Journal of Agricultural Education
Volume 45, Number 4, pp. 71-81
DOI: 10.5032/jae.2004.04071

RELATIONSHIPS BETWEEN SELECTED DEMOGRAPHIC CHARACTERISTICS AND THE QUALITY OF LIFE OF ADOLESCENTS IN A RURAL WEST TEXAS COMMUNITY

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Abstract

Agricultural educators have long had an interest in the viability of rural schools. At least part of this interest can be attributed to the large number of secondary programs located in rural school districts. In this study, the researchers examined the relationships between a composite quality of life measure, perceived control over one's quality of life, and perceived opportunities for the improvement in one's quality of life and students' gender, family socioeconomic status, and number of children and adults residing in the household. The literature indicates that quality of life is associated with various student performance indicators. Findings showed as family socioeconomic status increased, overall quality of life, control, and opportunities also increased. The additional demographic variables included in the study did not have a consistent influence upon the students' quality of life as measured by the three indicators. In formulating hypotheses, the researchers treated the three components of quality of life as a "bundle" in relation to the ethnicity, livelihood, and household composition variables of interest. If anything, the data have indicated that there is a great deal of variability in the three components based upon these measured variables.

Introduction

Rural communities are becoming increasingly smaller in population and fewer in number. The 2000 U.S. Census revealed there were only 59 million Americans, or a little less than 21% of the population, living in rural communities. Previously, the 1990 U.S. Census reported 23% of the population resided in rural communities. This data illustrates a population shift to urban and suburban areas. By U.S. Census definition, rural communities are areas who have less than 2,500 residents. Additionally, rural communities have higher numbers of low-paying, low-benefit jobs compared to more urban areas (Herzog & Pittman, 1995).

Communities are a unique part of rural education. Communities help establish the framework for helping students succeed in school (Bauch, 2001). Schools serve as the "cultural and social center of the town" (Bauch, 2001, p. 209). Rural schools are intertwined within the community they serve (Theobold & Nachtigal, 1995). Parents in rural communities are expected to aid in the educational process by supporting their schools and ensuring their children are prepared for school requirements (Bauch, 2001). Additionally, Bauch (2001) stated that some rural families encourage their children to obtain the basic skills required in hopes of them moving out of rural areas, attending college, and living a successful life outside of the rural community.

Rural schools are smaller than urban schools. According to Bauch (2001), rural students generally achieve lower levels of education when compared to urban students. High school completion rates were 7.8% lower in rural areas (Lipmann, Burns, & McArthur, 1996). However, rural students

have lower student absenteeism and dropout rates, and are less likely to be living with single parents (Lipmann et al., 1996). Kearney (1994) reported that smaller schools tend to have a positive school climate, a high level of student-faculty contact, and better school-community relationships. The vast majority of rural schools are located in areas with low tax bases and property values. Herzog and Pittman (1995) concluded that rural schools are often underfunded compared to other schools. School poverty has been shown to have a negative impact on student achievement, behavior, and teacher morale (Achilles & Mitchel, 2001-2002).

Information from the U.S. Department of Education (1999) indicated that 66.5% of rural schools offered one or more vocational programs. According to the National FFA Association (2002), 27% of its membership resides in rural, farm areas. In addition, rural schools are more likely than urban schools to offer vocational programs for the occupations of agriscience technician and welder (USDE, 1998). In a study of Houston Livestock Show and Rodeo Scholarship recipients (of which at least 60% were 4-H or FFA members), more than 90% indicated a very acceptable or excellent quality of life (Smith & Briers, 2001).

Theoretical Framework

The Mitzel model identified four classes of variables which influence teacher effectiveness. These variables included presage, context, process, and product variables (Mitzel, 1969). Presage variables refer to teacher characteristics, including formative experience, background, and competencies of the teacher (Dunkin & Biddle, 1974). These experiences include formative or personal background experiences, teacher-education experiences, and teacher properties. Teacher properties encompass variables such as authoritarianism, attitudes toward students, and personality (Dunkin & Biddle, 1974). Context variables include student knowledge and experiences, as well as the physical classroom situation. Context variables affect student learning, but are not in the control of the teacher (Mitzel, 1969; Dunkin & Biddle, 1974). Process variables may be defined as all interactions between students and teachers (Mitzel, 1969). Process variables are seen when context and presage variables interact. All activities within classrooms are considered process variables. Interactions which are not productive to student growth are also considered process variables (Dunkin & Biddle, 1974). Finally, product variables assess the outcomes of teaching. Product variables include teacher effectiveness and student growth or changes which come about as a result of instruction (Dunkin & Biddle, 1974). Primarily, product variables are seen as positive impacts on student knowledge. However, some classroom experiences may hinder future learning experiences. Standardized tests are the popularly used method to assess product variables.

Background and Setting

The condition of rural America is evident in Floyd County Texas. The 2000 U.S. Census revealed a decline of more than seven hundred (8.5%) residents between 1990 and 2000. Additionally, the 2000 Census revealed that 49.9% of the population was white, while 45.9% of the population was Hispanic. The 2000 U.S. Census indicated the median family income in Floyd County Texas was $32,123. These conditions are representative of the norm for many rural American towns.

Quality of life constructs are examples of context variables. The interaction of context variables need to be further examined to better understand how they affect learning and student achievement. Higher education, learning, and achievement have been positively correlated with quality of life, and therefore many benefits can be achieved through additional study of context variables (Mookherjee, 1992; Campbell, Converse, & Rogers, 1976; Edwards & Klemmack, 1973). Although there are numerous forces and factors which might influence quality of life, four variables are germane to this study. The variables included ethnicity, socio-economic status, number of children in the home, and number of parents in the home.

Ethnicity has been linked to quality of life scores. However, research to date has not clearly delineated the direction and strength of this link. Anglo female adolescents reported higher quality of life scores than African American female adolescents in a study conducted by Dew and Huebner (1994). Inversely, the same study revealed that African American male adolescents were found to have higher quality of life scores compared to Anglo male adolescents. Near, Rice, and Hunt (1978) found that non-Anglo adult males indicated less satisfaction with their lives and jobs than did adult Anglo males. Similarly, Mookherjee (1992) concluded that Anglos indicated a higher quality of life compared to African Americans.

Most of this data indicates that family income is positively related to quality of life (Campbell, Converse, & Rodgers, 1976; Mookherjee, 1992). Edwards and Klemmack (1973) determined that there is a positive relationship between income and overall life satisfaction. Families with a higher income revealed that they had a higher quality of life than lower income families (Metzen, Bradley, & Helmick, 1986). Research conducted by Palmore and Luikart (1972) indicated that income was more strongly linked with quality of life in participants with lower incomes. Furthermore, they determined that older middle aged participants indicated that income was less related to quality of life than younger middle aged participants (Palmore & Luikart, 1972). Higher education levels have also been positively linked to perceptions of well-being (Mookherjee, 1992; Campbell et al., 1976; Edwards & Klemmack, 1973).

Family composition, including number of siblings and number of parents in the home, has become a part of many studies seeking to determine what affects achievement and learning. Student achievement has been linked to home environment. The March 2000 Current Population Survey (CPS) revealed that the composition of American families is gradually changing. This survey determined that there are an increasing number of single-parent homes as a result of increased divorce rates and out-of-wedlock childbirth (U.S. Census Bureau, 2000). Between 1980 and 2000 the number of single-parent families increased 5% (U.S. Census Bureau, 1980; U.S. Census Bureau, 2000). Almost three out of 10 children in America live in single-parent families (Caldas & Bankston, 1999). Alarmingly, Caldas and Bankston (1999) reported that large concentrations of students from single-parent homes had decreased individual achievement, regardless of race, family income, or family composition. The results of their study indicate schools are more effective when there are fewer numbers of students from single-parent families. Lillard and Gerner (1999) reported that children who spent part of their childhood in single-parent homes are twice as likely to drop out of school, and less likely to attend college. All ethnic groups reported to have a decrease in the number of two-parent families, with African Americans having the lowest numbers of two-parent families (U.S. Census Bureau, 2000). According to Caldas and Bankston (1999) family structure significantly impacts a child's well-being. The number of parents in the family impacts the economic well-being, amount of attention and social interaction, and the behavior of the child.

The number of children per family may also influence student learning and achievement. An increased number of children may mean less attention and interaction between parents and each child. The average number of children per family has steadily decreased over the last 20 years. In 2000, the U.S. Census Bureau reported that the average family size for Anglos was 3.0, 3.4 people for African Americans, and 3.9 per family for Hispanics. Hispanics were reported to have larger family sizes than any other ethnic group (U.S. Census Bureau, 2000).

Purpose and Research Hypotheses

The purpose of this study was to determine relationships between selected demographic and livelihood system characteristics and the perceived quality of life of rural adolescents. The following research hypotheses were developed to guide the study:

1. Rural Anglo (white/non-Hispanic) students will have a greater perception of their quality of life, a greater perception of control over their quality of life, and greater perceived opportunities for the improvement of their quality of life than rural Hispanic adolescents.
2. Rural adolescents coming from households in the upper-range of socioeconomic status, will have a greater perception of their quality of life, a greater perception of control over their quality of life, and greater perceived opportunities for the improvement of their quality of life than rural adolescents coming from households in the lower and middle ranges of socioeconomic status.
3. Rural adolescents living in families of two children will have a greater perception of their quality of life, a greater perception of control over their quality of life, and greater perceived opportunities for the improvement of their quality of life than rural adolescents from single-child or three or more children families.
4. Rural adolescents living in families where two adults reside will have a greater perception of their quality of life, a greater perception of control over their quality of life, and greater perceived opportunities for the improvement of their quality of life than rural adolescents living in single adult families or families where three or more adults reside.

Methods/Procedures

Data for this descriptive/correlational study were collected Spring 2002. The target population for this study was adolescents residing in a rural community in Floyd County, Texas. The accessible population was students attending Floydada High School. Floydada is the largest of two school districts in Floyd County. On April 12, 2002 the researchers accompanied by undergraduates at Texas Tech University administered the Quality of Life Questionnaire and related demographic instrument to a nonrandom convenient sample of 176 students. Due to the sampling methodology, the authors would urge caution in generalizing the findings of this exploratory study beyond this sample.

In terms of instrumentation, the adolescent version of the Quality of Life profile was developed by faculty at the Center of Health Promotion at the University of Toronto (Raphael, Rukholm, Brown, Hill-Bailey, & Donato,1996), served as the primary data-gathering instrument. The first part of the two-section instrument utilizes 54 Likert-scaled statements to assess both importance of each statement and satisfaction with each statement in regards to this part of their life. Both the importance and satisfaction scales were measured on five points (ranging from 1=*Not At All* to 5=*Extremely*). The 54 statements measure overall quality of life and three constructs or domains. The initial construct is the "being" domain, where physical (body and health), psychological (thoughts and feelings), and spiritual (beliefs and values) are assessed. The second construct is the "belonging" domain consisting of items that measure the physical (one's life and how time is spent), community (access to things), and social (interaction with people) components of students. The "becoming" construct measures one's life in terms of the practical (daily things), growth (how one improves and changes), and leisure (things done for enjoyment).

The second section of the instrument utilized nine Likert-scaled statements to assess both how much control students had on the particular part of their life and the student's perceived opportunity to improve the particular part of their life. The control scale was measured on five points ranging from 1=*Almost None*, to 5=*Almost Total*, and the opportunity scale was measured on five points ranging from 1=*Almost None*, to 5=*Great Many*. Although the instrument developers have established face validity, content validity, construct validity, and internal consistency of the instrument, the following post-hoc Cronbach's reliability coefficients were found on this sample: (1) Being, r=.92; (2) Belonging, r= 90;

(3) Becoming, r=.93; (4) Overall Quality of Life (Cumulative Being, Belonging, and Becoming), r=.97; (5) Control, r=.81; (6) Opportunity, r=.90.

The researchers added a third demographic section to the questionnaire that solicited livelihood system information (age, gender, ethnicity, number of children under 18 in the household, number of adults over 18 residing in the household, and parental occupation). Adult occupations were assigned scores based upon an index developed by Hauser and Warren (1997). This scale is determined upon the characteristics of the workforce based upon the 1990 census and occupational prestige ratings obtained in 1989. Separate indices were used for males and females. These combined (both males and females) occupational index scores were used as a proxy for household socioeconomic status.

Data were analyzed using SPSS/v.11.0 and G*Power/v.2.0 software. SPSS was used to calculate descriptive statistics consisting of means, standard deviations, frequencies, and percentages to profile the adolescents. To test the research hypotheses, the researchers used single-factor general linear model (GLM) analysis of variance (ANOVA). GLM ANOVA was used rather than the traditional variance-ratio method to allow the researchers to break the variance accounted for in quality of life scores into predetermined component parts. Consequently, the researchers planned contrasts (as opposed to using post hoc comparisons) to test the specific research hypotheses. The use of GLM ANOVA also allowed the researchers to conduct polynomial contrasts for the purpose of analyzing trends in the data, in the case of research hypotheses four through six (which consisted of quantitative independent variables with three data points), the shape of the function relating the levels of these independent variables to the dependent variables were of interest to the researchers. In many of the analyses, the Levene's test for homogeneity of variance between groups was statistically significant, which violated one of the assumptions for ANOVA. Consequently, the researchers utilized the Brown-Forsythe F test ($F_{BF)}$ for the omnibus ANOVA hypotheses, which is recommended in place of the F test in cases where variances between groups are not equal (SPSS/PC v.11). For data analysis purposes only, the demographic makeup of this sample was viewed by the researchers as being representative of many rural high school students in the region. Consequently, inferential statistics were used as a mechanism for decision making, with an a priori alpha level set at .05. G*Power software was used to calculate Cohen's f (f_c) statistic, a measure of effect size. This was calculated to determine the overlap between membership within a particular group, being particularly sensitive to the use of the F statistic and contrast coding. To assist in the interpretation of effect size, the convention advanced by Cohen (1988) was used: .1=small; .25=medium; and $\geq$.40=large.

Results and Findings

The adolescents in the sample could be described as a group as being 16 years of age (M=16.11, SD=1.12). There were slightly more Hispanics (51.1%) than Anglos (41.5%), and males (52.3%) than females. These adolescents had an average of two adults (M=2.14, SD=0.87) and two children (under 18 years old) (M=2.10, SD=1.20) living in their home. Collectively, mothers in the household held higher socioeconomic status jobs than fathers. Higher occupational index scores reflect greater socioeconomic status within the household. The average status by mothers was about a score of 35 (M=34.79, SD=25.12) as compared to fathers with a score of 30 (M=29.41, SD=14.59). The combined occupational index score for the household was about 64 (M=64.21, SD=32.46).

Overall Quality of Life scores and the three component constructs are products of both the importance and satisfaction scores ranging from 3.33 to –3.33. Based upon a normal curve, Smith and Briers (2001) utilized the following convention for interpreting quality of life scores: (1) *Excellent*=3.32 to 1.51; (2) *Very Acceptable*=1.50 to 0.51; (3) *Adequate*=0.50 to -.50; (4) *Problematic*=-0.51 to -1.50; and (5) *Very Problematic*=-1.51 to -3.33. Overall, students in this sample perceived

themselves as having a very acceptable quality of life (M=1.45, SD=0.95). Similarly, students scored in the very acceptable range for the constructs of Being (M=1.50, SD=1.00), Belonging (M=1.44, SD=0.98), and Becoming (M=1.42, SD=1.05).

In terms of the perceived control that adolescents had over their life and potential opportunities for adolescents to improve their lives, these two constructs were based upon a five-point scale. Control scores were rated by asking "How much control do I have over..." my physical health, my thoughts and feelings, my beliefs and values, the places where I spend my time, the people whom I spend my time with, using what my community has to offer, the everyday things I can do in my life, the things I can do for fun and enjoyment, and the things I can do to improve myself." Overall, the adolescents felt fundamentally empowered based upon perceived control (M=4.12, SD=0.60). Opportunity scores were rated by asking: "Are there opportunities for me to improve..." the same nine statements identified above in reference to Control. These adolescents were less optimistic in regards to Opportunity, with an average perception between "some" and "many" (M=3.48, SD=0.90).

Hypothesis One

For the purpose of this hypothesis, it must be pointed out that of the 176 students participating in the study, 11 did not reveal ethnic background. In addition, one student was self-identified as being American Indian or Alaskan Native and another as being African American. Due to the missing data and the small cell size that would have resulted in including the latter two students, a total of 13 cases were omitted from the following analyses. There was a statistically significant ethnic effect upon overall quality of life, F_{BF} (1,123.59)=12.05, p<.001, f_C=.27. Anglo students (M=1.78, SD=1.09) perceived themselves as having a higher overall quality of life than Hispanic students (M=1.26, SD=.75). A statistically significant ethnic effect was found on perceived control over the students' quality of life, F_{BF} (1,152.01)=6.49, p=.01, f_C=.20. Anglo students (M=4.25, SD=.56) perceived themselves as having greater control over their quality of life, compared to Hispanic students (M=4.02, SD=.60). A statistically significant difference was found between ethic background and opportunities for the adolescents to improve their quality of life, F_{BF} (1,121.4)=36.34, p<.001, f_C=.46. Interestingly enough, Hispanic students (M=3.38, SD=.67) perceived themselves as having greater opportunities to improve their quality of life than did Anglo students (M=3.01, SD=.95).

Hypothesis Two

Data related to occupational index score, a proxy for socioeconomic status, were coded into the following categories: (1) 10 to 46 = low socioeconomic status; (2) 47 to 84 = middle socioeconomic status; and (3) 85 to 126 = high socioeconomic status. This assignment resulted in the groups being roughly equal in membership. It should be noted that 38% of the students did not respond to this question, resulting in a sample size of 138 for these analyses. An overall statistically significant socioeconomic status effect was found in overall quality of life, F_{BF}(2,116.61)=18.82, p<.001, f_C=.47. In terms of the planned contrasts, there was a significant difference between adolescents coming from upper socioeconomic status families, when compared to students whose families fell within the lower and middle socioeconomic status groups, t(64.46)=19.29, p<.001. However, no statistically significant difference in overall quality of life was found between adolescents in the lower socioeconomic status group and students in the middle group, t(90.7)=.21, p=.42. In terms of trends, there was a statistically significant quadratic trend (F(1,135)=8.99, p=.003).

A statistically significant socioeconomic status effect was found on perceived control over the students' quality of life, F_{BF} (2,131.81)=8.48, p<.001, f_C=.34. Adolescents in the higher status group felt significantly greater control over their quality of life, than did adolescents in the other groups, t(94.57)=82.33, p<.001. Similarly, adolescents in the middle status group felt significantly greater control over their quality of life, than did adolescents in

the lower group, $t(89.61)=2.04$, $p=.023$). There was a statistically significant linear trend ($F(1,134)=16.89$, $p<.001$) indicating as socioeconomic status increased perceived control over quality of life increased proportionally.

A statistically significant socioeconomic status effect was discovered on perceived opportunities for the adolescents to improve their quality of life, F_{BF} $(2,116.45)=13.83$, $p<.001$, $f_C=.42$. Adolescents in the higher status group perceived significantly greater opportunities for the improvement in their quality of life, than did adolescents in the other two groups, $t(65.40)=37.34$, $p<.001$. However, no statistically significant differences were found between students in the lower socioeconomic status group and students in the middle socioeconomic status group, $t(85.77)=-1.37$, $p=.087$). A statistically significant linear trend ($F(1,130)=25.75$, $p<.001$) indicating as socioeconomic status increased, perceived opportunities for the adolescents to improve their quality of life decreased proportionally.

Hypothesis Three

For the following analyses, families with one child were coded as one group, families with two children were coded as a second group, and families with three or more children were coded as a third group. When examining overall quality of life, statistically significant differences were found based upon number of children in the household, F_{BF} $(2,127.33)=9.8$, $p<.001$, $f_C=.33$. Adolescents in the families with two children felt significantly greater overall quality of life, than did adolescents in the other groups, $t(108.83)=-3.65$, $p<.001$). However, no statistically significant differences existed in overall quality of life between adolescents in one-child homes and those in homes with three or more children, $t(65.85)=-1.50$, $p=.069$. There was a statistically significant quadratic trend ($F(1,129)=13.00$, $p<.001$) indicating a nonlinear relationship between household composition based upon number of children.

No statistically significant household composition effect was found based upon number of children and perceived control over the students' quality of life, $F(2,123)=1.73$, $p=.09$, $f_C=.17$. However, a statistically significant socioeconomic household composition effect was discovered on perceived opportunities for the adolescents to improve their quality of life, $F_{BF}(2,90.27)=15.06$, $p<.001$, $f_C=.44$. Adolescents in homes with two children perceived significantly less opportunities for the improvement in their quality of life, than did adolescents in the other two groups, $t(98.82)=5.10$, $p<.001$. However, no significant differences were found between students in homes with only one child and students in homes with three or more children, $t(40.95)=-.15$, $p=.44$). A statistically significant quadratic trend ($F(1,120)=27.36$, $p<.001$) indicating nonlinearity between household composition based upon number of children and opportunities for the adolescents to improve their quality of life.

Hypothesis Four

For the following analyses, children from families with one adult were coded as one group, children from families with two adults were coded as a second group, and children from families with three or more adults were coded as a third group. When examining overall quality of life, statistically significant differences were found based upon number of adults in the household, $F_{BF}(2,75.65)=21.70$, $p<.001$, $f_C=.50$. Adolescents in the families with two adults had a significantly lower overall quality of life, than did adolescents in the other groups, $t(101.46)=4.14$, $p<.001$. Adolescents from one-adult households had a significantly higher overall quality of life than did adolescents from households with three or more adults, $t(51.66)=-5.26$, $p<.001$). There was a statistically significant quadratic trend ($F(1,158)=18.99$, $p<.001$) between household composition based upon number of adults and overall quality of life.

A statistically significant household composition effect based upon the number of adults in the home, was found on perceived control over the students' quality of life, $F(2,151)=8.94$, $p<.001$, $f_C=.33$. Adolescents in the families with two adults had a significantly lower perceptions of control over their quality of life, than did adolescents in the other groups, $t(151)=3.10$, $p<.001$. Similarly, adolescents from one-

adult households had significantly higher perceptions of control over their quality of life, than did adolescents from households with three or more adults, $t(151)=-3.08$, $p<.001$. There was a statistically significant quadratic trend ($F(1,151)=9.59$, $p<.001$) between household composition based upon number of adults and overall quality of life.

A statistically significant household composition effect, based upon the number of adults in the home, was found on perceived opportunities for the improvement of the adolescents' quality of life, $F(2,147)=28.14$, $p<.001$, $f_C=.53$. Adolescents in the families with two adults had significantly greater perceptions of control over their quality of life, than did adolescents in the other groups, $t(147)=-3.87$, $p<.001$. Similarly, adolescents from one-adult households had significantly lower perceptions of opportunities for the improvement of their quality of life, than did adolescents from households with three or more adults, $t(147)=6.56$, $p<.001$. There was a statistically significant quadratic trend ($F(1,147)=15.01$, $p<.001$) between household composition based upon number of adults and the adolescents' perceptions of opportunities for the improvement of their quality of life.

Conclusions, Recommendations and Implications

Due to the nonrandom sampling technique used in this study, the conclusions, recommendations, and implications will be limited only to those students participating in the study. As a group, these students were optimistic about their overall quality of life, were optimistic about perceived control over the quality of life, but were less optimistic about opportunities for the improvement of their quality of life. Intuitively, there must be a relationship among these measures of quality of life and the attitude in which these adolescents approach knowing, teaching, and learning, particularly in the affective domain. However, the breadth and depth of this relationship is certainly far from being understood. Hopefully by sharing this finding with teachers, counselors, and educational leaders in the high school, they will be able to approach these students with a deeper understanding of how their students feel about this important dimension of their life. It is recommended that future research focus upon the cognitive, affective, and behavioral components of attitudes and perceptions that these rural adolescents have towards the quality of their life.

The data did not support the first research hypothesis. Although Anglo students felt that they had a higher quality of life and exhibited more control over their quality of life, Hispanic students felt that they had significantly more opportunities for the improvement of their quality of life. In terms of practical significance, the analysis demonstrated convincingly that the differences in opportunities to improve quality of life between Hispanic and Anglo students are formidable. Subsequent research should examine the correlation between family socioeconomic status and ethnicity. If Hispanic students reside in households with lower socioeconomic status, then the gap between overall quality of life might be greater than the same gap faced by Anglo students. Consequently, the need to perceive opportunities by Hispanic students may be greater. Subsequent research should also focus upon generational differences among the Hispanic student population. Given the fact that most Hispanic students in rural West Texas communities are Mexican-Americans, intuitively there is a great deal of variability within this group of students based upon the number of generations that one's family has resided within the United States.

The second research hypothesis on socioeconomic status was supported by the data. For this group of students, the rural youth who came from the seemingly more affluent households perceived themselves as having a higher quality of life. Once again, the effect sizes of the relationships verified this finding convincingly. Of particular interest though was the nonlinear relationship between overall quality of life and socioeconomic status. Due to the fact that there was little difference between adolescents in the lower and medium groups, the trend was quadratic in nature. There was not a consistent increase of

change in quality of life based upon socioeconomic status. Clearly, there is a need for school districts to provide leadership for rural economic development. Often rural school districts are the largest employers within rural communities and are the primary source of social capital. Flagship school districts are fundamental in a community's ability to attract value-added agricultural businesses and other industries. They also have a significant influence upon the development of human capital that enters into the workforce, and can play a major role in adult education within a community.

Both research hypotheses associated with family composition were rejected. In terms of the number of children in the household, students in two-child households had a higher overall quality of life, but no difference was found between this group of students and the other groups in perceived control. Surprisingly, this same group of students felt that they had less opportunity to improve their quality of life than the other groups. There was a large practical significance in students' perceived opportunity to control their quality of life, and whether or not students resided in a two-child home. Another unexpected finding was that students residing in homes with two adults felt that they had a lower overall quality of life when compared to other family structures. This relationship was both statistically and practically significant. In fact, adolescents residing in single parent homes exhibited the highest overall quality of life.

Future research should look closer at the relationships between overall quality of life, perceived control, and opportunity for improvement. Might adolescents residing in single parent households have higher expectations for household maintenance activities than students from other households, and consequently feel that they have greater control over their quality of life? Would the amount of control directly influence perceptions of overall quality? Do students from traditional homes feel more financially and emotionally secure regarding future opportunities? Perhaps more sophisticated multivariate analyses might shed additional light on this subject. In formulating hypotheses, the researchers treated the three components of quality of life as a "bundle" in relation to the ethnicity, livelihood, and household composition variables of interest. If anything, the data have indicated that there is a great deal of variability in the three components based upon these measured variables. Future research should examine the relationship between degree and intensity of participation in school-based organizations and activities such as the FFA, FHA/HERO, band, choir, athletics and perceptions of quality of life. Additionally, organizations external to the school district such as church youth groups and 4-H participation should be examined.

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