintendent. A telephone script was used when talking to district superintendents (Appendix K). Rural superintendents were asked if they would approve the research and grant permission for the principal investigator to contact their school principals. One superintendent suggested the principal investigator send schools the survey materials along with mention of his permission. Table 8 describes the rural school superintendents contacted to approve school district participation. Eleven of the 15 rural school districts were contacted in random order. Six of the 11 school districts approved the study. Five of the six rural school districts approving participation had schools participate and return questionnaires.

Nevada Kurai Sci	nooi District Contact an	и г иппстраноп	
School	Superintendent		Returned
District	Contacted	Participation	Surveys
Carson City	No		
Churchill	Yes	Decline*	
Douglas	No		
Elko	Yes	Decline	
Esmeralda	Yes	Decline	
Eureka	Yes	Approve	Yes
Humboldt	Yes	Approve	No
Lander	Yes	Approve	Yes
Lincoln	Yes	Approve	Yes
Lyon	No		
Mineral	Yes	Decline	
Nye	Yes	Approve	Yes
Pershing	Yes	Decline	
Storey	No		
White Pine	Yes	Approve	Yes

Table 8Nevada Rural School District Contact and Participation

\* Decline = Superintendent declined participation, never confirmed, or school district required special review

Nineteen rural elementary schools were contacted to participate and nine

confirmed (Table 9). Principals requested 692 English and Spanish instruments, and

returned 145, for a response rate of 21%.

District /			Sumion	
District /		Surveys Degraafed	Surveys Datum ad	Datar
Schools	D (* * )	Requested		Return
Contacted	Participation	English/Spanish	English/Spanish	Rate
Eureka				
Eureka	Confirm	16/0	14 / 0	88%
Humboldt				
French Ford	Confirm	264 / 20	0 / 0	0
Lander				
Austin	Decline*			
Eleanor Lamaire	Decline			
Eliza Pierce	Decline			
Mary Black	Decline			
Lincoln <sup>1</sup>				
Caliente	Confirm	20/3	15 / 0	65%
Pahranagat Valley	Confirm	15 / 2	0 / 0	0
Panaca	Confirm	18 / 2	0 / 0	0
Pioche	Confirm	14 / 4	0 / 0	0
Nye				
Manse	Confirm	80 / 10	38 / 0	42%
Round Mountain	Decline			
Johnson	Decline			
Tonopah	Decline			
Hafen	Decline			
Mt. Charleston	Confirm	110 / 2	0 / 0	0
White Pine				
Lund	Confirm	20/0	17/0	85%
McGill	Confirm	20/0	7 / 0	35%
Norman	Confirm	69 / 3	54 / 0	75%
Total		646 / 46	145 / 0	21%

Rural Nevada Elementary School Contact and Participation

Table 9

\* Decline = Principal declined participation, never confirmed or did not reply <sup>1</sup>Superintendent confirmed participation

Table 10 shows the rural middle schools contacted to participate. Six out of the seven schools contacted confirmed their participation. Schools returned a total of 216 questionnaires of the 607 mailed out, achieving a 36% response rate.

Kurai Nevada Midale	School Coniac	ana Pariicipalioi	1	
District /		Surveys	Surveys	
Schools		Requested	Returned	Return
Contacted	Participation	English/Spanish	English/Spanish	Rate
Humboldt				
Winnemucca	Confirm	234 / 20	0 / 0	0
Lander				
Battle Mountain	Confirm	100 / 25	84 / 0	67%
Lincoln <sup>1</sup>				
Meadow Valley	Confirm	35 / 2	0 / 0	0
Pahranagat	Confirm	20 / 2	14 / 0	64%
Nye				
Clarke	Decline*			
Tonopah	Confirm	69 / 0	30 / 0	43%
White Pine				
White Pine	Confirm	100 / 0	88 / 0	88%
Total		558 / 49	216 / 0	36%

Table 10 ada Middle School Contact and Participati л al Ma

\* Decline = Principal did not reply <sup>1</sup>Superintendent confirmed participation

Five rural high schools, of the eight contacted, confirmed participation in the study (Table 11). A 45% response rate was achieved when 165 instruments were returned of the 368 mailed.

Rural Nevada High S	chool Contact	and Participation		
District /		Surveys	Surveys	
Schools		Requested	Returned	Return
Contacted	Participation	English/Spanish	English/Spanish	Rate
Humboldt				
Lowry	Decline*			
Lander				
Battle Mountain	Confirm	120 / 10	97 / 0	75%
Lincoln <sup>1</sup>				
Lincoln	Confirm	60 / 5	45 / 0	69%
Pahranagat Valley	Confirm	25 / 2	0 / 0	
Nye				
Beatty	Decline			
Pahrump	Decline			
Tonopah	Confirm	44 / 2	22 / 1	50%
White Pine				
White Pine	Confirm	100 / 0	0 / 0	0
Total		349 / 19	164 / 1	45%

Table 11Rural Nevada High School Contact and Participation

\* Decline = Principal declined participation, never confirmed or did not reply <sup>1</sup>Superintendent approved participation

Urban and rural school principals willing to participate in the study were asked to complete and sign the Letter of Cooperation. On rare occasion, principals followed that practice. Most often principals simply indicated the number of surveys they needed via e-mail communication and did not complete the Letter of Cooperation.

Extensive and systematic sampling and data collection efforts were employed, yet as the results of the data collection process indicate, working with children in public school environments limited the researcher's ability to control important sources of error in the study. The potential for error due to Dillman's (2007), Coverage and Nonresponse threats severely limit the generalizability of the findings. The reader should use caution when transferring these results to other populations.

#### Data Analysis Methods

A total of 4,041 English and 327 Spanish surveys were requested by Nevada school principals and 1,481 English and 11 Spanish surveys were returned, resulting in a 36.65% English survey response, and a 3.36% Spanish survey response. The overall response rate was 34.16%. The potential for error due to Dillman's (2007), Coverage and Nonresponse threats severely limit the generalizability of the findings. It was impossible to accurately differentiate the amount of coverage and nonresponse error. Principals estimated the number of students matching the sample selection criteria and selected classes they thought would provide the greatest access to students in each age group. Without direct access to the students in each school, the research was unable to control this source of coverage error. If a principal over-estimated the number of students matching the selection criteria, that would artificially inflate the festinate of coverage error. If a student did not respond because the principal did not provide him with an instrument, that would contribute to coverage error. If the student received an instrument, but failed to return it, that would contribute to nonresponse error. Students were anonymous at all times in this study. Lindner, Murphy, and Briers (2001) methods for statistically controlling nonresponse were considered and rejected due to the nature of the data collection process, the inaccessibility and anonymity of the respondents, and the fact that "late" respondents to this study were not truly "late respondents" in that they did not procrastinate but were simply provided the instruments at a date later than early respondents. The researcher was not able to sustain the required logical proposition by

Lindner, Murphy, and Briers (2001) that "late respondents" in this study were more like non-respondents than "early respondents."

Returned surveys were stored in a locked file cabinet in the principal investigator's office at the University of Nevada Cooperative Extension Office, 1329 Waterloo Lane, Gardnerville, Nevada. Data were coded and entered into SPSS. Nominal variables, Yes – No responses, were coded 1=yes, 2=no. Level of agreement responses were converted to numeric classes, 1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree. Frequency scale responses were converted to numeric classes, 1 = never, 2 = once, 3 = a few times, 4 = frequently.

Data were analyzed with SPSS 15.0 for Windows. Descriptive statistics, percentages and frequencies were compiled on the following; extracurricular activity involvement, school leadership positions held, close relationship with adults, care for others, 4-H participation, age, grade, gender, household size, location of family living unit, family types, and impact of 4-H youth development on members. Means were compiled on amount of negative behavior, personal identity, positive identity, and selfconfidence, character and empowerment.

Age groups, gender, 4-H participation, and population density were used as the independent variables. Age groups were established using 10-12 years old to represent 5<sup>th</sup> grade students, 13-14 years old representing 7<sup>th</sup> grade students, and 15-18 years old representing 9<sup>th</sup> grade students. Gender was determined by survey question #50, *are you female or male*. 4-H participation was determined by survey question #56, *have you ever belonged to a 4-H club that meets formally outside of school*. Population density was

determined by location of school where the respondent resided. As data were inputted, each respondents' data entry was coded as rural or urban depending on the location of the school.

The survey designers in 2000 essentially determined constructs, representing like attributes, proficiencies, abilities, practices, or skills and defined by established theories. Constructs were divided into two groups based on measurement indicators, indices and scales. Index constructs are composite measures, based on multiple nominal-level indicators. Index constructs included, extracurricular activity involvement, school leadership positions held, close relationship with adults, and caring for others. Scale constructs are composite measures, based on multiple continuous-level indicators. Scale constructs included, amount of negative behavior, personal identity, positive identity, and self-confidence, character and empowerment.

# Methods Summary

Nevada public school, 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grade students, enrolled in urban and rural schools were surveyed to assess the impact of 4-H on their lives. The survey instrument, previously used in four western states, was pilot tested and reformatted to determine reliability and enhance response rate. Schools within randomly selected rural and urban school districts were invited to participate. Principals at each school estimated the number of students matching the sample criteria and selected classes they thought would provide the greatest response without duplication. A total of 4,368 questionnaires were mailed to Nevada schools and 1,492 surveys were returned, resulting in a 34% overall response rate. The potential for error due to Dillman's (2007), Coverage and

Nonresponse threats severely limit the generalizability of the findings. The reader should use caution when transferring these results to other populations.

#### CHAPTER IV

#### FINDINGS AND DISCUSSION

The purposes of this study were to measure the impacts of 4-H programming on Nevada youth, replicate an impact evaluation research project, and obtain data for use to improve University of Nevada Cooperative Extension's 4-H programming. The research questions were the following:

- What is a description of study participants based upon: a) extracurricular activity involvement, b) school leadership positions held, c) close relationships with adults, d) caring for others, e) amount of negative behavior, f) personal identity, g) positive identity, h) self-confidence, character, and personal empowerment, and i) demographic characteristics and personolgical attributes?
- 2. How do the subjects differ in terms of; extracurricular activity involvement; school leadership positions held; close relationships with adults; caring for others; amount of negative behavior; personal identity; positive identity; selfconfidence, character, and personal empowerment; based upon age, gender, 4-H participation, and population density?
- 3. How does involvement in 4-H programming influence youth?

This chapter discusses the results of a survey entitled, *You and Your Free Time: A Survey of Nevada* 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> Grade Students, administered in 2007, and presented in the order of the research questions. Description of study participants is discussed, followed by independent variable comparisons by construct. Independent variables are discussed in the order of age, gender, 4-H participation, and population density. Summated construct means scores for independent variables is followed by the Analysis of variance for each construct. The final section of this chapter discusses the perceptions of 4-H program impact.

### **Description of Study Participants**

Frequencies and percentages were used to describe study participants in the constructs; extracurricular activity involvement, school leadership positions held, close relationships with adults, and caring for others. These constructs were composed of survey questions requiring a yes or no, dichotomous response. Means and standard deviations were used to describe study participants in the constructs; amount of negative behavior, personal identity, positive identity, and self-confidence, character and empowerment. These constructs were composed of survey questions requiring a Likert type, multiple level response. Frequencies and percentages were used, at the end of this section, to describe the demographic characteristics of the study participants.

Involvement in extracurricular activities of students during the school week is reported in Table 12. The most commonly practiced activity is spending time with friends without anything special to do (81.2%, n = 1,135). The next most commonly practiced activity is spending time on school or community sports teams (51.9%, n = 720). 4-H club activities or projects was reported to occupy the time of the fewest number of students (10.8%, n = 145).

Participation in a school leadership capacity is represented in Table 13. Some type of school leadership position was held by 13.8% of the students within the past

year. Elected positions were held by 12.5% of the students, while 10.5% participated as

a committee member and 6.1% served as a committee chairperson.

of Nevada Public School Studen	nts During the S	chool Week	
Activities	%	n	
Drama, Art, Music	39.5	544	
Sports Teams	51.9	720	
School Clubs	19.4	263	
4-H	10.8	145	
Outside School Clubs	21.5	293	
Spiritual	25.0	338	
Nothing Special To Do	81.2	1135	

Table 12Frequencies and Percentages of Extracurricular Activity Involvementof Nevada Public School Students During the School Week

Table 13
Frequencies and Percentages of School Leadership Positions Held
by Nevada Public School Students

e y i ve valaa i he he seneet sindenis		
Leadership Position Type	%	п
Elected to a leadership position	12.5	176
Held a leadership position	13.8	194
Served as a committee chair	6.1	89
Served as a committee member	10.5	154

Close relationships with parents/guardians and other adults is show in Table 14. Most respondents (85.9%) indicated that within the last month, they have had a good conversation with one parent/guardian that lasted 10 minutes or more. The discussion between child and parent/guardian on the topic of sex was the relationship indicator practiced by the fewest number of students (57.5%, n = 817).

Table 14

<u>Relationships with Parents/Guardians and Other Adults</u>		
Relationship	%	п
If you had an important question about your life,		
is there an adult (other than a parent/guardian)		
whom you feel comfortable going to for help?	65.4	954
In the last month, did you have a good conversation		
with one of your parents/guardians that lasted 10		
minutes or more?	85.9	1256
In the last month, did you have a good conversation		
with an adult (other than a parent/guardian) that		
lasted 10 minutes or more?	73.2	1072
Discussed drugs with parents/guardians	75.0	1074
Discussed alcohol with parents/guardians	74.0	1061
Discussed sex with parents/guardians	57.5	817
Discussed other issues with parents/guardians	76.9	1096

Frequencies and Percentages of Nevada Public School Students with Close Relationships with Parents/Guardians and Other Adults

Students caring for others in need, is reported in Table 15. Most students (85.8%, n = 1,264) claim to have helped others at school in the past year. Fewer than half the students indicated they have been involved in a project to make life better for other people (48%, n = 696), and to have given money or time to a charity or organization that helps people (49.9%, n = 723). The fewest number of students (39.3%, n = 566) claimed to have spent time helping people who are poor, hungry, sick or unable to care for themselves.

Table 15

Frequencies and Percentages of Nevad	la Public School	l Students Caring	for Others
Type of Help	%	n	·
Helped Others in School	85.8	1264	
Help Project to Make Life Better	48.0	696	
Time or Money to Charity	49.9	723	
Helped Sick, Poor, Hungry	39.3	566	

Amount of negative behavior practiced by students is shown in Table 16. Negative behaviors included cheating on a test, drinking alcohol without parents permission, shoplifting, using drugs, riding in a car with a driver who has been drinking or using drugs, damaging property just for the fun of it, smoking cigarettes, using smokeless tobacco, participating in any type of sexual activity, and skipping or cutting class without parent permission. Responses were on a frequency scale of 1 through 4, where 1 = never, 2 = once, 3 = a few times, and 4 = frequently. The most commonly practiced negative behavior was cheating on a test (M = 1.91, SD = .965). The least practiced negative behavior was the use of smokeless tobacco (M = 1.12, SD = .501).

<i>Students</i> , $(n = 1, 492)$			
Negative Behavior	$M^*$	SD	
Cheat on a Test	1.91	.965	
Drank Alcohol	1.61	.980	
Shoplifted	1.34	.763	
Used Drugs	1.33	.813	
Rode with DUI	1.50	.886	
Damaged Property	1.47	.828	
Smoked Cigarettes	1.31	.765	
Used Smokeless Tobacco	1.12	.501	
Sexual Activity	1.54	.990	
Skip or Cut Class	1.45	.843	
*Maan of fue area and a near		2	

Table 16 Amount of Negative Behavior Means for Nevada Public School Students. (n = 1.492)

\*Mean of frequency scale responses (1 = never, 2 = once)

3 = a few times, 4 = frequently)

Personal identity means for Nevada public school students are shown in Table 17. Personal identity included statements such as; I am good at planning ahead; I care about other people's feeling; and I feel really sad when one of my friends is unhappy. Students were asked to indicate a level of agreement to the personal identity statements on a Likert scale of 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. All statements were phrased positively. Agreement or strong agreement was indicative of high personal identity. The statement receiving the highest score, or the strongest personal identity characteristic was, saying no when asked to do something wrong (M = 4.16, SD = 1.05). The personal identity statement receiving the lowest score was, volunteer in class to lead activities (M = 2.80, SD = 1.12).

Personal Identity Means for Nevada Public Sch	ool Students, (	(n = 1,492)
Identity Characteristic	$M^*$	SD
Good at planning ahead	3.34	.96
Care about other's feelings	4.02	.94
Sad when friends are unhappy	3.74	1.03
Good at making and keeping friends	4.03	.91
Say no when asked to do something wrong	4.16	1.05
Stay away from people that get me in trouble	3.53	1.11
Volunteer in class to lead activities	2.80	1.12
Meet and greet new people easily	3.53	1.01
Comfortable in new situations	3.26	.96
Others kids look up to me	3.13	1.09
	· <u> </u>	

\*Mean of Likert scale responses (1 = strongly disagree, 2 = disagree,

3 = neutral, 4 = agree, 5 = strongly agree)

Table 18 shows the positive identity means for public school students. Positive identity included statements such as; when things don't go well for me, I am good at finding a way to make things better; I have little control over the things that will happen in my life; and on the whole, I like myself. Students were asked to indicate a level of agreement to the positive identity statements on a Likert scale of 1 = strongly disagree, 2

= disagree, 3 = neutral, 4 = agree, 5 = strongly agree. Four of the seven statements were negatively phrased. Disagreement or strong disagreement to negatively phrased statements was indicative of high positive identity. Agreement or strong agreement to the three positively phrased statements was indicative of high positive identity. The highest positive identity mean of the positively phrased statements was, all in all, I am glad I am me (M = 4.14, SD = .96). The lowest mean of the four negatively phrased statements was, I feel I do not have much to be proud of (M = 2.19, SD = 1.17).

Table 18		
Positive Identity Means for Nevada Public School	ol Students, (n	n = 1,492)
Statements	$M^*$	SD
When things don't go well for me, I am good		
at finding a way to make things better	3.52	.94
I have little control over things that will		
happen in my life <sup>n</sup>	2.69	1.23
On the whole I like myself.	3.95	1.01
At times, I think I am no good at all <sup>n</sup>	2.89	1.24
All in all, I am glad I am me	4.14	.96
I feel I do not have much to be proud of <sup>n</sup>	2.19	1.17
Sometimes I feel like my life has no purpose <sup>n</sup>	2.30	1.30
*Mean of Likert scale responses (1 = strongly di	sagree,	
2 = disagree, 3 = neutral, 4 = agree, 5 = strongly	agree)	

<sup>n</sup>Negatively phrased statements

Self-confidence, character, and empowerment means for students are displayed in Table 19. Self-confidence, character, and empowerment included statements such as; I can do things on my own; I set goals; ten years from now, I think I will be very happy; and I am responsible for my actions. Students were asked to indicate a level of agreement to the self-confidence, character and empowerment statements on a Likert scale of 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. One statement was negatively phrased; adults in my town or city don't care about people my age. Disagreement or strong disagreement to this statement was indicative of high self-confidence, character and empowerment. The positively phrased statement receiving highest level of agreement was, I am responsible for my actions (M = 4.18, SD = .83). The lowest level of agreement of the positively phrased statements was for the statement, I have good written record keeping skills (M = 2.50, SD = 1.22).

Table 19

Self-Confidence, Character and Empowerment Means for Nevada Public School Students,  $(n = 1,492)_{-}$ 

$M^*$	SD
4.00	.89
3.74	.98
4.07	.93
4.18	.83
4.05	.86
3.15	1.18
3.33	1.16
3.26	1.06
3.11	1.09
2.53	1.13
3.30	1.03
3.85	1.06
2.97	1.09
3.29	1.08
2.50	1.22
2.81	1.29
2 = disagree,	3 = neutral, 4
_ /	
	M*     4.00     3.74     4.07     4.18     4.05     3.15     3.33     3.26     3.11     2.53     3.30     3.85     2.97     3.29     2.50     2.81     2 = disagree,

<sup>n</sup>Negatively phrased statement

=

Table 20 shows that just over half, 50.9%, of the 1,492 survey participants, were female, and 46.3% were male. As indicated in Table 21, 63.1% of the survey respondents were from the urban school district, while 36.9% were from the rural districts. 4-H involvement was determined by the survey question asking if the student ever belonged to a 4-H Club that meets formally outside of school (Question 56). One hundred sixty six students, 11.1% of the respondents, indicated they had been involved in 4-H (Table 22). The majority of students, 83.5%, never belonged to 4-H.

Table 20

Frequencies and P	ercentages	by Gena	ler
Gender	%	n	
Male	46.3	691	
Female	50.9	759	
Missing	2.8	42	
Total	100.0	1492	

Table 21	
Frequencies and Percentages of Urban and Rural Youth	

	%	n	
Urban	63.1	941	
Rural	36.9	551	
Total	100.0	1492	
		-	

Table 22

Frequencies and Percen	ntages of 4-H Pa	rticipation	
4-H Participation	%	n	
4-H Youth	11.1	166	
Non 4-H Youth	83.5	1246	
Missing	5.4	80	
Total	100.0	1492	

Table 23 shows there were 507 9<sup>th</sup> grade students, 471 5<sup>th</sup> grade students and 382 7<sup>th</sup> grade students. Nine percent of the 1,492 returned surveys were from students in grades other than 5<sup>th</sup>, 7<sup>th</sup>, or 9<sup>th</sup>, or from students not identifying grade level.

Table 23			
Frequencies and I	Percentages by	Grade	
Grade	%	n	
5 <sup>th</sup>	31.6	471	
7 <sup>th</sup>	25.6	382	
9 <sup>th</sup>	34.0	507	
Other Grades	4.7	68	
Missing	4.3	64	
Total	100.0	1492	

T-1-1- 22

Table 24 describes the age distribution of the student respondents. Ages ranged from 10 to 18 years. The mean age was 13.04 years and the median age was 13.0 years. Race/ethnic breakdown of the student sample is illustrated in Table 25. Whites were the largest race/ethnic group represented by 56.6% of the students in the study, followed by 22.4% Hispanic, 11% other, 3.8% Native American, and 2.3% African American. The sample population demographics roughly mirror the Nevada student ethnicity/race composition at 44.5 % White students, 35.2% Hispanic, 11% African American, and 1.6% Native American (Nevada Department of Education, 2006).

Frequencies and	<u>Percentages by</u>	Age	
Age (years)	%	n	
10	9.2	137	
11	19.5	291	
12	8.7	130	
13	16.9	252	
14	10.3	153	
15	23.7	354	
16	3.7	55	
17	1.4	21	
18	.9	13	
Missing	5.8	86	
Total	100.0	1492	

Table 24Frequencies and Percentages by Age

Table 25

Frequencies and Percentages by Race/Ethnicity

Ethnicity	%	n	
African American	2.3	34	
Native American	3.8	56	
Hispanic	22.4	334	
White/Caucasian	56.6	844	
Other	11.0	164	
Missing	4.0	60	
Total	100.0	1492	

Living setting is illustrated in Table 26. A large majority of the students lived in town, 62.0 %, while the remainder lived in a large city, 22.1%, in the country not on a farm, 5.5%, and on the farm, 4.2%.

<u>Living Setting</u>	r	
%	n	
4.2	63	
6.5	97	
62.0	924	
22.1	329	
5.2	78	
100.0	1492	
	<u>Living Setting</u> 4.2 6.5 62.0 22.1 5.2 100.0	N         n           %         n           4.2         63           6.5         97           62.0         924           22.1         329           5.2         78           100.0         1492

Table 26

Number of other youth, less than 18 years old, living in the same household is represented in Table 27. The range of youth living in the same household was 0 to 23. The median number of other youth was 2, and the mean was 2.26.

14010 27			
Frequencies and Percer	ntages of Number	r of Other Youth	h in the Household
Number of Youth	%	n	
None	12.3	183	
1	27.9	417	
2	19.2	287	
3	14.5	216	
4	7.6	113	
5	5.4	80	
6	2.9	43	
7	1.3	19	
8	.4	6	
9	.4	6	
10 or more	.5	9	
Missing	7.6	113	
Total	100.0	1492	

Table 27

Parent and guardian status is shown in Table 28. Most of the student respondents, 60.6% live with both parents, while 12.2 % live with just their mother, 11.1% live with one parent and one step-parent, and 8.1% live sometimes with mother or father.

Table 28			
Frequencies and Percentages of Paren	t/Guardian Stati	US	
I live with my	%	n	
Two parents	60.6	866	
Mother	12.2	182	
Father	2.5	38	
Sometimes mother or father	8.1	121	
One parent + one step-parent	11.1	166	
Grandparents	1.3	20	
Guardian, relative, or other person	2.5	37	
Missing	4.2	62	
Total	100.0	1492	

Frequencies and percentages of grades earned by respondents are displayed in Table 29. Over one quarter of the youth (25.1%) claimed to earn half A's and half B's. Mostly A's were earned by 24.5% and half B's and half C's were earned by 20.1% of the youth.

Frequencies and Percentages of C	<u> Frades Earne</u>	d	
Grades	%	n	
Mostly A's	24.5	366	
About half A's and half B's	25.1	375	
Mostly B's	6.9	103	
About half B's and half C's	20.1	300	
Mostly C's	4.8	71	
About half C's and half D's	8.7	130	
Mostly D's	2.5	38	
Mostly below D's	3.4	50	
Missing	4.0	59	
Total	100.0	1492	

Table 29Frequencies and Percentages of Grades Earned

### Comparison of Age Groups

Three age groupings were created, 10–12 year olds, 13–14 year olds, and 15–18 year olds. Age group comparisons were made in; extracurricular activity involvement; school leadership positions held; close relationships with adults; caring for others; amount of negative behavior; personal identity; positive identity; and self-confidence, character and empowerment.

Table 30 shows the age group comparison in extracurricular activity involvement. Statistical differences between age groups was found in the involvement in drama, art, music, school clubs, 4-H, outside clubs, spiritual, and nothing special to do activities. Significantly more 10-12 year olds (46.7%, n = 243) were involved in drama, art, music, than 13-14 year olds (39.0%, n = 144) and 15-18 year olds (30.7%, n = 127) and involvement of 13-14 year olds was significantly higher than 15-18 year olds. Age group 13-14 (21.8%, n = 80), were significantly more involved in school sports than age group 15-18 (16.1%, n = 66). Involvement in 4-H was significantly higher for the 10-12

year olds (16.1%, $n = 82$ ) than for the 13-14 year olds (8.3%, $n = 30$ ) and 15-18 year
olds (5.7%, $n = 23$ ). Age group 10-12 (26.4%, $n = 136$ ) was significantly more involved
in outside school clubs than 13-14 age group (19.8%, $n = 72$ ) and age group 15-18
(16.8%, $n = 69$ ). Significantly more 10-12 year olds (28.3%, $n = 144$ ) were involved in
spiritual activities than 15-18 year olds (22.3%, $n = 92$ ). Age group 15-18 (83.9%, $n = 92$ )
355) was significantly more involved with spending time with friends without anything
special to do than age group 10-12 (78.6%, $n = 411$ ).

Age Group Comparison in Extracurricular Activity Involvement					`
10-1	12	13-1	4	15-	18
Years	Old	Years	Old	Years	Old
%	n	%	n	%	n
46.7 <sup>a</sup>	243	39.0 <sup>b</sup>	144	30.7 <sup>c</sup>	127
50.3	262	56.0	210	50.2	209
20.5 <sup>ab</sup>	105	21.8 <sup>a</sup>	80	16.1 <sup>b</sup>	66
16.1 <sup>a</sup>	82	8.3 <sup>b</sup>	30	5.7 <sup>b</sup>	23
26.4 <sup>a</sup>	136	19.8 <sup>b</sup>	72	16.8 <sup>b</sup>	69
28.3 <sup>a</sup>	144	24.2 <sup>ab</sup>	87	22.3 <sup>b</sup>	92
78.6 <sup>a</sup>	411	82.4 <sup>ab</sup>	310	83.9 <sup>b</sup>	355
	Activity 10-1 Years % 46.7 <sup>a</sup> 50.3 20.5 <sup>ab</sup> 16.1 <sup>a</sup> 26.4 <sup>a</sup> 28.3 <sup>a</sup> 78.6 <sup>a</sup>	$\begin{array}{r} Activity Involv\\\hline 10-12\\ Years Old\\\hline \% & n\\\hline 46.7^a & 243\\ 50.3 & 262\\ 20.5^{ab} & 105\\ 16.1^a & 82\\ 26.4^a & 136\\ 28.3^a & 144\\ 78.6^a & 411\\\hline \end{array}$	Activity Involvement10-1213-1Years OldYears $\frac{\%}{100}$ 9% $\frac{10}{46.7^a}$ 243 $243$ $39.0^b$ $50.3$ $262$ $56.0$ $20.5^{ab}$ $20.5^{ab}$ 105 $21.8^a$ $16.1^a$ $82$ $8.3^b$ $26.4^a$ 136 $19.8^b$ $28.3^a$ 144 $24.2^{ab}$ $78.6^a$ 411 $82.4^{ab}$	Activity Involvement10-1213-14Years OldYears Old $\frac{\%}{n}$ $\frac{\%}{n}$ $\frac{9}{6}$ $n$ $\frac{46.7^{a}}{243}$ $39.0^{b}$ $46.7^{a}$ $243$ $39.0^{b}$ $144$ $50.3$ $262$ $56.0$ $210$ $20.5^{ab}$ $105$ $21.8^{a}$ $80$ $16.1^{a}$ $82$ $8.3^{b}$ $30$ $26.4^{a}$ $136$ $19.8^{b}$ $72$ $28.3^{a}$ $144$ $24.2^{ab}$ $87$ $78.6^{a}$ $411$ $82.4^{ab}$ $310$	Activity Involvement10-1213-1415-Years OldYears OldYears $\frac{\%}{10}$ $\frac{\%}{10}$ $\frac{\%}{100}$ Years $\frac{\%}{100}$ $\frac{\%}{100}$ $\frac{\%}{100}$ $\frac{\%}{100}$ $\frac{10}{100}$ $\frac{243}{243}$ $\frac{39.0^{b}}{144}$ $\frac{144}{30.7^{c}}$ $50.3$ $262$ $56.0$ $210$ $50.2$ $20.5^{ab}$ $105$ $21.8^{a}$ $80$ $16.1^{b}$ $16.1^{a}$ $82$ $8.3^{b}$ $30$ $5.7^{b}$ $26.4^{a}$ $136$ $19.8^{b}$ $72$ $16.8^{b}$ $28.3^{a}$ $144$ $24.2^{ab}$ $87$ $22.3^{b}$ $78.6^{a}$ $411$ $82.4^{ab}$ $310$ $83.9^{b}$

Table 30

<sup>a</sup>differing letters in a row p < .05

Age group comparison in school leadership positions held is shown in Table 31. Significantly more 10-12 year olds (17.1%, n = 91) were elected to a leadership position than 13-14 year olds (10.4%, n = 40) and 15-18 year olds (9.0%, n = 13). Age group 10-12 (18.6%, n = 99) held significantly more school leadership positions than age group 13-14 (13.6%, n = 52) and age group 15-18 (8.3%, n = 11), and involvement of 13-14 year olds was significantly higher than 15-18 year olds. Significantly more 10-12 year
olds (9.9%, n = 54) served as school committee chair than the 13-14 year olds (3.5%, n = 14) and the 15-18 year olds (3.5%, n = 8). Age group 10-12 (15.2%, n = 83) served on school committees significantly more than age group 13-14 (7.0%, n = 28) and age group 15-18 (6.8%, n = 30).

Table 31Age Group Comparison in School Leadership Positions Held

	10-12	13-14	15-18	
	Years Old	Years Old	Years Old	
Leadership Position Type	% n	% n	% n	
Elected to a leadership position	17.1 <sup>a</sup> 91	10.4 <sup>b</sup> 40	9.0 <sup>b</sup> 13	
Held a leadership position	18.6 <sup>a</sup> 99	13.6 <sup>b</sup> 52	8.3 <sup>c</sup> 11	
Served as a committee chair	9.9 <sup>a</sup> 54	3.5 <sup>b</sup> 14	3.5 <sup>b</sup> 8	
Served as a committee member	15.2 <sup>a</sup> 83	$7.0^{b}$ 28	6.8 <sup>b</sup> 30	
$a_1:c_2 = 1 + t_2 = 1 + $				

<sup>a</sup>differing letters in a row p < .05

Age group comparison in close relationships with adults is shown in Table 32. Significantly more 10-12 year olds (88.2%, n = 479) had a good 10 minute conversation with a parent/guardian than 13-14 year olds (83.8%, n = 334). Age group 15-18 (81.2%, n = 359) had significantly more good 10 minute conversations with an adult other than a parent than age group 10-12 (69.0%, n = 377) and age group 13-14 (71.8%, n = 288). Significantly more 10-12 year olds (81.6%, n = 435) discussed drugs with parents/guardians than 13-14 year olds (74.7%, n = 289) and 15-18 year olds (70.3%, n = 306). That same trend was found in willingness to discuss alcohol and sex. Significantly more of the 10-12 year olds (80.6%, n = 429) discussed alcohol with parents than 13-14 year olds (73.3%, n = 285) and 15-18 year olds (69.6%, n = 303). The younger youth, 10-12 year olds (67.6%, n = 355) were significantly more willing to discuss sex with parents than the older youth, 13-14 year olds (55.4%, n = 216) and 15-

18 year olds (49.8%, n = 214).

Age Group Comparison in Close Relationsh	hip with	Adults				
	10-12 Years Old		13-14 Years Old		15-18 Years Old	
Relationship	%	n	%	n	%	n
If you had an important question about your	r					
life, is there an adult (other than a						
parent/guardian) whom you feel						
comfortable going to for help?	67.4	368	64.6	257	64.8	284
In the last month, did you have a good						
Conversation with one of your						
parents/guardians that lasted 10						
minutes or more?	88.2 <sup>a</sup>	479	83.8 <sup>b</sup>	334	86.2 <sup>ab</sup>	380
In the last month, did you have a good						
Conversation with an adult (other						
than a parent/guardian) that						
lasted 10 minutes or more?	69.0 <sup>a</sup>	377	71.8 <sup>a</sup>	288	81.2 <sup>b</sup>	359
Discussed drugs with parents/guardians	81.6 <sup>a</sup>	435	74.7 <sup>b</sup>	289	70.3 <sup>b</sup>	306
Discussed alcohol with parents/guardians	$80.6^{a}$	429	73.3 <sup>b</sup>	285	69.6 <sup>b</sup>	303
Discussed sex with parents/guardians	67.6 <sup>a</sup>	355	55.4 <sup>b</sup>	216	49.8 <sup>c</sup>	214
Discussed other issues with parents/						
guardians	80.7	428	75.8	292	76.9	334

Table 32

<sup>a</sup>differing letters in a row p < .05

Age group comparison in caring for others is shown in Table 33. Significantly more 10-12 year olds (93.1%, n = 514) help others in school than 13-14 year olds (84.3, n = 339) and 15-18 year olds (78.0%, n = 334), and significantly more 13-14 year olds help others in school than 15-18 year olds. Younger youth, the 10-12 year olds (53.4%, n = 295) were also found to be significantly more involved in projects to make life better for others than the older youth, 13-14 year olds (45.8%, n = 184) and 15-18 year olds

(44.7%, n = 197). Significantly more 10-12 year olds (56.5%, n = 313) give time or money to charity than 13-14 year olds (42.9%, n = 173) and 15-18 year olds (49.0%, n = 216). Age group 10-12 (48.2%, n = 263) were significantly more engaged in helping the sick, poor, and hungry than age group 13-14 (36.7%, n = 147) and age group 15-18 (31.3%, n = 138).

Table 33Age Group Comparison in Caring for Others

	10-12	13-14	15-18
	Years Old	Years Old	Years Old
Type of Help	% n	% n	% n
Helped Others in School	93.1 <sup>a</sup> 514	84.3 <sup>b</sup> 339	78.0 <sup>°</sup> 334
Help Project to Make Life Better	53.4 <sup>a</sup> 295	45.8 <sup>b</sup> 184	44.7 <sup>b</sup> 197
Time or Money to Charity	56.6 <sup>a</sup> 313	42.9 <sup>b</sup> 173	49.0 <sup>b</sup> 216
Helped Sick, Poor, Hungry	48.2 <sup>a</sup> 263	36.7 <sup>b</sup> 147	31.3 <sup>b</sup> 138
<sup>a</sup> differing letters in a row $p < .05$			

Age group comparison in amount of negative behavior is shown in Table 34. Age group 15-18 (M = 2.26, SD .983) cheat on tests at a significantly higher frequency than age group 13-14 (M = 1.98, SD = .983) and age group 10-12 (M = 1.53, SD = .765), and age group 13-14 cheats on significantly more tests than age group 10-12. Older youth, age group 15-18 (M = 2.12, SD = 1.136) drink alcohol without parent permission at a significantly higher frequency than age group 13-14 (M = 1.64, SD = .974) and age group 10-12 (M = 1.15, SD = .490), and 13-14 years olds drink alcohol without parents permission at significantly higher frequency than 10-12 year olds. Age group 15-18 (M = 1.49, SD = .876) shoplift at a significantly higher frequency than age group 13-14 (M = 1.32, SD = .728) and age group 10-12 (M = 1.17, SD = .547), and 13-14 year olds

practice significantly more shoplifting than 10-12 year olds. Age group 10-12 (M = 1.07, SD = .373) use drugs at a significantly lower frequency age group 13-14 (M = 1.29, SD =.737) and age group 15-18 (M = 1.61, SD = 1.038), and 13-14 year olds practice significantly less drug use than 15-18 year olds. Age group 15-18 (M = 1.71, SD = .995) ride with a driver who has been drinking or using drugs at a significantly higher frequency than age group 13-14 (M = 1.50, SD = .875) and age group 10-12 (M = 1.27, SD = .682), and 13-14 year olds rode with a driver who had been drinking at a significantly higher frequency than the 10-12 year olds. Age group 10-12 (M = 1.27, SD = .643) damaged property at a significantly lower frequency than age group 13-14 (M =1.51, SD = .850) and age group 15-18 (M = 1.61, SD = .925). Age group 15-18 (M =1.51, SD = .974) smoke cigarettes at a significantly higher frequency than age group 13-14 (M = 1.31, SD = .736) and age group 10-12 (M = 1.11, SD = .434), and 13-14 year olds smoke cigarettes at a significantly higher frequency than 10-12 year olds. Age group 15-18 (M = 1.18, SD = .617) use smokeless tobacco at a significantly higher frequency than age group 13-14 (M = 1.10, SD = .407) and age group 10-12 (M = 1.06, SD = .340). Age group 15-18 (M = 2.02, SD = 1.181) engage in sexual activities at a higher frequency than age group 13-14 (M = 1.45, SD = .927) and age group 10-12 (M =1.15, SD = .560), and 13-14 year olds engage in significantly more sexual activity than 10-12 year olds. Age group 15-18 (M = 1.91, SD = 1.034) skip or cut class without parent permission at a significantly higher frequency than age group 13-14 (M = 1.35, SD = .738) and age group 10-12 (M = 1.11, SD = .457), and 13-14 year olds skip class at a higher frequency than 10-12 year olds.

inge Group Comparison in Amount	oj negu		iavioi				
	10-	12	13-	14	15-	18	
	Years	s Old	Years	Old	Years	Old	
Negative Behavior	$M^{z}$	SD	М	SD	М	SD	
Cheat on a Test	1.53 <sup>a</sup>	.765	1.98 <sup>b</sup>	.983	2.26 <sup>c</sup>	.983	
Drank Alcohol	1.15 <sup>a</sup>	.490	1.64 <sup>b</sup>	.974	2.12 <sup>c</sup>	1.136	
Shoplifted	$1.17^{a}$	.547	1.32 <sup>b</sup>	.728	1.49 <sup>c</sup>	.876	
Used Drugs	$1.07^{a}$	.373	1.29 <sup>b</sup>	.737	1.61 <sup>c</sup>	1.038	
Rode with DUI	1.27 <sup>a</sup>	.682	$1.50^{b}$	.875	1.71 <sup>c</sup>	.995	
Damaged Property	1.27 <sup>a</sup>	.643	1.51 <sup>b</sup>	.850	1.61 <sup>b</sup>	.925	
Smoked Cigarettes	1.11 <sup>a</sup>	.434	1.31 <sup>b</sup>	.736	1.51 <sup>c</sup>	.974	
Used Smokeless Tobacco	$1.06^{a}$	.340	$1.10^{a}$	.407	1.18 <sup>b</sup>	.617	
Sexual Activity	$1.15^{a}$	.560	1.45 <sup>b</sup>	.927	$2.02^{\circ}$	1.181	
Skip or Cut Class	1.11 <sup>a</sup>	.457	1.35 <sup>b</sup>	.738	1.91 <sup>°</sup>	1.034	
		-					

Age Group Comparison in Amount of Negative Behavior

Table 34

<sup>z</sup>Means of frequency scale responses (1 = never, 2 = once, 3 = a few times, 4 = frequently) <sup>a</sup>differing letters in a row p < .05

Age group comparison in personal identity is presented in Table 35. Age group  $10-12 \ (M = 3.90, SD = .989)$  had significantly stronger agreement with the statement, *I feel really sad when one of my friends is unhappy*, than age group  $13-14 \ (M = 3.68, SD = 1.042)$  and age group  $15-18 \ (M = 3.64, SD = 1.008)$ . Age group  $10-12 \ (M = 4.36, SD = .990)$  had significantly strong agreement with the statement, *I know how to say no when someone wants me to do things that are wrong or dangerous*, than age group  $13-14 \ (M = 4.13, SD = 1.080)$  and age group  $15-18 \ (M = 3.98, SD = 1.022)$ , and  $13-14 \ year olds$  had significantly stronger agreement with that statement than  $15-18 \ year olds$ . Age group  $10-12 \ (M = 3.87, SD = 1.031)$  had significantly stronger agreement with the statement, *I stay away from people who might get me in trouble*, than age group  $13-14 \ (M = 3.50, SD = 1.153)$  and age group  $15-18 \ (M = 3.19, SD = 1.006)$ , and  $13-14 \ year olds$  had significantly stronger agreement than the  $15-18 \ year olds$ . The younger age group,  $10-12 \ (M = 3.19, SD = 1.006)$ , and  $13-14 \ year olds$  had significantly stronger agreement than the  $15-18 \ year olds$ .

years old (M = 3.04, SD = 1.424) had significantly stronger agreement with the statement, I volunteer in class to lead activities, than the 13-14 age group (M = 2.77, SD = 1.094) and the 15-18 age group (M = 2.58, SD = 1.058), and the 13-14 year olds had significantly stronger agreement with the statement than the 15-18 year olds. Older youth, age group 15-18 (M = 3.15, SD = 1.057), had significantly stronger agreement with the statement, I am comfortable in new situations, than the younger age group 10-

12 (M = 3.20, SD = .981).

Age Group Comparison in Personal Identity

	10-	12	13-14		15-	18	
	Year	s Old	Years	s Old	Years	s Old	
Identity Characteristic	$M^{\mathrm{z}}$	SD	M	SD	M	SD	
Good at planning ahead	3.32	.991	3.30	.924	3.42	.947	
Care about other's feelings	4.07	.936	4.02	.922	4.02	.914	
Sad when friends are unhappy	$3.90^{a}$	.989	3.68 <sup>b</sup>	1.042	3.64 <sup>b</sup>	1.008	
Good at making and keeping friends	4.04	.952	4.05	.855	4.03	.848	
Say no when asked to do something wrong	4.36 <sup>a</sup>	.990	4.13 <sup>b</sup>	1.080	3.98 <sup>c</sup>	1.022	
Stay away from people that get me in							
trouble	3.87 <sup>a</sup>	1.031	3.50 <sup>b</sup>	1.153	3.19 <sup>c</sup>	1.006	
Volunteer in class to lead activities	3.04 <sup>a</sup>	1.424	2.77 <sup>b</sup>	1.094	2.58 <sup>c</sup>	1.058	
Meet and greet new people easily	3.49	1.027	3.53	.992	3.57	.997	
Comfortable in new situations	3.20 <sup>a</sup>	.981	3.26 <sup>ab</sup>	.915	3.35 <sup>b</sup>	.971	
Others kids look up to me	3.18	1.098	3.09	1.094	3.15	1.057	
<sup>z</sup> Means of Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = $\frac{1}{2}$							

agree, 5 = strongly agree

<sup>a</sup>differing letters in a row p < .05

Table 36 shows age group comparison in positive identity. Age group 10-12 (M = 2.95, SD = 1.245) expressed significantly stronger agreement and less positive identity to the negatively phrased statement, I have little control over the things that will happen

*in my life*, than age group 13-14 (M = 2.50, SD = 1.203) and age group 15-18 (M = 2.51, SD = 1.164). Age group 10-12 (M = 3.01, SD = 1.257) had significantly stronger agreement and less positive identity to the negatively phrased statement, *at times I think I am no good at all*, than age group 13-14 (M = 2.81, SD = 1.268) and age group 15-18 (M = 2.79, SD = 1.200).

Table 36Age Group Comparison in Positive Identity

	10-	12	13-14		15-18	
	Years	Old	Years Old		Years Old	
Statements	$M^{\mathrm{z}}$	SD	M	SD	M	SD
When things don't go well for me, I am						
good at finding a way to make						
things better	3.55	.957	3.53	.875	3.49	.953
I have little control over things that will						
happen in my life <sup>n</sup>	2.95 <sup>a</sup>	1.245	$2.50^{b}$	1.203	2.51 <sup>b</sup>	1.164
On the whole I like myself.	4.01	1.009	3.96	.990	3.91	1.022
At times, I think I am no good at all <sup>n</sup>	3.01 <sup>a</sup>	1.257	2.81 <sup>b</sup>	1.268	$2.79^{b}$	1.200
All in all, I am glad I am me	4.16	.980	4.15	.928	4.13	.914
I feel I do not have much to be proud of <sup>n</sup>	2.25	1.227	2.16	1.183	2.11	1.075
Sometimes I feel like my life has						
no purpose <sup>n</sup>	2.29	1.318	2.31	1.320	2.26	1.253
<sup>z</sup> Means of Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 =						
agree, $5 = \text{strongly agree}$ )						
<sup>n</sup> Negatively phrased statements						
<sup>a</sup> differing letters in a row $p < .05$						

Age group comparison in self-confidence, character and empowerment is shown in Table 37. Age group 10-12 (M = 3.84, SD = .940) had significantly weaker agreement with the statement, *I can do things on my own*, than age group 13-14 (M = 4.06, SD .840) and age group 15-18 (M = 4.16, SD = .795). Age group 10-12 (M = 3.67, SD = 1.008) had significantly weaker agreement with the statement, *I set goals*, than age group 13-14 (M = 3.79, SD = .941) and age group 15-18 (M = 3.79, .977). Age group 10-12 (M = 3.79, .977). 3.95, SD = .937) had significantly weaker agreement with the statement, *I like to try new* things, than age group 13-14 (M = 4.07, SD = .831) and age group 15-18 (M = 4.17, SD= .763). Age group 10-12 (M = 3.43, SD = 1.067) has significantly stronger agreement with the statement, adults in my town or city make me feel important, than age group 13-14 (M = 3.20, SD = 1.058) and age group 15-18 (M = 3.10, SD = .984). Age group 10-12 (M = 3.30, SD = 1.100) had a significantly stronger agreement with the statement, *adults* in my town or city listen to what I have to say, than age groups 13-14 (M = 3.00, SD =1.074) and age group 15-18 (M = 3.00, SD = 1.043). Age group 10-12 (M = 2.28, SD =1.123) had a significantly weaker agreement to the negatively phrase statement, *adults in* my town or city don't care about people my age, than the 13-14 age group (M = 2.68, SD = 1.157) and age group 15-18 (M = 2.71, SD = 1.47). Age group 10-12 (M = 3.43, SD = 1.057) had a significantly stronger agreement to the statement, in my town or city I feel *like I matter to people*, than age group 13-14 (M = 3.27, SD = 1.006) and age group 15-18 (*M* = 3.16, *SD* = .982). Age group 10-12 (*M* = 3.99, *SD* 1.010) had a significantly stronger agreement to the statement, in my family I feel useful and important, than age group 13-14 (M = 3.78, SD = 1.089) and age group 15-18 (M = 3.77, SD = 1.043). Age group 10-12 (M = 3.14, SD = 1.135) had a significantly stronger agreement with the statement, I'm given lots of chances to help make my town or city a better place to live, than age group 13-14 (M = 2.89, SD = 1.054) and age group 15-18 (M = 2.81, SD =1.017). Age group 10-12 (M = 3.17, SD = 1.114) had a significantly weaker agreement with the statement, students help decide what goes on at my school, than age group 1314 (M = 3.33, SD = 1.079) and age group 15-18 (M = 3.46, SD = .991). Age group 10-12 (M = 2.77, SD 1.310) had a significantly stronger agreement with the statement, *I have good record keeping skills*, than age group 13-14 (M = 2.40, SD = 1.157) and age group 15-18 (M = 2.27, SD = 1.092).

Table 37

Age Group Comparison in Self-Confidence, Character and Empowerment

	10-12		13-14		15-18	
	Years	Old	Years Old		Years	Old
Statements	$M^{\mathrm{z}}$	SD	M	SD	M	SD
I can do things on my own	3.84 <sup>a</sup>	.940	4.06 <sup>b</sup>	.840	4.16 <sup>b</sup>	.795
I set goals	3.67 <sup>a</sup>	1.008	3.79 <sup>b</sup>	.941	3.79 <sup>b</sup>	.977
Ten years from now, I think I will be						
very happy	4.07	.954	4.10	.898	4.10	.858
I am responsible for my actions	4.18	.834	4.18	.818	4.26	.734
I like to try new things	3.95 <sup>a</sup>	.937	4.07 <sup>b</sup>	.831	4.17 <sup>b</sup>	.763
I am a good organizer	3.16	1.166	3.12	1.228	3.18	1.162
I am a good money manager	3.32	1.199	3.30	1.161	3.36	1.115
Adults in my town or city make me feel						
important	3.43 <sup>a</sup>	1.076	3.20 <sup>b</sup>	1.058	3.10 <sup>b</sup>	.984
Adults in my town or city listen to what						
I have to say	3.30 <sup>a</sup>	1.100	3.00 <sup>b</sup>	1.074	3.00 <sup>b</sup>	1.043
Adults in my town or city don't care						
about people my age <sup>n</sup>	$2.28^{a}$	1.123	2.68 <sup>b</sup>	1.157	2.71 <sup>b</sup>	1.047
In my town or city, I feel like I matter to						
people	3.43 <sup>a</sup>	1.057	3.27 <sup>b</sup>	1.006	3.16 <sup>b</sup>	.982
In my family I feel useful and important	3.99 <sup>a</sup>	1.010	3.78 <sup>b</sup>	1.089	3.77 <sup>b</sup>	1.043
I'm given lots of chances to help make my						
town or city a better place to live	3.14 <sup>a</sup>	1.135	2.89 <sup>b</sup>	1.054	2.81 <sup>b</sup>	1.017
Students help decide what goes on at						
my school	3.17 <sup>a</sup>	1.114	3.33 <sup>b</sup>	1.079	3.46 <sup>b</sup>	.991
I have good written record keeping skills	$2.77^{a}$	1.310	$2.40^{b}$	1.157	2.27 <sup>b</sup>	1.092
I am comfortable giving a speech or						
demonstration	2.84	1.324	2.87	1.273	2.73	1.296
<sup>z</sup> Means of Likert scale responses (1 = strong	gly disag	gree, 2 =	= disagr	ree, $3 = 1$	neutral,	4 =
agree, $5 = \text{strongly agree}$			U			

<sup>a</sup>differing letters in a row p < .05

<sup>n</sup>Negatively phrased statement

## Comparison of Gender

Gender comparisons were made in; extracurricular activity involvement; school leadership positions held; close relationships with adults; caring for others; amount of negative behavior; personal identity; positive identity; and self-confidence, character and empowerment. Gender comparison in extracurricular activity involvement is presented in Table 38. Significantly more females (47.6%, n = 340) participated in drama, art, and music than males (29.8%, n = 186). Conversely, significantly more males (57.7%, n = 365) participated in sports teams, than females (46.7%, n = 335). Significantly more females (22.2%, n = 156) participated in school clubs than males (15.7%, n = 98).

Gender Comparison in Extracurricular Activity Involvement						
	Female Youth		Male Y	outh		
Activities	%	n	%	n		
Drama, Art, Music	*47.6	340	*29.8	186		
Sports Teams	*46.7	335	*57.7	365		
School Clubs	*22.2	156	*15.7	98		
4-H	11.9	83	9.0	56		
Outside School Clubs	21.3	150	21.7	135		
Spiritual	27.0	190	22.5	139		
Nothing Special To Do	83.0	606	79.3	501		
* <i>p</i> < .05						

 Table 38

 Comparison in Extracurricular Activity Involv

Gender comparison in school leadership positions held is shown in Table 39. Significantly more females (15.8%, n = 114) held school leadership positions than males (11.1%, n = 73). Significantly more female students (12.6%, n = 94) occupied school committee positions than male students (8.1%, n = 55).

	Female	Youth	Male Youth		
Position Type	%	n	%	n	
Elected Leadership	13.3	96	11.1	73	
Held Leadership Position	*15.8	114	*11.1	73	
Committee Chair	6.4	48	5.4	37	
Committee Member	*12.6	94	*8.1	55	

Table 39Gender Comparison in School Leadership Positions Held

Gender comparison in close relationship with adults is shown in Table 40. Females (76.9%, n = 575) had significantly more good 10 minute conversations with an adult other than a parent/guardian than males (70.1%, n = 480). Females (78.6%, n = 570) were significantly more prone to discuss drugs with parents/guardians than males (72.1%, n = 487). Female students (77.9%, n = 565) were significantly more likely to discuss the subject of alcohol with a parent/guardian than male students (70.8, n = 479). Females ((61.3%, n = 442) were significantly more likely to discuss the subject of sex with a parent/guardian than males (54.3%, n = 363). Females (81.3%, n = 587) were also significantly more likely to discuss other issues with parents/guardians than males (73.3%, n = 493).

Table 40

Gender Comparison in Close Relationship with Adults

	Female	Youth	Male	Youth
Relationship	%	n	%	n
If you had an important question about your life,				
is there an adult (other than a parent/guardian)				
whom you feel comfortable going to for help?	67.6	503	63.1	429
In the last month, did you have a good conversation				
with one of your parents/guardians that lasted 10				
minutes or more?	86.3	641	85.7	589
In the last month, did you have a good conversation				
with an adult (other than a parent/guardian) that				
lasted 10 minutes or more?	*76.9	575	*70.1	480
Discussed drugs with parents/guardians	*78.6	570	*72.1	487
Discussed alcohol with parents/guardians	*77.9	565	*70.8	479
Discussed sex with parents/guardians	*61.3	442	*54.3	363
Discussed other issues with parents/guardians	*81.3	587	*73.4	493
*m < 05				

Table 41 shows gender comparison in caring for others. Females (89.2%, n = 699) helped others in school this past year significantly more than males (82%, n = 564). Females (53.8 %, n = 405) were significantly more likely to donate time or money to charity or organizations that help people than males (46.2%, n = 315). Females (43.1%, n = 322) were significantly more likely to spend time helping people who are poor, hungry, sick or unable to care for themselves than males (73.4%, n = 240).

	Female	Youth	Male Youth		
Type of Help	%	n	%	n	
Helped Others in School	*89.2	699	*82.0	564	
Help Project to Make Life Better	50.0	374	46.6	319	
Time or Money to Charity	*53.8	405	*46.2	315	
Helped Sick, Poor, Hungry	*43.1	322	*35.4	240	
* . 05					

Table 41Gender Comparison in Caring for Others

Gender comparison in amount of negative behavior is reported in Table 42. Male students (M = 1.97, SD = 1.010) have cheated on a test significantly more often within the past year than female students (M = 1.85, SD = .913). Males (M = 1.41, SD .815) practiced significantly more shoplifting in the past year than females (M = 1.26, SD = .679). Male students (M = 1.36, SD = .851) have used drugs like marijuana, methamphetamines or cocaine, or sniffed glue or other fumes to get high, significantly more often than females (M = 1.28, SD = .748). Male youth (M = 1.61, SD = .923) damage property just for the fun of it, significantly more often than female youth (M = 1.18, SD = .596) used smokeless tobacco significantly more often than females (M = 1.06, SD = .343). Males (M = 1.46, SD = .936). In the past year, male s(M = 1.50, SD = .886) skip or cut class without parent permission significantly more often than females (M = 1.50, SD = .886) skip or cut class without

	Female Youth	Male Youth				
Negative Behavior	$M^{z}$ SD	M SD				
Cheat on a Test	*1.85 .913	*1.97 1.010				
Drank Alcohol	1.60 .983	1.62 .968				
Shoplifted	*1.26 .679	*1.41 .815				
Used Drugs	*1.28 .748	*1.36 .851				
Rode with DUI	1.47 .851	1.50 .894				
Damaged Property	*1.33 .689	*1.61 .923				
Smoked Cigarettes	1.30 .746	1.31 .772				
Used Smokeless Tobacco	*1.06 .343	*1.18 .596				
Sexual Activity	*1.46 .936	*1.61 1.028				
Skip or Cut Class	*1.38 .782	*1.50 .886				
<sup>2</sup> Means of frequency scale responses (1 = never, 2 = once, 3 = a few times, 4 =						

Table 42Gender Comparison in Amount of Negative Behavior

<sup>2</sup>Means of frequency scale responses (1 = never, 2 = once, 3 = a few times frequently) \*p < .05

Table 43 shows gender comparison in personal identity. Females (M = 3.44, SD = .941) had significantly stronger agreement than males (M = 3.24, SD = .960) with the statement, *I am good at planning ahead*. Female students (M = 4.25, SD = .858) had significantly stronger agreement with the statement, *I care about other people's feelings*, than male students (M = 3.78, SD = .949). Females (M = 4.07, SD = .905) felt significantly stronger about the statement, *I feel really sad when one of my friends is unhappy*, than males (M = 3.38, SD = 1.031). Females (M = 4.26, SD = .980) had significantly stronger agreement with the statement, *I know how to say no when someone wants me to do things I know are wrong or dangerous*, than males (M = 4.06, SD = 1.108). Female youth (M = 3.64, SD = 1.072) had significantly stronger agreement with the statement, *I stay away from people who get me in trouble*, than male youth (M = 3.41, SD = 1.136). Females (M = 2.89, SD = 1.117) expressed significantly stronger

agreement than males (M = 2.70, SD = 1.119) with the statement, *I volunteer in class to lead activities*. Females (M = 3.20, SD = 1.051) had significantly stronger agreement with the statement, *I feel other kids look up to me and follow my example*, than males (M = 3.06, SD = 1.130).

Table 43Gender Comparison in Personal Identity

	Female Youth		Male Youth
Identity Characteristic	$M^{\mathrm{z}}$	SD	M SD
Good at planning ahead	*3.44	.941	*3.24 .960
Care about other's feelings	*4.25	.858	*3.78 .949
Sad when friends are unhappy	*4.07	.905	*3.38 1.031
Good at making and keeping friends	4.06	.885	4.00 .926
Say no when asked to do something wrong	*4.26	.980	*4.06 1.108
Stay away from people that get me in trouble	*3.64	1.072	*3.41 1.136
Volunteer in class to lead activities	*2.89	1.117	*2.70 1.119
Meet and greet new people easily	3.57	1.027	3.48 .984
Comfortable in new situations	3.24	.963	3.27 .959
Others kids look up to me	*3.20	1.051	*3.06 1.130

<sup>2</sup>Means of Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) \*p < .05

Gender comparison in positive identity is shown in Table 44. Males (M = 2.76,

SD = 1.251) expressed significantly more disagreement to the negatively phrased

statement, at times I think I am no good at all, than females (M = 2.98, SD = 1.224).

Female Youth Male Youth  $M^{z}$ Statements SD М SD When things don't go well for me, I am good at finding a way to make things better .952 3.50 .913 3.53 I have little control over things that will happen in my life<sup>n</sup> 2.71 1.236 2.66 1.225 On the whole I like myself 3.92 1.021 4.01 .990 At times, I think I am no good at all<sup>n</sup> \*2.98 1.224 \*2.76 1.251 All in all, I am glad I am me 4.15 .993 4.15 .914 I feel I do not have much to be proud of<sup>n</sup> 2.15 1.150 2.22 1.190 Sometimes I feel like my life has no purpose<sup>n</sup> 2.35 1.320 2.21 1.272 <sup>z</sup>Means of Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 =

Table 44Gender Comparison in Positive Identity

<sup>2</sup>Means of Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) <sup>n</sup>Negatively phrased statements \*p < .05

Gender comparison in self-confidence, character and empowerment is shown in Table 45. Females (M = 3.80, SD = .958) had significantly stronger agreement to the statement, *I set goals*, than males (M = 3.69, SD = 1.016). Female students (M = 4.27, SD = .786) had significantly stronger agreement than male students (M = 4.11, SD =.848) with the statement, *I am responsible for my actions*. Female youth (M = 3.31, SD =1.195) had significantly stronger agreement with the statement, *I am a good organizer*, than male youth (M = 2.98, SD = 1.141). Males (M = 3.41, SD = 1.154) had significantly stronger agreement with the statement, *I am a good money manager*, than females (M =3.26, SD = 1.166). Females (M = 3.03, SD = 1.070) had significantly stronger agreement than males (M = 2.90, SD = 1.117) with the statement, *I'm given lots of chances to help make my town or city a better place to live*. Females (M = 3.36, SD = 1.070) had significantly stronger agreement than males (M = 3.21, SD = 1.070) had students help decide what goes on at my school. Females (M = 2.90, SD = 1.212) had

significantly stronger agreement than males (M = 2.06, SD = 1.032) with the statement, I

have good record keeping skills.

### Table 45

Gender	Compariso	n in Self-C	Confidence,	Character an	d Empowerment
	1				1

	FemaleYouth		Male Y	Youth	
Statements	$M^{\mathrm{z}}$	SD	M	SD	
I can do things on my own	3.39	.888	4.04	.882	
I set goals	*3.80	.958	*3.69	1.016	
Ten years from now, I think I will be very					
happy	4.12	.921	4.03	.933	
I am responsible for my actions	*4.27	.786	*4.11	.848	
I like to try new things	4.08	.854	4.02	.869	
I am a good organizer	*3.31	1.195	*2.98	1.141	
I am a good money manager	*3.26	1.166	*3.41	1.154	
Adults in my town or city make me feel					
important	3.27	1.092	3.25	1.016	
Adults in my town or city listen to what					
I have to say	3.12	1.097	3.13	1.080	
Adults in my town or city don't care about					
people my age <sup>n</sup>	2.49	1.113	2.58	1.156	
In my town or city, I feel like I matter to people	3.32	1.036	3.28	1.032	
In my family I feel useful and important	3.85	1.076	3.87	1.023	
I'm given lots of chances to help make my town					
or city a better place to live	*3.03	1.068	*2.90	1.117	
Students help decide what goes on at my school	*3.36	1.070	*3.21	1.087	
I have good written record keeping skills	*2.90	1.212	*2.06	1.032	
I am comfortable giving a speech or demonstration	2.75	1.323	2.87	1.267	
$\overline{Z}$ $M_{\text{const}}$ $= 61$ $\overline{L}$ $\overline{L}_{\text{const}}$ $\overline{L}_{co$	2	_ 1:			

<sup>z</sup>Means of Likert scale responses (1 = strongly disagree, 2 = disagree,

3 = neutral, 4 = agree, 5 = strongly agree)

<sup>n</sup>Negatively phrased statement

#### Comparison of 4-H Participation

Youth who have been involved in a 4-H Club that meet formally outside of school were compared to those that have never been involved in 4-H. 4-H participation was determined by survey question 56, *have you ever belonged to a 4-H club that meets formally outside of school?* 4-H participation comparisons were made in; extracurricular activity involvement; school leadership positions held; close relationships with adults; caring for others; amount of negative behavior; personal identity; positive identity; and self-confidence, character and empowerment.

4-H participation comparison in extracurricular activity involvement is shown in Table 46. 4-H youth (48.1%, n = 75) were found to be significantly more involved in drama, art and music activities than non 4-H youth (37.4%, n = 430). 4-H youth (67.7%, n = 107) were significantly more active in school and community sports teams than non 4-H youth (49.7%, n = 576). 4-H youth (29.4%, n = 45) were significantly more involved in school clubs than non 4-H youth (17.7%, n = 202). 4-H youth (43.6%, n = 68) were significantly more involved in 4-H than non 4-H youth (5.8%, n = 65). The discrepancy in this finding may have been caused by confusion between in-school and outside-of-school 4-H programming. 4-H youth (35.2%, n = 55) were involved in significantly more outside school clubs than non 4-H youth (18.9%, n = 215). 4-H youth (31.8%, n = 49) were active in significantly more spiritual activities than non 4-H youth (24.2%, n = 274).

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4-η Γαπιείραποη Comparison in Exiracurricular Activity Involvement					
	Non 4-H Youth		4-H Y	outh	
Activities	%	n	%	n	
Drama, Art, Music	*37.4	430	*48.1	75	
Sports Teams	*49.7	576	*67.7	107	
School Clubs	*17.7	202	*29.4	45	
4-H	*5.8	65	*43.6	68	
Outside School Clubs	*18.9	215	*35.2	55	
Spiritual	*24.2	274	*31.8	49	
Nothing Special To Do	81.4	953	82.8	130	

Table 46 A-H Participation Comparison in Extracurricular Activity Involvement

4-H participation comparison in school leadership positions held is displayed in Table 47. 4-H youth (20.1%, n = 32) were elected to significantly more school leadership positions than non 4-H youth (11.4%, n = 136). 4-H youth (20.1%, n = 32) held significantly more school leadership positions than non 4-H youth (12.9%, n = 153). 4-H youth (9.8%, n = 16) served as chair of significantly more school committees, than non 4-H youth (5.1%, n = 63). 4-H youth (15.9%, n = 26) served as a member on significantly more school committees than non 4-H youth (9.3%, n = 115).

Table 47				
4-H Participation Compari,	son in Schoo	l Leadership H	Positions Held	
	Non 4-H Youth		4-H Y	outh
Position Type	%	n	%	n
Elected Leadership	*11.4	136	*20.1	32
Held Leadership Position	*12.9	153	*20.1	32
Committee Chair	*5.1	63	*9.8	16
Committee Member	*9.3	115	*15.9	26
* <i>p</i> < .05				

Table 48 shows 4-H participation comparison in close relationships with adults. 4-H youth (72.7%, n = 120) were significantly more comfortable than non 4-H youth (64.2%, n = 786) to seeking help from an adult, other than a parent/guardian, regarding an important question about life. 4-H youth (82.4%, n = 136) had significantly more good 10 minute conversations with an adult other than a parent/guardian than non 4-H youth (72.4%, n = 893).

Table 48				
4-H Participation	Comparison	in Close	Relationship	os with Adults

	Non 4-H	Youth	4-H Y	outh
Relationships	%	n	%	n
If you had an important question about your life,				
is there an adult (other than a parent/guardian)				
whom you feel comfortable going to for help?	*64.2	786	*72.7	120
In the last month, did you have a good conversation				
with one of your parents/guardians that lasted 10				
minutes or more?	85.9	1059	87.7	143
In the last month, did you have a good conversation				
with an adult (other than a parent/guardian) that				
lasted 10 minutes or more?	*72.4	893	*82.4	136
Discussed drugs with parents/guardians	75.6	910	74.5	120
Discussed alcohol with parents/guardians	74.1	893	75.2	121
Discussed sex with parents/guardians	57.0	681	63.1	101
Discussed other issues with parents/guardians	77.2	926	78.1	125
* <i>p</i> < .05				

4-H participation comparison in caring for others is shown in Table 49. 4-H youth (92.1%, n = 152) helped significantly more people in school than non 4-H youth (85.0%, n = 1052). 4-H youth (62.8%, n = 103) were involved in significantly more projects to make life better for others, than non 4-H youth (45.9%, n = 566). 4-H youth (58.2%, n = 96) were significantly more engaged in giving money and time to charity or organizations that help people than non 4-H youth (48.4%, n = 595). 4-H youth (52.4%, n = 86) spent significantly more time helping people who are poor, sick, hungry, or unable to help themselves than non 4-H youth (36.8%, n = 450).

4-H Participation Comparison in Caring for Others							
	Non 4-H	I Youth	4-H Youth				
Type of Help	%	n	%	n			
Helped Others in School	*85.0	1052	*92.1	152			
Help Project to Make Life Better	*45.9	566	*62.8	103			
Time or Money to Charity	*48.4	595	*58.2	96			
Helped Sick, Poor, Hungry	*36.8	450	*52.4	86			
* <i>p</i> < .05							

Table 494-H Participation Comparison in Caring for Others

Table 50 shows 4-H participation comparison in amount of negative behavior. No significant differences were found between 4-H and non 4-H youth in the frequency

within	whick	h they	engage	in negat	tive be	haviors.

4-H Participation Comparison in Amount of Negative Behavior						
	Non 4-F	I Youth	4-H Y	outh		
Negative Behavior	$M^{z}$	SD	М	SD		
Cheat on a Test	1.91	.968	1.91	.949		
Drank Alcohol	1.62	.976	1.58	.998		
Shoplifted	1.33	.747	1.35	.801		
Used Drugs	1.32	.800	1.35	.845		
Rode with DUI	1.49	.979	1.53	.932		
Damaged Property	1.46	.824	1.43	.796		
Smoked Cigarettes	1.31	.759	1.31	.793		
Used Smokeless Tobacco	1.11	.470	1.17	.572		
Sexual Activity	1.54	.988	1.51	.989		
Skip or Cut Class	1.45	.840	1.42	.875		
<sup>z</sup> Means of frequency scale responses $(1 = never, 2 = once, 3 = a \text{ few times}, 4 = 0)$						
frequently)						

Table 50 4 H Participation Comparison in Amount of Negative P

4-H participation comparison in personal identity is shown in Table 51. 4-H

youth (M = 3.00, SD = 1.208) expressed significantly stronger agreement to the

statement, I volunteer in class to lead activities, than non 4-H youth (M = 2.76, SD =

1.099).

Table 51

4-H Participation Comparison in Personal Identity

	Non 4-H	H Youth	4-H Y	Youth	
Identity Characteristic	$M^{z}$	SD	M	SD	
Good at planning ahead	3.34	.946	3.35	.998	
Care about other's feelings	4.04	.911	3.99	1.015	
Sad when friends are unhappy	3.74	1.005	3.77	1.133	
Good at making and keeping friends	4.04	.901	3.95	.892	
Say no when asked to do something wrong	4.14	1.060	4.26	.950	
Stay away from people that get me in trouble	3.53	1.099	3.53	1.140	
Volunteer in class to lead activities	*2.76	1.099	*3.00	1.208	
Meet and greet new people easily	3.53	.994	3.47	1.096	
Comfortable in new situations	3.25	.954	3.34	.976	
Others kids look up to me	3.12	1.080	3.23	1.105	
	•	1.	2	1 1 4	

<sup>z</sup>Means of Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) \*p < .05

4-H participation comparison in positive identity is shown in Table 52. No

significant differences were found between 4-H and non 4-H youth within the items used

to measure positive identity.

	Non 4	-H Yout	h 4-H	Youth
Statements	$M^{z}$	SD	М	SD
When things don't go well for me, I am good				
at finding a way to make things better	3.52	.925	3.45	1.005
I have little control over things that will				
happen in my life <sup>n</sup>	2.68	1.226	2.59	1.200
On the whole I like myself.	3.96	1.018	4.01	.975
At times, I think I am no good at all <sup>n</sup>	2.89	1.232	2.82	1.283
All in all, I am glad I am me	4.15	.942	4.15	.988
I feel I do not have much to be proud of <sup>n</sup>	2.17	1.153	2.20	1.198
Sometimes I feel like my life has no purpose <sup>n</sup>	2.28	1.294	2.35	1.304
<sup>z</sup> Means of Likert scale responses (1 = strongly disa	agree, 2	= disagre	ee, 3 =	neutral, 4
agree, $5 = \text{strongly agree}$ )				
<sup>n</sup> Negatively phrased statements				

Table 524-H Participation Comparison in Positive Identity

4-H participation comparison in self-confidence, character and empowerment is shown in Table 53. 4-H youth (M = 3.46, SD = 1.110) had significantly stronger agreement than non 4-H youth (M = 3.22, SD = 1.047) with the statement, *adults in my town make me feel important*. 4-H youth (M = 3.49, SD 1,033) expressed significantly stronger agreement to the statement, *in my town or city I feel like I matter to people*, than non 4-H youth (M = 3.26, SD = 1.024). 4-H youth (M = 3.44, SD = 1.084) had stronger agreement to the statement, *I'm given lots of chances to help make my town or city a better place to live*, than non 4-H youth (M = 2.89, SD = 1.077). 4-H youth (M = 2.82, SD = 1.243) had significantly stronger agreement than non 4-H youth (M = 2.44, SD =1.210) to the statement, *I have good written record keeping skills*.

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Non 4-H Youth 4-H Youth  $M^{z}$ Statements SD М SD I can do things on my own 4.00 .872 4.03 .913 I set goals 3.73 .987 3.84 .989 Ten years from now, I think I will be very 4.08 .912 4.07 1.061 happy I am responsible for my actions 4.18 .815 4.24 .859 I like to try new things 4.04 .868 4.08 .829 I am a good organizer 3.14 1.178 3.21 1.212 I am a good money manager 3.30 1.154 3.46 1.179 Adults in my town or city make me feel important \*3.22 1.047 \*3.46 1.110 Adults in my town or city listen to what I have to say 3.09 1.076 3.22 1.135 Adults in my town or city don't care about people my age<sup>n</sup> 2.53 1.118 2.48 1.210 In my town or city, I feel like I matter to people \*3.26 1.024 \*3.49 1.033 In my family I feel useful and important 3.84 1.058 3.94 1.016 I'm given lots of chances to help make my town or city a better place to live \*2.89 1.077 \*3.44 1.084 Students help decide what goes on at my school 3.28 1.077 3.29 1.144 I have good written record keeping skills \*2.44 1.210 \*2.82 1.243 I am comfortable giving a speech or demonstration 2.80 1.296 2.86 1.262 <sup>z</sup>Means of Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree)

Table 53

*4-H Participation Comparison in Self-Confidence, Character and Empowerment* 

<sup>n</sup>Negatively phrased statement

# **Comparison of Population Density**

School district location was used to determine urban/rural designation.

Questionnaires returned from Washoe county schools were coded urban. All other

returned questionnaires were coded rural. Population density is synonymous to

comparison between urban and rural. Urban and rural comparisons were made in;

extracurricular activity involvement; school leadership positions held; close relationships

with adults; caring for others; amount of negative behavior; personal identity; positive identity; and self-confidence, character and empowerment.

Table 54 shows urban and rural comparison in extracurricular activity involvement. Rural youth (43.2%, n = 224) were significantly more involved in drama, art and music activities than urban youth (37.3%, n = 320). Rural youth (58.3%, n = 305) were significantly more involved in school and community sports teams than urban youth (48.1%, n = 415). Rural youth (23.2%, n = 118) were significantly more active in school clubs than urban youth (17.1%, n = 145). Rural youth (13.2%, n = 67) were significantly more involved in 4-H than urban youth (9.3%, n = 78). Rural youth (29.2%, n = 149) were significantly more involved in spiritual activities than urban youth (22.5%, n = 189).

Urban and Kurai Comparison in Extracurricular Activity Involvement								
Urban Youth			Rural Youth					
Activities	%	n	%	n				
Drama, Art, Music	*37.3	320	*43.2	224				
Sports Teams	*48.1	415	*58.3	305				
School Clubs	*17.1	145	*23.2	118				
4-H	*9.3	78	*13.2	67				
Outside School Clubs	20.4	173	23.4	120				
Spiritual	*22.5	189	*29.2	149				
Nothing Special To Do	81.3	711	81.1	424				
* <i>p</i> < .05								

Table 54				
Urban and Rural	Comparison in	Extracurricular	Activity	Involvement

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Urban and rural comparison in school leadership positions held is represented in Table 55. Rural youth (12.7%, n = 69) were significantly more involved as members of school committees than urban youth (9.2%, n = 85).

Orban and Karai Comparison in School Leadership I Ostitons Heid								
	Urban Y	Youth	Rural	Youth				
Position Type	%	n	%	n				
Elected Leadership	11.3	99	14.4	77				
Held Leadership Position	12.9	133	15.2	81				
Committee Chair	5.5	51	7.0	38				
Committee Member	*9.2	85	*12.7	69				

Urban and Rural Comparison in School Leadership Positions Held

Table 55

Table 56 shows urban and rural comparison in close relationships with adults. Rural youth (61.0%, n = 317) were significantly more willing to discuss the subject of sex with a parent/guardian than urban youth (55.6%, n = 500).

Table 56

Urban and Rural Comparison in Close Relationships with Adults

	Urban Y	Youth	Rural	Youth
Relationship	%	n	%	n
If you had an important question about your life,				
is there an adult (other than a parent/guardian)				
whom you feel comfortable going to for help?	65.8	605	64.9	349
In the last month, did you have a good conversation				
with one of your parents/guardians that lasted 10				
minutes or more?	86.0	792	85.6	464
In the last month, did you have a good conversation				
with an adult (other than a parent/guardian) that				
lasted 10 minutes or more?	72.0	663	75.3	409
Discussed drugs with parents/guardians	74.6	678	75.7	396
Discussed alcohol with parents/guardians	74.3	674	73.6	387
Discussed sex with parents/guardians	*55.6	500	*61.0	317
Discussed other issues with parents/guardians	76.8	903	77.0	402
* < 05				

<sup>\*</sup>*p* < .05

Urban and rural comparison in caring for others is shown in Table 57. Urban youth (41.9%, n = 380) spend significantly more time helping people who are poor, hungry, sick or unable to care for themselves than rural youth (34.9%, n = 186).

Urban and Rural Comparison in Caring for Others						
	Urban Y	outh	Rural Y	Rural Youth		
Type of Help	%	n	%	n		
Helped Others in School	84.7	787	87.5	477		
Help Project to Make Life Better	46.5	424	50.6	272		
Time or Money to Charity	52.2	477	45.9	246		
Helped Sick, Poor, Hungry	*41.9	380	*34.9	186		
* <i>p</i> < .05						

Table 57Urban and Rural Comparison in Caring for Other

Table 58 shows urban and rural comparison in amount of negative behavior. Urban youth (M = 1.39, SD = .804) practiced a significantly higher frequency of shoplifting than rural youth (M = 1.26, SD = .680). Rural youth (M = 1.56, SD = .920) rode in a car with a driver who had been drinking or using drugs significantly more often than urban youth (M = 1.46, SD = .864). Urban youth (M = 1.51, SD = .848) damaged property significantly more often than rural youth (M = 1.40, SD = .790). Rural youth (M = 1.38, SD = .860) smoked cigarettes significantly more frequently than urban youth (M = 1.27, SD = .700). Rural youth (M = 1.16, SD = .567) claimed to have used smokeless tobacco significantly more often than urban youth (M = 1.10, SD = .457). Urban youth (M = 1.53, SD = .900) skip or cut class without parent permission at a significantly higher frequency than rural youth (M = 1.31, SD = .720).

	Urban	Youth	Rural Youth
Negative Behavior	$M^{\mathrm{z}}$	SD	M SD
Cheat on a Test	1.95	.972	1.85 .950
Drank Alcohol	1.60	.961	1.63 1.011
Shoplifted	*1.39	.804	*1.26 .680
Used Drugs	1.35	.836	1.29 .772
Rode with DUI	*1.46	.864	*1.56 .920
Damaged Property	*1.51	.848	*1.40 .790
Smoked Cigarettes	*1.27	.700	*1.38 .860
Used Smokeless Tobacco	*1.10	.457	*1.16 .567
Sexual Activity	1.56	1.009	1.50 .954
Skip or Cut Class	*1.53	.900	*1.31 .720
<sup>z</sup> Means of frequency scale responses $(1 = n)$	ever, 2 =	= once, 3 =	= a few times, 4 =

Urban and Rural Comparison in Amount of Negative Behavior

Table 58

<sup>2</sup>Means of frequency scale responses (1 = never, 2 = once, 3 = a few times, 4 frequently) \*p < .05

Urban and rural comparison in personal identity is shown in Table 59. Urban youth (M = 4.06, SD = .956) had significantly stronger agreement than rural youth (M =3.96, SD = .900) with the statement, *I care about other people's feelings*. Urban youth (M = 2.86, SD = 1.099) had significantly stronger agreement with the statement, *I volunteer in class to lead activities*, than rural youth (M = 2.72, SD = 1.158). Urban students (M = 3.60, SD = .980) had significantly stronger agreement than rural students (M = 3.40, SD = 1.045) with the statement, *I meet and greet new people easily*. Urban youth (M = 3.31, SD = .923) had significantly stronger agreement with the statement, *I am comfortable in new situations*, than rural students (M = 3.18, SD = 1.021).

Table 59Urban and Rural Comparison in Personal Identity

	Urban Youth		Rural Youth
Identity Characteristic	$M^{z}$	SD	M SD
Good at planning ahead	3.35	.972	3.32 .935
Care about other's feelings	*4.06	.956	*3.96 .900
Sad when friends are unhappy	3.78	1.009	3.67 1.057
Good at making and keeping friends	4.03	.909	4.02 .902
Say no when asked to do something wrong	4.17	1.029	4.13 1.094
Stay away from people that get me in trouble	3.53	1.079	3.53 1.157
Volunteer in class to lead activities	*2.86	1.099	*2.72 1.158
Meet and greet new people easily	*3.60	.980	*3.40 1.045
Comfortable in new situations	*3.31	.923	*3.18 1.021
Others kids look up to me	3.16	1.048	3.07 1.161
	•	1.	0 1 1

<sup>2</sup>Means of Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) \*p < .05

Table 60 shows urban and rural comparison in positive identity. Urban youth (M = 3.57, SD = .911) expressed significantly stronger agreement than rural youth (M = 3.42, SD = .973) with the statement, when things don't go well for me I am good at finding a way to make things better. Urban students (M = 4.01, SD = .974) had significantly stronger agreement with the statement, on the whole I like myself, than rural students (M = 3.85, SD = 1.074). Urban youth (M = 4.19, SD = .933) had significantly more agreement than rural youth (M = 4.05, SD = 1.000) with the statement, all in all I am glad I am me. Urban youth (M = 2.15, SD = 1.147) expressed significantly stronger disagreement than rural youth (M = 2.27, SD = 1.209) with the negatively phrased statement, I feel I do not have much to be proud of. Urban youth (M = 2.41, SD = 1.303) with the negatively phrased statement, sometimes I feel like my life has no purpose.

	Urban `	Youth	Rural	Youth
Statements	$M^{\mathrm{z}}$	SD	M	SD
When things don't go well for me, I am good				
at finding a way to make things better	*3.57	.911	*3.42	.973
I have little control over things that will				
happen in my life <sup>n</sup>	2.70	1.212	2.68	1.259
On the whole I like myself	*4.01	.974	*3.85	1.074
At times, I think I am no good at all <sup>n</sup>	2.87	1.231	2.93	1.266
All in all, I am glad I am me	*4.19	.933	*4.05	1.000
I feel I do not have much to be proud of <sup>n</sup>	*2.15	1.147	*2.27	1.209
Sometimes I feel like my life has no purpose <sup>n</sup>	*2.23	1.297	*2.41	1.303
<sup>z</sup> Means of Likert scale responses (1 = strongly d	isagree 2 =	= disagre	3 = neutral	4 =

Table 60Urban and Rural Comparison in Positive Identity

<sup>z</sup>Means of Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) \*p < .05

<sup>n</sup>Negatively phrased statements

Urban and rural comparison in self-confidence, character and empowerment is shown in Table 61. Urban youth (M = 3.23, SD = 1.165) had significantly stronger agreement than rural youth (M = 3.03, SD = 1.191) with the statement, I am a good organizer. Urban youth (M = 3.90, SD = 1.037) had a significantly stronger agreement than rural youth (M = 3.78, SD = 1.084) with the statement, in my family I feel useful and important. Urban youth (M = 2.90, SD = 1.274) had a significantly stronger agreement than rural youth (M = 2.65, SD = 1.310) with the statement, I am comfortable giving a speech or demonstration in front of people.

	Urba	n Youth	Rural	Youth
Statements	$M^{z}$	SD	M	SD
I can do things on my own	3.99	.898	4.00	.879
I set goals	3.74	.995	3.75	.967
Ten years from now, I think I will be very				
happy	4.09	.902	4.05	.965
I am responsible for my actions	4.17	.826	4.20	.826
I like to try new things	4.06	.856	4.04	.871
I am a good organizer	*3.23	1.165	*3.03	1.191
I am a good money manager	3.31	1.150	3.35	1.181
Adults in my town or city make me feel				
important	3.25	1.017	3.26	1.120
Adults in my town or city listen to what				
I have to say	3.15	1.078	3.05	1.109
Adults in my town or city don't care about				
people my age <sup>n</sup>	2.53	1.127	2.54	1.143
In my town or city, I feel like I matter to people	3.31	1.015	3.27	1.067
In my family I feel useful and important	*3.90	1.037	*3.78	1.084
I'm given lots of chances to help make my town				
or city a better place to live	3.01	1.062	2.90	1.143
Students help decide what goes on at my school	3.27	1.077	3.32	1.094
I have good written record keeping skills	2.53	1.232	2.45	1.208
I am comfortable giving a speech or demonstration	*2.90	1.274	*2.65	1.310

Table 61Urban and Rural Comparison in Self-Confidence, Character and Empowerment

<sup>z</sup>Means of Likert scale responses (1 = strongly disagree, 2 = disagree,

3 = neutral, 4 = agree, 5 = strongly agree)

\**p* < .05

<sup>n</sup>Negatively phrased statement

## Summated Construct Index and Scale Scores

Summated construct scores were calculated for the independent variables, age,

gender, 4-H participation, and population density. Constructs represent the grouping of

items respective to dependent variables; extracurricular activity involvement; school

leadership positions held; close relationships with adults; caring for others; amount of

negative behavior; personal identity; positive identity; and self-confidence, character and

empowerment. Data were transformed and recoded into new variables that represent composite dependent construct variables.

Constructs, extracurricular activity involvement, school leadership positions held, close relationships with adults, and caring for others, were dichotomous response scale questions. Dichotomous scale data were inputted using 1 = no, and 2 = yes. These summated constructs were referred to as index scores and analyzed by comparing sums.

Constructs, amount of negative behavior, personal identity, positive identity, and self-confidence, character and empowerment, were multiple level response scale questions. Multiple scale data were inputted using 1 = never, 2 = once, 3 = a few times, 4 =frequently for amount of negative behavior, and 1 =strongly disagree, 2 =disagree, 3 =neutral, 4 =agree, 5 =strongly agree for dependent variables personal identity, positive identity, and self-confidence, character and empowerment. Negatively phrased question responses were recoded as 5 =strongly disagree, 4 =disagree, 3 =neutral, 2 =agree, and 1 =strongly agree. These summated constructs were referred to as scale scores and analyzed by comparing means.

Survey questions used to create the constructs were:

- Extracurricular activity involvement, Question 1
- School leadership positions held, Questions 19 22
- Close relationships with adults, Questions 24 27
- Caring for Others, Questions 23, and 45 47
- Amount of negative behavior, Question 44
- Personal identity, Questions 2 11

91

- Positive identity, Questions 12 18
- Self-confidence, character and empowerment, Questions 28 43

Construct reliability is reported in Table 62. Reliability ranged from a low of

.448 Cronbach's alpha for extracurricular activity involvement construct, to a high of

.888 Cronbach's alpha for school leadership positions held construct.

	Number of	Cronbach's	
Construct	Items	Alpha Coefficient	
Extracurricular Activity Involvement	7	.448	
School Leadership Positions Held	4	.888	
Close Relationships with Adults	7	.692	
Caring for Others	4	.635	
Amount of Negative Behavior	10	.882	
Personal Identity	10	.748	
Positive Identity	7	.776	
Self-Confidence, Character and Empowerment	16	.812	

Table 62Construct Reliability

Summated construct index scores for age groups is shown in Table 63. Age group 10-12 (Sum = 4665, n = 484) and age group 13-14 (Sum = 3285, n = 346) were significantly more involved in extracurricular activities than age group 15-18 (Sum 3678, n = 399). Age group 10-12 (Sum = 2377, n = 519) held significantly more school leadership positions than age group 13-14 (Sum = 1634, n = 377), and age group 15-18 (Sum = 1798, n = 421). Age group 10-12 (Sum = 6141, n = 497) had significantly closer relationships with adults than age group 13-14 (Sum = 4467, n = 372), and age group 15-18 (Sum = 5063, n = 422). Age group 10-12 (Sum = 3489, n = 537) were significantly

more involved in caring for others than age group 13-14 (Sum = 2403, n = 395), and age

group 15-18 (Sum = 2639, n = 438).

Table 63Summated Construct Index Scores for Age Groups

	10-12 years		13-14 y	13-14 years		/ears
Construct	Sum	n	Sum	n	Sum	n
Extracurricular Activity Involvement	4665 <sup>a</sup>	484	3285 <sup>a</sup>	346	3678 <sup>b</sup>	399
School Leadership Positions Held	2377 <sup>a</sup>	519	1634 <sup>b</sup>	377	1798 <sup>b</sup>	421
Close Relationships with Adults	6141 <sup>a</sup>	497	4467 <sup>b</sup>	372	5063 <sup>b</sup>	422
Caring for Others	3489 <sup>a</sup>	537	2403 <sup>b</sup>	395	2639 <sup>b</sup>	438
<sup>a</sup> differing letters in a row $p < .05$						

Table 64 shows summated construct scale scores for age groups. Age group 15-18 (M = 17.47, SD = 6.523) were significantly more engaged in negative behavior than age group 13-14 (M = 14.47, SD = 5.535), and age group 10-12 (M = 11.93, SD =3.603), and age group 13-14 practiced significantly more negative behavior than age group 10-12. Age group 10-12 (M = 36.53, SD = 5.495) were significantly higher in personal identity than age group 13-14 (M = 35.39, SD = 5.580), and age group 15-18 (M = 34.94, SD = 5.556). Age groups 13-14 (M = 11.38, SD = 2.028), and 15-18 (M =11.46, SD = 2.052) were significantly higher in positive identity than age group 10-12 (M = 11.09, SD = 1.853).

	<i>y</i> 0	1				
	10-12	10-12 years		13-14 years		years
Construct	М	SD	М	SD	М	SD
Amount of Negative Behavior	11.93 <sup>a</sup>	3.603	14.47 <sup>b</sup>	5.535	17.47 <sup>c</sup>	6.523
Personal Identity	36.53 <sup>a</sup>	5.495	35.29 <sup>b</sup>	5.580	34.94 <sup>b</sup>	5.556
Positive Identity	11.09 <sup>a</sup>	1.853	11.38 <sup>b</sup>	2.028	11.46 <sup>b</sup>	2.052
Self-Confidence, Character and						
Empowerment	24.50	3.560	24.40	3.404	24.26	3.285
<sup>a</sup> differing letters in a row $n < 05$						

Table 64 Summated Construct Scale Scores for Age Groups

differing letters in a row p < .05

Summated construct index scores for gender are shown in Table 65. Female youth (Sum = 6371, n = 667) were significantly more involved in extracurricular activities than male youth (Sum = 5607, n = 600). Female students (Sum = 3173, n =710) held significantly more school leadership positions than male students (Sum = 2800, n = 646). Female youth (Sum = 8494, n = 690) had significantly more close relationships with adults than male youth (Sum = 7641, n = 642). Females (Sum = 4647, n = 732) were significantly more caring of others than males (Sum = 4105, n = 674).

Table 65 Summated Construct Index Scores for Gender

	Female Youth		Male Youth		
Construct	Sum	n	Sum	n	
Extracurricular Activity Involvement	*6371	667	*5607	600	
School Leadership Positions Held	*3173	710	*2800	646	
Close Relationships with Adults	*8494	690	*7641	642	
Caring for Others	*4647	732	*4105	674	
* <i>p</i> < .05					

Table 66 shows summated construct scale score for gender. Male youth (M =15.09, SD = 6.194) practiced significantly more negative behaviors than female youth (M = 14.01, SD = 5.397). Female youth (M = 36.61, SD = 5.344) had significantly higher personal identity than male youth (M = 34.42, SD = 5.737). Females (M = 24.56, SD = 3.400) had significantly higher self-confidence, character and empowerment than males (M = 24.18, SD = 3.430).

Table 66

Summated Construct Scale Scores for Gender

	Female Youth		Male Youth			
Construct	M	SD	M	SD		
Amount of Negative Behavior	*14.01	5.397	*15.09	6.194		
Personal Identity	*36.61	5.344	*34.42	5.737		
Positive Identity	11.22	1.916	11.37	2.019		
Self-Confidence, Character and						
Empowerment	*24.56	3.400	*24.18	3.430		
* <i>p</i> < .05						

Summated construct index scores for 4-H participation are shown in Table 67. 4-H youth (Sum = 1522, n = 148) were involved in significantly more extracurricular activities than non 4-H youth (Sum = 10122, n = 1085). 4-H youth (Sum = 732, n = 157) held significantly more school leadership positions than non 4-H youth (Sum = 5097, n = 1167). 4-H youth (Sum = 1076, n = 162) practiced significantly more care for others than non 4-H youth (Sum = 7436, n = 1209).
	Non 4-H	I Youth	4-H Youth		
Construct	Sum	n	Sum	n	
Extracurricular Activity Involvement	*10122	1085	*1522	148	
School Leadership Positions Held	*5097	1167	*732	157	
Close Relationships with Adults	13842	1147	1929	156	
Caring for Others	*7436	1209	*1076	162	
* < 05					

Table 67Summated Construct Index Scores for 4-H Participation

\**p* < .05

Table 68 shows summated construct scores for 4-H participation. 4-H youth (M = 25.30, SD = 6.107) had significantly higher self-confidence, character and empowerment than non 4-H youth (M = 24.24, SD = 5.842).

Table 68Summated Construct Scale Scores for 4-H Participation

	Non 4-H	I Youth	4-H Youth
Construct	M	SD	M SD
Amount of Negative Behavior	14.57	5.842	14.56 6.107
Personal Identity	35.49	5.526	35.84 6.183
Positive Identity	11.30	1.970	11.33 1.973
Self-Confidence, Character and Empowerment	*24.24	5.842	*25.30 6.107
* <i>p</i> < .05			

Summated construct index scores for population density are shown in Table 69. Rural youth (Sum = 4694, n = 486) were involved in significantly more extracurricular activities than urban youth (Sum = 7556, n = 809). Rural youth (Sum = 2374, n = 528) held significantly more school leadership positions than urban youth (Sum = 3733, n = 857).

	Urban `	Youth	Rural Y	Youth		
Construct	Sum	n	Sum	n		
Extracurricular Activity Involvement	*7556	809	*4694	486		
School Leadership Positions Held	*3733	857	*2374	528		
Close Relationships with Adults	10394	862	6059	499		
Caring for Others	5585	895	3247	526		
* < 05						

Table 69 Summated Construct Index Scores for Population Density

\*p < .05

\**p* < .05

Table 70 shows summated construct scale scores for population density. Urban youth (M = 35.89, SD = 5.485) had significantly higher personal identity than rural youth (M = 34.98, SD = 5.876). Urban youth (M = 11.39, SD = 1.941) had significantly higher positive identity than rural youth (M = 11.07, SD = 2.003).

Summated Construct Scale Scores for Population Density Urban Youth Rural Youth Construct М SD М Amount of Negative Behavior 14.73 5.904 14.38 5.897 Personal Identity \*35.89 5.485 \*34.98 5.876 **Positive Identity** \*11.39 1.941 \*11.07 2.003 Self-Confidence, Character and Empowerment 24.45 3.363 24.28 3.505

Table 70

Effects of Age Groups, Gender, 4-H Participation, and Population Density

Analysis of variance (ANOVA) was conducted on eight constructs by the

independent variables; age groups, gender, 4-H participation (4-H/Non 4-H), and

population density (urban/rural).

SD

ANOVA was used to avoid experiment-wise error. The pooled variance in ANOVA produces a more valid test than individual t-tests.

ANOVA for the extracurricular activities construct by age groups, gender, 4-H participation, and population density is displayed in Table 71. Significance was found in variables, age groups (F = 3.974, p = .019), 4-H participation (F = 49.881, p = .000), and population density (F = 7.826, p = .005), in the amount of extracurricular activities youth engage in during the school week. Although the ANOVA showed these mean differences, the effect size was very small. The partial Eta squared was .007 for age groups, .022 for 4-H participation, and .007 for population density, demonstrating a very low contribution to the overall variance in predicting the amount of extracurricular activities youth engage in during the school week, by each of these factors alone. Table 63 showed extracurricular activities for age group 15-18 (Sum = 3678, n = 399) was statistically lower than age group 13-14 (Sum = 3285, n = 346) and age group 10-12 (Sum = 4665, n = 484). Table 67 showed 4-H youth (Sum = 1522, n = 148) were significantly more engaged in extracurricular than non 4-H youth (Sum = 10122, n 1085). Table 69 showed rural youth (Sum = 4694, n = 486) participated in significantly more extracurricular activity engagement than urban youth (Sum = 7556, n = 809). Additionally, Table 70 shows the interactions of age groups, gender, and population density (F = 5.669, p = .004), and the 4-way interaction of age, gender, 4-H participation and population density (F = 3.183, p = .042) were significant and explain 1% and 0.5% of the variance in extracurricular activity engagement, respectively.

Table 71

	Sum of	*	Mean		I	Partial Eta	
Source	Squares	df	Square	F	Sig.	Squared	
А	14.995	2	7.477	3.974	.019	.007	
В	1.695	1	1.695	.901	.343	.001	
С	49.881	1	49.881	26.512	.000	.022	
D	14.725	1	14.725	7.826	.005	.007	
A x B	.003	2	.001	.001	.999	.000	
A x C	5.020	2	2.510	1.334	.264	.002	
B x C	.001	1	.001	.000	.985	.000	
A x B x C	.236	2	.118	.063	.939	.000	
A x D	2.136	2	1.068	.568	.567	.001	
B x D	2.089	1	2.089	1.110	.292	.001	
A x B x D	21.332	2	10.666	5.669	.004	.010	
C x D	4.765	1	4.765	2.532	.112	.002	
A x C x D	1.832	2	.916	.487	.615	.001	
B x C x D	1.956	1	1.956	1.040	.308	.001	
A x B x C x D	11.977	2	5.989	3.183	.042	.005	
Error	2174.994	1156	1.881				
Corrected							
Total	2370.149	1179					

ANOVA for Extracurricular Activity Involvement Construct Index Scores by Age Groups, Gender, 4-H Participation, and Population Density

A = Age groups 10-12 years, 13-14 years, 15-18 years

B = Gender

C = 4-H participation

D = Population density

Table 72 shows the ANOVA for leadership positions construct by age groups, gender, 4-H participation and population density variables. Statistical significance was found for the variables; age groups (F = 6.459, p = .002), 4-H participation (F = 5.009, p = .025), and population density (F = 4.287, p = .039). Partial Eta squared shows that variation in the construct may be explained by age groups (1%), population density (0.3%), and 4-H participation (0.4%). Table 63 showed that age group 10-12 (Sum = 2377, n = 519) held significantly more school leadership positions than age group 13-14

(Sum = 1634, n = 377) and age group 15-18 (Sum = 1798, n = 421). 4-H youth (Sum = 732, n = 157) were found to be statistically more likely to participate in school leadership positions than non 4-H youth (Sum = 5097, n = 1167), as presented in Table 67. Table 69 showed that rural students (Sum = 2374, n = 528) were statistically more likely to be involved in school leadership than urban students (Sum = 3733, n = 857).

Table 72 ANOVA for School Leadership Positions Held Construct Index Scores by Age Groups, Gender, 4-H Participation, and Population Density

	Sum of		Mean	Partial Eta				
Source	Squares	df	Square	F	Sig.	Squared		
А	9.062	2	4.531	6.459	.002	.010		
В	2.569	1	2.569	3.663	.056	.003		
С	3.513	1	3.513	5.009	.025	.004		
D	3.007	1	3.007	4.287	.039	.003		
A x B	.336	2	.168	.239	.787	.000		
A x C	3.177	2	1.588	2.264	.104	.004		
B x C	.063	1	.063	.090	.764	.000		
A x B x C	.395	2	.198	.282	.755	.000		
A x D	3.594	2	1.797	2.562	.078	.004		
B x D	.048	1	.048	.069	.793	.000		
A x B x D	3.716	2	1.858	2.649	.071	.004		
C x D	2.045	1	2.045	2.915	.088	.002		
A x C x D	1.367	2	.683	.974	.378	.002		
B x C x D	.333	1	.333	.475	.491	.000		
A x B x C x D	3.941	2	1.970	2.809	.061	.004		
Error	872.662	1244	.701					
Corrected								
Total	942.874	1267						
	10.10	10.14	15 10					

A = Age groups 10-12 years, 13-14 years, 15-18 years

B = Gender

C = 4-H participation

D = Population density

The ANOVA for close relationships with adults by age groups, gender, 4-H

participation, and population density variables is shown in Table 73. Statistical

significance was found in the interaction of 4-H participation and gender (F = 3.844, p = .050). Partial Eta squared value for the interaction was .003, indicating minimal predictive power. Figure 2 shows the interaction between gender and 4-H participation. 4-H youth had more close relationships with adults than non 4-H youth. Female 4-H and non 4-H youth were very similar in relationship closeness. Relationship closeness was much higher for 4-H youth than non 4-H youth. The vast difference in male youth relationship closeness may be the primary factor attributing to the interaction.

Table 73

ANOVA for Close Relationships with Adults Construct Index Scores by Age Groups, Gender, 4-H Participation, and Population Density

	Sum of		Mean		Partial Eta		
Source	Squares	df	Square	F	Sig.	Squared	
А	1.710	2	.855	.229	.795	.000	
В	.188	1	.188	.050	.823	.000	
С	13.041	1	13.041	3.491	.062	.003	
D	.001	1	.001	.000	.985	.000	
A x B	1.035	2	.518	.139	.871	.000	
A x C	6.380	2	3.190	.854	.426	.001	
B x C	14.356	1	14.465	3.844	.050	.003	
A x B x C	9.582	2	4.791	1.283	.278	.002	
A x D	.300	2	.150	.040	.961	.000	
B x D	.298	1	.298	.080	.778	.000	
A x B x D	8.274	2	4.137	1.108	.331	.002	
C x D	2.033	1	2.033	.544	.461	.000	
A x C x D	2.298	2	1.149	.308	.735	.001	
B x C x D	3.869	1	3.869	1.036	.309	.001	
$A \mathrel{x} B \mathrel{x} C \mathrel{x} D$	.948	2	.515	.127	.881	.000	
Error	4556.778	1220	3.735				
Corrected							
Total	4709.312	1243					

A = Age groups 10-12 years, 13-14 years, 15-18 years

B = Gender

C = 4-H participation

D = Population density



*Figure 2.* Close relationships with adults construct interaction between gender and 4-H participation.

The ANOVA for caring for others construct by age groups, gender, 4-H participation, and population density is shown in Table 74. One variable was found to be significant in predicting the likelihood of youth helping others in need, 4-H participation (F = 13.198, p = .000). Variance in the caring for others construct may be attributed to 4-H participation (1%). Table 67 showed that 4-H youth (Sum = 1076, n = 162) were statistically more likely to care for others in need than Non 4-H youth (Sum = 7436, n = 1209).

Table 74

	Sum of		Mean		Partial Eta		
Source	Squares	df	Square	F	Sig.	Squared	
А	8.430	2	4.215	2.692	.068	.004	
В	3.010	1	3.010	1.922	.166	.001	
С	20.665	1	20.665	13.198	.000	.010	
D	1.771	1	1.771	1.131	.288	.001	
A x B	2.887	2	1.444	.922	.398	.001	
A x C	4.885	2	2.443	1.560	.211	.002	
B x C	.215	1	.215	.137	.711	.000	
A x B x C	1.074	2	.537	.343	.710	.001	
A x D	.962	2	.481	.307	.736	.000	
B x D	3.876	1	3.876	2.476	.116	.002	
A x B x D	4.377	2	2.189	1.398	.247	.002	
C x D	.001	1	.001	.001	.978	.000	
A x C x D	1.357	2	.679	.433	.648	.001	
B x C x D	.153	1	.153	.098	.755	.000	
A x B x C x D	2.102	2	1.051	.671	.511	.001	
Error	2030.790	1297	1.566				
Corrected							
Total	2172.012	1320					

ANOVA for Caring for Others Construct Index Scores by Age Groups, Gender, 4-H Participation, and Population Density

A = Age groups 10-12 years, 13-14 years, 15-18 years

B = Gender

C = 4-H participation

D = Population density

The amount of negative behavior construct is composed of youth responses to ten types of negative practices such as cheating on a test, shoplifting, and damaging property. The ANOVA for negative behavior by age groups, gender, 4-H participation, and population density variables is shown in Table 75. Age groups (F = 42.038, p = .000) and the interaction of gender and 4-H participation (F = 5.214, p = .023) were found to be significant predictors of risk behavior in youth. Age groups variable was found to explain 6.1% of the variance in negative behavior, while the gender and 4-H

participation interaction explained 0.4%. Table 64 showed that as age increases, youth were statistically more likely to engage in negative behavior (age group 10-12, M = 11.93, SD = 3.603; age group 13-14, M = 14.47, SD = 5.535; age group 15-18, M = 17.47, SD = 6.523). Amount of negative behavior construct interaction between gender and 4-H participation is shown in Figure 3. Amount of negative behavior of female 4-H youth is higher than female non 4-H youth. Conversely, the amount of negative behavior of male non 4-H youth is higher than male 4-H youth.

Table 75

ANOVA for Amount of Negative Behavior Construct Scale Scores by Age Groups, Gender, 4-H Participation, and Population Density

	Sum of		Mean	Partial Eta			
Source	Squares	df	Square	F	Sig.	Squared	
А	2312.049	2	1156.024	42.038	.000	.061	
В	24.515	1	24.515	.891	.345	.001	
С	10.886	1	10.886	.396	.529	.000	
D	4.855	1	4.855	.177	.674	.000	
A x B	36.253	2	18.127	.659	.517	.001	
A x C	4.938	2	2.469	.090	.914	.000	
B x C	143.372	1	143.372	5.214	.023	.004	
A x B x C	16.679	2	8.339	.303	.738	.000	
A x D	40.974	2	20.487	.745	.475	.001	
B x D	2.458	1	2.458	.089	.765	.000	
A x B x D	57.454	2	28.727	1.045	.352	.002	
C x D	3.543	1	3.543	.129	.720	.000	
A x C x D	42.706	2	21.353	.776	.460	.001	
B x C x D	42.758	1	42.758	1.555	.213	.001	
$A \mathrel{x} B \mathrel{x} C \mathrel{x} D$	28.031	2	14.015	.510	.601	.001	
Error	35337.225	1285	27.500				
Corrected							
Total	42867.066	1308					

A = Age groups 10-12 years, 13-14 years, 15-18 years

B = Gender

C = 4-H participation

D = Population density



*Figure 3*. Amount of negative behavior construct interaction between gender and 4-H participation.

The personal identity construct included items such as; *meet and greet new people easily; comfortable in new situations; and other kids look up to me.* Table 76 describes the ANOVA for personal identity by age groups, gender, 4-H participation, and population density variables. Statistical significance was found in variables gender (F = 10.350, p = .001), and population density (F = 5.929, p = .015), in the prediction of personal identity of Nevada 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grade students. Partial Eta squared calculations showed that 0.5% of the variation in the way youth feel about their personal identity may be explained by population density, while gender was found to explain 0.8% of the variation. Table 70 showed that urban youth had statistically higher personal identity (M = 35.89, SD = 5.485) than rural youth (M = 34.98, SD = 5.876). Table 66 showed that females had statistically higher personal identity (M = 36.61, SD = 5.344) than males (M = 34.42, SD = 5.737).

# Table 76

ANOVA for Personal Identity Construct Scale Scores by Age Groups, Gender, 4-H Participation, and Population Density

	Sum of		Mean		Partial Eta			
Source	Squares	df	Square	F	Sig.	Squared		
А	167.410	2	83.705	2,845	.058	.004		
В	304.473	1	304.473	10.350	.001	.008		
С	9.476	1	9.476	.322	.570	.000		
D	174.420	1	174.420	5.929	.015	.005		
A x B	49.757	2	24.879	.846	.430	.001		
A x C	13.475	2	6.737	.229	.795	.000		
B x C	27.666	1	27.666	.940	.332	.001		
A x B x C	35.628	2	17.814	.606	.546	.001		
A x D	6.974	2	3.487	.119	.888	.000		
B x D	.323	1	.323	.011	.917	.000		
A x B x D	2.920	2	1.460	.050	.952	.000		
C x D	32.003	1	32.003	1.088	.297	.001		
A x C x D	4.127	2	2.064	.070	.932	.000		
BxCxD	1.774	1	1.774	.060	.806	.000		
$A \mathrel{x} B \mathrel{x} C \mathrel{x} D$	16.674	2	8.337	.283	.753	.000		
Error	37684.778	1281	29.418					
Corrected								
Total	40118.593	1304						
A = Age groups 10-12 years, 13-14 years, 15-18 years								

B = Gender

C = 4-H participation

D = Population density

Positive identity construct includes items such as; *all in all, I am glad I am me;* 

and when things don't go well for me, I am good at finding a way to make things better.

The ANOVA for positive identity by age groups, gender, 4-H participation, and

population density is displayed in Table 77. Gender (F = 3.962, p = .047), and population density (F = 4.016, p = .045) were found to have statistical significance in predicting youth positive identity. Gender and population density were each found to explain 0.3% in how Nevada youth describe their positive identity. The positive identity construct mean for males (M = 11.37, SD = 2.019) was not found to be statistically higher than the mean for females (M = 11.22, SD = 1.916), as presented in Table 66. Table 70 showed the urban youth construct mean for positive identity (M = 11.39, SD = 1.941) was statistically higher than the rural youth construct mean (M = 11.07, SD = 2.003).

Table 78 illustrates the ANOVA for self-confidence, character and empowerment construct by age groups, gender, 4-H participation, and population density variables. This construct is composed of youth responses to statements such as; *I can do things on my own; I set goals; and adults in my town or city make me feel important*. One variable, 4-H participation, was found to be statistically significant (F = 8.155, p = .004) and contribute 0.6% to the variance in the self-confidence, character and empowerment construct. Table 68 showed that 4-H youth (M = 25.30, SD = 6.107) had statistically higher self-confidence, character and empowerment than non 4-H youth (M = 24.24, SD = 5.842).

Table 77

	Sum of		Mean		Partial Eta		
Source	Squares	df	Square	F	Sig.	Squared	
А	17.965	2	8.982	2.333	.097	.004	
В	15.253	1	15.253	3.962	.047	.003	
С	5.561	1	5.561	1.444	.230	.001	
D	15.463	1	15.463	4.016	.045	.003	
A x B	11.626	2	5.813	1.510	.221	.002	
A x C	1.309	2	.655	.170	.844	.000	
B x C	4.697	1	4.697	1.220	.270	.001	
A x B x C	5.597	2	2.798	.727	.484	.001	
A x D	1.040	2	.520	.135	.874	.000	
B x D	1.180	1	1.180	.306	.580	.000	
A x B x D	6.722	2	3.361	.873	.418	.001	
C x D	1.596	1	1.596	.415	.520	.000	
A x C x D	.205	2	.102	.027	.974	.000	
B x C x D	6.963	1	6.963	1.808	.179	.001	
A x B x C x D	13.932	2	6.966	1.809	.164	.003	
Error	4924.245	1279	3.850				
Corrected							
Total	5073.257	1302					

ANOVA for Positive Identity Construct Scale Scores by Age Groups, Gender, 4-H Participation, and Population Density

A = Age groups 10-12 years, 13-14 years, 15-18 years

B = Gender

C = 4-H participation

D = Population density

Table 78

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	Sum of		Mean		P	artial Eta	
Source	Squares	df	Square	F	Sig.	Squared	
А	.164	2	.082	.007	.993	.000	
В	3.221	1	3.221	.275	.600	.000	
С	95.479	1	95.479	8.155	.004	.006	
D	2.641	1	2.641	.226	.635	.000	
A x B	11.238	2	5.619	.480	.619	.001	
A x C	.457	2	.229	.020	.981	.000	
B x C	.206	1	.206	.018	.895	.000	
A x B x C	6.891	2	3.445	.294	.745	.000	
A x D	24.584	2	12.292	1.050	.350	.002	
B x D	2.083	1	2.083	.178	.673	.000	
A x B x D	20.076	2	10.038	.857	.425	.001	
C x D	.131	1	.131	.011	.916	.000	
A x C x D	11.962	2	5.981	.511	.600	.001	
B x C x D	7.323	1	7.323	.625	.429	.000	
A x B x C x D	36.370	2	18.185	1.553	.212	.002	
Error	14670.102	1253	11.708				
Corrected							
Total	15034.572	1276					

ANOVA for Self-Confidence, Character and Empowerment Construct Scale Scores by Age Groups, Gender, 4-H Participation, and Population Density

A = Age groups 10-12 years, 13-14 years, 15-18 years

B = Gender

C = 4-H participation

D = Population density

# Perceptions of 4-H Impact

Youth who had ever belonged to 4-H were asked to indicate the level of impact 4-H has had on their lives. Impact of 4-H programming comparison by age groups is presented in Table 79. No significant differences were found between the three age groups in perceptions of how 4-H impacted their lives. Table 80 shows the impact of 4-H programming by gender. No significant differences were found in perceptions of 4-H impact were found between females and males. With regard to the seven statements, however, females felt that 4-H programming had a greater impact on their lives, than males. Impact of 4-H programming comparison by population density is shown in Table 81. No significant differences in perceptions of 4-H impact were found between urban and rural youth. The statement resulting in the highest rating or strongest agreement in the comparison by age groups, gender, and population density was, 4-H provides a safe place for learning and growing. The statement resulting in the lowest rating or weakest agreement in the three comparisons was, if it weren't for 4-H there would be few other activities of interest to me outside school time.

Table 79

Impact of 4-H Programming Comparison by Age Groups

	10-12		13-14			15-18
	Year	s Old	Year	rs Old	Yea	rs Old
Statements	М	SD	M	SD	М	SD
My Participation in 4-H has been critical						
to my success in life	3.00	1.287	3.20	1.040	2.97	1.121
4-H has made a positive difference in my life	3.12	1.244	3.42	1.048	3.19	1.120
4-H has made a positive difference in my						
family life	3.09	1.244	3.10	1.026	3.03	1.121
If it weren't for 4-H, there would be few other						
organized activities of interest to me						
outside school time	2.91	1.309	2.75	1.062	2.72	1.143
4-H provides a safe place for learning and						
growing	3.44	1.191	3.49	1.101	3.62	1.158
4-H Clubs are supportive environments where						
I feel accepted for who I am	3.32	1.303	3.53	1.174	3.34	1.096
In 4-H, I can explore my own interests	3.47	1.218	3.45	1.062	3.55	1.028

Table 80

Impact of 4-H Programming Comparison by Gender

	Female	e Youth	Male	Youth
Statements	M	SD	M	SD
My Participation in 4-H has been critical				
to my success in life	3.08	1.143	2.96	1.208
4-H has made a positive difference in my life	3.30	1.142	3.06	1.190
4-H has made a positive difference in my				
family life	3.08	1.133	3.08	1.186
If it weren't for 4-H, there would be few other				
organized activities of interest to me				
outside school time	2.89	1.144	2.70	1.295
4-H provides a safe place for learning and				
growing	3.54	1.186	3.38	1.078
4-H Clubs are supportive environments where				
I feel accepted for who I am	3.47	1.212	3.28	1.231
In 4-H, I can explore my own interests	3.56	1.060	3.34	1.192

Table 81

Impact of 4-H Programming Comparison by Population Density

	Urban	Youth	Rural	Youth
Statements	M	SD	M	SD
My Participation in 4-H has been critical				
to my success in life	3.07	1.069	3.03	1.212
4-H has made a positive difference in my life	3.27	1.113	3.19	1.181
4-H has made a positive difference in my				
family life	3.22	1.150	3.01	1.138
If it weren't for 4-H, there would be few other				
organized activities of interest to me				
outside school time	2.87	1.260	2.81	1.181
4-H provides a safe place for learning and				
growing	3.58	1.117	3.45	1.168
4-H Clubs are supportive environments where				
I feel accepted for who I am	3.38	1.194	3.43	1.227
In 4-H, I can explore my own interests	3.51	1.136	3.45	1.099

Youth involved in 4-H were asked to identify the best and worst part of 4-H

programming. Qualitative data was categorized using the Constant Comparative Method

(Glaser & Strauss, 1967). Tables 82, 83, and 84, summarize the best part of 4-H as indicated by 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grade youth, respectively. The most common responses regarding the best part of 4-H across grade levels were those associated to skill building and learning new things. The next most common response was in the category of meeting with friends and new people. Helping the community was also a best part of 4-H response category that was found in each grade level.

l able 82	
The Best Part of 4	-H According to 5 <sup>th</sup> Grade Students
Number of	Response
Responses	Category
22	Skill building and learning new things
8	Meeting with friends and new people
6	Fun
3	Helping others and the community
3	Activities and exercise
3	Nothing
2	Food and eating
1	Great teachers
1	Fair

Table 82

According to /" Grade Students
Response
Category
Skill building and learning new things
Meeting with friends and new people
Fun
Activities and exercise
Making money
Nothing
Fair and 4-H Camp
Great teachers
Having goals to achieve
Leadership
Safe place
Support
Help the community
Working with leaders

Table 83 rt of A II A coording to 7th Curdo Stud

Table 84	
The Best Part of 4-H	According to 9 <sup>th</sup> Grade Students
Number of	Response
Responses	Category
10	Skill building and learning new things
4	Meeting with friends and new people
4	Activities and exercise
3	Leadership opportunities
3	Helping the community
2	Recognition and awards
2	Fun
2	Support
2	4-H Camp
1	Nothing
1	Making money
1	Freedom of choice

The worst part of 4-H as indicated by 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grade students is reported in

Tables 85, 86, and 87, respectively. Worst part responses were more difficult to

categorize than best part responses as they lacked similarity. Nothing or don't know, was

the most often response indicated by  $5^{\text{th}}$ ,  $7^{\text{th}}$ , and  $9^{\text{th}}$  grade students.

Number of	Response
Responses	Category
8	Nothing / don't know
6	Not enough time and time competes with other interests
5	Mean kids that make fun of you
3	Given orders to follow
3	Too hot
2	Rules
2	Chores
2	No food
2	Boring
1	Failing
1	Not fun
1	Bathrooms
1	Picture taking
1	Can't say what you want to say
1	Helmets
1	No activity
1	Fair

Table 85 \_th  $\frac{11}{N}$ 

<u>Number of</u>	Response
Responses	Category
8	Nothing / don't know
5	Some people make fun of you, bullies
3	Keeping track of money, record keeping
2	Failing and embarrassment
2	Time of day and missing other activities
1	No activity
1	No horse to work with
1	No friends in it
1	Smell
1	Guns that kick
1	Saying goodbye to your animal
1	Making a horse ride with a bit
1	Getting into trouble for things you didn't do
1	No cooperation
1	Too much time
1	Scooping poop

 Table 86

 The Worst Part of 4-H According to 7<sup>th</sup> Grade Students

Table	87
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The Worst Part of 4-H According to 9<sup>th</sup> Grade Students

Number of	Response
Responses	Category
10	Nothing / don't know
6	Boring, not fun
3	Dirty, work
2	Time of day and missing other activities
1	People not friendly
1	Selling animals
1	Not many members
1	Leaders not organized
1	Sanding wood
1	Songs and meetings
1	Nothing for older kids
1	Doing things the way you are told
1	Reporting your absence
1	Studying

#### CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

## Summary

The purposes of this study were to replicate a 4-H impact evaluation study conducted previously in four western States, measure the impact of 4-H programming on the lives of Nevada youth, and to provide accountability and program improvement data for University of Nevada Cooperative Extension. The objectives were to describe the study participants based upon demographic characteristics and dependent variables; determine how the subjects differed by independent variables, age groups, gender, 4-H participation, and population density; and determine how 4-H programming influences youth. Specifically, this study addressed the research questions:

- What is a description of study participants based upon: a) extracurricular activity involvement, b) school leadership positions held, c) close relationships with adults, d) caring for others, e) amount of negative behavior, f) personal identity, g) positive identity, h) self-confidence, character, and personal empowerment, and i) demographic characteristics and personolgical attributes?
- 2. How do the subjects differ in terms of; extracurricular activity involvement; school leadership positions held; close relationships with adults; caring for others; amount of negative behavior; personal identity; positive identity; selfconfidence, character, and personal empowerment; based upon age, gender, 4-H participation, and population density?
- 3. How does involvement in 4-H programming influence youth?

Results indicate that youth who have ever been involved in Nevada 4-H programming have some character and behavior traits that differ from youth who have never been involved in 4-H. In particular, youth involved in 4-H are more likely to engage in other organized activities in and out of school, participate in more school leadership roles, care and contribute to the well-being of more people in need and have higher self-confidence, character and empowerment than youth that have never been involved in 4-H.

Statistically more 4-H youth participate in drama, art, music, sports teams, school clubs, outside school clubs, and spiritual activities during the school week, than non 4-H youth. 4-H youth seem to be attracted to organized activities more so than non 4-H youth. Ouellette (2000) reports that youth not involved in after-school activities are more likely to engage in risky behavior. Strangely enough, this trend was not supported in this study. No significant difference was found between 4-H and non 4-H youth in the engagement in ten types of negative behavior. This finding was similar to the results in Colorado (Goodwin et al., 2005b) and in Utah (Tubbs, 2005). More research is needed to determine if a minimum amount of organized youth activities is needed for youth to avoid risky behavior. Additionally, rural youth were statistically more likely to participate in activities during the week, than urban youth. These activities include drama, art, music, sports teams, school clubs, 4-H, and spiritual. One would expect that urban schools and communities have more activities to choose from during the school week, than rural schools and communities. The National Research Council and Institute of Medicine (2004) reported that communities offering a wide range of organized youth

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programs experience less risk behavior. The results of this study do not strongly support this trend. Rural youth, participating in more organized activities, were more likely to ride in a car with a driver who had been drinking or using drugs, smoke cigarettes, and use smokeless tobacco, than urban youth.

4-H youth were more likely to participate in school leadership positions than non 4-H youth. Statistically more 4-H youth than non 4-H youth are elected to school leadership positions, hold school leadership positions, serve as chair on school committees, or serve as members of school committees. This finding is supported in other studies (Astroth & Hayes, 2001; Goodwin, Carroll, & Oliver, 2005b; Goodwin et. al., 2005a; Tubbs, 2005). As expected, 4-H programming promotes leadership skill building and offers many opportunities for youth to participate in leadership roles.

Another dramatic distinction between 4-H and non 4-H youth was found in the concern youth show for other students and other people in the community. 4-H youth are more likely to help others in school, participate in a project to make life better for others, donate time or money to charity, and help people who are poor, hungry, sick, or unable to care for themselves than non 4-H youth. This trend is not surprising as 4-H programming typically includes a substantial community service component. It appears that Nevada 4-H youth have a stronger inclination toward helping others and community service participation than non 4-H youth.

Also consistent with other studies (Astroth & Haynes, 2001; Goodwin et al., 2005a), 4-H youth described a higher level of self-confidence, character, and empowerment, than non 4-H youth. Results indicate 4-H youth agree or strongly agree more than non 4-H youth to the statements; *I am a good money manager, adults in my town make me feel important, in my town or city, I feel like I matter to people, I'm given lots of chances to help my town or city a better place to live,* and *I have good record keeping skills*. Again, these results are not surprising in that 4-H programming has a long history of involving youth in community service and building record keeping skills.

Only one of the personal identity statements was found to stand out in the comparison between 4-H and non 4-H. Statistically more 4-H youth were likely to volunteer in class to lead activities, than non 4-H youth. This difference was also found to be true by Tubbs in 2005. This characteristic could logically be grouped with the other leadership traits, and as expected, 4-H youth appears to have a strong leadership tendency.

Meaningful differences between urban and rural youth were found in personal identity, positive identity, extracurricular activity engagement, and leadership positions held. Urban youth were found to express a higher level of personal identity than rural youth. Urban youth cared more about other's feelings, volunteered in class to lead activities more frequently, claimed to meet and greet new people more easily, and were more comfortable in new situations, than rural youth. Urban youth were also found to have a stronger positive identity than rural youth in agreement with the statements; *when things go wrong for me, I am good at finding a way to make things better; on the whole I like my self; and all in all, I am glad I am me;* and in disagreement with the statement; *sometimes I feel like life has no purpose.* 

Differences in the amount of negative behavior were split with urban youth practicing some behavior types and rural youth practicing more of others. Rural youth were more likely to ride in a car with a driver who has been drinking or using drugs, smoke cigarettes, and use smokeless tobacco, than urban youth. Urban youth were more likely to shoplift, damage property, and skip or cut class, than rural youth. These results may suggest that urban and rural youth exhibit the same problem behaviors and share the same concerns as found by Perkins, LaGreca, and Mullis (2002). However, the results are supportive of Springer, Selwyn, and Kelder's (2006) findings with no significant differences in sexual activities between urban and rural youth.

In other significant distinctions between rural and urban youth, rural youth were more likely to serve as a member of a school committee, and discuss the subject of sex with a parent/guardian, than urban youth. Urban youth, on the other hand, claim to be better organizers, were more comfortable giving a speech, and more likely to help people who are poor, hungry, sick or unable to care for themselves, than rural youth. No differences were noted between urban and rural youth in closeness of relationships with parents/guardians and other adults. Population density appears to not be a reliable variable and is not a consistent influencing factor in youth development.

Differences between female and male youth were most prevalent in the construct of personal identity. Females were more likely to be good at planning, care about other's feelings, feel sad when a friend is unhappy, say no when asked to do something wrong, stay away from people who get them in trouble, volunteer in class to lead activities, and

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think other kids look up to them and follow their example, than males. Previous studies in Wyoming, Idaho, Colorado and Utah did not test gender differences.

Age was a variable that had considerable influence on youth development. As youth get older they practice more negative behavior. This risk behavior trend is consistent with the Youth Risk Behavior Survey results for Nevada (2005). The incidence of risk behavior was found to be higher for high school students than middle school students in each risk behavior measured.

In summary, the following trends were observed:

Youth involved in 4-H were more likely than non 4-H youth to:

- Engage in organized extracurricular activities
- Participate in school leadership roles
- Care for others in need
- Possess higher self-confidence, character and empowerment

Urban youth are more likely than rural youth to:

- Possess higher personal identity
- Possess higher positive identity

Rural youth are more likely than urban youth to:

- Engage in organized extracurricular activities
- Participate in school leadership roles

Female youth are more likely than male youth to:

• Possess higher personal identity

Male youth are more likely than female youth to:

• Possess higher positive identity

Older youth are more likely than younger youth to:

• Practice negative behavior

Younger youth are more likely than older youth to:

- Engage in organized extracurricular activities
- Engage in school leadership positions

# **Conclusions and Recommendations**

These data show that youth involved in 4-H programming have an advantage over youth not involved in 4-H. Specifically, 4-H youth appear to have a disposition to involve themselves in organized activities. Active involvement in activities that promote growth and development is a healthy alternative to idle time. Although there was no difference shown between 4-H and non 4-H youth spending time with friends without anything special to do, the amount of time youth devote to this activity was not measured. It may be found the 4-H youth spend time with friends without anything to do, but to a lesser extent than non 4-H youth. Logically, youth involved in such a large number of extracurricular activities don't have too much time doing nothing.

4-H youth were also found to be more likely to be involved with leadership activities at school than non 4-H youth. Our country needs citizens to engage in democracy. The trend today across the nation shows a drastic decline in citizen participation. It would be interesting to investigate the percentage of local, state, and national leaders who got their start in 4-H. 4-H programming produces individuals that involve themselves in our communities. A longitudinal study conducted by Heinz and Youniss (2006) revealed that adolescents who were involved in community service work with people in need, felt they had made meaningful contributions which influenced their self-awareness. Later in life these individuals were found to be more likely to volunteer and be civically engaged.

Youth involved with 4-H possess a social conscious. Concern for others, particularly those in need, is a noteworthy characteristic. This study shows that youth involved in 4-H care for fellow students, and others less fortunate. Social responsibility and community service are a few of the life skills 4-H members learn. University of Nevada Cooperative Extension youth development programming teaches these skills and in turn, Nevada youth are contributing to community well being. Safrit and Auck (2003) state "America's youth need to be actively engaged in their communities through volunteerism and service that allows them to actively participate in decisions affecting themselves and their families, schools, workplaces, and communities" (p. 1). They recognized that 4-H is in a unique position to provide community service, volunteerism, and service-learning opportunities to youth.

Recommendations for Additional Research

1. Merge and analyze data sets from western state studies.

Composite analysis of data from studies in Montana, Idaho, Colorado, Utah, and Nevada should be conducted. New Mexico is nearing completion of the same study and should be included. Care was taken with the Nevada study to remain true to the original survey design used in the previous investigations. Nevada survey question order was slightly modified using Dillman's (2007) Tailored Design Method (TDM).to improve response rate. There have been other minor changes made to the instrument over time including elimination of nine questions by Goodwin et al. in 2005. Variation in data analysis has also occurred over time. In the Utah study, 4-H participation was determined from responses indicating 4-H involvement for two or more years, whereas in Nevada, participation was determined by youth responding to the question; *have you ever belonged to a 4-H Club that meets formally outside of school.* Risk behavior of only 9<sup>th</sup> grade youth was used in the Utah study, whereas risk behavior of all youth was used in the Nevada study. This study grouped questions into constructs and analyzed them by age groups, gender, 4-H participation and population density. ANOVA was not performed in previous studies, however, the manner with which questions were grouped remained consistent. Composite analyses could potentially investigate other youth development influences such as, race/ethnicity differences. Investigators of composite data will need to prepare data sets and make necessary adjustments to insure a valid analysis.

2. Hone instrument to improve construct validity and reliability.

Negatively phrased questions may be confusing to students, particularly younger youth. Pilot testing should be conducted and questions should be modified if optimum student understanding is not apparent. Further work needs to be done to improve the construct validity of the instrument. For instance, the question regarding; volunteer in class to lead activities, should be merged within the leadership positions held construct. Researchers should investigate if questions are best suited to measure the various constructs this instrument intends to measure. Also, questions that determine personality type may be useful in predicting youth characteristics and behaviors.

3. Investigate other impact evaluation approaches less taxing on school time.

It may be likely, continued use of this instrument is short lived. Future research using the same student survey approach may confront reluctance from schools. A 34% response rate was achieved in the Nevada study from schools agreeing to participate. A total of 115 Nevada schools were contacted and 76 schools, 66%, declined to participate. The relatively low response rate of schools agreeing to participate and the high percentage of schools declining to participate is a problem caused by several factors. A collection of reasons given by school administrators for not participating is presented in Appendix L. In summary, schools are inundated with survey requests and many surveys are administered. The CDC's Youth Risk Behavior Survey is administered throughout the country in public secondary schools every two years. In some cases, request to give another similar survey is too much to ask. Surveys compete with class time and required testing. Number of school days is limited by the State Legislature. A few teachers are not willing to sacrifice time needed to cover materials to administer another survey. Fortunately, the University of Nevada Institutional Review Board allowed the use of a parent opt-out consent form. In the future it is likely that more stringent requirements will be imposed mandating parents to sign a consent form prior to participation. This requirement may significantly decrease response rate further by burden school teachers and administrators with additional responsibilities they may not be willing to assume. It

is recommended that other evaluation approaches be investigated to streamline data collection and improve 4-H impact evaluation efforts.

### **Recommendation for Practice**

Safrit and Auck (2003) make sound recommendations to improve our 4-H programming by capitalizing upon which 4-H seems to excel, leadership and community service. Their recommendations include:

1. Encourage volunteers to conduct community service and connect project work with service opportunities. 4-H programming typically encourages community service but thought is seldom given to making the connection between project and service. Community service that makes this connection may promote more enthusiastic participation by 4-H members. Making this connection may require more creative brainstorming on the part of members, parents, and leaders. More time spent on the front end of community service produces added benefits in the long term. When youth understand that their involvement in a particular field has application to the larger community, a feeling of contribution should result.

2. Youth development professionals develop and share community service learning materials. 4-H leaders need help understanding the value of community service and the inherent educational opportunity. Community service must be conveyed as not just another Extension office expectation but a purposeful means of youth development. Materials must be developed and made available to 4-H leaders describing how learning is optimized through community service. Also, training should be provided to increase the likelihood of community service learning material use.

3. Link statewide events to learning opportunities in volunteerism, community service, and service learning. State events can set the standard for community service learning and be a model for county programs to emulate.

4. Develop partnerships with schools and youth organizations by sharing curriculum and community service opportunities and essentially bring community service learning to all youth not just those identified as 4-H members. 4-H programs can expand their reach and collaborate with other youth entities within the community. Opportunity to identify service related to community needs, and opportunity to involve a more diverse youth work force spanning various interest groups, may result in more impact full service projects.

5. In addition to Safrit and Auck's (2003) recommendations, study results should be summarized and made available to legislators, school officials, and community leaders. It is the responsibility of the University of Nevada Cooperative Extension to disseminate accountability information. Community decision-makers need to be made aware of how 4-H programming and how their investments pay long term dividends in the growth and development of our youth.

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#### APPENDIX A

Susan Ford Publicover, CIP Director	UNIVERSITY OF NEVADA •Reno Office of Human Research Protecti 205 Ross Hall/331 Reno, Nevada 89557-0246 (775) 327-2368 FAX: (775) 327-2369 Www.unr.edu/ohrp January 19, 2007 MEMORANDUM
TO:	Steven Lewis UNCE / Minden
FROM:	Susan Ford Publicover, CIPS
SUBJECT:	Certification of Protocol SA06/07-049 "You and Your Free Time In and Out of School: A Survey of Nevada 5th, 7th and 9th Grade Students" (Sponsor: none)

On December 7, 2006, the University of Nevada, Reno, Social Behavioral Institutional Review Board reviewed and approved the above referenced protocol, pending receipt and approval of minor revisions of the protocol. Revisions of the protocol (01/10/07 ver.) were given final approval on January 18, 2007, so the research may now proceed. Please note that a waiver of signed assent and parental permission was granted for this protocol.

This protocol expires on December 7, 2007 unless renewed prior to that date.

The Principal Investigator is responsible for advising the Board of any changes in the protocol\* or unanticipated risks that may arise during the course of research within ten (10) working days. (For appropriate forms see <u>http://www.unr.edu/ohrp</u>)

[\*If you wish to close this protocol prior to the expiration date, please notify the Board by submitting a completed "Request to Modify Protocol" form indicating "closure" and include a final progress report, a summary of all activities since the protocol was approved.]

This institution has a human subjects assurance of compliance on file with the Department of Health and Human Services, Office of the Secretary, Office for Human Research Protections. The assurance number is FWA00002306.

If any additional information is necessary, please contact Holly Koontz or me at 775-327-2368.

cc: protocol file

#### **APPENDIX B**

KEITH W. RHEAULT Superintendent of Public Instruction

GLORIA P. DOPF

Deputy Superintendent Instructional, Research and Evaluative Services

JAMES R. WELLS Deputy Superintendent Administrative and Fiscal Services



DEPARTMENT OF EDUCATION 700 E. Fifth Street Carson City, Nevada 89701-5096 (775) 687-9200 • Fax: (775) 687-9101 January 25, 2007 SOUTHERN NEVADA OFFICE 1820 E. Sahara, Suite 205 Las Vegas, Nevada 89104-3746 (702) 486-6455 Fax: (702) 486-6450

MOODY STREET OFFICE 1749 Moody Street, Suite 40 Carson City, Nevada 89706-2543

#### MEMORANDUM

TO:	Nevada School District Superintendents and
	Selected Nevada School Principals
	Keith Rhead
FROM:	Keith Rheault, Superintendent of Public Instruction
	Nevada Department of Education

SUBJECT: Letter of Support - Doctoral Survey of Selected Nevada School Students

I have had the opportunity to review the planned student survey of Mr. Steve Lewis, Doctoral Candidate at the University of Nevada, Reno. The study examines the influences of organized extracurricular activities on student risk behaviors and replicates similar studies that have been conducted in Montana, Idaho, Colorado and Utah. The results of the survey would provide an excellent resource that would supplement the Youth Risk Behavior Survey information conducted every two years by the state.

I have known Steve for about 20 years through his work with the University of Nevada Cooperative Extension Service and know that he has always had a strong interest in the success of our youth through his many years of public service with 4-H youth. I would encourage you, when asked by Steve, to participate in the "Survey of Nevada 5<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup> Grade Students Out-Of-School Time Survey."

If you have any questions regarding the information in this Memorandum, please do not hesitate to give me a call at 687-9217.

(NSPO Rev. 7-06)

(0) 558

#### APPENDIX C

Washoe County School District Approval Letter

Steven Lewis of the University of Nevada Cooperative Extension Service has been granted permission to conduct a research study within the District entitled, "You and Your Free Time In and Out-of School: A Survey of Nevada 5th, 7th, 9th Grade Students." This student-level survey will examine the influence of organized extracurricular activities on risk behaviors.

A letter of support for this project from Dr. Keith Rheault, Superintendent of Public Instruction, Nevada Department of Education, is attached.

Mr. Lewis will be contacting Principals directly if their school is selected to participate. As with all approved research, participation is voluntary. Principals, teachers, parents and students may decline to participate for any reason.

If you have any questions about the research project, please feel free to email or call.

Janette M. Hall, M.A., M.S. Data Analyst Public Policy, Accountability & Assessment Washoe County School District 425 East Ninth Street Reno, Nevada 89520 775.325.2081

#### APPENDIX D



University of Nevada Cooperative Extension

#### (cover letter, initial superintendent/principal contact)

(insert date)

(insert superintendent/principal name)

University of Nevada Cooperative Extension is conducting a research project to determine the influence of in and out of school time activities on the quality of life of Nevada youth. Your assistance in this effort is requested.

Enclosed, please find a survey copy, a letter of support from the state superintendent, a letter of cooperation, and UNR's Institutional Review Board approval.

Information from the 20-minute survey of 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grade students will be used to determine the effectiveness of various out of school time activities, such as 4-H. The survey also looks at the avoidance of "at risk" behaviors and the enhancement of positive youth development. This study was previously conducted in Montana, Idaho, Utah and Colorado. With your help, we have an opportunity to collect data specific to Nevada. This information will guide many youth development efforts in the future for our state.

I will be contacting you by phone in about a week to answer questions you might have and to ask if your school district is willing to participate. Your assistance in working with University of Nevada to conduct this study is greatly appreciated.

Sincerely your,

Steven R. Lewis, Extension Educator

The University of Nevada, Reno is committed to Equal Employment Opportunity/Affirmative Action in recruitment of its students and employees and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, and sexual orientation. The University of Nevada employs only United States citizens and aliens lawfully authorized to work in the United States. Women and under-represented groups are encouraged to apply.

APPENDIX E

# YOU AND YOUR FREE TIME IN AND OUT OF SCHOOL: A SURVEY OF NEVADA 5TH, 7TH, & 9TH GRADE STUDENTS





University of Nevada Cooperative Extension This is not a test. There are no right or wrong answers. This is a survey about the activities you are involved with in and outside of school. Your participation in this survey is strictly <u>voluntary</u>. This means you don't have to take it if you don't want to. Also, you have the option of leaving blank any question you prefer not to answer. If you choose not to take the survey, you will be asked to read quietly or do homework, (teacher discretion). Your answers will be kept private. Your answers will not be read by your teacher or anyone else at school. Your name will not show anywhere on the survey, and your answers will not be identified with you individually. Your survey will only be combined with all the other student surveys completed in Nevada. Thank you for taking the time to complete this survey

<sup>1.</sup> During the school week, **do you spend time.....** (Circle your answers.)

•	in drama, art, dance, band, choir, orchestra, music lessons, practicing voice or an instrument?	Yes	No
٠	playing on or helping with sports teams at school or in the community?	Yes	No
•	in other school clubs or organizations (for example, school newspaper, student government, school plays, language clubs, hobby clubs, debate, etc.)?	Yes	No
•	in 4-H club activities or projects?	Yes	No
٠	in clubs or organizations (other than sports) outside of school (such as Scouts, Boys and Girls Clubs, YWCA, YMCA, etc.)?	Yes	No
•	attending services, groups, or programs of a spiritual nature?	Yes	No
•	with your friends without anything special to do?	Yes	No

# How do you rate yourself on the following statements? *(circle best response)*

2.	I am good a	at planning	ahead?		
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
3.	l care abou	t other peop	ole's feeling	js.	
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
4.	I feel really	sad when o	one of my fr	iends is un	happy.
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5.	I am good a	at making a	nd keeping	friends.	
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6.	I know how things I kno	w to say "n ow are wron	o" when so g or dange	omeone wa rous.	ants me to do
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
7.	l stay away	from peopl	e who migh	nt get me in	trouble.
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8.	l volunteer	in class to l	ead activiti	es.	
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9.	l can meet	and greet n	ew people e	easily.	
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
10.	I am comfo	rtable in ne	w situation	s.	
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11.	l feel other	kids look u	p to me and	l follow my	example.
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

# How much do you agree or disagree with the following statements? (*Circle one answer per statement*)

12. When things don't go well for me, I am good at finding a way to make things better.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
13.I have <u>little</u> life.	<u>e</u> control ov	er the thing	ıs that will	happen in my	
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
14. On the wh	ole, I like my	/self.			
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
15. At times, I	think I am n	o good at a	II.		
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
16. All in all, I	am glad I an	n me.			
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
17.I feel I do r	not have mu	ch to be pro	oud of.		
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
18. Sometimes I feel like my life has no purpose.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Please check	one answ <u>er</u>	per q <u>uestio</u>	on.		
		A60 67			

19. Were you <u>elected</u> to a leadership position in your school this <u>past year</u>?
□ No □ Yes □ Not possible in my grade or school
20. Did you hold any leadership position in your school this <u>past year</u>?
□ No □ Yes □ Not possible in my grade or school

<ul> <li>21. Did you serve as a committee chairperson in your school this past year?</li> <li>□ No □ Yes □ Not possible in my grade or school</li> </ul>									
22.	Did you so past year?	erve a ? □ Yo	<b>sacom</b> es □	mitte Not	ee m	<b>ember i</b> ı ible in my	n yo grad	<b>ur scho</b> de or sch	<b>ol this</b>
23.	23. Did you help others in your school this past year? □ No □ Yes								
	Я	lf yes □ ⊂	<b>, how o</b> Once	ften '	? A fe	w times		Freque	ently
24.	<ul> <li>24. If you had an important question about something going on in your life, is there an adult <i>(not counting your parents/ guardians)</i> to whom you felt comfortable going to for help?</li> <li>□ No</li> <li>□ Yes</li> </ul>								
	_		Dince		A fe	w times		Freque	ently
25.	In the last one of you more?	mont ur pare	h, did yo ents/gua	ou ha ardia	ave a Ins tl	a good c nat laste	onv d 10	ersatio minut	n with es or
	Never	· 🗆	Once		A fe	w times		Freque	ntly
26.	26. In the last month, did you have a good conversation with an adult( <i>not a parent/guardian</i> ) that lasted 10 minutes or more?								
27. If you had an important concern about the following issues, would you talk to your parents/guardians about it? <i>(check one response for each issue)</i>									
					<u>Wc</u>	uld Talk	to P	arent?	
	Drugs					Yes		No	
	Alcohol					Yes		No	
	Sex					Yes		No	
	Any other	seriou	us issue			Yes		No	

How much c statements? (	lo you agre <i>circle one a</i> l	ee or disa nswerpers	gree with <i>tatement)</i>	the following
28.I can do th	ings on my	own.		
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
29.I set goals				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
30. Ten years	from now, l	think I will I	oe very hap	ру.
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
31.I am respo	nsible for m	y actions.		
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
32.I like to try	new things.	•		
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
33.I am a goo	d organizer.			
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
34.I am a goo	d money ma	inager.		
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
35. Adults in r	ny town or c	ity make m	e feel impo	rtant.
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
36. Adults in r	ny town or c	ity listen to	what I hav	e to say.
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
37. Adults in r	ny town or c	ity don't ca	re about p	eople my age.
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
38. In my town	n or city, I fe	el like l mat	ter to peop	le.
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

39.In	mv	family.	I feel	useful	and	important.

Strongly Disagree	Disagree	Neutral	Agree	Strongly
Disagree				Agree

40. I'm given lots of chances to help make my town or city a better place to live.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Diougroo				7.g.00

41. Students help decide what goes on at my school.

Strongly	Disagree	Neutral	Agree	Strongly
Disagree			9	Agree

42.1 have good written record keeping skills (such as keeping a journal or diary).

Strongly	Disagree	Neutral	Aaree	Strongly
Disagree	Dibugice	neutur	Agree	Agree

43.1 am comfortable giving a speech or demonstration in front of people.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Blockgroo				7.g. 00

### Please check approximately how many times . . .

44. During the past year did you . . .

a)	cheat on a	test?		
	□ Never	Once	□ A few times	□ Frequently
b)	drink alcoh	ol without	your parents per	mission?
	Never	Once	☐ A few times	□ Frequently
c)	shoplift?			
	□ Never	Once	□ A few times	Frequently
d)	use drugs cocaine; or	like marijua <sup>r</sup> sniff glue (	na, methamphet or other fumes to	amines or o get high?
	Never	Once	A few times	□ Frequently
e)	ride in a ca using drug	r with a driv s?	ver who had bee	n drinking or
	Never	Once	A few times	Frequently

200 2

f)	damage pro	operty just	for the fun of it?	□ Frequently
g)	smoke ciga	arettes?	□ A fow times	
h)	use smoke	less tobaco	co (like Copenha	gen/Skoal)?
i)	participate	in any type	e of sexual activit	Li Frequentiy
	□ Never		A few times	Frequently
1)	skip or cut parents?	class with	out permission fr	om your
	Never	Once	A few times	Frequently

### During the last 12 months, have you...

- 45. been involved in a project to help make life better for other people?
  - 🗆 No
  - Yes
- 46. given money or time to a charity or organization that helps people?
  - No
  - Yes
- 47. spent time helping people who are poor, hungry, sick or unable to care for themselves?
  - 🛛 No
  - Yes

#### Please fill in the blanks.

48. How old are you? \_\_\_\_\_ years old

- 49. What grade are you in this year?
  - $\Box$  5<sup>th</sup> grade  $\Box$  8<sup>th</sup> grade
  - $\Box$  6<sup>th</sup> grade  $\Box$  9<sup>th</sup> grade
  - $\Box$  7<sup>th</sup> grade  $\Box$  10<sup>th</sup> grade

50. Are you female or male?
51. Which ethnic group do you most closely identify yourself? (Check only one.)         □ African-American       □ Native-American         □ Hispanic       □ White         □ Other
<ul> <li>52. Where does your family now live? (check only one.)</li> <li>On a farm</li> <li>In the country, not on a farm</li> <li>In town</li> <li>Large city</li> </ul>
53. What kinds of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check only one.)         Image: State of grades do you earn in school? (check on you earn in s
<ul> <li>Mostly D's Mostly below D's</li> <li>54. How many others (18 years old or younger) besides yourself usually live in your home?</li> </ul>
55. Which statement best describes your family? (check only one answer.)
I live with my parents.
I live with only my mother.
I live with only my father.
Sometimes I live with my mother and sometimes I live with my father.
I live with one parent and one step-parent.
I live with my grandparents.
I live with a guardian, relative, or other person(s).

- 56. Have you ever belonged to a 4-H Club that meets formally outside of school?
  - No No
  - □ Yes



- 57. How many years have you been or were you in 4-H?
- 58. Do you currently belong to a 4-H Club?
  - 🛛 No
  - Yes
- 59. My participation in 4-H has been critical to my success in life.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
and protocological model				30 10 <b>0</b> 000 000 000

60. 4-H has made a positive difference in my life.

			-	
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

- 61. 4-H has made a positive difference in my family life. Strongly Disagree Neutral Agree Strongly Agree
- 62. If it weren't for 4-H, there would be few other organized activities of interest to me outside of school time in my community.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

#### 63.4-H provides a safe place for learning and growing.

Strongly Disagree	Disagree	Neutral	Agree	Strongly
				Agree

64.4-H clubs are supportive environments where I feel accepted for who I am.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Disagree				Ayree

#### 65. In 4-H, I can explore my own interests.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0				0

\_\_\_\_

66. What is the best part of 4-H? (Please write in the space below.)

67. What is the <u>worst</u> part of 4-H? (Please write in the space below.)

# **END OF SURVEY**

# Thank you for helping with this study.

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#### APPENDIX F

# Letter of Cooperation

#### (Insert Date)

Steve Lewis University of Nevada Cooperative Extension PO Box 338 Minden, NV 89423-0338 775-782-9960 775-782-9968 fax lewiss@unce.unr.edu

Insert School Name

This letter acknowledges that agrees to participate in You and Your Free Time In and Out of School: A Survey of Nevada 5<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup> Grade Students, a study conducted by the University of Nevada Cooperative Extension.

We have been thoroughly briefed by Steve Lewis, Extension Educator, about the processes involved in cooperating with this effort. We are satisfied that the students to be involved in this study are adequately protected as human subjects. We understand that the subjects' participation is completely voluntary. We also understand that the data from individuals or individual schools will not be analyzed or reported separately.

We plan to have the survey implemented in our school on or close to 2007.

We will need copies of the survey instrument in English and

\_copies of the instrument in Spanish.

We look forward to receiving the statewide results and sharing them with our staff, students, parents and community.

Sincerely,

**Principal Signature** 

#### APPENDIX G



# University of Nevada Cooperative Extension

Dear Parent or Guardian:

The University of Nevada Cooperative Extension (UNCE) is conducting a study to assess the impact of 4-H and other out-of-school youth programs on Nevada's children. The results will reveal some important information about our youth that may be used by school administrators and community decision-makers to help youth avoid risky behavior and increase their chance to succeed in life. UNCE is investigating how young people spend their time, the extracurricular activities in which they are involved, and what experiences have had the greatest impact on their character, confidence and competence.

The school in which your son/daughter is enrolled has been randomly selected for participation in this statewide study. The survey will only take about 20 minutes or less to complete because the questions have check boxes with a response scale that ranges from "Strongly Agree" to "Strongly Disagree." This is an anonymous and confidential survey. Your child's name will not appear anywhere on the form or in the printed results.

Participation in this study is completely voluntary. Each child who participates will also be given the option of leaving blank any question she/he prefers not to answer. The decision to participate is up to you and your child. Please remember that this survey offers your child the opportunity to share his or her confidential opinions on some very important issues facing all Nevada youth. If you decline, your son or daughter will be allowed to read or study while classmates are taking the survey.

You may ask about your child's rights as a human subject or you may report (anonymously if you so choose) any comments, concerns, or complaints to the University of Nevada, Reno Social Behavioral Institutional Review Board, telephone number 775-327-2368, or by addressing a letter to the Chair of the Board, c/o Office of Human Research Protection, 205 Ross Hall/331, University of Nevada, Reno; Reno, NV 89557. UNR protocol number, SA06/07-049.

Please let the school know **only if you** <u>do not</u> **wish** your son or daughter to participate in this study. You may do so by filling out the bottom of this letter and returning it (via your child) to his/her teacher. Feel free to call me if you have any questions about this important study.

Sincerely,

Steven R. Lewis, Extension Educator

 $\Box$ 

Child's Name

Will Not Participate Parent's Signature

#### APPENDIX H



Estimado Padre / Estimada Madre o Persona Responsable de la Custodia:

La Extensión Cooperativa de la Universidad de Nevada (*University of Nevada Cooperative Extensión*, por sus siglas en inglés UNCE) está llevando a cabo un estudio para evaluar el impacto en los jóvenes de Nevada del programa 4-H y de otros programas para niños que se realizan fuera del horario de las escuelas. Los resultados revelarán cierta cantidad de información importante acerca de nuestros jóvenes que podrán usarlos los administradores de las escuelas y las personas de la comunidad a cargo de tomar decisiones para ayudar a los jóvenes a evitar conductas riesgosas y aumentar sus posibilidades de tener éxito en la vida. UNCE está investigando como los niños pasan sus tiempos, las actividades extracurriculares en las cuales participan y cuales son las experiencias que han tenido el mayor impacto en el carácter y temperamento, nivel de confianza y capacidades de los jóvenes.

La escuela a la cual está yendo su hijo o hija ha sido seleccionada para participar en este estudio de todo el Estado de Nevada. La encuesta se podrá completar en aproximadamente solo 20 minutos, o quizás menos, porque las preguntas tienen casillitas con una escala de respuestas que va de*SD*e "Estoy firmemente de Acuerdo" a "Estoy firmemente en Desacuerdo." Esta encuesta es anónima y confidencial. El nombre de su hijo o hija no aparecerá en ningún lugar del formulario ni tampoco en los resultados que se lleguen a imprimir.

La participación en este estudio es completamente voluntaria. Cada niño o niña que participe también tendrá la opción de dejar cualquier pregunta en blanco, que él o ella prefiera no responder. La decisión de participar queda a cuenta suya y de su niño o niña. Por favor recuerde que esta encuesta le ofrecerá a su hijo o hija la oportunidad de compartir confidencialmente sus opiniones con respecto a asuntos importantes que enfrentan todos los jóvenes en Nevada. Si no desea participar, a su hijo o hija se le permitirá que lea algo o estudie mientras que los demás compañeros se encuentren tomando la encuesta.

Usted podrá hacer preguntas acerca de los derechos de su niño o niña como participante del estudio o podrá reportar (anónimamente si escoge hacerlo) cualquier comentario, inquietud o queja al Comité de Repaso de la Conducta Social Institucional de la Universidad de Nevada, Reno (conocido como *Social Behavioral Institutional Review Board*), llamando al número de teléfono 775-327-2368, o escribiendo una carta al Oficial Responsable del Consejo de la siguiente manera: Chair of the Board, c/o Office of Human Research Protection, 205 Ross Hall/331, University of Nevada, Reno; Reno, NV 89557. UNR protocol number, SA06/07-049.

Por favor infórmele a la escuela **solamente si <u>no</u> desea** que su hijo o hija participe en este estudio. Usted puede completar la parte de debajo de esta carta y enviarla (por medio de su hijo o hija) al maestro. Por favor siéntase plenamente a gusto de llamarme si tiene alguna pregunta acerca de este estudio tan importante.

Sinceramente,

Steven R. Lewis, Educador de la Extensión

Nombre del Niño/Niña

⊔ No participará

Firma del Padre/Madre

#### APPENDIX I



University of Nevada Cooperative Extension

## **INSTRUCTIONS**

#### You and Your Free Time In and Out of School: A Survey of Nevada 5<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup> Grade Students

**Thank you** for helping administer this survey. The results will reveal some important information about our youth that may be used to help them avoid risky behavior and increase their chance to succeed in life!

#### What does this packet include?

- Instructions (you are reading them right now)
- Surveys (English and Spanish versions)
- Parent/Guardian Letter (English and Spanish versions)
- Tracking Form
- Return Envelope

#### 1) What do you do first?

Send the <u>Parent/Guardian Letter</u> home with your students at least a couple days prior to giving the survey. This letter explains the purpose of the survey, and instructs them to act if they don't want their child to participate. Remind the students to return the form if their parents don't want them to participate.

Make sure that you have enough surveys. I included a few extras but if you need more please call early on so I have time to get them to you.

#### 2) Day of the survey

Please distribute one survey to each student and then <u>read</u> the following instructions which also appears at the top of each survey form:

This is not a test. There are no right or wrong answers. This is a survey about the activities you are involved with in and outside of school. Your participation in this survey is strictly <u>voluntary</u>. This means you don't have to take it if you don't want to. Also, you have the option of leaving blank any question you prefer not to answer. If you choose not to take the survey, you will be asked to read quietly or do homework, (teacher discretion). Your answers will be kept private. Your answers will not be read by your teacher or anyone else at school. Your name will not show anywhere on the survey, and your answers will not be identified with you individually. Your survey will only be combined with all the other student surveys completed in Nevada. Thank you for taking the time to complete this survey.

- Inform students choosing not to take the survey, what they will be doing, such as reading quietly or doing homework. This may also be instructive to students who complete the survey early.
- Instruct students (completing the Spanish and English survey versions) to turn their survey over on their desk when completed. Once all surveys are completed, <u>instruct</u> <u>students to take their survey and physically place it inside the one return envelope</u> provided per class. This procedure is critically important to insure anonymity.
- Then, please complete the tracking form, insert it in the same return envelope containing all the surveys, seal the envelope, and mail it as soon as possible.

You should encourage students to work through the survey in a focused way, not spending too much time thinking about the answer to any particular question. For most children the survey will take only 20 minutes to complete. Some children will have more trouble reading the survey questions than others. For slower readers, you may have to allow them extra time. If you have an in-class aide, you might be able to have this person read the questions to the students. If any student struggles too much with completing the survey, instruct them to turn it in together with all the other students at the end of 30 minutes, even if incomplete.

I encourage you to foster a serious atmosphere where students do not work together on answers to the questions. Please try to keep students focused on finishing the questionnaire and concentrating on answering to the best of their ability. If any students have questions, feel free to try and help them understand the questions.

Thanks again very much for your help! **Steve Lewis, University of Nevada Cooperative Extension, PO Box 338, Minden, NV 89423, 775-782-9960.** If you have any questions about your rights as a volunteer in this research, contact University of Nevada Reno, Social Behavioral Institutional Review Board at (775) 327-2368 or by addressing a letter to the Chair of the Board, c/o UNR Office of Human Research Protection, 205 Ross Hall/331, University of Nevada Reno, Reno, NV 89557.

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APPENDIX J

N	University of Nevada Cooperative Extension
	TRACKING FORM You and Your Free Time In and Out of School: A Survey of Nevada 5 <sup>th</sup> , 7 <sup>th</sup> , 9 <sup>th</sup> Grade Students
County:	
School Name:	
Grade Level:	
Proctor's Name:	
Date Survey was	Given:
Number of Surve	eys Attached:
Comments:	
(please complet	te and enclose with surveys in the pre-paid self addressed envelope) Thank You!!!
Steve Lewis, Uni 89423, 775-782-9 research, contact Board at (775) 32 Office of Human Reno, NV 89557.	versity of Nevada Cooperative Extension, PO Box 338, Minden, NV 960. If you have any questions about your rights as a volunteer in this University of Nevada Reno, Social Behavioral Institutional Review 7-2368 or by addressing a letter to the Chair of the Board, c/o UNR Research Protection, 205 Ross Hall/331, University of Nevada Reno,

#### APPENDIX K

## Phone Script for Public School District Superintendents and Principals

Hello, I'm Steve Lewis, with University of Nevada Cooperative Extension. Thanks for taking my call.

About a week ago I sent you some information on a student survey we are conducting across the state – You and Your Free Time In and Out of School: A Survey of Nevada 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> Grade Students. Did you receive the materials?

#### Script for District Superintendent

(If answer is no) - I'd be happy to drop another copy in the mail for you to review (check mailing address).

(If answer is yes) – I'd like to know if you have any questions about the survey or the process? Also, I'm calling to see if you will grant approval for me to contact your principals to see if they are willing to participate.

(If answer is no) – Thank you for taking the time to review the materials.

(If the answer is yes) – Thank you, I will be contacting your principals with the same packet of information I sent you. I will also mention that I've spoken to you and you have given me permission to speak to them.

#### Script for School Principals

(If answer is no) - I'd be happy to drop another copy in the mail for you to review (check mailing address).

(If answer is yes) – I'd like to know if you have any questions about the survey or the process? Also, I'm calling to see if you will grant approval for me to conduct this survey at your school.

(If answer is no) – Thank you for taking the time to review the materials.

(If answer is yes) – Fantastic, thank you! Please complete the cooperation letter indicating your willingness to participate. Also, identify the date you intend to give the survey and the number of surveys you will need. Please be aware that the parent opt out letter needs to go out at least 2 weeks prior to giving the survey. Thanks again!

#### APPENDIX L

#### Reasons Why Schools Did Not Participate

We will see what we can do, we have been surveyed to death this school year.

We have recently completed a very similar survey for the state. We are not interested in administering a similar instrument to our students again this year. If you have questions regarding surveys you should direct them to Katherine Louden in the substance abuse/ share office.

I am sorry but Reno High School will not be able to conduct your survey. We have had a great number of surveys this school year and I do not wish to conduct any more surveys this school year. Again, I am sorry. Thank You.

I'm sorry...we really can't do this....right in the middle of testing....just finished several surveys for the state.

We are giving a risk survey to our students this week. We would not be interested in participating in another survey. Sorry.

Sorry, but we are not going to participate in this survey.

I am sorry but we are off track right now and will not come back on track for another two weeks. We are down to crunch time and my teachers cannot handle one more thing. Thank you anyway!

Sorry, our teachers and students have been tested and surveyed to death. With all the things we are expected to accomplish this is just one more . We will not be participating this year. Thanks.

You are right we are inundated with surveys and I have promised my teachers no more. I apologize but we just have so much to accomplish and so little time. I hope that you find your answers through some other avenues.

At this time, our teachers are too busy to do a survey. We have done so may already. Sorry.

I am so sorry but it is impossible for me to help with anything at this point. Evaluations, budget and the accountability report are killing me. I worked all Friday night, Saturday and Sunday (until midnight) and I am still not close to having my work done. Sorry.

We will be unable to assist you with your survey. Thank you for thinking of us.

Sorry, but we are inundated with far too much and too little time for teaching.

I understand and have been so willing to do this in the past. However, we are a 5 - 8 school and have been inundated with testing. We are a brand new school and the teachers/students have had to endure too much up to this point.

While we find this survey to be extremely valuable and will consider this in the next few years....we just are unable to do this now. I am very sorry and want you to know we will try in the future, just not now. Thank you.

We do have many things going on. We also don't have a large 4-H population at Galena. I don't think we are the correct group to be surveying.

I have spoken with the teachers and the principal. Our students are test weary. They have participated in many tests this year and still have one school wide test to take. Additionally, at this point in the year, our time is very limited. Is it possible to administer the survey at the beginning of the 07-08 school year? I believe we would get more accurate results from the students, and there would be a more positive attitude toward the project. Thank you.

I spoke with Mr. Roberts, Principal PVHS and he is not interested in participating in the Risk Behavior Survey at this time.

I wrote to you on your first request, but it sounds like it didn't return to you. I attempted to cal today at about 1:00 because of your messages (I wasn't here yesterday, hence returning this e-mail today), but the long-distance code wouldn't work. We are absolutely buried with end-of-the-year activities, both scheduled and non-scheduled, and I'm not sure how much more my staff can take with "extras." Not to diminish your study or the importance of the survey, but we can't do it right now. I'm sorry, it's just lousy timing for us.

Our Associate Superintendent got back to me concerning the permission slips to take the survey, he said that we would not give the survey without an OK in hand from the parents. I do not have the time to collect and review these material at this time of the year. Thanks

We have done several surveys this school year for UNR. At this time we will be unable to participate. Thank you.

## VITA

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