

## AN ABSTRACT OF THE THESIS OF

Elizabeth Ellen Gorham for the degree of Doctor of Philosophy in Family Resource Management presented on May 21, 1992. Title: Impact of Family Life and Work on Quality of Life of Utah Dairy Farm Wives and Husbands.

Abstract approved : Redacted for Privacy

Dr. Geraldine Olson

An investigation was conducted to determine the impact of work and family life on the quality of life of Utah dairy farm wives and husbands. A total of 116 Utah married couples were randomly selected from dairy herd inventory records in five counties to be interviewed. Wives and husbands were interviewed simultaneously in separate rooms by female and male trained interviewers respectively. Both wives and husbands responded to identical questions regarding off-farm employment, satisfaction, and family relations. Data used in this study came from the Utah State University Experiment Station study conducted in 1986.

Results showed husbands' work domain satisfaction to be higher than the work domain satisfaction of wives. Wives' family life domain satisfaction and husbands' work domain satisfaction explained variance in the overall quality of life of wives and couples. However, only husbands' work domain satisfaction explained variance in husbands' overall quality of life.

Family life domain satisfaction of wives and couples was affected positively by off-farm income of husbands and husbands' family relations. In addition, hours in off-farm employment negatively affected wives' family life domain satisfaction. Husbands'

family relations assessment and husbands' age positively affected the family life domain satisfaction of husbands. Work domain satisfaction of wives was negatively affected by wives' hours spent in off-farm employment.

Domain satisfactions were, therefore, successful in explaining variance in quality of life of Utah dairy farm wives, husbands, and couples. Family and work factors of husbands explained variance in the family life domain of wives and husbands. One wives' work factor explained variance in the work domain satisfaction of wives. Satisfaction domains and family life and work characteristics are, thus, recommended for use in predicting overall quality of life and satisfaction for dairy farm couples.

Impact of Family Life and Work on Quality of Life of  
Utah Dairy Farm Wives and Husbands

by

Elizabeth Ellen Gorham

A THESIS

submitted to

Oregon State University

in partial fulfillment of

the requirements for the

degree of

Doctor of Philosophy

Completed May 21, 1992

Commencement June 1993

APPROVED:

*Redacted for Privacy*

Associate Professor of Family Resource Management in Charge of Major

*Redacted for Privacy*

Director of Family Resource Management Graduate Program

*Redacted for Privacy*

Dean of Graduate School

Date thesis is presented May 21, 1992

Typed by researcher Elizabeth Ellen Gorham

Dedicated

to my parents

Ralph and Betty Jane Gorham

## ACKNOWLEDGEMENTS

I express my sincere appreciation and gratitude to Dr. Geraldine Olson, Associate Professor and Director of the Family Resource Management Program at Oregon State University, who has served as my mentor and major advisor. Her knowledge, patience, and encouragement were valuable "inputs" needed to attain this "output" goal.

I am grateful for the interest, support, and valuable suggestions from my final program committee - Alice Mills Morrow, Martha Fraundorf, Samuel Vuchinich, and Herschel Weeks. In addition, thanks to my interim committee members - Jane Meiners, Anisa Zvonkovic, and Tom Grigsby. Thanks to the statisticians (Suzi Maresh, Maria Norton, and others) who aided my understanding of data analysis and to the librarians at the OSU Kerr Library (Judy, Laurel, and Marjorie) for unlocking the secrets of library referencing. Special thanks to Randy Thunell as my chief editor consultant at a time when his support was invaluable.

Gratitude is expressed to the Utah State University Extension Administration and State 4-H Staff for their support of me in this undertaking. Permission to utilize the Utah State University Experiment Station data base and answers to my many questions from Norleen, Glen, and DeeVon are much appreciated. I am grateful to contributors of the Hawthorne Fellowship for support monies to continue my studies.

The many chalkboard discussions with fellow graduate students (Jariah, Jerri, Colleen, Edgar, Scott and others) will long be remembered. I am grateful to those who provided a home for me during my stopovers in Corvallis - Laurel Maughan, Arlene

Holyoak, Ann Messersmith, Margaret Reese, the Hays and others. I treasure their friendship.

Finally, to my loving and caring parents, Ralph and Betty Jane Gorham, who continually express their confidence in me, I dedicate this work.

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# Impact of Family Life and Work on Quality of Life of Utah Dairy Farm Wives and Husbands

## CHAPTER 1

### INTRODUCTION

Nostalgia portrays the lives of farmers as being idyllic in which quality of life is unsurpassed. American life, characterized by traditional social and familial values, is believed to be typified and embodied in the structure of family farms in rural America (Strange, 1988). This is not generally a representative picture of the life of rural farm residents today.

Replacement of some family farms by large agribusiness, rural to urban migration, and the necessity of pursuing off-farm income create concern that the quality of rural life is being eroded (Comstock, 1987; Strange, 1988; Ulrich, 1989). The changing structure of the farm environment demands changes in the lives of farm operator families. Such changes may threaten their perceived quality of life.

What constitutes quality of life for rural farm residents? What factors affect the quality of life perceived by wives and husbands employed in the time intensive occupation of dairy farming? How does satisfaction with traditional values of work and family life relate to quality of life of dairy farm couples? What differences exist in the perceived quality of life by dairy farm wives and husbands? The answers to questions like these will help professionals who work with farm families, as well as the farmers themselves,

identify potential threats to well-being and potentially acceptable solutions for dealing with change.

### Statement of Purpose

This study will identify specific components of work and family life which have an impact on the quality of life of Utah dairy farm families. "Quality of life" is defined as satisfaction with work and family life, and with life as a whole. The quality of life of wives and husbands measured separately and the quality of life of wives and husbands combined as couples will be explored. When possible, factors of quality of life for wives and husbands on dairy farms will be compared to such determinants from other studies.

### Justification for the Study

Smith and Coward (1981) identify both negative and positive images of farm families today. Factors used to depict farm populations include involvement of family members in work on the farm, participation in traditional family and work roles, location in areas with low population density, and limited access to public services. Farmers, in addition, face rising costs, rapid change in farming practices, and increased competition. Thus, farmers are in a transition stage, struggling to retain ties with traditional farm and household practices while seeking to adopt new technologies.

In the late 1970s, many farmers experienced an increase in their farm income. This income was often reinvested to update farm equipment and operations. With adoption of new technology, farm operators were freed to seek a secondary source of

income or to expand their farming operation (Heatherington, 1983; Sander, 1986). The women's liberation movement of the 1970s sanctioned the entry of women into the paid labor force. As the economic farm crisis of the mid-1980s became more widespread, many full-time homemakers were pressured to enter employment outside the home.

Today, many farm families are dependent upon off-farm income (Scholl, 1986; Acock and Deseran, 1986; Coughenour and Swanson, 1983; Ghebremedhin, 1986; Goodwin and Jones, 1986; Huffman, 1976; Sweet, 1972; Findeis, 1985; Sander, 1986). Off-farm work provides stable income during off-seasons, or when crop failures or other catastrophes occur. For some, off-farm income is the only way they can retain their farming status.

Other changes in the farm family which are similar to, but lag behind those of metropolitan families, include decreased birth rate, delayed child bearing, increased teen marriage, and increased divorce rates (Brown, 1982). In addition, the number of part-time farmers, many from urban rather than farm backgrounds, has increased. The number of medium-sized, family-owned and operated farms has, however, decreased (Dobbins and Robbins, 1983).

Past research into the determinants of life quality, has not been differentiated by type of farming. Dairy farming is more capital and time intensive than other types of farming (Sander, 1986). A study, utilizing dairy farm couples only, may provide insights not evidenced when all types of farmers are included.

It is not understood what work and family life characteristics affect the quality of life of dairy farm wives and husbands and how they affect their quality of life. An

examination of the relationships of work and family life components to the quality of life of dairy farm couples is warranted. Identification of these components can help provide dairy farm couples, and those professionals who advise them, with better knowledge to make important decisions that may have an impact on their future quality of life and on the society as a whole.

### Research Objectives

The research objective of this project is to construct a model that best explains variance in specific life satisfaction domains, as well as overall quality of life for wives and husbands operating dairy farms.

Questions to be answered by this research concerning dairy farm wives and husbands individually, and together as couples include:

1. What level of overall quality of life is perceived?
2. How does satisfaction with the domains of work and family life relate to overall quality of life?
3. How does satisfaction with on-farm, household, and off-farm work relate to overall quality of life?
4. How do work and family life components influence satisfaction with work and family life domains, and overall quality of life?
5. Are there significant differences between husbands and wives as groups and as couples in their satisfaction with work and family life domains, and overall quality of life?



The procedure for analyzing comparison results for wives and husbands as individuals and as couples is outlined as follows:

- a. Determine the level of satisfaction with overall quality of life for wives, husbands, and couples.
- b. Analyze the data to determine the relationship of work and family life domain satisfactions with overall quality of life.
- c. Analyze the data to determine the relationship of off-farm employment status satisfaction with overall quality of life.
- d. Identify how the variance in work and family life domain satisfactions and overall quality of life can be attributed to components of work and family life.

### Definition of Terms

Quality of life - the average of two "satisfaction with life as a whole" scores, reported by husband and wife in response to two similar questions. The couple measure is calculated by averaging the quality of life scores for husband and wife. Thus, the couple measure is not uniquely derived from a question which they respond to as a couple. Though this ratio may not adequately replicate the interaction between individuals of a couple, it depicts how averaged responses vary across couples. It assumes that the satisfaction with the unit is influenced by both adult members of that unit, even though the unit has no "unique" life of its own.

Farm size as determined by the number of cows milked - small = 20 to 50 cows, medium = 51 to 150, and large = more than 150 cows.

Off-farm employment - the employment of husband and/or wife for a wage, in other than on-farm or household labor.

## CHAPTER 2

### REVIEW OF LITERATURE

The purpose of this chapter is to review the literature related to concepts, definitions, and measurements of the quality of life. To predict the quality of life of individuals and couples, it is important to accurately define the concept of quality of life and understand how changes affect it. Identity of individual and couple characteristics affecting their quality of life can be especially helpful in making future predictions.

#### Concepts and Definitions of Quality of Life

The concept of "quality of life" and how to assess it is not totally understood by researchers and others. Much effort has been expended by researchers to discern what factors an individual uses to evaluate quality of life. Campbell (1976) describes quality of life as "the extent to which pleasure and satisfaction characterize human existence and the extent to which people can avoid the various miseries which are potentially the lot of each of us. Quality of life is the rewards and disappointments which make up the experience of living" (p. 11). "Well-being" is a term used interchangeably with quality of life. Quality of life is a broad global concept which denotes a person's well-being or contentment with his/her situation or experiences in life (Andrews and Withey, 1976; Campbell, 1981). Michalos (1983) explores three different quality of life "gap theories": 1) comparisons with the best previous experience (what one has compared with the best

one has had in the past); 2) comparisons of what one has with average folks (what one thinks others like one's self have); and 3) goal-achievement gap (what one has compared to what one wants). Considering the relative strength of the connections of these three theories with elements of satisfaction, the goal-achievement gap produces the strongest connection for both males and females.

Quality of life is a dynamic, rather than a static, concept. It is not characterized by stability. Any type of change is a potential disrupter in a person's life. Economic, social, and physical changes are often associated with changes in aspirations. The effect of change hinges upon the perceived gap between aspirations and the perceived situation. The effect of change will dissipate as a person's aspiration level adjusts to his circumstances. Thus, the extent to which one's aspirations are in line with one's perceived situation influences a person's quality of life and, perhaps, one's motivation to adjust (Inglehart and Rabier, 1986).

Events which have occurred recently in a person's life potentially have greater effect upon individual aspirations than do past or impersonal events. Over time, the importance of an event may lose its power to influence aspirations. The period of adjustment, however, may be long or short, gradual or rapid. Changes in environment, or personal life, can produce short or long term, and immediate or latent effects on quality of life. Certain circumstances may persist over years which gradually raise or lower aspirations, but significant change in aspirations may occur in a short period of time. The length and speed of adjustment are dependent upon the type and direction of change. Changes may be forced upon an individual or they may be initiated by the individual for

his own benefit. These changes might range from a changing economic climate to changes in regulatory policy, or from changing social climate to alterations in health care needs. All may effect quality of life. Generally, one of two means is employed to reduce the gap between one's perceived situation and one's aspirations. By both raising and lowering aspirations, one can change the level of life satisfaction (Inglehart and Rabier, 1986). Both strategies constitute a redefinition of the situation. A person who willingly and with increased determination adjusts his efforts to match a higher level of aspiration would experience the satisfaction of success. If, however, his efforts fail to match his higher level of aspiration, the gap between what he has and what he wants widens and his feelings of satisfaction are reduced. Another person who willingly lowers his aspiration level to the point at which he can achieve would experience the satisfaction of resignation. The aspirations of both individuals might be equally satisfied but their feeling associated with success or resignation may differ (Campbell et al., 1976).

Andrews and McKennell (1980) conceptualize satisfaction as an attitude having both an affective (feeling or emotional) component and a cognitive (thinking or reasoning) component. In comparison with happiness, satisfaction is more cognitive in nature, requiring thinking and weighing of possible alternatives. Recognition of life experiences is subjective. According to Campbell (1976, p. 118), "the quality of life lies in the experience of life". Individuals are deemed the best judge of their own well-being. Based on an individual's own standards, satisfaction is determined by the perceived relationship between expectations and attainments (Campbell et al., 1976). Satisfaction,

therefore, is dependent upon the goals, values, and predispositions of the individual (Allardt, 1973).

Quality of life is, thus, a somewhat elusive, variable, subjective, and individual concept. A person's quality of life is his assessment of his perceived situation as compared to his aspiration level.

### Measurement of Quality of Life

Indicators are formulated to assess individual quality of life or well-being. During the 1960s, the U.S. government amassed information to objectively measure what might be perceived as quality of life for a societal unit (Liu, 1974). Such indices include crime and divorce rates, housing and health statistics, employment rates, and poverty levels. Government policy decisions to improve the quality of life of all U.S. citizens are often made on the basis of these statistics.

In 1960, Gurin, Veroff, and Feld were commissioned to create a measurement device to detect mental illness. Study participants reported their level of happiness. Concepts of negative and positive affect were later added to reported levels of happiness (Bradburn and Caplovitz, 1965). Of the studies completed during the 1970s, Campbell, Converse, and Rogers (1976) and Andrews and Withey (1976) simultaneously published study results which are often quoted. Campbell et al. (1976) utilized a "well-being index" which measured positive and negative affect, cognition, and strain components. Andrews and Withey (1976) conducted an extensive study which resulted in "Life 3", a generalized life satisfaction measure, as the best measure of life quality. On a seven point response

scale, survey participants are requested to respond twice to the same question, "How satisfied are you with your life as a whole?". The question and method are simple, yet sensitive (Andrews and Withey, 1976).

It may seem that multiple-item indices would increase reliability of uncertain measurements. However, Inglehart and Rabier (1986) argue that sets of items originally grouped together in an index may lose their initial coherence and integrity. Separate items may not covary neatly regardless of appropriately grouped and complete they were when initially used in different time indices. Therefore, the single-item indicator, which is more simple to collect, may be more reliable than the multiple-item index over time (Inglehart and Rabier, 1986). Studies utilizing global (general) measurement of satisfaction with life as a whole may be highly reliable and valid, but provide inadequate information for upgrading quality of life (Andrews and Withey, 1976). An understanding of the reasons for high or low quality of life is thus needed to be able to predict the quality of life of individuals and couples.

#### Life Domains as a Measure of Satisfaction

Life domains, according to Wilkening (1982, pg. 430) "..refer to areas of activity and aspects of the environment of the individual". Campbell, Converse, and Rogers (1976) explained 54 percent of the variance in the well-being measure utilizing satisfaction scores of seventeen life domains. Andrews and Withey (1976) identified fourteen life concerns (their equivalent to life domains) which explained approximately 63 percent of the variance in satisfaction with life as a whole. Assuming they are

"topically heterogeneous", Andrews and Withey (1976) surmise that fewer than twelve concerns can be used to provide a reasonably good prediction of global well-being. The more stable the variable, the less likely it will be used as a predictor of quality of life (Campbell, Converse, and Rogers, 1976; Inglehart and Rabier, 1986). Analysis of global satisfaction using life domain measurement is supported by Michalos (1983). The most commonly used domains of satisfaction are health, family life, financial or material level of living, and job.

Satisfaction with the family life domain correlates highly with satisfaction with life as a whole. Quality of life is positively associated with family relations (Medley, 1980; Michalos, 1980, 1982, 1983; White, 1981; Haavio-Mannila, 1971; Andrews and Withey, 1976; Campbell et al., 1976; and Bubolz, Eicher, Evers, and Sontag, 1980). In the study of industrial workers conducted by Bharadwaj and Wilkening (1977), family life was the strongest predictor of overall life satisfaction. They postulate that satisfaction in the family life domain is more personal, and is more under one's control than are satisfactions with other domains. Other life domain categories classified by them as "personal" are health, work, community, standard of living, and spare time activity. Organizational involvement, natural environment, and national government are domains least personal and least susceptible to individual control (Bharadwaj and Wilkening, 1977). In Andrews and Withey's study (1976), the most noted expressions of dissatisfaction are with local services, prices, financial security, and government operations.

In focusing on the frequency of disagreements about money between spouses, Berry and Williams (1987), found, for wives, marital satisfaction is the most important



predictor of life satisfaction, and income satisfaction is second; for husbands, however, income satisfaction is the most important predictor of life satisfaction. Objectively measured income, however, was not an important predictor of overall quality of life. Mammen, Helmick, and Metzen (1986), in their North Central Regional study, noted that subjectively measured satisfaction with financial resources, although not the most important contributor, does impact one's quality of life. Objective measures of individual economic status were less effective in the measurement of overall quality of life. Overall life satisfaction, according to Ackerman and Paolucci (1983), does not rely heavily on satisfaction domains which are materialistic in nature. Farm work, self, health, financial, family life, and leisure were satisfaction domains identified by Ackerman, Jenson, and Bailey (1991) as contributors to overall quality of life in their study of dairy farm couples.

In a review of 350 jobs cited in twenty-three studies, Near (1984) found that more than ninety percent of the respondents had a significant positive relationship between job satisfaction and life satisfaction. Job satisfaction is positively correlated with quality of life in studies of Michalos (1980), Morgan (1980), Rose (1980), Vredenburg and Sheridan (1979), White (1981), and Rice, Hunt, and Near (1980).

Intercorrelations with satisfactions of life domains can also exist. Job satisfaction, for example, correlates positively with family life satisfaction (Hawkes, Guagnano, Smith, and Forest, 1984). Satisfaction domains serve as aids in channeling investigations of quality of life. They provide additional information for predicting quality of life for individuals and couples. However, satisfaction domains are somewhat general in nature.

Specific measurements of personal and couple characteristics are desirable for predicting quality of life.

### Explanatory Variables

Because the family is often identified as an important means for socialization, value formulation, and support of the individual, family structure and family relationships might help explain quality of life. Employment situations and employment status of individuals might also influence a person's quality of life. Farmers employed in dairying potentially differ in the size of their dairy operation (number of cows milked), their home background (value formation), and their work in off-farm employment (time spent and income received).

Attempts to utilize demographics (such as education, income, age, gender, number of children, and marital status) to further define satisfaction with life domains have shown very little promise. Wilkening (1982), McHenry, Hamdorf, and Walters (1985), Molnar (1985), and Light, Hertsgaard, and Martin (1985) all attribute less than ten percent of the variance to such factors.

### Family Relations

When change threatens to disrupt a person's life, the family may be considered a major source of support. Previously established bonds between family members determine the level of support an individual perceives he can receive from his family. Family bonding, according to Olson and McCubbin and others (1983), is dependent upon

1) "pride", or loyalty and trust and 2) "accord", or ability to collectively deal with problems and work together to accomplish tasks.

Adjustment of aspiration level to perceived situation is anticipated to occur when high levels of pride and accord exist. Family support, therefore, may mediate the severity of impact of the change. Medley (1980), Michalos (1980, 1982, 1983), and White (1981) found that family relations correlate positively with overall life satisfaction. It is anticipated that the strength of family relations will have an important impact on the overall quality of life.

#### Length of Marriage

Couples married for several years tend to regard family life more positively than couples married only a short time (Rowe, Williams, Lee, and Johnson, 1985). Based upon one study (Rowe et al., 1985), the longer couples are married, the more familiar they become with the characteristics of their spouse. Aspirations for the marital partner and one's self are "remodelled" through mutual and separate experiences. If the gap between aspirations for the marital relationship and the perceived situation remains minimal, couples report high quality of life and contentment with marriage. However, for husbands, in Berry and Williams' study (1987), satisfaction with life was negatively correlated with the number of years married. A curvilinear relationship between marital satisfaction and length of time married is found by Lupri and Frideres (1981) and Schram (1979). According to Hudson and Murphy (1980), after the honeymoon, marital satisfaction proceeds on a general decline until about the twentieth year, or until the

children leave home. From that point, there is a rapid increase in marital satisfaction into old age.

An increase in the length of marriage correlates with an increase in marital satisfaction in Miller's study (1976). The longer the marriage, the more perfect couples report their marriage and mate to be. Dissatisfied couples, however, may have terminated their marriage by divorce, leaving a greater concentration of couples who are reportedly satisfied with marriage. The relationship of length of marriage to overall life satisfaction (rather than marital satisfaction) is unknown.

### Children

No studies are available which relate the quality of life to the presence or absence of children. However, several researchers report marital happiness to be negatively correlated with having children (Spanier and Lewis, 1980; Campbell, 1981; Glen and McLanahan, 1982; Houseknecht, 1979; Lupri and Frideres, 1981; Miller and Sollie, 1980). By contrast, no association between marital happiness and having children is found by Marini (1980). Therefore, the impact of the presence or absence of children on the overall quality of life are uncertain.

### Farm Size

Martinson, Wilkening, and Rodefild (1976) found that those working on large farms express lower levels of powerlessness and feelings of social isolation (factors which have been linked to quality of life). However, farm size does not seem to be a factor in

determining attitudes about personal well-being for Coughenour and Christensen (1980). Well-being, states Molnar (1985) is significantly affected by individual commitment to farming. Farm size is a major factor in the amount of on-farm work involvement, especially for the wife. Coughenour and Swanson (1983) find less involvement of the wife in on-farm work on larger farms and whenever hired farm labor is present. There is greater involvement of the wife when the farm is smaller. Farm size as a variable, however, is somewhat misleading. Larger farms generally are more mechanized and employ hired laborers to assist with or to do the work. Farm size may also be specified in different ways. More popular methods include farm acreage, income, or herd size. Jenson, Ackerman, and Bailey (1986), for example, utilize dairy herd size in classifying three different categories of farm size.

### Home Background

Family tasks are allocated along traditional sex role lines in rural families (Bayer, 1975; Blood, 1958, Larson, 1974). Also, stronger traditional values are held by urban residents whose fathers are farmers than by urban residents without a farm background (Grasmick and Grasmick, 1978). Transference of parental traditional values in farming to offspring is evident in Acock's 1984 study of farm generations. Traditional values include thriftiness, a strong work ethic, and family solidarity.

The impact of farm background upon quality of life, however, may be obscured by imposed factors in the environment which require non-traditional responses. Feelings of discontent may result when traditionally oriented individuals (those with a farm

background) are forced to modify their work roles. Farm families who rely heavily upon off-farm income for survival may be forced to reinterpret their traditional role values. It might be expected that quality of life would be affected by changes in the environment, depending upon the degree to which that change was sought and/or perceived as positive.

Overall life satisfaction, report Buttel, Wilkening, and Martinson (1977) in their study of Wisconsin farm families, tends to be higher for conservatively oriented individuals than for individuals constantly seeking change. Though this is a general statement, it may have significance for dairy farmers. Also, despite the lower level of material wealth, both rural farm and non-farm residents in the Mason, Falkenberry, and Seidler study (1975), report higher levels of subjective well-being than do non-rural residents. For them, it may be preferable to live in a less densely populated location. Thus, in 1975, residency in a rural environment still had a positive impact on quality of life, perhaps due to value differences in environment such as population density or life style.

#### Off-Farm Work

Farm operators who fail to earn sufficient income from the farm enterprise often seek off-farm employment to supplement the farming income (Carlin and Ghelfi, 1979; Wilkening, 1981). Off-farm employment income is increasingly more important to farm families (Buttel, 1982), especially to farmers operating small farms (Ahearn, 1986). Over one-third of all farm wives and over one-half of all farm husbands were gainfully

employed off the farm in a study of 1,772 farm couples (Deseran, Falk, and Jenkins, 1984; Banks and Kalbacher, 1981; Jones and Rosenfeld, 1981).

According to a 1988 Agricultural Economics and Land Ownership Survey conducted by the U.S. Bureau of the Census, net cash income sources of farm families are as follows: 57 percent from off-farm income, 29 percent from sales of agricultural products, 12 percent from government payments, and 20 percent from other farm related income. Considering all farmers in all types of farming, over half their net cash income is dependent upon off-farm employment with net sales from agricultural products contributing less than a third of the total net cash income. Farm owner-residents and non-owner-residents of the farm do not differ significantly in farm earnings (Deseran et al., 1984); however, it was noted that farm owner-residents have less farm income when they work off the farm. Potentially, as time in off-farm employment and off-farm income increases, input into farm tasks decreases and may result in lower farm income, states Deseran et al.(1984) in their cross-sectional study. Dairy farm families earn less (under 20 percent of net farm income) from off-farm sources than do couples in non-dairy farm operations in the 1985 study conducted by Findeis. Dairy farm operations are generally more daily labor intensive than other types of farming. Thus, dairy farmers might be expected to have fewer blocks of discretionary time with which to generate off-farm income.

Wife's paid employment has a negative effect upon her husband's job satisfaction (Staines, Pottick, and Fudge, 1986; Burke and Weir, 1976). Currently and formerly employed wives express higher life satisfaction than housewives who have never been

employed outside the home (Freudiger, 1983). Job satisfaction for wives in the paid labor force is higher than the satisfaction they or unemployed wives get from doing housework (Newberry, Weisman, and Myers, 1979). Rogers' research (1977) attributes the difference in job satisfaction as a matter of aspirations to be working in the paid labor force or full-time in the home. Of women desiring paid employment, employed women are more satisfied with their lives than are full-time housewives. However, among those preferring not to be employed outside the home, full-time housewives are most satisfied. Thus, when women's aspirations for work status are achieved, satisfaction is higher than when their aspirations for work status are not met.

Occupational status correlates positively with job satisfaction (Hawkes et al., 1984; Kallenberg and Loscocco, 1983; Lacy, Hougland, and Shepard, 1982; Quinn and Staines, 1979). Job satisfaction varies with employment opportunities available in the rural community (Hawkes, et al., 1984). Smaller, more rural communities have fewer employment opportunities compared to employment found in more metropolitan areas. Educational preparation and former job experience influence the type of employment a rural resident seeks and is able to secure. It is evident that rural residents often lack the training needed to secure a preferred and good paying job. Long commuting distances may discourage a rural resident's involvement in off-farm employment. Economic hard times compounds the situation of scarcity of employment opportunities.



## Gender

Andrews and Withey (1976) report no differences between men and women on any measure of global well-being. There are others, however, who find some differences. The highest predictors of overall life satisfaction differ for men and women industrial workers in the study by Bharadwaj and Wilkening (1977). They find that satisfaction with health and family are the highest predictors of overall life satisfaction for men while satisfaction with family is clearly the major indicator for women.

Females experience higher levels of marital satisfaction than males (Atkinson, 1980; Rhyne, 1981; Bernard, 1972; Campbell, Converse, and Rogers, 1976; U.S. Bureau of the Census, 1976; Knaub, Draughn, Wozniak, Little, Smith, and Weeks, 1988). Also, husbands are less satisfied with their marriages than are their female partners (Lupri and Frideres, 1981).

Haavio-Mannila (1971) maintains that "even though the position of women in society is in many respects inferior to men's positions, women seldom express more dissatisfaction than men" (p.585). She hypothesizes that ".... the position of women is generally inferior to that of men, but women may find alternative sources of satisfaction in their lives and substitute these [family, work, and leisure] for high social position" (p. 585).

## Age

Overall life satisfaction increases with age in the initial cross-sectional baseline study of Campbell, et al. (1976) and in Campbell's longitudinal study (1981). Older

couples perceive greater satisfaction with their life as a whole. Andrews and Withey (1976), however, find no significant effects in life satisfaction due to age differences. There is no relationship between age and reference to perceived present quality of life of college students, their friends and their parents in a study conducted by Staats and Stassen (1987). However, there is a positive correlation between age and their expectations for quality of life in the future.

Satisfaction increases with age in nearly all life domains (with the exception of health) in a sample of Oregonians (Mason et al., 1975). Husbands are more satisfied when the wife is over sixty years of age in the study by Knaub, et al. (1988). Though the effect of age upon overall quality of life is uncertain, there may be a tendency for older persons (in good health) to be more satisfied with their quality of life than younger persons.

## Education

Light et al. (1985) find that farm residents with higher levels of education reflect higher levels of overall life satisfaction. They surmise that "...education could be expected to result in more efficient management practices, wiser use of resources and increased understanding of the environmental factors (markets, world situations) that impact on farm families' well-being" (Light et al., 1985, pg. 11).

Education has a positive influence on overall life satisfaction for students who attend college but a negative influence on those who fail to graduate from college (Campbell, 1981). A possible explanation is that a college education broadens one's

perspective of available alternatives. However, failure to complete the requirements for graduation may make many of the perceived alternatives out of one's reach. Thus, under such circumstances, it may be that an increase in the level of education makes a person less satisfied with their life as a whole. Individuals with a high school education or less, however, are reported to be almost as satisfied with their lives as college graduates (Andrews and Withey, 1976; Campbell, et al., 1976; Campbell, 1976; Light et al., 1985). Therefore, the relationship between level of education and life satisfaction is probably not linear.

Education is not a major factor in the labor allocation of farmers to off-farm versus farm pursuits in Ahern's study (1986). Job satisfaction negatively correlates with education level (Hawkes et al. with Mexican-American subjects, 1984; Kallenberg, 1977; Mason, 1980). Those individuals who have graduated from high school and/or have completed one or more higher education degrees are anticipated to have a higher overall quality of life.

### Summary

From a review of the literature, it is anticipated that overall quality of life is measurable utilizing satisfaction domains and selected personal, family life, and work characteristics. More personal satisfaction domains are expected to have the greatest effect on overall quality of life. Family relations, home background, and level of education are anticipated to have a positive impact on the overall quality of life.

However, the relationship of length of marriage, number of children, farm size, off-farm work, and age to overall quality of life are unclear.

Researchers seek to identify conditions or situations which constitute quality of life. A limited number of studies have concentrated on the farm population in general. However, dairy farm couples have not generally been the subject of research related to quality of life.

Results of this study are expected to provide more accurate information for educators, counselors, bankers, and others who provide guidance to farm couples. There is a need for dairy farm wives and husbands to understand which conditions and factors may have significant positive and negative impact upon the quality of their lives and, perhaps, on that of their children. General trends and observations will not specifically respond to the individual needs of every dairy farm husband and wife. However, these trends and observations can provide a starting point for further exploration into factors which limit or enhance quality of life.

## CHAPTER 3

### METHODOLOGY

#### Target Population

Wives and husbands as couples residing on Utah dairy farms were the population for this study. Neither age, length of marriage, number of children, nor farm size were used to define the population.

#### Selection of the Sample

Dairy farming in Utah is concentrated in five northern counties - Cache, Box Elder, Davis, Utah, and Wasatch. The Dairy Herd Inventory for these counties provided a list of all farmers in the target population. To be included in the study, participants had to be 1) a married couple 2) milking at least 20 cows. All names listed which did not represent farm couples and those farms with less than twenty cows were removed from the list prior to drawing the sample. One hundred sixty-five dairy farm couples were contacted to participate in the study. However, two contacts were wives whose husbands had recently died and one wife was packing to join her husband who had opted to take advantage of the dairy herd buy out program and enter military service out of state. Twenty-nine couples refused to be interviewed. Refusals occurred for the following reasons: 1) lack of time during farming season; 2) disapproval of government, United States Department of Agriculture, and/or Utah State University; and 3) preferred not to

talk about their poor farm financial situation (only one or two couples' response). Eighteen additional couples did not specifically refuse to participate but failed to be available at scheduled interview times. No follow-up was made by the primary investigators to determine if those who refused differed significantly from the 116 couples who participated. When the farm was an extended family enterprise, the couple with the greatest knowledge of farm operation and financial accounts was selected to participate in the study. Responses from both husband and wife were solicited to provide a more complete assessment of the impact of selected characteristics and satisfaction domains on quality of life. County extension agents sent personal letters to potential respondents informing them of the study and requesting their participation. (See sample letter in Appendix A.) In summary, of 165 couples randomly selected from the dairy herd inventory lists for personal face-to-face interviews, 116 couples or 232 people (70 percent) of the original random selected sample) qualified and accepted the invitation to be interviewed.

### Collection of Data

Data for this study were obtained from a Utah State University Experiment Station sponsored project conducted by Jenson, Ackerman, and Bailey (1986). The project investigators sent an informative letter to those married couples willing to participate in the study. (See sample letter in Appendix B.) Following the letter, the principal investigator or interviewer telephoned to schedule a date and time for interviews in the respondents' home.

The researchers trained twelve females and nine males (seven were husband and wife teams) to solicit information requested on the questionnaire in an unbiased manner. They were instructed to read the questions directly from the questionnaire and to accurately record their answers. The male interviewer met with the husband in a separate room while the female interviewer met with the wife. The trained interviewers were paid minimum wage to conduct the approximate one-hour-and-fifteen-minute interview. Respondents were interviewed over a period of eight months.

### Survey Instrument

The survey instruments (found in Appendices C and D) consisted of separate questionnaires for wives and husbands. Questions about off-farm employment, life satisfaction, and family relations and were identical on the two questionnaires. Interviewers asked only the wife for information about the children. Details relating to the farm operation were solicited from the husband only.

The quality of life questions used in the interviews were developed by the principle investigators after reviewing similar questions used in studies by Andrews and Withey (1976). Comparison of the construct validity of their "delighted-terrible" scale with the validity of other measurement scales revealed it to be among the top three possessing the highest construct validity. In a series of tests, the scale produced an average validity coefficient of .8 for single-item measures and a .9 validity coefficient for three-item indices (similar measures combined). The proportion of observed variance that

was true variance was 64 percent for single items and 81 percent for the three-item indices.

Using the two questionnaires, interviewers solicited the following information for variables used in this study: overall quality of life, satisfaction with the work domain, satisfaction with the family life domain, off-farm employment participation, length of marriage, level of education, number of children, assessment of family bonding, farm size, home background, and age.

### Operational Definitions and Measurement

Quality of life. Husband and wife responded separately to two similar questions pertaining to their overall quality of life. They were, "And now, a very general one; how do you feel about your life as a whole?" and "And now, to sum up this section, how do you feel about your life as a whole?". The first question was stated as the third in a series of forty-two questions pertaining to specific points of satisfaction and the other was the last question in the series. Using a seven-level response scale devised by Andrews and Withey (1976), respondents indicated their satisfaction with overall quality of life. Level of satisfaction on the "D-T Scale" (Delighted to Terrible) was indicated as follows: 0 = no involvement; 1 = terrible; 2 = mostly dissatisfied; 3 = dissatisfied; 4 = mixed or somewhat dissatisfied and somewhat satisfied; 5 = satisfied; 6 = mostly satisfied; 7 = delighted. Values of "0" were declared missing and not included in the analysis. Quality of life is the mean of the responses to the two questions for each husband and wife respectively. Reliability for these two similar questions as a measure of overall quality



of life was tested for internal reliability with Cronbach's alpha coefficient. The alpha score for wives was .8240 and .7272 for husbands. Both coefficients being high, the use of the two questions to indicate overall quality of life was justified.

Family life domain satisfaction. Using the identical "D-T Scale" mentioned above, both wives and husbands responded to the question, "How satisfied are you with your own family life - your wife/husband, your marriage, your children, if any?", as the measurement of the family life domain satisfaction.

On-farm work satisfaction. Satisfaction of the husband or wife with work performed on the farm was measured on the "D-T Scale". On-farm work satisfaction is the mean of a minimum of three total responses to satisfaction with the following: 1) their actual work on the farm; 2) working on the farm - the physical surroundings, the hours, and the amount of work; and 3) their relationships with others on the farm - farming partners, family members who worked on the farm, and hired help. If one or more responses were missing, the index was set to a missing value and not included in the analysis. Utilizing the Cronbach's alpha test, a very high reliability coefficient (.9122) was calculated for on-farm work satisfaction of wives and a reliability coefficient of .6779 was calculated for husbands' on-farm work satisfaction.

Off-farm employment satisfaction. The off-farm employment index, measured on the "D-T Scale", was the response to one question asked the respondents, "How satisfied are you with your off-farm job, if any?"

Household work satisfaction. One question, "How do you feel about your housework - the work you need to do around the home?", was used as the index of household work satisfaction for both husband and wife measured on the "D-T Scale".

Work domain satisfaction. Strong positive correlations have been found between well-being scales and ratings of satisfaction with various life domains. Using a scale of seven levels devised by Andrews and Withey (1976), husband and wife responded to his/her satisfaction with 1) on-farm work (three components); 2) off-farm work (one component); and 3) household work (one component). Each respondent indicated his/her satisfaction with each of the three dimensions of work involvement (as delineated above) on the "D-T Scale". The mean of the responses to five questions formed the work satisfaction index. Respondents who answered fewer than three of the five questions were assigned a missing value for the index and not included in the analysis. However, only 22 wives and 32 husbands responded to three or more of the component measurements of the work domain satisfaction. Thus, additional tests will be conducted to determine the best possible combination of variables to represent the work domain satisfaction.

Off-farm employment participation. Indicators of off-farm job participation were measured for both husband and wife by asking for the average number of hours per week spent on the job, and the amount of before tax money earned from off-farm jobs in 1985 in thousands of dollars.

Length of marriage. The number of years married to the present spouse was provided by the wife to the investigator.

Level of education. Educational levels of wives and husbands were manifested by the highest grade completed in school. The following categories were listed: 1) 1 - 8th grade; 2) 9 - 11th grade; 3) 12th grade or high school equivalent; 4) vocational school beyond high school; 5) some college \_\_\_\_ years; 6) bachelor's degree; 7) master's degree; and 8) Ph.D., M.D., other professional degree.

Number of children. Wives were asked to state the number of children who were currently residing at home.

Family relations. A series of twelve questions was designed by Olson and McCubbin, et al. (1983) to measure family pride and accord. Respondents were requested to indicate their agreement (1 = strongly disagree, 2 = moderately disagree, 3 = neither agree or disagree, 4 = moderately agree, or 5 = strongly agree) with each statement. Questions 2, 4, 6, 7, and 11 were written in a negative mode to indicate strength of pride and accord. Thus, the scores were reversed for these five questions and added to the scores for the seven other questions to produce an index of family relations. A Cronbach's alpha test showed reliability of the index of family relations as .5159 for wives and .4957 for husbands.

Farm size. The size of dairying operation was determined by the number of cows being milked: 20 to 50 cows is regarded as a small farm, 51 to 150 cows as a medium size farm, and a large farm as milking over 150 cows.

Home background. Farm or ranch, rural nonfarm, or city (nonfarm) were the three possible response categories for the wife to describe where she and where her husband grew up.

Age. The wife was asked to state her age and the age of her husband.

Paired couple response. No dyad measurement has yet been discovered for adequately combining individual responses of wives and husbands. However, spouses have the potential of affecting each other's satisfaction responses negatively or positively. The computed mean value of satisfaction responses of wives and husbands was used as the paired couple response in this study. It, however, assumes that spouses affect each other's responses equally. Likely, wife and husband do not respond equally; instead, one may be dominant and the other submissive. More basically, the "unit" measure may not reflect a "unit" response, if, indeed, such an entity exists. Therefore, the paired couple response utilized in this study may be inadequate to give an accurate indication of potential relationships between "outside" variables and the unit's response to them as measured by their level of satisfaction. The paired couple measure is simply an attempt to assimilate the possible interaction of wives and husbands in determining the unit's level of satisfaction.

### Hypotheses Tested

Hypotheses which were formulated and tested in this study:

1. Dairy farm wives have a higher level of satisfaction with the family life domain than their husbands.
2. Dairy farm husbands have a higher level of satisfaction with the work life domain than their wives.

Satisfaction with family life and work domains for dairy farm wives were each compared to the same satisfaction domains for dairy farm husbands. The paired T-test compared the means of the two variables for each couple. If the observed value of  $t$  exceeded the critical (table) value of  $t$ , the hypothesis was accepted.

3. Dairy farm couples in which the wife has a farm background are more satisfied with their overall quality of life than are couples with wives not having a farm background.
4. Dairy farm couples in which the husband has a farm background are more satisfied with their overall quality of life than are couples with husbands not having a farm background.

The effect of the home background of wives and husbands on the overall quality of life of dairy farm wives and husbands was tested. The groups-T test was used to determine the F-ratio of two variance estimates: the mean square between groups and the mean square within groups (or the estimate of error variance). To determine interaction effects, a repeated measures test was used. If the F-ratio exceeded the critical value of  $F$  (in standard tables), the hypothesis was accepted and it was concluded that the population means were not equal.

5. Dairy farm wives employed in an off-farm job will be less satisfied with household work than dairy farm wives not employed in an off-farm job.

6. Dairy farm husbands employed in an off-farm job will be less satisfied with on-farm work than dairy farm husbands not employed in an off-farm job.

The effect of off-farm employment of wife on wives' satisfaction with household work and of husbands on husbands' on-farm work was determined. Utilizing the independent groups T-test, wives' satisfaction with household work for those not employed in an off-farm job was compared with the household work satisfaction of wives with off-farm employment. Husbands' satisfaction with on-farm work for those employed in an off-farm job was compared with the on-farm work satisfaction of husbands' not engaged in off-farm employment. The hypothesis was accepted if the observed value of  $t$  exceeded the critical (table) value of  $t$ .

7. Overall quality of life: a) for wives, is positively correlated with their age and b) for husbands, is positively correlated with their age.

The magnitude, direction, and significance level of relationships between age and overall quality of life were determined. The correlation coefficients were compared with criterion values for Pearson's  $r$  in a standard table to determine statistical significance. If the correlation coefficient was less than the table value, the hypothesis was not accepted.

### Model Building

In addition to assessing relationships among life satisfaction domains for wives and husbands, four basic models (see Model 1, 2, 3, and 4) were tested in this study to

establish which factors significantly affect overall quality of life, family life domain satisfaction, and work domain satisfaction.

All variables to be analyzed using the multiple regression test were first included in a correlation matrix to determine multicollinearity. One variable of each matched pair was dropped from the equation where the significance of correlation values was  $p = < .01$ . Family life and work satisfaction variables for husbands and wives were included in the linear regression model to determine the variance they accounted for in the overall quality of life for wives, husbands, and paired couples. In addition, all descriptive independent variables were evaluated for their contribution to the variance in 1) family life satisfaction, 2) work satisfaction, and 3) overall quality of life for dairy farm wives, husbands and paired couples. The forced entry regression test was employed using variables with estimated beta values significantly greater than zero. Models best explaining the variance in satisfaction with the family life domain, work domain satisfaction, and overall quality of life were selected.

#### Data Analysis Procedure

Data were coded, computerized, and analyzed using the Statistical Package for Social Sciences, SPSS (primarily using the PC version). Because this study focused on dairy farm couples and their overall quality of life, paired questionnaires were used in the hypothesis testing.

Frequencies were used to provide descriptive information. The Paired and Groups T-tests, One-way Anova, Pearson's Product Moment Correlation and Forced Entry

**Model 1. The Relationship of Satisfaction Domains to Overall Quality of Life.**

$$Y1 = f (A1, B1, A2, B2)$$

**Where Y1 = Overall quality of life for 1) wife, 2) husband, and 3) paired couple**

**A1 = Family life domain satisfaction of wife**

**A2 = Work domain satisfaction of wife**

**B1 = Family life domain satisfaction of husband**

**B2 = Work domain satisfaction of husband**



Model 2. The Relationship of Independent Variables to Family Life Domain Satisfaction.

$$Y2 = f (X1, X2, X3, X4, X5, X6, X7, X8, X9, X10, X11, \\ X12, X13, X14, X15)$$

Where Y2 = Family life domain satisfaction of a) wife, b) husband, and c) paired couple

X1 = Age of wife

X2 = Age of husband

X3 = Education of wife

X4 = Education of husband

X5 = Home background of wife

X6 = Home background of husband

X7 = Hours in off-farm work of wife

X8 = Hours in off-farm work of husband

X9 = Dollars earned in off-farm work by wife

X10 = Dollars earned in off-farm work by husband

X11 = Family relations of wife

X12 = Family relations of husband

X13 = Farm size

X14 = Length of marriage

X15 = Number of children

Model 3. The Relationship of Independent Variables to Work Domain Satisfaction.

$$Y3 = f (X1, X2, X3, X4, X5, X6, X7, X8, X9, X10, X11, \\ X12, X13, X14, X15)$$

Where Y3 = Work domain satisfaction of a) wife, b) husband, and c) paired couple

X1 = Age of wife

X2 = Age of husband

X3 = Education of wife

X4 = Education of husband

X5 = Home background of wife

X6 = Home background of husband

X7 = Hours in off-farm work of wife

X8 = Hours in off-farm work of husband

X9 = Dollars earned in off-farm work by wife

X10 = Dollars earned in off-farm work by husband

X11 = Family relations of wife

X12 = Family relations of husband

X13 = Farm size

X14 = Length of marriage

X15 = Number of children

Model 4. The Relationship of Independent Variables to Overall Quality of Life.

$$Y4 = f (X1, X2, X3, X4, X5, X6, X7, X8, X9, X10, X11, \\ X12, X13, X14, X15)$$

Where Y4 = Overall quality of life for 1) wife, 2) husband, and 3) paired couple

X1 = Age of wife

X2 = Age of husband

X3 = Education of wife

X4 = Education of husband

X5 = Home background of wife

X6 = Home background of husband

X7 = Hours in off-farm work of wife

X8 = Hours in off-farm work of husband

X9 = Dollars earned in off-farm work by wife

X10 = Dollars earned in off-farm work by husband

X11 = Family relations of wife

X12 = Family relations of husband

X13 = Farm size

X14 = Length of marriage

X15 = Number of children

Multiple Regression were statistical tests utilized to analyze the data and to test the hypotheses. The probability level of type 1 error (i.e. "alpha level") for all statistical tests was set at  $p < .05$ .

## CHAPTER 4

### STUDY RESULTS

This study was conducted to determine the effect of selected satisfaction domains on overall quality of life. Other factors, representing personal, work and family life aspects of dairy farm couples, were also tested for their effect on wives' and husbands' declared quality of life. With this knowledge, dairy farm couples, by understanding what factors contribute to a positive life style, may alter their aspirations or their productive efforts to achieve their desired quality of life.

This chapter includes a discussion of sample characteristics and a descriptive analysis of family life and work characteristics of dairy farm wives and husbands. Overall quality of life responses, work and family life satisfaction responses, hypothesis testing, and regression results are also discussed.

#### Sample Characteristics

The target population for this study were farmers on the Dairy Herd Inventory for five Utah counties. Descriptive statistics of wives and husbands used in this study included age, education level, home background, hours in off-farm employment, income from off-farm employment, family relations, farm size, length of marriage, and number of children. Tables E.1 through E.9 (in Appendix E) provide details on the sample characteristics.

## Age

There was a wide range of ages represented in this study. (See Table E.1 in Appendix E.) Husbands ranged in age from 23 to 81 with two-thirds between ages 43 to 60. Wives ranged in age from 21 to 82 with about half between ages 42 to 54. The mean age for the sample of husbands was 51.01 years and 48.69 years for wives. Twenty-nine respondents (11.0 percent of the sample) were 65 years of age and over and seven (3.1 percent of the sample) were under 25 years of age. In the U.S. total farm population in 1985, there were an estimated 7.1 percent between ages of 20 to 24, 53.9 percent between ages 25 to 44, 25.1 percent between ages 45 to 64, and 13.9 percent 65 years of age and over (U.S. Bureau of the Census, 1988). In comparison with the national population data of farm residents, the proportion of young dairy farm couples in this study was reversed with the older age group. One possible reason for this difference is that, in two or more generation families, older family members were more often interviewed (those under 25 years of age in the this study constitute one-seventh the number found residing on farms nationally). Also, couples involved in capital intensive dairy farm operations are more likely to have inherited the operation and be older than farm residents employed in other types of farming.

## Education Level

Stated as the highest educational level achieved, nearly twice as many husbands (11) had a "9th to 11th grade" education as the number of wives (6). (See Table E.2 in

Appendix E.) Although, almost three times as many wives (11) listed "vocational training" as did the number of husbands (4) in the study. About equal numbers of wives and husbands had graduated from high school (47 wives and 41 husbands) and the same was true of those who had some college training (42 wives and 38 husbands). Ten wives (8.6 percent) of the wives graduated from college with a bachelor's degree and twenty-two (19.0 percent) of the husbands graduated with one or more college degrees.

### Home Background

In Table E.3 (see Appendix E), nearly all husbands (93.1 percent or 108) were raised on a farm compared to only half (50.0 percent or 58) of the wives in the sample. Thirty-two wives (27.6 percent), however, reported a rural non-farm background. More than one-fifth (22.4 percent or 26) of the wives had a city (non-farm) background with only five (4.3 percent) husbands with such a background.

### Hours in Off-Farm Employment

Nearly two-thirds of the sample (62 percent of the wives and 67 percent of the husbands) were not employed off the farm. (See Table E.4 in Appendix E.) Forty-three wives (38.0 percent) and thirty-seven husbands (33.0 percent) were engaged in off-farm employment. However, sixty couples (55 percent) had one or both members working in off-farm jobs. Eighteen husbands (16.1 percent) in off-farm employment worked 40 to 49 hours per week while only eight (7.0 percent) of the wives worked a similar number of hours in their off-farm job. Fourteen couples (12.9 percent) worked 40 to 49 hours in

off-farm employment. Over twice as many wives (32) than husbands (14) were employed off the farm from 1 to 39 hours. Eleven wives and 23 husbands were employed off the farm more than 40 hours per week. The hours spent per week in off-farm employment by wives ranged from 0 to 50 hours; for husbands, 0 to 80 hours; and, for couples, it was 0 to 100 hours. Taken together, husbands averaged 36.2 hours per week in off-farm employment; wives averaged 25.9 hours per week.

#### Income from Off-Farm Employment

The average reported income of all wives with off-farm employment was \$8,000 per year; 8 wives (24 percent of those employed) reported earnings of \$2,000 per year. (Consult Table E. 5 in Appendix E.) Income earned in off-farm employment by husbands was substantially higher, partly due to the increased number of hours worked. The average reported annual income for all husbands in off-farm employment was \$18,000. An equal number of employed husbands, 5 (or 18 percent), each reported an average annual income of \$18,000 and \$25,000 from their off-farm job. The range of annual income earned by employed wives was \$1,000 to \$35,000 and was \$1,000 to \$40,000 for employed husbands. In general, husbands earned an average off-farm annual income of \$18,000 while wives averaged under \$7,000 per year from their off-farm job.

Fifty-one percent of the couples (64) reported average annual earnings of between \$1,000 to \$40,000 with a mean of \$7,000 and a mode of \$1,000. There were 13 dual earner couples (11.2 percent) in off-farm employment.



## Family Relations

As found in Table E.6 in Appendix E, the range of scores possible using the family relations index was 12 to 60. The vast majority of wives (103 or 88.9 percent) and husbands (109 or 95.7 percent) showed moderately strong family pride and accord, with scores of 37 to 48. Averaging husband and wife scores into a couple measure further narrowed the range from 32-56 to 35-49.5. Additionally, couple scores ( $n = 111$ ) were concentrated in the in the 37 to 48 response range.

High scores in family pride and accord might be expected since 99 percent of the sample population professed to be members of the area's predominant religion, Church of Jesus Christ of Latter-Day Saints (Mormon) which has strong family relationships as a tenet of their belief. Family solidarity is also a value of those with traditional farm backgrounds.

## Farm Size

In Table E.7 (in Appendix E), it is noted that an equal number of the sample (47 couples or 40.5 percent) resided on small farms and medium-sized farms. Twenty-two couples (or 19.0 percent) represented large farms. The distribution of dairy farm sizes in Utah is approximately 50 percent small farms, 38 percent medium-sized farms, and 12 percent large farms. Thus, in proportion to the population of Utah dairy farms, the study population over sampled larger dairy farms (milking over 150 cows) and medium-sized dairy farms (milking 51 to 150 cows) but under sampled smaller dairy farms (milking from 20 to 50 cows).

### Length of Marriage

The average number of years couples in the sample had been married was 28.4 years. (See Table E.8 in Appendix E.) On the extremes, there were two couples married for one year and one couple married for sixty-one years. The highest number of couples (42 or 36.2 percent) were married for 30 to 40 years which is in line with the mean age of wives and husbands.

### Number of Children

In Table E.9 (Appendix E), more than two-thirds (66.4 percent) of the couples reported having children at home. Thirty-nine percent (or 48) of the couples had one to three children at home with only three couples (2.6 percent) having more than six or more children at home. Couples studied had an average of two children living at home. In 1980, the mean number of children found on all farms in the U.S. was two (Bureau of the Census, 1988). There were 71.5 percent with 1 to 2 children, 24.8 percent with 3 to 4 children and 3.5 percent with 5 or more children listed in the same report. In 1986, the mean family size was larger in Utah (3.67, from Utah Department of Health, 1990) than nationwide (3.21, from U.S. Bureau of the Census, 1990). The mean age of the study respondents indicates the probability that some or all of the couples' children have left home. The age of the oldest or youngest child of the couple might be more useful for analysis of quality of life than the number of children at home, but this information was not collected by the principal investigators.

### Hypothesis Testing

Seven hypotheses were tested in this study. The paired t-test was used for hypotheses 1 and 2. Since 93 percent of all husbands had a farm or ranch background, the cell sizes were extremely uneven. Therefore, the anova test for hypothesis 3 was not performed. Hypothesis 4 was tested using a one-way anova. Hypotheses 5 and 6 were tested using an independent groups t-test. Pearson's Product Moment Correlation was used to test hypothesis 7.

#### Family Life Satisfaction of Wives and Husbands

Hypothesis 1: Dairy farm wives have a higher level of satisfaction with the family life domain than their husbands.

Because the traditional major role of farm wives is caring for family members, it was assumed that family life domain satisfaction for wives would be higher than for husbands. With a two-tailed probability of .177, T-value of -1.36, and 115 degrees of freedom, wife's family life satisfaction mean was 6.04 and husband's family life satisfaction mean was 6.16. (See Table E.13 in Appendix E.) There was no significant difference between dairy farm wives and husbands in their mean level of satisfaction with family life. Therefore, the hypothesis that dairy farm wives had a significantly higher level of family life satisfaction than do husbands was not rejected. In actuality, dairy farm wives had a slightly lower mean level of satisfaction with family life (though it was not significant) than did dairy farm husbands. The correlation coefficient for family life satisfaction reported by wives and husbands was .455. This indicates that variance within

the couple did exist. From Michalos' study (1983), satisfaction with various life domains was found to be similar for males and females. This statement holds true for the family life satisfaction of husband and wife respondents in this study.

### Work Domain Satisfaction of Wives and Husbands

Hypothesis 2: Dairy farm husbands have a higher level of satisfaction with the work domain than their wives.

The following five work satisfaction measures were used to define the work domain satisfaction index: off-farm employment, on-farm work, hours spent in on-farm work, help with on-farm work, and household work. Because not all respondents could be expected to be involved in all work situations, a minimum of three responses was initially required for wives' and husbands' work satisfaction index to be included in the results. However, a redefinition of the work domain satisfaction index was necessitated by too many missing and "does not apply" responses. The mean satisfaction with from one to five individually selected work factors was used as the redefined of work domain satisfaction. Even then, a Cronbach's alpha test of internal reliability produced coefficients of .6456 for wives' work domain satisfaction and .7035 for husbands' work domain satisfaction.

Table 1 shows the comparison of work domain satisfaction for wives and husbands. The T-value was -2.46 with 115 degrees of freedom; the two-tailed probability was .015. Therefore, dairy farm wives and husbands do differ significantly in their mean level of satisfaction with work. With a mean satisfaction level of 5.24, dairy farm

husbands are significantly more satisfied with their work domain than are dairy farm wives with a mean of 5.03. The correlation coefficient between reported mean level of satisfaction with the work domain of dairy farm wives and husbands was .214 suggesting support of the findings. Perhaps, wives (predominately in the homemaker role) visualize their work as providing them less status than husbands visualize themselves in their work role as the breadwinner. Husbands, however, may depend upon their work for personal identification.

Table 1  
Comparison of Work Domain Satisfaction for Wives and Husbands

VARIABLES	MEAN	STANDARD DEVIATION	STANDARD ERROR
Wives' Work Domain Satisfaction	5.0266	.787	.073
Husbands' Work Domain Satisfaction	5.2399	.700	.065

T = - 2.46, df = 115, \*p = .015

#### Home Background and Overall Quality of Life

Hypothesis 3: Dairy farm couples in which the husband has a farm background have a higher overall quality of life than do couples with husbands not having a farm background.

This test was not conducted because the cell sizes were extremely uneven (93 percent in the "farm or ranch" category). Thus, it could not be determined if a significant difference existed among the mean overall life satisfaction for couples in which the husband grew up in a) farm or ranch, b) rural non-farm, or c) city (nonfarm) circumstance. Rural non-farm and city (nonfarm) responses were collapsed into one category and a groups t-test was performed. However, there was no significant difference found in the mean overall satisfaction for husbands with a farm or ranch background and a combined rural nonfarm with city (nonfarm) background.

Hypothesis 4: Dairy farm couples in which the wife has a farm background are enjoy a higher overall quality of life than do couples with wives not having a farm background.

The observed significance level of the F-test was .8152 which is not significant at the .05 level. (See Table E.14 in Appendix E.) Therefore, the farm background of dairy farm wives (farm or ranch, rural non-farm, or city (non-farm)) did not make a significant difference in their mean overall life satisfaction.

Interviewers asked respondents to indicate the environment where they had grown up: 1) farm or ranch, 2) rural (nonfarm), or 3) urban. The duration of times spent in the environment designated and the intensity and direction of its effect upon the individual are unknown. However, if wives without a farm background perceived their change of environment as positive, the results of this test are to be expected. Acceptance of the traditional role of farm women might place them in a position inferior to men, but,

according to Haavio-Mannila (1971), women would find alternative sources of satisfaction as a compensation for loss of social status.

#### Wives' Household Work Satisfaction by Off-Farm Job Status

Hypothesis 5: Dairy farm wives employed in an off-farm job will be less satisfied with household work than dairy farm wives not employed in an off-farm job.

The results of comparing wives' household work satisfaction by off-farm employment status are found in Table E.15 in Appendix E. With a two-tail probability of .237, a T-value of -1.19 and 81 degrees of freedom, there was no significant difference between dairy farm wives employed in an off-farm job and those not so employed in their mean satisfaction with household work. The 33 wives reporting employment in an off-farm job had a household work satisfaction mean of 4.52 compared with a mean of 4.82 for the 50 wives reportedly without an off-farm job.

Roger's research (1977) explains the lack of a significant difference in household work of wives employed in off-farm work and those not so employed as the achievement of aspirations for their work status. Thus, the most important factor in determining wives satisfaction with their work status is not their off-farm employment status, but their aspirations for their current work status. Wives not employed in off-farm work are not totally satisfied with their household work status. Though wives' aspirations for involvement in off-farm employment were not included in this study, it may be that employment opportunities are not available in their rural communities or commensurate

with their training. Also unknown is the extent to which responsibilities in raising children are preventing or delaying wives seeking an off-farm job.

#### Husbands' On-Farm Work Satisfaction by Off-Farm Job Status

Hypothesis 6: Dairy farm husbands employed in an off-farm job will be less satisfied with on-farm work than dairy farm husbands not employed in an off-farm job.

Between dairy farm husbands employed in an off-farm job and those not so employed, there is no significant difference in mean satisfaction with their work on the farm. Detailed results of husbands' on-farm work satisfaction by off-farm work employment status can be found in Table E.16 (Appendix E). The two-tail probability was .206 with a T-value of -1.28 and 83 degrees of freedom. The 32 husbands reportedly employed in an off-farm job with an on-farm work satisfaction mean of 5.28 were not significantly different from the 53 husbands reportedly without off-farm employment, with an on-farm work satisfaction mean of 5.52.

Because off-farm employment has become increasingly important to farm families, income from off-farm employment may be perceived as a positive means of support for maintaining farm operations. It may also serve as a release from pressures encountered in farming. Again, it is not the work status that is the most important consideration but the achievement or non-achievement of aspirations for their current work status that determines their satisfaction.



## Age and Overall Quality of life

Hypothesis 7: Overall quality of life is positively correlated with the age of dairy farm wives and age of dairy farm husbands.

As reported in Table E.17 (Appendix E), the correlation coefficient of for wives' age with wives' overall quality of life was  $-.0981$  and, at  $.146$ , was not significant. A value of  $.0287$  was the correlation coefficient for husbands' age with husbands' overall quality of life; it was not significant at  $.380$ . Likewise, at  $.339$  level of significance, couples' age did not correlate significantly with couples' overall quality of life ( $-.0389$ ). In fact, no significant correlations exist between age of dairy farm wives and husbands and the overall quality of life for wives, husbands, and paired couples.

Though reports on the effect of age on life satisfaction are contradictory in the literature, age does not have a significant impact in this study. The findings of Andrews and Withey (1976) were similar. Age indicates duration of life not necessarily quality of life. At different arbitrary age intervals, it is anticipated that individuals will accomplish certain developmental tasks such as become financially independent, have a steady job, be married and raise a family, have gained some status in the community (Whitbourne and Weinstock, 1979). Failure to accomplish such tasks within the normal age interval only signifies an alternative lifestyle. Although, of major concern to older couples, but not measured in this study, is the effect of health status on quality of life. If a person is reasonably healthy in their later years, they will be satisfied with their life, but low levels of life satisfaction have been associated with poor health (Andrews and Withey, 1976).

### Model Building

An initial examination for multicollinearity yielded correlations at  $p = < .01$  between pairs of independent variables (see Table E.18 in Appendix E). Thus, only two of the four independent variables were included in Model 1. Correlations at  $p = < .01$  included wives' family life domain satisfaction with wives' work domain satisfaction and husbands' family life domain satisfaction with husbands' work domain satisfaction. Wives' family life domain satisfaction and husbands' work domain satisfaction were retained in model 1 equations to represent the two different satisfaction domains ( $r = .064$ ). (In Appendix E, see Table E.19 for inclusion of all four independent variables.) Thus, wife's work domain satisfaction and husbands' family life domain satisfaction were omitted from the equations due to correlation values at the designated level of significance.

In Models 2, 3 and 4, several independent variables correlated at  $p = < .01$  level of significance and were, therefore, not included. Variables dropped from the equations included husbands' home background, wives' home background, number of children at home, number of years of married, wives' age, wives' family relations assessment, husbands' level of education, wives' off-farm job income, and husbands' hours worked in off-farm employment. Husbands' home background was dropped due to extreme unevenness in cell size; wives' home background correlated with age of husbands and wives and was subsequently dropped. Number of children and number of years married were correlated and, also, both correlated with the wives' age and with husbands' age. Because of significant correlations ( $p = < .01$ ), only one of each of the following variable

pairs was selected for use in wives', husbands', and couples' domain satisfaction and overall quality of life models: age of wife and age of husband; highest education level attained by wife and highest education level attained by husband; average hours spent per week in off-farm employment by wife and dollars earned (per thousand) by wife in off-farm employment; average hours per week spent in off-farm employment by husband and dollars earned (per thousand) by husband in off-farm employment, and family relations assessment of husbands and family relations assessment of wives. Therefore, farm size, husbands' assessment of family relations, wives' education level, wives' average hours spent in off-farm employment, husbands' average annual income from off-farm employment, and husbands' age were the six variables used in Models 2, 3 and 4.

Forced entry regression analysis was used to determine variables making a significant contribution to explained variance in overall quality of life, family life domain satisfaction, and work domain satisfaction of dairy farm wives, husbands, and paired couples.

#### Model 1: Relationship of Life Satisfaction Domains to Overall Quality of Life

Wives' family life domain satisfaction and husbands' work domain satisfaction were the independent variables included in the model. The result of the forced entry regression is shown in Table 2.

Both variables contributed significantly in explaining the variance in overall quality of life for wives and paired couples; only one variable was significant in explaining the husbands' quality of life. Husbands' family life domain satisfaction

Table 2  
Relationship of Life Satisfaction Domains to Overall Quality of Life of Dairy Farm Wives, Husbands, and Paired Couples

A. Overall Quality of Life of Wives:

VARIABLE	ESTIMATED BETA	P-VALUE
Wives' Satisfaction with Family Life Domain	.572024	.0000**
Husbands' Satisfaction with Work Domain	.161189	.0334*

F-ratio = 34.53748, F-probability = .0000, R square = .37938

\*p = < .05, \*\*p = < .01

B. Overall Quality of Life of Husbands:

VARIABLES	ESTIMATED BETA	P-VALUE
Wives' Satisfaction with Family Life Domain	-.042456	.5714
Husbands' Satisfaction with Work Domain	.621552	.0000**

F-ratio = 34.72263, F-probability = .0000, R square = .38064

\*p = < .05, \*\*p = < .01

C. Overall Quality of Life of Paired Couples:

VARIABLES	ESTIMATED BETA	P-VALUE
Wives' Satisfaction with Family Life Domain	.345378	.0000**
Husbands' Satisfaction with Work Domain	.514223	.0000**

F-ratio = 43.34887, F-probability = .0000, R square = .43414

\*p = < .05, \*\*p < .01

with the work domain was significant in all three equations; wives' satisfaction with the family life domain was significant in only the equations for wives' and couples' quality of life.

Significant variables in the overall quality of life model for wives were both wives' family life domain satisfaction ( $p = .00005$ ) and husbands' work domain satisfaction ( $p = .0334$ ). These variables explain 37.9 percent of the variance in wives' overall quality of life. Only one variable, husbands' satisfaction with work domain, contributed significantly ( $p = .00005$ ) to husbands' overall quality of life. The variables together explained 38.1 percent of the variance in husbands' overall quality of life and the F-value of 34.54 was significant at  $p = .00005$ .

Wives' satisfaction with the family life domain and husbands' satisfaction with family life domain were both significant at  $p = .00005$  in explaining the variance in overall quality of life of paired couples. All variables accounted for 43.4 percent variance in paired couples' overall quality of life with an F-value of 43.34 ( $p = .00005$ ).

#### Model 2: Relationship of Independent Variables to Family Life Domain Satisfaction

The results of the forced entry regression analysis to explain the relationship between the family life domain satisfaction of wives, husbands, and paired couples with selected independent variables are shown in Table 3.

There was significant variance in the family life domain satisfaction for wives due to husbands' family relations and dollars earned in off-farm employment by husbands (both significant at the  $p < .01$ ). In addition, hours spent in off-farm employment by

**Table 3**  
**Relationship of Independent Variables to Family Life Domain Satisfaction of Dairy Farm Wives, Husbands, and Paired Couples**

**A. Family Life Domain Satisfaction of Wives:**

VARIABLE	ESTIMATED BETA	P-VALUE
Age of Husband	.09282	.3195
Education of Wife	-.03667	.6787
Job Work Hours of Wife	-.18646	.0416*
Dollars Earned by Husband	.26010	.0049**
Family Relations of Husband	.28387	.0018**
Farm Size	-.05628	.5422

F-ratio = 4.59669, F-probability = .0004, R square = .20961

\*p = < .05, \*\*p = < .01

**B. Family Life Domain Satisfaction of Husbands:**

VARIABLE	ESTIMATED BETA	P-VALUE
Age of Husband	.19960	.0425*
Education of Wife	-.08800	.3434
Job Work Hours of Wife	.12624	.1853
Dollars Earned by Husband	.09356	.3254
Family Relations of Husband	.24815	.0086**
Farm Size	.16208	.0957

F-ratio = 2.65690, F-probability = .0194, R square = .13291

\*p = < .05, \*\* p = < .01

**C. Family Life Domain Satisfaction of Paired Couples:**

VARIABLE	ESTIMATED BETA	P-VALUE
Age of Husband	.18184	.0526
Education of Wife	-.07736	.3827
Job Work Hours of Wife	-.04788	.5973
Dollars Earned by Husband	.22878	.0128*
Family Relations of Husband	.33823	.0002**
Farm Size	.06002	.5156

F-ratio = 4.61200, F-probability = .0003, R square = .21016

\*p = < .05, \*\*p = < .01

wives had a negative impact on wives' family life domain satisfaction. Farm wives in a traditional homemaker role are reliant upon the husband as the breadwinner. If, in addition to his provider role, the husband provides strong support for family interaction, it is much appreciated by his wife. It makes her traditional role as nurturer of the family easier and more enjoyable, especially if the wife and/or husband were engaged in off-farm employment. Time spent in off-farm employment by wives lessens the time available to for the care of the home and family. Also, the traditionally oriented husband may disapprove of his wife being employed off the farm.

For farming in general, there is a strong dependence upon off-farm income for maintenance of farming operations and family needs. However, for dairy farmers, the picture is less clear. The off-farm income of farmers in this sample is low in comparison to national averages. Off-farm income represents increased financial security to farm families.

Average hours per week spent in off-farm employment by wives had a significant negative effect ( $\beta = -.18646$ ) upon wives' satisfaction with the family life domain ( $p = .0416$ ). Employment in the off-farm job market may prevent the wife from spending adequate time with her family. She might, therefore, feel pressured to accomplish expected tasks prescribed by her homemaker role. The F-value of 4.60 for Model 2 was significant at  $p < .000$ . All variables in the equation accounted for 21.0 percent of the variance in wives' family life domain satisfaction.

Only husbands' family relations was significant (at  $p < .05$ ) in the equation explaining husbands' family life domain satisfaction. Questions to ascertain the strength

of family bonds and family life domain satisfaction have the same focal point - the family. Therefore, it is not surprising that husbands' family relations is significant in the equation explaining husbands' satisfaction with the family life domain.

Dollars earned in off-farm employment, however, did not have a significant effect upon the husbands' family relations as it did for wives. Perhaps, husbands accept their traditional breadwinner role as their responsibility, without regard to any pleasure they might derive from it. Husbands' age was significant in explaining husbands' family life domain satisfaction at  $p = .0425$ . Husbands' age may indicate level of maturation for the ability to appreciate family life. A total of 13.3 percent of variance in husbands' family life domain satisfaction was explained by the variables entered. The F-value of 2.66 was close to significance at  $p = .019$ .

Making significant contributions to the variance of paired couples' family life domain satisfaction were husbands' family relations (at  $p < .001$ ) and husbands' average dollars earned in off-farm employment (at  $p < .05$ ). The couple unit measure showed a stronger total effect of husbands' family relations on life domain satisfaction. It also indicated a possible interaction between spouses relative to husbands' off-farm income. All variables entered accounted for 21.0 percent of the variance in the paired couples' family life satisfaction. The F-ratio of 4.61 was significant at  $p < .001$ .

Thus, husbands' assessment of his family's pride in and support of each other and husbands' income from off-farm employment had a significant effect upon wives', and couples' satisfaction with the family life domain. In addition, wives' family life domain satisfaction was negatively affected by wives' hours spent in off-farm employment.



Husbands' family life domain satisfaction was significantly impacted by husbands' income from off-farm employment and age of husbands. Education level and farm size had no significant effect on satisfaction with the family life domain.

### Model 3: Relationship of Independent Variables to Work Life Domain Satisfaction

Results of the forced entry regression to determine the impact of selected independent variables on work domain satisfaction for wives, husbands, and paired couples is found in Table 4.

The only variable deemed significant ( $p < .05$ ) in affecting the work domain satisfaction of wives was wives' average hours spent per week in off-farm employment. The estimated beta (-.20745) indicates that the average hours spent by wives in off-farm employment have a negative effect upon their satisfaction with the work domain. The reason for the negative effect of this variable is unclear. However, the following reasons are possible considerations: 1) for those employed in an off-farm job, they may consider any number of hours to be too many, especially if the pay received is low; 2) for those not employed in an off-farm job, they are able to maintain the traditional farm wife role and take pleasure in not being required to work off the farm. The F-value of 1.59 was not significant at  $p < .05$ ; all variables accounted for 8.4 percent of the variance in wives' work domain satisfaction.

No independent variables contributed significantly to the variance (at  $p < .05$ ) in husbands' work domain satisfaction. Husbands, in the traditional breadwinner role, may be expected to have high work aspirations. Work is interpreted as their responsibility

Table 4  
Relationship of Independent Variables to Work Domain Satisfaction of Dairy Farm Wives, Husbands, and Paired Couples

A. Work Domain Satisfaction of Wives:

VARIABLES	ESTIMATED BETA	P-VALUE
Age of Husband	.02756	.7832
Education of Wife	-.04611	.6286
Job Work Hours of Wife	-.20745	.0354*
Dollars Earned by Husband	.07482	.4438
Family Relations of Husband	.13673	.1539
Farm Size	.08753	.3791

F-ratio = 1.58632, F-probability = .1584, R square = .08384

\*p = < .05, \*\*p = < .01

B. Work Domain Satisfaction of Husbands:

VARIABLES	ESTIMATED BETA	P-VALUE
Age of Husband	.19119	.0570
Education of Wife	-.10763	.2573
Job Work Hours of Wife	.08001	.4103
Dollars Earned by Husband	-.05561	.5668
Family Relations of Husband	.13633	.1528
Farm Size	-.04103	.6780

F-ratio = 1.79860, F-probability = .1065, R square = .09401

\*p = < .05, \*\*p = < .01

C. Work Domain Satisfaction of Paired Couples:

VARIABLES	ESTIMATED BETA	P-VALUE
Age of Husband	.09358	.3612
Education of Wife	-.04237	.6633
Job Work Hours of Wife	.04521	.6502
Dollars Earned by Husband	.07581	.4474
Family Relations of Husband	.16573	.0912
Farm Size	.04748	.6400

F-ratio = .80212, F-probability = .5705, R square = .04423

\*p = < .05, \*\*p = < .01

rather something they do to bring satisfaction. Age of husband was close to being significant ( $p=.057$ ). All variables accounted for only 9.4 percent of the variance in the work domain satisfaction of husbands. The F-value of 1.80 was not significant at  $p < .05$ .

For paired couples, no variables were significant at  $p < .05$  in explaining the variance in their work domain satisfaction. In the couple unit data, average hours spent in off-farm work is no longer viewed as having a negative impact, nor is it perceived as a significant factor affecting the work domain satisfaction. Only 4.4 percent of the variance in the work domain satisfaction of paired couples was explained by the independent variables. The F-value of 0.8 was not significant at  $p < .05$ .

To summarize, the average number of hours spent in off-farm employment by wives was the only independent variable contributing significantly to work domain satisfaction. Involvement in an off-farm job had a negative effect upon the work domain satisfaction of wives (estimated beta =  $-.20745$ ). Age, education, family relations, dollars earned in off-farm employment, and farm size all failed to contribute significantly to the variance in work domain satisfaction of wives, husbands, and paired couples.

#### Model 4: Relationship of Independent Variables to Overall Quality of Life

Forced entry regression results to determine the relationship between overall quality of life of dairy farm wives, husbands, and paired couples and selected independent variables are found in Table E.20 in Appendix E.

No independent variables contributed significantly to the variance in wives' overall quality of life. Average hours worked per week in off-farm employment by wives was close ( $p = .0881$ ), but not significant in affecting the variance of the overall quality of life at  $p < .05$ . The F-value of 1.18 was not significant at  $p < .05$  and all variables entered contributed 6.4 percent of the variance in wives' overall quality of life.

No independent variable was significant at  $p < .05$  in explaining the variance in husbands' overall quality of life. Only 3.2 percent of the variance in husbands' overall quality of life could be attributed to independent variables in the Model 4 equation.

Also, no independent variable was found to be significant at  $p < .05$  in explaining the variance in the overall quality of life for paired couples. The F-value of 0.79 was not significant at  $p < .05$ . All independent variables entered contributed 4.3 percent of the variance in paired couples' overall quality of life.

Age husbands, education of wives, average hours spent in off-farm employment by wives, dollars earned by husbands in off-farm employment, family relations of husbands, and farm size were independent variables having no significant effect upon the overall quality of life of wives, husbands, and paired couples.

The results of the proposed models suggest that overall quality of life is best defined by employing satisfaction domains. Independent variables can be used to increase understanding of satisfaction domains, but those used in this study are ineffective in explaining the variance of overall quality of life.

## CHAPTER 5

### SUMMARY AND DISCUSSION

#### Summary

The purpose of this study was to determine the effects of work and family life characteristics on overall quality of life and on work and family life domain satisfactions in order to assist married couples anticipating a career in agriculture or currently employed as dairy farmers. From a stratified random sample of Utah dairy farm couples, 116 wives and husbands were simultaneously interviewed as study participants. Information on work and family life characteristics was collected by trained interviewers.

#### Hypothesis Testing

The results of the hypotheses tested are summarized in Table 5. Seven hypotheses were proposed in this study. The Anova test on hypothesis 3 was not conducted due to an extremely uneven cell sizes relative to husbands' backgrounds; only eight out of 116 husbands had a non-farm background. In hypothesis 1, wives' failed to show significantly higher family life domain satisfaction than their husbands and, therefore, was not accepted. Hypothesis 2 was accepted because husbands showed significantly higher work domain satisfaction than their wives. Hypothesis 4 was not accepted: background of dairy farm wives did not influence their overall quality of life. The off-farm employment of wives, tested in hypothesis 5, did not significantly influence the household work

satisfaction of wives; therefore, hypothesis 5 was not accepted. Hypothesis 6 was, likewise, not accepted because off-farm employment of husbands failed to significantly affect their on-farm work satisfaction. There was no significant correlation of wives' age on wives' overall quality of life. Likewise, there was no significant correlation of husbands' age on husbands' overall quality of life; nor did wives' and husbands' ages correlate significantly with overall life satisfaction of paired couples. Upon further investigation, there was no significant correlation of wives' or husbands' ages with overall quality of life of wives, husbands, or paired couples. Thus, hypothesis 7 was not accepted.

Table 5  
Summary of Hypothesis Testing

HYPOTHESES	TEST USED	P-VALUES
Ho1: Family Life Domain Satisfaction of Wives and Husbands	Paired T	.177
Ho2: Work Domain Satisfaction of Wives and Husbands	Paired T	.015*
Ho4: Wives' Farm Background & Quality of Life	Anova	.815
Ho5: Wives' Household Work Satisfaction by Off-Farm Work Status	Independent Groups T	.237
Ho6: Husbands' On-Farm Work Satisfaction by Off-Farm Job Status	Independent Groups T	.206
Ho7: Age & Overall Quality of Life	Pearson's R	.146(W) .380(H) .339(C)

\*p = < .05, \*\*p = < .01

### Model Building

A summary of the results of the forced entry regression analyses are shown in Tables 6 and 7. Overall quality of life was significantly influenced by wives' family life domain satisfaction and husbands' work domain satisfaction. In addition, the family relations of husbands and dollars earned in off-farm employment by husbands had significant influence upon the family life domain. Only one factor, wives' average hours spent in off-farm employment, significantly influenced work domain satisfaction.

Table 6  
Summary of Forced Entry Regression Analyses - Observed Significance Levels and (Beta Weights) of Regression Coefficients for Model 1

INDEPENDENT VARIABLES	OVERALL QUALITY OF LIFE		
	Model 1		
	Wives	Husbands	Couples
Wives' Family Life Domain Satisfaction	.0000** (.57202)	.7517 (-.04246)	.0000** (.34538)
Husbands' Work Domain Satisfaction	.0334* (.16119)	.0000** (.62155)	.0000** (.51422)
R square =	.38938	.38064	.43414

N = 116, \*p = < .05, \*\*p = < .01

Table 7

Summary of Forced Entry Regression Analyses - Observed Significance Levels and (Beta Weights) of Regression Coefficients for Models 2, 3, and 4

INDEPENDENT VARIABLES	FAMILY LIFE SATISFACTION			WORK SATISFACTION			OVERALL LIFE SATISFACTION		
	Model 2			Model 3			Model 4		
	W	H	C	W	H	C	W	H	C
Age of Husband	.3195 (.0928)	.0425* (.1996)	.0526 (.1818)	.7832 (.0276)	.0570 (.1912)	.3612 (.936)	.1674 (-.1404)	.7697 (.0301)	.4798 (-.0724)
Education of Wife	.6787 (-.0367)	.3434 (-.0880)	.3827 (-.0774)	.6286 (-.0461)	.2573 (-.1076)	.6633 (-.0424)	.9686 (4E-03)	.2397 (-.1155)	.4215 (-.0784)
Hours in Off-Farm Work by Wife	.0416* (-.1865)	.1853 (.1262)	.5973 (-.0479)	.0354* (-.2075)	.4103 (.0800)	.6502 (.0452)	.0881 (-.1694)	.4237 (.0803)	.5445 (-.0605)
Dollars Earned in Off-Farm Work by Husband	.0049* (.2601)	.3254 (.0936)	.0128* (.2288)	.4438 (.0748)	.5668 (-.0556)	.4474 (.0758)	.7163 (.0358)	.9483 (7E-03)	.7837 (.0274)
Family Relations Index of Husband	.0018* (.2839)	.0086* (.2482)	.0002* (.3382)	.1539 (.1367)	.1528 (.1363)	.0912 (.1657)	.0902 (.1645)	.3267 (.0964)	.0820 (.1708)
Farm Size	.5422 (-.0563)	.0957 (.1621)	.5156 (.0600)	.3791 (.0875)	.6580 (-.0410)	.6400 (.0475)	.8299 (-.0216)	.4544 (.0765)	.7251 (.0357)
R-square =	.2096	.1329	.2102	.0838	.0940	.0442	.0639	.0322	.0434

N = 110, \*p = < .05, \*\*p = < .01



## Discussion

Data for this study were collected from both spouses of dairy farm couples. The results indicated that reliance upon the responses of one spouse to the exclusion of the other would have given an unbalanced image of variables affecting their individual and "combined" overall quality of life, family life satisfaction, and work satisfaction. Wives are affected by both work and family life variables, but husbands are affected only by their own work variables, with the exception of hours worked in off-farm employment by wives and their own assessment of family pride and support. Males with traditional backgrounds are socialized to be the major breadwinner for the family; it is logical, therefore, that their satisfaction is reflected primarily by their own work variables. Family pride and support (as measured by the family relations index) are major reasons why husbands devote their lives to being the family breadwinner. Traditionally, the preference of husbands is not to share the breadwinner role with the wife. The traditional female role is care of the family; adequacy of financial support to meet the needs of the family have an effect upon her role as the family caretaker. The majority of wives in this sample are not employed in an off-farm job; they are dependent upon their husbands for the family income. Even when the wife is employed in an off-farm job, her income is supplemental. It may be more difficult for wives to obtain a high paying job in rural areas than it is for husbands. Wives who spend time in off-farm employment are, additionally, expected to maintain all tasks associated with her role as family caretaker. Therefore, understandably, both work and family life variables affect wives' satisfaction.

It is important to note that age, education level, home background, length of marriage, number of children, and farm size had no significant effect on wives' and husbands' satisfaction. However, variables related to work and family life (especially for wives) did have a significant effect on their overall life satisfaction, family life domain satisfaction, and work domain satisfaction. One of the qualities of a good satisfaction measure, as stated by Atkinson (1982), is that it readily responds to change. Past research of Andrews and Withey (1976) and Campbell et al. (1976), has proven that family life and work domain satisfactions, which are personal domains, are meaningful indicators of overall life satisfaction. This study generally supports those earlier findings.

The measure for work domain satisfaction, with multiple components, was unmanageable until redefined through self selection. It was not anticipated that all wives and husbands would not respond to a three work component minimum. Because paired data were used in the analysis, if either spouse failed to respond to the three component minimum, the couple was dropped from the analysis. Self selection of components classified as the work domain may be a more realistic representation of dairy farm wives' and husbands' perception of factors perceived in their work domain.

Only with on-farm work were different dimensions (the actual farm work, the farm hours, and the farm help) explored. Exploring different dimensions of work provides additional information for determining which factors limit or enhance quality of life. It was impossible to utilize similar dimensions of household work and off-farm employment using the data collected.

A limitation of the data set used was the failure to identify the ages of all children of the couples sampled (not just those living at home). This made it impossible to use the family life cycle stage as an independent variable. DuVall and Miller (1985), suggest that stage of family life cycle (assigned according to the age of the oldest child) might be a more reliable variable than age of children to monitor changes taking place within the family. Such changes are likely to have an effect on overall quality of life, family life domain satisfaction, and work domain satisfaction.

Generally married persons are described as being more satisfied with their life than are those who are single or divorced. Since all respondents in this study were married, there was no opportunity to know if differences in marital status might have been reflected in life satisfaction.

Finally, no control exists to guarantee that responses to the questions posed by the trained interviewers were answered truthfully rather than as respondents felt the interviewers wanted to hear. However, it is doubtful that the trained interviewers, paid to collect the data, introduce much bias. No further information regarding those who declined to be included in the study is available; the extent of self-selection bias in this study is, therefore, unknown.

### Recommendations

All respondents in this study were engaged in dairy farming in Utah. The results of this study should not be generalized to all farm couples. It is not known if dairy farm couples exhibit significantly different levels of life satisfaction than farm

couples not employed in dairying. Before generalizing the results of this study to all farm couples, wives and husbands engaged in other types of farming and from various geographical locations should be studied.

Data collection for this study occurred over an eight-month period. Employing full-time or and increased number of interviewers to complete data collection over a shorter period of time might decrease the number of refusals to participate in the study. Although the focus of this study was not concerned with the actual level of satisfaction felt, interviewing participants while engaged an arduous task such as haying may report a lower level of satisfaction. Also, not taken into account, was the introduction of the Dairy Termination Program (Husbands' satisfaction with the work domain was significant in all three equations; wives' satisfaction with the family life domain was not significant in only the equation for husbands' quality of life. DTP) during the time of data collection. This U.S. Department of Agriculture program enacted to reduce surplus milk production. Farmers were permitted the option of submitting a sealed bid for disposing of their entire dairy herd and not re-entering dairy farming for at least five years. This unusual situation likely did have an effect on the level of satisfaction expressed by wives and husbands in this study.

A more realistic dyad measurement of the quality of life is recommended in subsequent studies. Wives and husbands, after being interviewed separately, could be asked to respond as a couple to provide dyad measurements of satisfaction. This would be better than assuming equal influence of spouses in determining the satisfaction of the couple unit.

Need for a more adequate index of off-farm employment satisfaction was indicated in this study. Farming technology has experienced many changes in the last two decades. Most dairies are forced to utilize computerized rationing and new marketing strategies have been adopted to counteract stiffer competition. Some farm couples may have been forced to turn to off-farm employment to pay for updated technology or to compensate for its non-adoption in their dairy operation. Aspirations for involvement in off-farm employment, the availability of off-farm employment opportunities in rural communities, the skills required by employers and job skills possessed by farm couples are factors which might be explored in a future study.

A more complete understanding of the work domain satisfaction index is needed. Perhaps, on-farm work, off-farm work, and household work are naturally perceived as separate work domains. Viewing them as separate domains may provide valuable information regarding overall quality of life that is otherwise lost when different work indices are compiled to represent the work domain satisfaction.

In this study, only two satisfaction domains (family life and work) were identified. They both were significant in accounting for the variance in overall quality of life. (Independent variables used in this study were less effective in explaining such variance.) Use of additional satisfaction domains (i.e. health, financial, marital, occupational prestige, social life), might provide further understanding of the dimensions of overall quality of life.

Demographics other than those used in this study might be effective as indicators of family life satisfaction, work satisfaction, and overall quality of life.

Identification of satisfaction domains most significant in determining the overall quality of life of dairy farm wives and husbands can be employed to direct efforts for improving their quality of life on the dairy farm. If a change of occupation to a non-farm lifestyle is warranted, it would be important for couples to recognize which life satisfaction domains were most important in maintaining their life quality.

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## **APPENDICES**

Appendix A.

Sample Letter from Local County Extension Agents

(Requesting participation of randomly selected farm couple)



# COOPERATIVE EXTENSION SERVICE



84

UTAH STATE UNIVERSITY

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Logan, Utah 84322-4900  
(801) 750-2200

March 19, 1986

Dear :

Your name has been randomly selected from a list of dairy farmers in Utah County to be included in a study designed to measure family involvement in Utah's dairy farms. The study is under the direction of the College of Family Life and the College of Agriculture. The individuals conducting this study would like to have an opportunity of visiting for approximately one hour and fifteen minutes with both the husband and the wife regarding their perception of the dairy farm operation.

We have seen the questionnaire and see nothing on the questionnaire that would be invading the privacy of your lives or asking questions that you may not want to answer about your dairy farm operation. We would really encourage you to participate in this study as it is information like this that helps us provide the type of programs that will help farm families in very difficult times. One of the research team members will be contacting you in the near future, asking you to participate in this study and setting a time wherein that interview can be scheduled. If you have any questions regarding this request, please feel free to get in touch with either of us.

We appreciate the opportunity of being associated with you. If our office can be of assistance in any way, please feel free to contact us.

Sincerely yours,

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Agricultural Agent

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Home Economist

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## Appendix B.

### Sample Letter from Study Investigators

(Notifying respondents they could expect a phone call  
to set up an interview appointment)

# COOPERATIVE EXTENSION SERVICE



86

UTAH STATE UNIVERSITY

Logan, Utah 84322-4900  
(801) 750-2200

April 11, 1986

Dear :

We have written this follow-up letter to let you know how our study of Utah's dairy farmers is progressing. You may remember receiving a letter dated March 19, 1986, in which we said your family had been randomly chosen to participate in a confidential survey of the state's dairy farm families.

This study is being conducted by Utah State University to help dairy farm families deal with the pressures of the industry. We want to ask you how you manage your business, how you handle your finances, and how your family deals with the stresses of the business. When our survey is completed, we will provide you and other dairy farmers in Utah with information on management practices and methods of coping with stress that are working for dairy farm families.

We know too, that the Dairy Herd Buyout program has added pressure to both those who plan to stay and those who are getting out of the industry. We will be gathering information on how farmers are coping with the buyout.

The investigators in this study are Glen Jenson, Ph.D., Professor and Extension Specialist, Family and Human Development; DeeVon Bailey, Ph.D., Assistant Professor and Extension Specialist, Agricultural Economics; and Norleen Ackerman, Ph. D., Associate Professor and Extension Specialist, Home Economics and Consumer Education.

Someone from the research team will be calling you to ask for about an hour-and-a-half of your time to discuss these vital issues. We realize this is a busy time of the year for you, but we hope you will give us this time in order to help all of the state's dairy farm families.

If you have questions or concerns about this study, please give one of us a call.

Sincerely yours,

Glen Jenson, Ph.D.  
750-1542

DeeVon Bailey, Ph.D.  
750-2316

Norleen Ackerman, Ph.D.  
750-1571

Appendix C.  
Wife's Questionnaire  
(Portions used for this study)

\_\_\_\_\_ Time Started

\_\_\_\_\_ Interviewer

Sample No. \_\_\_\_\_

## FARM SURVEY QUESTIONNAIRE - WIFE

## Section 1. DEMOGRAPHIC (to be filled out by interviewer)

First, some questions about family characteristics.

1. What is your race? \_\_\_\_\_

2. What is your husband's race? \_\_\_\_\_

1. White
2. Black
3. Hispanic
4. Oriental
5. Native American
6. Other

3. What is your age? \_\_\_\_\_

4. What is your husband's age? \_\_\_\_\_

5. What is the highest grade each of you finished in school including college and vocational school?

Husband: \_\_\_\_\_

6. Wife: \_\_\_\_\_

1. 1 - 8th grade
2. 9 - 11th grade
3. 12th grade or high school equivalent
4. vocational school beyond high school
5. some college \_\_\_\_\_ years
6. bachelor's degree
7. master's degree
8. Ph.D., M.D., other professional degree

7. What is your present marital status? Wife: \_\_\_\_\_

1. First marriage
2. remarried
3. Living together - not married
4. Divorced
5. Separated
6. Widowed
7. Never married

8. And, for your husband, is (this his first marriage....) also?

Husband: \_\_\_\_\_

9. How long have you been married to your present spouse? \_\_\_\_\_ years

10. Which response most describes where you grew up?

1. Farm or ranch

Wife: \_\_\_\_\_

2. Rural nonfarm

3. City (nonfarm)

11. And your husband?

Husband: \_\_\_\_\_

12. For your children who are living at home, could you give us their sex and ages? (starting with the oldest)

Sex

Age

\_\_\_\_\_ 0. No children at home

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

13. Has the farm been in your family for more than your generation?

\_\_\_\_\_ 1. Yes \_\_\_\_\_ 2. No

14. What is the relationship to you of others who draw a significant income from the farm?

\_\_\_\_\_ 1. Grandparent(s)

\_\_\_\_\_ 2. Parent(s)

\_\_\_\_\_ 3. Brother(s)

\_\_\_\_\_ 4. Sister(s)

\_\_\_\_\_ 5. Child(ren)

\_\_\_\_\_ 6. Others

15. How many families receive the major portion of their living expenses from this farm?

\_\_\_\_\_ families

16. How many homes are located on your farm/ranch?

\_\_\_\_\_

## Section 5. OFF FARM EMPLOYMENT

Next, we have some questions about the off-the-farm employment.

1. Have you ever held a job for pay, outside the home and farm?

\_\_\_\_ 1. Yes  
 \_\_\_\_ 2. No (skip to question 9)

2. Do you currently have a job for pay, outside of home and farm work?

\_\_\_\_ 1. Yes (skip to question 3)  
 \_\_\_\_ 2. No --> In what year did you leave your last job?

19\_\_\_\_ (If 1981 or before, skip to Q9)  
 (If 1982-1986, go to Q3)

We'd like to know about your current (most recent) job.

3. What is (was) your job title and main duties? \_\_\_\_\_

\_\_\_\_\_

4. What is (was) the average number of hours per week spent on the job?

\_\_\_\_\_ hours

5. What is (was) the main reason you have (had) an off-farm job?

\_\_\_\_\_

6. What is (was) your off-farm job income usually used for?

\_\_\_\_\_

7. (If employed in 1985) Approximately how much money did YOU earn from off farm jobs in 1985 before taxes? (round to nearest thousand dollars)

\$\_\_\_\_\_,000.00

8. (If currently employed) Have you signed any loan agreement which commits your wages to the payments of farm loans IF payments are not made when promised?

\_\_\_\_\_ 1. Yes \_\_\_\_\_ 2. No \_\_\_\_\_ 3. Don't know  
(skip to Q9)

9. (If under 65 years) Are you looking for work now or do you intend to start looking for work outside your farm (ranch) operation during the next 12 months?

\_\_\_\_\_ 1. Yes \_\_\_\_\_ 2. No \_\_\_\_\_ 3. Don't know

## Section 6. LIFE SATISFACTION

We'd like to know something about your feelings toward a number of aspects of your life, such as your community, your work, your family, and so on.

Using the response scale on card #3 [showing scale below], please state the number that best represents your feelings about the items I read.

I feel:

7	6	5	4	3	2	1
Delight- ed	Pleased	Mostly Satisfied	Mixed (about equally satisfied & dissatisfied)	Mostly Dissatis- fied	Unhappy	Terrible
0. Does not apply to me						

How do you feel about...

1. Your house/apartment? \_\_\_\_\_
2. This community as a place to live? \_\_\_\_\_
3. And now, a very general one: How do you feel about your life as a whole? \_\_\_\_\_
4. Your own health and physical condition? \_\_\_\_\_



5. The things you and your family do together? \_\_\_\_\_
6. Your off-the-farm job, if any? \_\_\_\_\_
7. The goods and services you can get when you buy in this area --  
things like food, appliances, clothes? \_\_\_\_\_
8. The amount of time you have for doing the things you want to do? \_\_\_\_\_
9. Your chance of getting a good job off the farm if you went looking  
for one? \_\_\_\_\_
10. How well your family agrees on how family income should be spent? \_\_\_\_\_
11. Yourself -- what you are accomplishing and how you handle  
problems? \_\_\_\_\_
12. Your opportunity to change things around you that you don't like? \_\_\_\_\_
13. Your chances for relaxation - even for a short time? \_\_\_\_\_
14. What you have to pay for basic necessities, such as food, housing,  
and clothing? \_\_\_\_\_
15. The amount of fun and enjoyment you have? \_\_\_\_\_
16. What our government is doing about the farm economy? \_\_\_\_\_
17. The things you do and the times you have with your friends? \_\_\_\_\_
18. The amount of pressure you are under? \_\_\_\_\_
19. Your standard of living -- the things you have like housing, car,  
furniture, recreation, and the like? \_\_\_\_\_
20. Your own family life -- your wife/husband, your marriage, your  
children, if any? \_\_\_\_\_
21. The outdoor space there is for you to use outside your home? \_\_\_\_\_
22. The income you (and your family) have? \_\_\_\_\_
23. The way our national government is operating? \_\_\_\_\_

24. The usefulness, for you personally, of your education? \_\_\_\_\_
25. How fairly you get treated? \_\_\_\_\_
26. The schools in the area? \_\_\_\_\_
27. The doctors, clinics, and hospitals you would use in  
this area? \_\_\_\_\_
28. The extent to which you are achieving and getting ahead? \_\_\_\_\_
29. The work you do on your farm -- the work itself? \_\_\_\_\_
30. Working on the farm -- the physical surroundings, the hours,  
and the amount of work you do? \_\_\_\_\_
31. The people you work with -- your farming partners,  
family members who work on the farm and hired help? \_\_\_\_\_
32. The way you spend your spare time, your nonworking activities? \_\_\_\_\_
33. The services you can get when you have to have someone come in  
to fix things around your home - like painting, repairs? \_\_\_\_\_
34. The services you get in this rural area - like road maintenance,  
snow removal, and fire and police protection? \_\_\_\_\_
35. How secure you are financially? \_\_\_\_\_
36. The extent to which you can adjust to changes in your life? \_\_\_\_\_
37. The way our political leaders think and act? \_\_\_\_\_
38. The information you get from newspapers, magazines, radio  
and TV? \_\_\_\_\_
39. The entertainment you get from TV, radio, movies, and local  
events and places? \_\_\_\_\_
40. The taxes you pay -- I mean the local, state, and national  
taxes altogether? \_\_\_\_\_
41. Your housework -- the work you need to do around the home? \_\_\_\_\_

42. And now, to sum up this section, how do you feel about your life as a whole? \_\_\_\_\_

### Section 11. FAMILY RELATIONS

Using the responses on card #7, please rate the following items as they apply to your family:

	1	2	3	4	5
	Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree
1. We can express our feelings.					_____
2. We tend to worry about many things.					_____
3. We really do trust and confide in each other.					_____
4. We have the same problems over and over.					_____
5. Family members feel loyal to the family.					_____
6. Accomplishing what we want to do seems difficult for us.					_____
7. We are critical of each other.					_____
8. We share similar values and beliefs as a family.					_____
9. Things work out well for us as a family.					_____
10. Family members respect one another.					_____
11. There are many conflicts in our family.					_____
12. We are proud of our family.					_____

Appendix D.

Husband's Questionnaire

(Portions used for this study)

\_\_\_\_\_ Time Started  
 \_\_\_\_\_ Interviewer

Sample No. \_\_\_\_\_

## FARM SURVEY QUESTIONNAIRE - HUSBAND

### Section 5. OFF FARM EMPLOYMENT

Next, we have some questions about the off-the-farm employment.

1. Have you ever held a job for pay, outside the home and farm?

- \_\_\_\_ 1. Yes  
 \_\_\_\_ 2. No (skip to question 9)

2. Do you currently have a job for pay, outside of home and farm work?

- \_\_\_\_ 1. Yes (skip to question 3)  
 \_\_\_\_ 2. No --> In what year did you leave your last job?

19\_\_\_\_ (If 1981 or before, skip to Q9)  
 (If 1982-1986, go to Q3)

We'd like to know about your current (most recent) job.

3. What is (was) your job title and main duties? \_\_\_\_\_

\_\_\_\_\_

4. What is (was) the average number of hours per week spent on the job?

\_\_\_\_\_ hours

5. What is (was) the main reason you have (had) an off-farm job?

\_\_\_\_\_

6. What is (was) your off-farm job income usually used for?

\_\_\_\_\_

7. (If employed in 1985) Approximately how much money did YOU earn from off farm jobs in 1985 before taxes? (round to nearest thousand dollars)

\$\_\_\_\_,000.00

8. (If currently employed) Have you signed any loan agreement which commits your wages to the payments of farm loans IF payments are not made when promised?

\_\_\_\_\_ 1. Yes \_\_\_\_\_ 2. No \_\_\_\_\_ 3. Don't know  
(skip to Q9)

9. (If under 65 years) Are you looking for work now or do you intend to start looking for work outside your farm (ranch) operation during the next 12 months?

\_\_\_\_\_ 1. Yes \_\_\_\_\_ 2. No \_\_\_\_\_ 3. Don't know

## Section 6. LIFE SATISFACTION

We'd like to know something about your feelings toward a number of aspects of your life, such as your community, your work, your family, and so on.

Using the response scale on card #3 [showing scale below], please state the number that best represents your feelings about the items I read.

I feel:

7	6	5	4	3	2	1
Delight- ed	Pleased	Mostly Satisfied	Mixed (about equally satisfied & dissatisfied)	Mostly Dissatis- fied	Unhappy	Terrible
0. Does not apply to me						

How do you feel about....

1. Your house/apartment? \_\_\_\_\_
2. This community as a place to live? \_\_\_\_\_
3. And now, a very general one: How do you feel about your life as a whole? \_\_\_\_\_
4. Your own health and physical condition? \_\_\_\_\_

5. The things you and your family do together? \_\_\_\_\_
6. Your off-the-farm job, if any? \_\_\_\_\_
7. The goods and services you can get when you buy in this area --  
things like food, appliances, clothes? \_\_\_\_\_
8. The amount of time you have for doing the things you want to do? \_\_\_\_\_
9. Your chance of getting a good job off the farm if you went looking  
for one? \_\_\_\_\_
10. How well your family agrees on how family income should be spent? \_\_\_\_\_
11. Yourself -- what you are accomplishing and how you handle  
problems? \_\_\_\_\_
12. Your opportunity to change things around you that you don't like? \_\_\_\_\_
13. Your chances for relaxation - even for a short time? \_\_\_\_\_
14. What you have to pay for basic necessities, such as food, housing,  
and clothing? \_\_\_\_\_
15. The amount of fun and enjoyment you have? \_\_\_\_\_
16. What our government is doing about the farm economy? \_\_\_\_\_
17. The things you do and the times you have with your friends? \_\_\_\_\_
18. The amount of pressure you are under? \_\_\_\_\_
19. Your standard of living -- the things you have like housing, car,  
furniture, recreation, and the like? \_\_\_\_\_
20. Your own family life -- your wife/husband, your marriage, your  
children, if any? \_\_\_\_\_
21. The outdoor space there is for you to use outside your home? \_\_\_\_\_
22. The income you (and your family) have? \_\_\_\_\_
23. The way our national government is operating? \_\_\_\_\_

24. The usefulness, for you personally, of your education? \_\_\_\_\_
25. How fairly you get treated? \_\_\_\_\_
26. The schools in the area? \_\_\_\_\_
27. The doctors, clinics, and hospitals you would use in  
this area? \_\_\_\_\_
28. The extent to which you are achieving and getting ahead? \_\_\_\_\_
29. The work you do on your farm -- the work itself? \_\_\_\_\_
30. Working on the farm -- the physical surroundings, the hours,  
and the amount of work you do? \_\_\_\_\_
31. The people you work with -- your farming partners,  
family members who work on the farm and hired help? \_\_\_\_\_
32. The way you spend your spare time, your nonworking activities? \_\_\_\_\_
33. The services you can get when you have to have someone come in  
to fix things around your home - like painting, repairs? \_\_\_\_\_
34. The services you get in this rural area - like road maintenance,  
snow removal, and fire and police protection? \_\_\_\_\_
35. How secure you are financially? \_\_\_\_\_
36. The extent to which you can adjust to changes in your life? \_\_\_\_\_
37. The way our political leaders think and act? \_\_\_\_\_
38. The information you get from newspapers, magazines, radio  
and TV? \_\_\_\_\_
39. The entertainment you get from TV, radio, movies, and local  
events and places? \_\_\_\_\_
40. The taxes you pay -- I mean the local, state, and national  
taxes altogether? \_\_\_\_\_
41. Your housework -- the work you need to do around the home? \_\_\_\_\_



42. And now, to sum up this section, how do you feel about your life as a whole? \_\_\_\_\_

### Section 11. FAMILY RELATIONS

Using the responses on card #7, please rate the following items as they apply to your family:

	1	2	3	4	5
	Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree
1. We can express our feelings.					_____
2. We tend to worry about many things.					_____
3. We really do trust and confide in each other.					_____
4. We have the same problems over and over.					_____
5. Family members feel loyal to the family.					_____
6. Accomplishing what we want to do seems difficult for us.					_____
7. We are critical of each other.					_____
8. We share similar values and beliefs as a family.					_____
9. Things work out well for us as a family.					_____
10. Family members respect one another.					_____
11. There are many conflicts in our family.					_____
12. We are proud of our family.					_____

Appendix E.  
Tables of Study Results

## Appendix E. Tables of Study Results

Table E.1  
Age of Dairy Farm Wives and Husbands

AGE	WIVES' AGE		HUSBANDS' AGE		COUPLES' AVERAGE AGE	
	N	%	N	%	N	%
Under 25	2	1.7	1	0.9	2	1.7
25 - 44	38	32.8	30	25.8	32	27.6
45 - 64	63	54.3	67	57.8	67	57.8
Over 64	13	11.2	18	15.5	15	12.9
TOTALS	116	100.0	116	100.0	116	100.0

Table E.2  
Education Level of Dairy Farm Wives and Husbands

LEVEL OF EDUCATION	WIVES' EDUCATION		HUSBANDS' EDUCATION	
	N	%	N	%
9th to 11th Grade	6	5.2	11	9.5
12th to High School Graduate	47	40.5	41	35.3
Vocational Training	11	9.5	4	3.4
Some College	42	36.2	38	32.8
Bachelor's Degree	10	8.6	18	15.5
Master's Degree	0	0.0	3	2.6
Professional Degree	0	0.0	1	0.9
TOTALS	116	100.0	116	100.0

Table E.3  
Home Background of Dairy Farm Wives and Husbands

HOME BACKGROUND	WIVES' BACKGROUND		HUSBANDS' BACKGROUND	
	N	%	N	%
Farm or Ranch	58	50.0	108	93.1
Rural Nonfarm	32	27.6	3	2.6
City (Nonfarm)	26	22.4	5	4.3
TOTALS	116	100.0	116	100.0

Table E.4  
Average Hours Spent Per Week in Off-Farm Employment by Dairy Farm Wives, Husbands,  
and Paired Couples (Percentages do not include missing data)

AVERAGE HOURS PER WEEK	WIVES' HOURS		HUSBANDS' HOURS		COUPLES' HOURS	
	N	%	N	%	N	%
0	70	62.0	75	67.0	49	45.0
1 - 8	7	6.2	1	0.9	6	5.5
9 - 16	4	3.5	4	3.5	7	6.4
17 - 24	11	9.7	3	2.7	7	6.4
25 - 32	6	5.3	3	2.7	4	3.7
33 - 40	12	10.6	20	17.8	17	15.6
41 - 48	0	0.0	1	0.9	2	1.8
49 - 56	3	2.7	3	2.7	3	2.8
57 - 64	0	0.0	2	1.8	6	5.5
65 - 72					3	2.8
73 - 80					1	0.9
81 - 88					1	0.9
89 - 96					2	1.8
97 and Over					1	0.9
TOTALS	113	100.0	112	100.0	109	100.0

Table E.5

Average Dollars Earned Per Month in 1985 (in thousands of dollars) in Off-Farm Employment by Dairy Farm Wives, Husbands, and Paired Couples (Percentages do not include missing data)

AVERAGE DOLLARS PER MONTH	WIVES' INCOME		HUSBANDS' INCOME		COUPLES' INCOME	
	N	%	N	%	N	%
0	73	67.6	81	71.1	52	48.6
\$1,000 - \$5,000	21	19.4	7	6.1	18	16.8
\$6,000 - \$10,000	7	6.5	5	4.4	10	9.4
\$11,000 - \$15,000	2	1.9	2	1.8	4	3.7
\$16,000 - \$20,000	3	2.8	4	3.5	6	5.6
\$21,000 - \$25,000	1	0.9	7	6.1	6	5.6
\$26,000 - \$30,000	0	0.0	3	2.6	5	4.7
\$31,000 - \$35,000	1	0.9	2	1.8	2	1.9
\$36,000 - \$40,000	0	0.0	3	2.6	4	3.7
TOTALS	108	100.0	114	100.0	107	100.0

Table E.6  
Family Relations Index of Dairy Farm Wives, Husbands, and Paired Couples

FAMILY RELATIONS INDEX	WIFES' INDEX		HUSBANDS' INDEX		COUPLES' INDEX	
	N	%	N	%	N	%
24 & Under	0	0.0	0	0.0	0	0.0
25 - 30	0	0.0	2	1.7	0	0.0
31 - 36	8	6.9	6	5.2	3	2.6
37 - 42	66	56.9	69	59.4	83	71.6
43 - 48	37	31.9	40	34.5	28	24.1
49 - 53	5	4.3	0	0.0	2	1.7
54 - 60	0	0.0	1	0.9	0	0.0
TOTALS	116	100.0	116	100.0	116	100.0

Table E.7  
Size of Dairy Farm (number of cows milked)

SIZE OF DAIRY FARM	NUMBER	PERCENT
Small (20 - 50 cows)	47	40.5
Medium ( 51 - 150 cows)	47	40.5
Large (Over 150 cows)	22	19.0
TOTALS	116	100.0

Table E.8  
Length of Marriage in Years for Dairy Farm Couples

NUMBER OF YEARS	NUMBER OF COUPLES	PERCENT OF COUPLES
1 - 10	13	11.2
11 - 20	19	16.4
21 - 30	28	24.1
31 - 40	42	36.2
41 - 50	7	6.1
51 - 60	6	5.1
Over 60	1	0.9
TOTALS	116	100.0

Table E.9  
Number of Children at Home of Dairy Farm Couples

NUMBER OF CHILDREN	NUMBER OF COUPLES	PERCENT OF COUPLES
0	39	33.6
1	18	15.5
2	16	13.8
3	14	12.1
4	8	6.9
5	9	7.8
6	9	7.8
7	1	0.9
8	2	1.7
TOTALS	116	100.0

Table E.10

Reported Family Life Domain Satisfaction of Dairy Farm Wives, Husbands, and Paired Couples

	Wife Average		Husband Average		Couple Average	
LEVEL OF SATISFACTION	N	%	N	%	N	%
1) Terrible	0	0.0	0	0.0	0	0.0
2) Unhappy	0	0.0	0	0.0	0	0.0
3) Mostly Dissatisfied	0	0.0	0	0.0	0	0.0
3.5)					0	0.0
4) Mixed	8	6.9	3	2.6	0	0.0
4.5)					6	5.2
5) Mostly Satisfied	18	15.5	19	16.4	6	5.2
5.5)					21	18.1
6) Pleased	52	44.8	50	43.1	24	20.7
6.5)					44	37.9
7) Delighted	38	32.8	44	37.9	15	12.9
TOTAL RESPONDENTS	116	100.0	116	100.0	116	100.0
Mean	6.034		6.164		6.099	
Median	6.000		6.000		6.500	



Table E.11  
Reported Work Domain Satisfaction of Dairy Farm Wives, Husbands, and Paired  
 Couples

LEVEL OF SATISFACTION	Wife Average		Husband Average		Couple Average	
	N	%	N	%	N	%
1) Terrible	0	0.0	0	0.0	0	0.0
2) Unhappy	0	0.0	0	0.0	0	0.0
3) Mostly Dissatisfied	3	3.1	2	2.0	1	1.0
3.5)	6	6.1	3	13.1	5	5.1
4) Mixed	15	15.3	28	28.6	18	18.3
4.5)	20	20.4	24	24.5	27	27.6
5) Mostly Satisfied	39	39.8	30	30.6	34	34.7
5.5)	12	12.2	15	15.3	10	10.2
6) Pleased	3	3.1	9	7.9	3	3.1
6.5)	0	0.0	5	4.3	0	0.0
7) Delighted	0	0.0	2	0.0	0	0.0
TOTAL RESPONDENTS	98	100.0	116	100.0	98	100.0
Mean	4.86		4.99		4.90	
Median	5.00		4.80		5.00	

Table E.12

Reported Overall Quality of Life of Dairy Farm Wives, Husbands, and Paired Couples

LEVEL OF SATISFACTION	Wife Average		Husband Average		Couple Average	
	N	%	N	%	N	%
1) Terrible	0	0.0	0	0.0	0	0.0
2) Unhappy	0	0.0	0	0.0	0	0.0
3) Mostly Dissatisfied	1	0.9	0	0.0	0	0.0
3.5)	0	0.0	2	1.7	0	0.0
4) Mixed	4	3.4	4	3.4	2	1.7
4.5)	6	5.2	4	3.4	9	7.7
5) Mostly Satisfied	32	27.6	21	18.1	26	22.4
5.5)	20	17.2	29	25.0	40	34.5
6) Pleased	37	31.9	36	31.0	28	24.2
6.5)	10	8.6	12	10.3	10	8.7
7) Delighted	6	5.2	8	6.9	1	0.9
TOTAL RESPONDENTS	116	100.0	116	100.0	116	100.0
Mean	5.560		5.651		5.606	
Median	6.000		6.000		6.000	

Table E.13

Comparison of Family Life Domain Satisfaction for Wives and Husbands

VARIABLES	MEAN	STANDARD DEVIATION	STANDARD ERROR
Wives' Satisfaction with Family Life Domain	6.0345	.874	.081
Husbands' Satisfaction with Family Life Domain	6.1638	.791	.073

T = -1.36, df = 115, p = .177 (two-tailed)

Table E.14

Wives' Overall Quality of Life by Home Background

SOURCE	DEGREES OF FREEDOM	SUM OF SQUARES	MEAN SQUARES
Between Groups	2	.2222	.1111
Within Groups	113	61.3554	.5430
TOTAL	115	61.5776	

F-ratio = .2046, F-probability = .8152

Table E.15

Wives' Household Work Satisfaction by Off-Farm Employment Status

WORK STATUS	N	MEAN	STANDARD DEVIATION	STANDARD ERROR
With Off-Farm Employment	33	4.5152	1.034	.180
Without Off-Farm Employment	50	4.8200	1.207	.177

T = -1.19, df = 81, p = .237 (two-tailed)

\*p = < .05, \*\*p = < .01

Table E.16

Husbands' On-Farm Work Satisfaction by Off-Farm Employment Status

WORK STATUS	N	MEAN	STANDARD DEVIATION	STANDARD ERROR
With Off-Farm Employment	33	5.2121	.927	.161
Without Off-Farm Employment	53	5.5157	.802	.110

T = -.161, df = 84, p = .112 (two-tailed)

\*p = < .05, \*\*p = < .01

Table E.17  
Correlation of Age with Overall Quality of Life for Wives, Husbands, and Paired  
 Couples

	WIVES' AGE	HUSBANDS' AGE	COUPLES' AGE
A. Wives' Overall Quality of Life.			
CORRELATIONS	-.0981	-.0888	-.942
Significance	.146	.172	.157
B. Husbands' Overall Quality of Life.			
CORRELATIONS	.0394	.0287	.0342
Significance	.337	.380	.358
C. Paired Couples' Overall Quality of Life.			
CORRELATIONS	-.0384	-.0391	-.0389
Significance	.347	.339	.339

N = 116, \*p = < .05, \*\*p = < .01

Table E.18  
Correlation Values and (Significance) of Selected Independent Variables

	AGE OF HUSBAND	NUMBER OF CHILDREN	YEARS MARRIED	EDUCATION OF HUSBAND	BACK- GROUND OF WIFE
AGE OF WIFE	.9813 (.000)	-.5603 (.000)	.9242 (.00)		-.2685 (.002)
AGE OF HUSBAND		-.5771 (.000)	.9072 (.000)		-.2826 (.001)
NUMBER OF CHILDREN			-.5333 (.000)		
EDUCATION OF WIFE				.3864 (.000)	
	FAMILY RELATIONS OF HUSBAND	HOURS SPENT IN OFF-FARM JOB BY WIFE	INCOME EARNED IN OFF-FARM JOB BY HUSBAND	WORK DOMAIN SATISFAC- TION OF WIFE	WORK DOMAIN SATISFAC- TION OF HUSBAND
FAMILY RELATIONS OF WIFE	.2958 (.001)				
INCOME EARNED IN OFF-FARM JOB BY WIFE		.7002 (.000)			
HOURS SPENT IN OFF-FARM JOB BY HUSBAND			.6619 (.000)		
FAMILY LIFE DOMAIN SATISFAC- TION OF WIFE				.3510 (.000)	
FAMILY LIFE DOMAIN SATISFAC- TION OF HUSBAND					.3787 (.000)

N = 111, p = < .01

Table E.19

Relationship of (Four) Life Satisfaction Domains to Overall Quality of Life of Dairy Farm Wives, Husbands, and Paired Couples

A. Overall Quality of Life of Wives:

VARIABLE	ESTIMATED BETA	P-VALUE
Wives' Satisfaction with Family Life Domain	.46238	.0000**
Wives' Satisfaction with Work Domain	.30923	.0002**
Husbands' Satisfaction with Family Life Domain	-.13070	.1047
Husbands' Satisfaction with Work Domain	.17024	.0330*

F-ratio = 23.92157, F-probability = .0000, R square = .46295

\*p = < .05, \*\*p = < .01

B. Overall Quality of Life of Husbands:

VARIABLES	ESTIMATED BETA	P-VALUE
Wives' Satisfaction with Family Life Domain	-.02682	.7517
Wives' Satisfaction with Work Domain	-.06537	.4419
Husbands' Satisfaction with Family Life Domain	.06897	.4207
Husbands' Satisfaction with Work Domain	.60189	.0000**

F-ratio = 17.53334, F-probability = .0000, R square = .38719

\*p = < .05, \*\*p = < .01

C. Overall Quality of Life of Paired Couples:

VARIABLES	ESTIMATED BETA	P-VALUE
Wives' Satisfaction with Family Life Domain	.28411	.0005**
Wives' Satisfaction with Work Domain	.15880	.0494*
Husbands' Satisfaction with Family Life Domain	-.03991	.6211
Husbands' Satisfaction with Work Domain	.50719	.0000**

F-ratio = 23.10346, F-probability = .0000, R square = .45431

\*p = < .05, \*\*p = < .01

Table E.20

Relationship of Independent Variables to Overall Quality of Life of Dairy Farm Wives, Husbands, and Paired Couples

A. Overall Quality of Life Index of Wives:

VARIABLES	ESTIMATED BETA	P-VALUE
Age of Husband	-.14039	.1674
Education of Wife	-3.787E-03	.9686
Job Work Hours of Wife	-.16937	.0881
Dollars Earned by Husband	.03584	.7163
Family Relations of Husband	.16454	.0902
Farm Size	-.02157	.8299

F-ratio = 1.18302, F-probability = .3211, R square = .06389

\*p = < .05, \*\*p = < .01

B. Overall Quality of Life Index of Husbands:

VARIABLES	ESTIMATED BETA	P-VALUE
Age of Husband	.03014	.7697
Education of Wife	-.11551	.2397
Job Work Hours of Wife	.08034	.4237
Dollars Earned by Husband	6.4961E-03	.9483
Family Relations of Husband	.09641	.3267
Farm Size	.07647	.4544

F-ratio = .57650, F-probability = .7483, R square = .03219

\*p = < .05, \*\*p = < .01

C. Overall Quality of Life Index for Paired Couples:

VARIABLES	ESTIMATED BETA	P-VALUE
Age of Husband	-.07240	.4798
Education of Wife	-.07837	.4215
Job Work Hours of Wife	-.06046	.5445
Dollars Earned by Husband	.02737	.7837
Family Relations of Husband	.17080	.0820
Farm Size	.03570	.7251

F-ratio = .78680, F-probability = .5822, R square = .04342

\*p = < .05, \*\*p = < .01