

# Agricultural Scholarship Recipients' Quality of Life



**James H. Smith<sup>1</sup>**  
**Texas Tech University**  
**Lubbock, TX 79409-2131**

**Gary E. Briers<sup>2</sup>**  
**Texas A&M University**  
**College Station, TX 77843-2116**

**Charlotte Welch Smith<sup>3</sup>**  
**Texas Tech University**  
**Wolfforth, TX 79382**

## Abstract

The purpose of this study was to describe the quality of life (QOL) of Houston Livestock Show and Rodeo (HLS&R) scholarship recipients, to evaluate their QOL in relation to normative data on QOL, and to determine if this population sample agreed with the literature concerning correlates of QOL.

The target population consisted of scholarship recipients from 1957 through 1997; HLS&R requested a census to collect data.

The survey instrument consisted of two sections; one section requested descriptive personal, education and employment, and scholarship data. The second section consisted of the Quality of Life Profile.

The instrument was mailed to 4,283-scholarship recipients. Four hundred forty-four surveys were undeliverable, providing an accessible population of 3,839. Fifteen months of data collection yielded 1,512 completed surveys, representing 39.4% of the accessible population.

QOL for individuals in this population was very acceptable with more than 90% indicating very acceptable or excellent QOL. No individuals indicated a very problematic QOL.

Two variables, involvement in voluntary organizations and/or religious associations and gender, were statistically significantly, though negligibly, related to QOL. Females and those who had higher levels of community involvement tended to have higher QOL scores. No evidence indicated that education, income, and place of residence were related to QOL.

## Introduction and Theoretical Framework

The mission of agricultural education is to prepare students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber, and natural resources systems. In addition,

the vision for agricultural education embraces a world where all people value and understand the vital role of agriculture in advancing personal and global well-being (The Council, 2002).

The question arises, how can successful careers, informed choices, and personal well-being be measured? Assessment of job satisfaction is a partial means of measurement; measurement of life satisfaction is another partial means. A "holistic" approach that encompasses the whole person is measurement of an individual's quality of life. Quality of life (QOL) encompasses both job and life satisfaction as well as the choices an individual makes. Measurement of an individual's quality of life is a means of "measuring" an individual's personal well-being.

Because attending an institution of higher education is only a dream for so many students, the Houston Livestock Show and Rodeo (HLS&R) in 1957 initiated its first educational scholarship program. Since the scholarship and educational program began, more than \$92 million has been committed to Texas students for their education. In the fall of 2002, 1,833 students were enrolled at 93 Texas colleges and universities on direct scholarships from HLS&R. Scholarship recipients, historically, have enrolled in a variety of disciplines (Houston Livestock Show & Rodeo, 2002); however, the Show's relationship with youth is most significant through the youth organizations FFA and 4-H. In one year, 70 FFA members and 70 4-H members are awarded \$10,000 scholarships each. In addition to this \$1.4 million in scholarships, the Show annually provides funds for the Texas 4-H Congress, National FFA Foundation, and members of Texas FFA judging teams advancing to national FFA contests (Houston Livestock Show & Rodeo, 2002).

In an effort to explore the scholarship recipient's careers, communities, and well-being, the Agricultural Consortium of Texas, at the request of

<sup>1</sup> Dept. of Agricultural Education & Communications, P.O. Box 42131, Phone: (806) 742-2816, Fax (806) 742-2880, email: james.h.smith@ttu.edu

<sup>2</sup> Department of Agricultural Education, 107 Scoates Hall, Phone: (409) 862-3000, Fax (409) 845-6296, email: g-briers@tam.u.edu

<sup>3</sup> Phone: (806) 866-2681, email: charlotte.smith@ttu.edu

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officers of the HLS&R, proposed research that included an examination of quality of life.

“Well-being” in this study refers to “quality of life.” “Quality of life,” in the context of this research, is defined as an overall general well-being comprised of both objective and subjective evaluations of physical, material, social, and emotional well-being. QOL also includes the degree to which individuals enjoy the important possibilities of their lives, or according to Renwick and Brown (1996), “How good is your life for you?” This study viewed both objective measures of resources and subjective evaluations of an individual's life experiences as important dimensions of quality of life. An individual's quality of life appears to encompass not only material well-being but also perceptions of well-being, a basic dimension of satisfaction. An “objective evaluation” refers to a description of life conditions whereas “subjective evaluation” refers to personal satisfaction with life conditions. Significant to these evaluations is the relative importance an individual places on each of these areas (Felce & Perry, 1996). Two seminal studies conducted during the 1970s, which are often quoted in QOL literature, were by Campbell, et al. (1976) and Andrews and Withey (1976). Campbell, et al. (1976) disclosed that a sense of well-being is more dependent on an individual's satisfaction with resources than on the quality of these resources. Andrews and Withey (1976) concluded that QOL is determined by an individual's perceptions of well-being based on evaluation of life domains such as family, residence, job, friends, neighbors, health, and evaluations of criteria such as standards, aspirations, values, and goals.

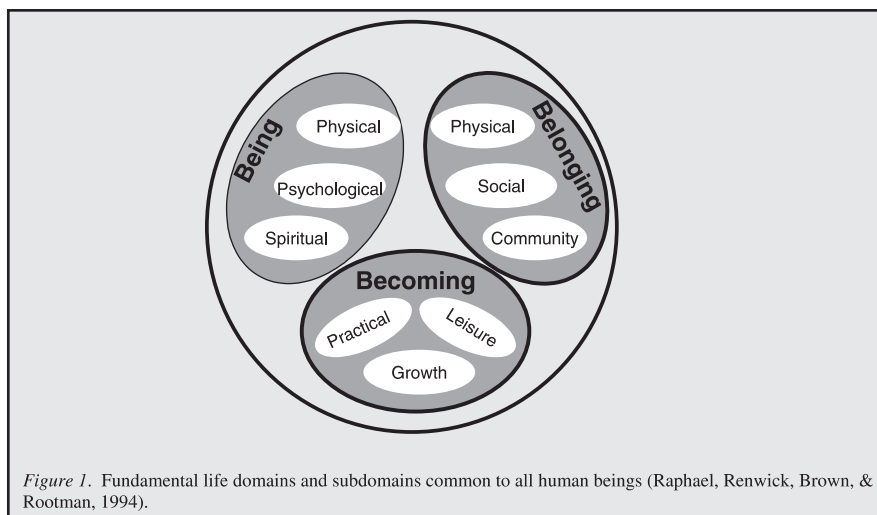


Figure 1. Fundamental life domains and subdomains common to all human beings (Raphael, Renwick, Brown, & Rootman, 1994).

The framework for this research focused on an individual's possibilities in three fundamental areas of life common to all human beings, which are essential dimensions of human experience. These three life domains are being, belonging, and becoming (Figure 1) (et al. 1994). Being reflects who one is

as an individual. Belonging refers to ties individuals have with their social and physical environment. The third domain, becoming, focuses on purposeful activity in which individuals engage in an attempt to accomplish goals, aspirations, and hopes (Raphael, et al., 1994).

Literature on QOL issues indicates that level of educational attainment, level of income, and level of involvement in voluntary associations, along with church-related associations, are positively related to QOL. A positive correlation with QOL implies that a factor measures or indicates happiness and satisfaction (Heylighten & Bernheim, 1998). Also, indications are that gender has little or no correlation to QOL.

### Guiding Principles

The following assumptions were used as guiding principles for this study:

1. The concept of quality of life applies to all human beings.
2. The quality of life of an individual is subject to change.
3. Quality of life is holistic, therefore considering all aspects of an individual's lifephysical, psychological, social, and spiritual.
4. Components of quality of life, those things constituting our human condition, are common for all individuals.
5. Quality of life considers the interaction between the individual and the environment of the individual.
6. Quality of life is a product of both objective conditions and subjective evaluations persons impose on their current circumstances.
7. The perspective of the individual is emphasized as a measure of studying quality of life.

### Purposes of the Study

The purposes of this study were to describe the quality of life of HLS&R scholarship recipients, to compare their quality of life to normative data on quality of life, and to determine correlates of quality of life. Variables selected as possible correlates included education, income, involvement in voluntary organizations and religious associations, and gender as indicated by prior research.

### Method and Procedures

A descriptive-correlational design was used in this survey research. The instrument used to collect data for this study consisted of two sections. The first

section provided descriptive personal, educational, employment, and scholarship data. The second section consisted of the Quality of Life Profile, (QOLP), a generic measure of health and well-being developed by a multidisciplinary research team from the Quality of Life Research Unit at the Centre for Health Promotion (CHP), University of Toronto, (Renwick and Brown, 1996).

The QOLP consists of 54 items, with six items in each of nine subdomains. Respondents provided an importance rating along a five-point Likert response scale for each of the 54 statements. This process is repeated for a satisfaction rating for each of the 54 statements. QOL scores were computed using importance and satisfaction scores for each of the 54 aspects of life. QOL scores are computed as follows:

$[QOL = (importance\ score / 3) * (satisfaction\ score - 3)]$  with QOL scores ranging from -3.33 (not at all satisfied with extremely important issues) to 3.33 (extremely satisfied with very important issues) (Raphael, D'Amico et al., 1996). Importance scores serve as a weight for converting satisfaction scores into quality of life scores. Items rated as particularly important produce especially high quality of life scores where high satisfaction is indicated. Similarly, items rated as particularly important produce especially low quality of life scores where lack of satisfaction is indicated (Raphael & D'Amico, 1996). For example, a participant who rates appearance as extremely important (5) and reports being very satisfied (4) receives a quality of life score for this item of 1.67:  $[(5/3) * (4-3)]$ . A participant who rates appearance as extremely important (5) and reports being not very satisfied (2) receives a quality of life score for this item of -1.67:  $[(5/3) * (2-3)]$ .

**Table 1**  
*Internal Consistency (Cronbach's alpha) for Domains, Subdomains, and Total Scale for the Quality of Life Profile of Houston Livestock Show & Rodeo Survey Participants, 1998*

| QOL Domain         | Importance | Satisfaction | QOL        |
|--------------------|------------|--------------|------------|
| <b>Being</b>       | <b>.86</b> | <b>.90</b>   | <b>.91</b> |
| Physical           | .75        | .80          | .81        |
| Psychological      | .81        | .85          | .86        |
| Spiritual          | .78        | .83          | .84        |
| <b>Belonging</b>   | <b>.87</b> | <b>.88</b>   | <b>.89</b> |
| Physical           | .81        | .84          | .85        |
| Social             | .70        | .73          | .73        |
| Community          | .76        | .78          | .78        |
| <b>Becoming</b>    | <b>.88</b> | <b>.91</b>   | <b>.92</b> |
| Practical          | .75        | .78          | .79        |
| Leisure            | .76        | .85          | .86        |
| Growth             | .83        | .86          | .87        |
| <b>Total Scale</b> | <b>.94</b> | <b>.96</b>   | <b>.96</b> |

The Quality of Life Research Unit conducted psychometric evaluation of the QOLP over a five-year period. In developing the QOLP, the researchers used focus groups, participant review, and pilot testing and validation to set aside any items that were clearly irrelevant to people-in-general. Items identified as being for people-in-general were collected and used to develop the QOLP, a measure of life quality for any audience. All items were pilot tested with classes of students at Ryerson University and the University of Toronto as well as 29 members of a multi-service agency in a large metropolitan suburb. Once reviewed by the developers for validity and reliability, the items were placed into the QOLP. In addition, a validation study of the QOLP was conducted by administering the instrument to staff and volunteers from a service agency in Canada. Cronbach's alpha, a measure of internal consistency of scales, was calculated with a total scale reliability of .97 for the QOLP (Raphael, et al., 1996).

Reliability of the QOLP in this study was determined by examining internal consistency. Internal consistency coefficients, computed with Cronbach's alpha, for importance, satisfaction, and QOL for each subdomain, the three broad domains, and for the overall scale are indicated in Table 1. For importance, all domain and subdomain scores were at or above 0.70. Overall importance had an internal consistency coefficient of 0.94. For satisfaction, social belonging had the lowest coefficient, 0.73, with overall satisfaction having a value of 0.96. QOL coefficients were consistent with satisfaction coefficients with the instrument having an overall QOL coefficient of 0.96.

QOL scores above 0 reflect a positive QOL, while those below 0 reflect a negative QOL. Overall QOL scores greater than 1.50 are considered excellent scores. Scores from 0.51 to 1.50 indicate a very acceptable QOL situation. Scores from -0.50 to 0.50 indicate an adequate QOL situation. Scores of -0.51 to -1.50 indicate problematic QOL, while scores less than -1.50 are very problematic (Quality of Life Research Unit, 1998).

The HLS&R officials required that the population for this study include all scholarship recipients who were awarded direct scholarships by the HLS&R for forty years, beginning in 1957 and continuing through 1997, thus resulting in a census. The researcher received from the HLS&R a database of names and addresses of 4,283 scholarship recipients. Included in the survey packet was a prepaid envelope for return of the instrument and a prepaid information up date postcard to be mailed separate from the instrument.

More than five hundred survey packets were returned undeliverable. The database was updated by identifying those individuals with returned packets with "bad" addresses. The researchers

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attempted to determine address information for these recipients. A sorting of the database for those with “bad” addresses was performed. Again this was provided to members of the Agricultural Consortium of Texas for further review and updating. Eventually

salary ( $r = 0.12$ ; Cohen's  $d = 0.24$ ), and educational level ( $r = 0.09$ ; Cohen's  $d = 0.18$ ). However, the length of time one took to respond was not correlated with gender, community involvement, size of community, or quality of life. Thus, the responding sample may be slightly biased in terms of age (younger recipients over-sampled), salary (lower salaries over-sampled), and education level (lower education levels over-sampled). However, because days to respond was not correlated with quality of life, the major dependent variable in this study, nor with two primary variables (gender and community involvement) and because the correlations of days to respond with age, salary, and education level were low to negligible (Davis, 1971), a general assumption could be made that the sample was sufficiently representative of the population regarding quality of life, gender, and community involvement.

Loss of research participants can be a problem over a long period of time. Gall, et al. (1996) found that the response rate of individuals agreeing to participate in a longitudinal panel study declined significantly over time. “The response rate was 61.9% for a one-year follow-up, 37.9% after 5 years, and 27.9% after 11 years.” (p. 379). While this was not a panel study, but because prospective respondents in this study were as much as 40 years removed from receiving this scholarship, it was expected that some potential respondents especially those long removed from receiving their scholarships would be less likely to respond. Spearman rho correlation coefficient, point biserial correlation, and multiple correlation were used to describe associations between variables.

**Table 2**

*Quality of Life Scores for Domains, Subdomains, and Total Scale of the Quality of Life Profile of Houston Livestock Show & Rodeo Survey Participants, 1998*

| QOL Domain         | N           | M           | SD         |
|--------------------|-------------|-------------|------------|
| <b>Being</b>       | <b>1482</b> | <b>1.45</b> | <b>.75</b> |
| Physical           | 1498        | 1.23        | .83        |
| Psychological      | 1496        | 1.33        | .92        |
| Spiritual          | 1496        | 1.80        | .94        |
| <b>Belonging</b>   | <b>1432</b> | <b>1.45</b> | <b>.77</b> |
| Physical           | 1490        | 1.55        | .94        |
| Social             | 1475        | 1.50        | .93        |
| Community          | 1459        | 1.27        | .88        |
| <b>Becoming</b>    | <b>1459</b> | <b>1.18</b> | <b>.81</b> |
| Practical          | 1473        | 1.20        | .85        |
| Leisure            | 1490        | 1.15        | .97        |
| Growth             | 1479        | 1.17        | .96        |
| <b>Total Scale</b> | <b>1390</b> | <b>1.36</b> | <b>.71</b> |



Figure 2. Quality of life of Houston Livestock Show and Rodeo survey participants, 1998.

444 (10.4%) surveys, of the original population of 4,283, were undeliverable. This provided an accessible population of 3,839. The total number of useable surveys received was 1,512, representing 39.4% of the accessible population. Research has indicated that late respondents are similar to non-respondents (Miller & Smith, 1983; Lindner, et al., 2001); so, to determine if the responding sample was likely to have been representative of the total population, “days to respond” was correlated with primary variables of interest in this study. “Days to respond” was positively correlated with age ( $r = 0.15$ ; Cohen's  $d = 0.30$ ),

## Results and Findings

Respondents' mean QOL scores from the Quality of Life Profile for domains, subdomains, and total scale indicated that being and belonging domains scores ranked equally high with each reporting QOL scores of 1.45 (Table 2) indicating very acceptable QOL. Subdomains that were rated especially high ( $>1.50$ ) were spiritual being (1.80), physical belong-



ing (1.55), and social belonging (1.50), indicating excellent QOL in these subdomains. Domain, subdomain, and total scale mean QOL scores indicate a vast majority of survey participants had a very acceptable to excellent QOL. Quality of life scores above 0 reflect a positive quality of life, while those below 0 reflect a negative quality of life. Quality of life scores greater than 1.50 are considered excellent scores.

Overall QOL scores were grouped into descriptive categories using the following distribution: "excellent" (score > 1.50), "very acceptable" (score of 0.51 to 1.50), "adequate" (score of -0.50 to 0.50), "problematic" (score of -0.51 to -1.50), and "very problematic" (score of < -1.50) (Quality of Life Research Unit, 1998). Overall, 37.9% of survey participants had an excellent QOL while 52.3% had a very acceptable QOL (Figure 2). There were only 0.3% of survey participants who reported a problematic QOL, while no respondents had a very problematic QOL.

No statistically significant evidence was found that a positive relationship existed between educational attainment, level of income, and QOL. A positive relationship was found to exist between level of involvement in voluntary organizations or religious associations and QOL. The Spearman rho correlation coefficient ( $r = 0.078$ ; Cohen's  $d = 0.16$ ) was negligible (Davis, 1971) but significant at the .05 level.

A statistically significant though negligible relationship (point biserial correlation coefficient of  $r = -0.101$ ; Cohen's  $d = 0.20$ ),  $p < .01$ ) was found between gender and QOL. Because female was coded "0" and male, "1," the relationship of -0.101 indicates that females reported a higher QOL than did males.

Finally, to compare these respondents to similar individuals in other studies, the researchers examined those scholarship recipients who had begun college five or more years prior to the study. Thus, all individuals 24 and older ( $n = 894$  respondents) were studied. Of that group, 95.4% ( $n = 853$ ) had been graduated from college, having earned at least baccalaureate degrees. Previous research nationally indicates that only 52.8% of students in public and private universities receive a degree (ACT, 1998). Similarly, Jacobs (1992) found no significant differences in student academic achievement, as measured by graduation rates and final grade point average, between scholarship groups and a non-scholarship group. This group of recipients of HLS&R scholarships and respondents in this study were markedly different in terms of persistence to a degree.

## Conclusions

On the basis of the evidence from this study, two variables, gender and involvement in voluntary

organizations were significantly related to quality of life. Females and those who had higher levels of community involvement tended to have higher quality of life scores. This conclusion supports the findings by Brinkerhoff and Jacob (1985), Edwards and Klemmack (1973), Palmore and Luikart (1972), and Graney (1975) who found that the more individuals are involved in voluntary organizations the more likely they were to report a higher quality of life.

This conclusion supports Medley (1980) who found that younger women reported higher quality of life than younger men did. No evidence indicated that education and income were related to quality of life.

Overall, self-perceived quality of life for individuals in this population sample was high with over 90% indicating very acceptable or excellent quality of life. Campbell, et al. (1976) found 82% of their sample (on a nationwide probability sample of 2,147 adults regarding life satisfaction) to be satisfied with quality of life compared to more than 90% of the sample of Houston Livestock Show and Rodeo scholarship recipients who rate their quality of life as very acceptable or excellent. On the other hand, the Campbell, et al. sample included almost 7% who reported dissatisfaction with their quality of life. The sample for this study had less than 1% with a problematic quality of life. An interesting finding of this study was that no individuals indicated a very problematic quality of life.

## Implications/Recommendations

Based on the results previously stated, certain implications emerge. Findings of this study suggest that the Houston Livestock Show and Rodeo has contributed significantly to the identification and assistance with the educational needs for numerous young Texans. A result of survey responses in this study implies that ethnic diversity in awarding of scholarships has been lacking. Statistics from the Texas Education Agency (1996) indicate that high school seniors graduating in 1996 included 12.1% African American, 29.2% Hispanic, and 55.4% Anglo. This researcher found that African Americans (1.3%) and Hispanics (8.2%) were under represented in the scholarship awards when compared with ethnic diversity of Texas high school graduating seniors in 1996. Both ethnic groups, African Americans ( $n = 17$ ) and Hispanics ( $n = 112$ ), recorded higher quality of life scores, 1.49 and 1.39 respectively, than did Anglos (1.36). On the basis of these data, if a purpose of the Houston Livestock Show and Rodeo is to improve the quality of life of Texas youth, more intervention programs that appeal to groups underrepresented among scholarship awardees and that provide meaningful opportunities for their involvement would be fruitful.

Practical evidence from this study indicates that

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the more individuals are involved in voluntary organizations the higher their quality of life. This implies that the Houston Livestock Show and Rodeo Scholarship Committee emphasize involvement in extracurricular activities and voluntary clubs and youth organizations as part of the criteria for selection of scholarship recipients. Because of cultural difference, programs could be designed and implemented through collaboration of county leaders, educators, and the Houston Livestock Show and Rodeo, to provide meaningful opportunities targeted toward meeting the needs of various groups of youth.

## Literature Cited

- ACT, Inc. 1998, April 1. New low for college graduation rates, but dropout picture brighter. Retrieved January 1999, from <http://www.act.org/news/releases/1998/04-01-98.html>.
- Andrews, F., & Withey, S. 1976. Social indicators of well-being. New York: Plenum Press.
- Brinkerhoff, M., & Jacob, J. 1985. Quality of life in an alternative lifestyle: The smallholding movement. *Social Indicators Research*, 18(2), 153-173.
- Campbell, A., Converse, P., & Rogers, W. 1976. The quality of American life. New York: Russell Sage Foundation.
- Davis, J. 1971. Elementary survey analysis. Englewood Cliffs, NJ: Prentice-Hall.
- Edwards, J., & Klemmack, D. 1973. Correlates of life satisfaction: A re-examination. *Journal of Gerontology*, 28(4), 497-502.
- Felce, D., & Perry, J. 1996. Exploring current conceptions of quality of life: a model for people with or without disabilities. In R. Renwick, I. Brown, & M. Nagler (Eds.), *Quality of life in health promotion and rehabilitation* (pp. 51-62). Thousand Oaks, CA: Sage.
- Gall, M., Borg, W., & Gall, J. 1996. Educational research: An introduction (6th ed.). White Plains, NY: Longman Publishers.
- Graney, J. 1975. Happiness and social participation in aging. *Journal of Gerontology*, 30, 701-706.
- Heylighten, F., & Bernheim J. 1998. Global progress: An empirical analysis and an evolutionary framework. Retrieved September 7, 1998 from <http://pespmc1.vub.ac.be/Papers/Progress.html>
- Houston Livestock Show and Rodeo 1998, September 29. Largest increase in Houston Livestock Show and Rodeo scholarship history. Retrieved October 20, 1998, from <http://www.hlsr.com/press/result.cfm>
- Houston Livestock Show and Rodeo 2002. Scholarship programs. Retrieved January 20, 2003, from [http://www.rodeo.houston.com/education/scholar\\_prog.aspx](http://www.rodeo.houston.com/education/scholar_prog.aspx)
- Jacobs, N. 1992. Differences in the academic performance of scholarship and non-scholarship students at the University of South Carolina (Doctoral dissertation, University of South Carolina, 1992). *Dissertation Abstracts International*, 53, 2685.
- Lindner, J., Murphy, T., & Briers, G. 2001. Handling nonresponse in social science research. *Journal of Agricultural Education*, 42, 43-53.
- Maccia, G. & Maccia, E. 1975. SIGGS theory as a systems theory for education which enhances the quality of life. In *Systems thinking and the quality of life: Proceedings of the annual North American meeting* (The Society for General Systems Research), p. 228-233.
- Palmore, E., & Luikart, C. 1972. Health and social factors related to life satisfaction. *Journal of Health & Social Behavior*, 13, 68-80.
- Quality of Life Research Unit. 1998. Scoring the Quality of Life Profile. Retrieved December 3, 1998, from <http://www.utoronto.ca/qol/assess.htm>
- Raphael, D., D'Amico, J., Brown, I., & Renwick, R. 1996. The quality of life profile: A generic measure of health and well-being. Toronto, Ontario: University of Toronto.
- Raphael, D., Renwick R., Brown I., & Rootman, I. 1994. Quality of life indicators and health: Concept status and emerging conceptions. *Social Indicators Research*, 39, 65-88.
- Renwick, R., & Brown, I. 1996. The Centre for Health Promotion's conceptual approach to quality of life: Being, belonging, becoming. In R. Renwick, I. Brown, & M. Nagler (Eds.), *Quality of life in health promotion and rehabilitation* (pp. 75-86). Thousand Oaks, CA: Sage.
- The Council. 2002. About Agricultural Education. Retrieved December 20, 2002, from <http://www.teamaged.org/aged.htm>.