

Final Research Report

**COMMUNITY SATISFACTION, COMMUNITY
ATTACHMENT, AND RURAL DEVELOPMENT**

Submitted to:

Cooperative State Research, Education, and Extension Service
United States Department of Agriculture

November, 2004

Project Investigator:

Gene L. Theodori
Assistant Professor & Extension Specialist for Community Development
Department of Recreation, Park & Tourism Sciences
Texas A&M University

National Research Initiative Competitive Grants Program award number 00-35401-9258.

ACKNOWLEDGEMENTS

I wish to express my gratitude to the area residents of Sanderson and Stanton. Without their cooperation this study could not have been completed.

I would also like to acknowledge the Cooperative State Research, Education, and Extension Service, United States Department of Agriculture, who funded this research. Support came from grant number 00-35401-9258.

Finally, I want to extend a special thanks to Rong Hu and Chyrel Mayfield who helped collect, code, and clean the household survey data. Thanks to both of you.

TABLE OF CONTENTS

LIST OF FIGURES.....	iv
LIST OF TABLES.....	v
INTRODUCTION	1
METHODOLOGY.....	2
Study Site Selection	2
Selected 1997 Agricultural Characteristics	7
Selected 2000 Sociodemographic Characteristics	9
Selected 2000 Economic Characteristics	12
Data Collection	15
Focus Groups	15
Key Informant Interviews	16
Household Survey	17
ANALYSES	18
Objective 1	18
Review of the Community Attachment and Community Satisfaction Literature	18
Dimensions and Indicators of Community Satisfaction	19
Dimensions and Indicators of Community Attachment	21
Community Attachment and Satisfaction: Separate Yet Related Phenomena	22
Measurement of Variables	24
Community Attachment	24
Community Satisfaction	27
Indicators of Community Attachment and Community Satisfaction	28
Statistical Procedures and Results	29
Independent Sample t-tests	29
Pearson's Bivariate Correlations	30
Bivariate and Multivariate Correlation/OLS Regression	32
Objective 2	58
Measurement of Variables	59
Individual Well-Being	59
Statistical Procedures and Results	61

Objective 3	64
Community-Level Action Measures as Dependent Community Attachment and/or Community Satisfaction Variables	64
Community-Level Action Measures as Independent Variables	66
Measurement of Variables	69
Community-Level Action	69
Statistical Procedures and Results	70
Objective 4	72
ENDNOTES	76
REFERENCES	78

LIST OF FIGURES

Figure 1: Estimated Population Growth/Decline From 1980 to 1999 in Texas Counties	4
Figure 2: West Texas Study Sites	6

LIST OF TABLES

Table 1.	Selected 1997 Agricultural Characteristics of Two Counties and the State of Texas	8
Table 2.	Selected 2000 Sociodemographic Characteristics of the Study Sites and the State of Texas	10
Table 3.	Selected 1999 – 2000 Economic Characteristics of Study Sites and the State of Texas	13
Table 4.	Selected Sociodemographic and Economic Characteristics of the Sample and Census Data.....	18
Table 5.	Factor Loadings for Multi-Item Attachment Scale Items	26
Table 6.	Factor Loadings for Domain-Specific Community Satisfaction Items	27
Table 7.	T-tests for the Community Attachment, Community Satisfaction, and Indicator Variables	30
Table 8.	Pearson’s Bivariate Correlation Matrix (Sanderson)	31
Table 9.	Pearson’s Bivariate Correlation Matrix (Stanton)	31
Table 10.	Regression of “Interest in Community” – Sanderson	33
Table 10a.	Estimated Scores for “Interest in Community – Sanderson” Solving for the Gender by Length of Residence Interaction	34
Table 11.	Regression of “Interest in Community” – Stanton	35
Table 11a.	Estimated Scores for “Interest in Community – Stanton” Solving for the Age by Length of Residence Interaction	36
Table 12.	Regression of “Multi-Item Attachment Scale” – Sanderson	37
Table 12a.	Estimated Scores for “Multi-Item Attachment Scale – Sanderson” Solving for the Age by Length of Residence Interaction	38
Table 12b.	Estimated Scores for “Multi-Item Attachment Scale – Sanderson” Solving for the Education by Income Interaction	38
Table 13.	Regression of “Multi-Item Attachment Scale” – Stanton	39
Table 13a.	Estimated Scores for “Multi-Item Attachment Scale – Stanton” Solving for the Age by Marital Status Interaction	40
Table 13b.	Estimated Scores for “Multi-Item Attachment Scale – Stanton” Solving for the Education by Income Interaction	40
Table 13c.	Estimated Scores for “Multi-Item Attachment Scale – Stanton” Solving for the Education by Length of Residence Interaction	41
Table 13d.	Estimated Scores for “Multi-Item Attachment Scale – Stanton” Solving for the Marital Status by Employment Status Interaction	41
Table 14.	Regression of “Social Bonds” – Sanderson	42
Table 14a.	Estimated Scores for “Social Bonds – Sanderson” Solving for the Age by Education Interaction	43
Table 14b.	Estimated Scores for “Social Bonds – Sanderson” Solving for the Age by Race Interaction	43
Table 14c.	Estimated Scores for “Social Bonds – Sanderson” Solving for the Education by Race Interaction	44
Table 14d.	Estimated Scores for “Social Bonds – Sanderson” Solving for the Education by Marital Status Interaction	44

Table 14e. Estimated Scores for “Social Bonds – Sanderson” Solving for the Education by Home Ownership Interaction	44
Table 14f. Estimated Scores for “Social Bonds – Sanderson” Solving for the Education by Employment Status Interaction	45
Table 15. Regression of “Social Bonds” – Stanton	46
Table 15a. Estimated Scores for “Social Bonds – Stanton” Solving for the Age by Length of Residence Interaction	47
Table 15b. Estimated Scores for “Social Bonds – Stanton” Solving for the Age by Employment Status Interaction	47
Table 15c. Estimated Scores for “Social Bonds – Stanton” Solving for the Education by Income Interaction	47
Table 15d. Estimated Scores for “Social Bonds – Stanton” Solving for the Education by Length of Residence Interaction	48
Table 15e. Estimated Scores for “Social Bonds – Stanton” Solving for the Income by Length of Residence Interaction	48
Table 16. Regression of “Satisfaction with Domains” – Sanderson	49
Table 16a. Estimated Scores for “Satisfaction with Domains – Sanderson” Solving for the Age by Race Interaction	50
Table 16b. Estimated Scores for “Satisfaction with Domains – Sanderson” Solving for the Education by Income Interaction	50
Table 16c. Estimated Scores for “Satisfaction with Domains – Sanderson” Solving for the Race by Length of Residence Interaction	50
Table 17. Regression of “Satisfaction with Domains” – Stanton	51
Table 17a. Estimated Scores for “Satisfaction with Domains – Stanton” Solving for the Education by Income Interaction	52
Table 17b. Estimated Scores for “Satisfaction with Domains – Stanton” Solving for the Education by Length of Residence Interaction	52
Table 17c. Estimated Scores for “Satisfaction with Domains – Stanton” Solving for the Income by Income Interaction	53
Table 18. Regression of “Overall Satisfaction” – Sanderson	54
Table 18a. Estimated Scores for “Overall Satisfaction – Sanderson” Solving for the Marital Status by Home Ownership Interaction	55
Table 19. Regression of “Overall Satisfaction” – Stanton	56
Table 19a. Estimated Scores for “Overall Satisfaction – Stanton” Solving for the Education by Income Interaction	57
Table 20. Factor Loadings for Optimistic Attitude	60
Table 21. Zero-Order and Partial Correlations Between Optimistic Attitude and the Measures of Community Attachment and Community Satisfaction.....	62
Table 22. Zero-Order and Partial Correlations Between Happiness and the Measures of Community Attachment and Community Satisfaction ...	63
Table 23. Zero-Order and Partial Correlations Between Community-Level Action Index and the Measures of Community Attachment and Community Satisfaction	71

INTRODUCTION

The concepts of community attachment and community satisfaction have been investigated by numerous researchers. Most investigators who examined one or both of these concepts have generally treated community attachment and/or satisfaction as their dependent variable(s) of primary interest in their research designs. The most common objective in their studies was to identify determinates of community attachment and/or satisfaction. Although justifiably worthy, most studies have suffered from confusion concerning levels of analysis, have provided few definitive findings on the most important predictors of attachment and satisfaction, and have produced little information on the implications of varying levels of community attachment and/or satisfaction for individual- and community-level issues (Theodori 2000). Furthermore, few researchers have articulated a persuasive argument as to why continued efforts to measure levels of community attachment and community satisfaction are advantageous.

Roughly a quarter of a century ago, Goudy and Ryan (1982: 259) stated “little is known about the consequences of different levels of community attachment on either residents or the community itself.” They declared that research was needed to examine how community attachment contributed to factors such as quality of life, community decision-making processes and development efforts, and the maintenance of community groups and institutions. The situation today, as manifested in the extant literatures on community attachment and the related concept of community satisfaction remains very much the same. If these concepts are to be viewed as meaningful and practical, then an understanding of the relationship of community attachment and community satisfaction to individual- and

community-level issues is warranted. Only under this condition will the findings from such work be beneficial for social scientists and policy makers.

The purpose of this study was to replicate and extend the research literature on community attachment and community satisfaction. Specifically, the following study objectives were addressed:

- 1) To provide an increased understanding of the analytical distinctiveness between the concepts of community attachment and community satisfaction.
- 2) To empirically examine the effects of community attachment and community satisfaction on individual well-being.
- 3) To empirically examine the effects of community attachment and community satisfaction on community-level action.
- 4) To use the results to develop a refined model that will aid in designing new approaches to rural community development.

METHODOLOGY

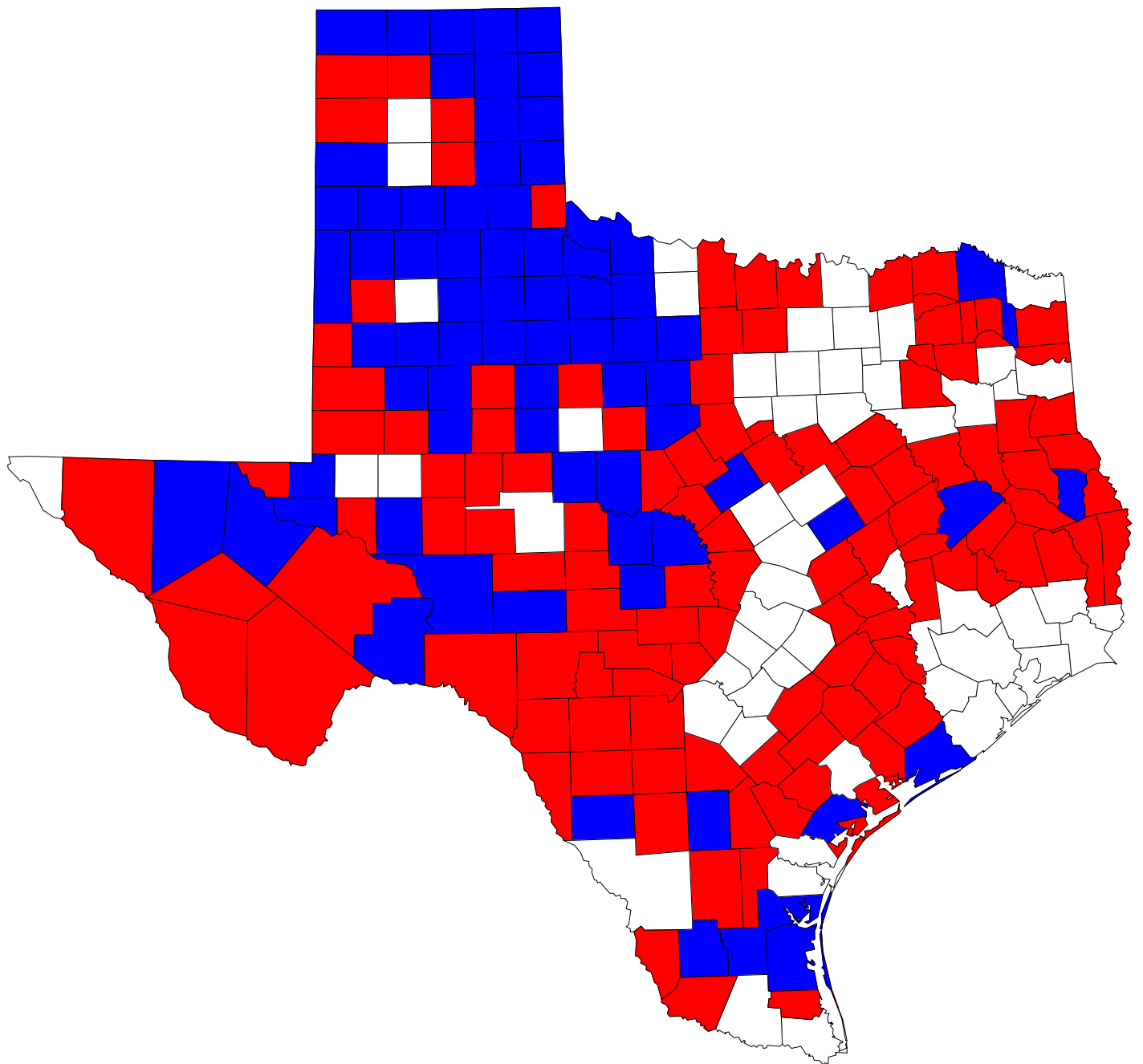
Study Site Selection

The first step of this research required the selection of case study sites. Study sites were purposely selected using county- and place-level data available from the United States Census of Population and Housing and the Texas State Data Center. Telephone conversations with Texas Cooperative Extension personnel (i.e., District Extension Directors and county Extension agents) as well as field observations also aided in the identification and selection of study sites.

The study-site selection process began at the county level and narrowed to the community level. First, U.S. Census of Population and Housing data and population estimates available from the Texas State Data Center were used to empirically classify all nonmetropolitan counties in Texas with respect to their history of population growth or decline from 1980 to 1999. A map of this classification is provided in Figure 1.

Next, using Census data and Texas State Data Center population estimates, all cities and census defined places (CDPs) within each nonmetropolitan county were categorized in terms of estimated population growth or decline from 1980 to 1999. This categorization produced the following construct types:

- 1) Cities/CDPs estimated to increase in population from 1980 to 1999 located in counties estimated to increase in population from 1980 to 1999.
- 2) Cities/CDPs estimated to increase in population from 1980 to 1999 located in counties estimated to decrease in population from 1980 to 1999.
- 3) Cities/CDPs estimated to decrease in population from 1980 to 1999 located in counties estimated to increase in population from 1980 to 1999.
- 4) Cities/CDPs estimated to decrease in population from 1980 to 1999 located in counties estimated to decrease in population from 1980 to 1999.



Population Growth/Decline

- Growth 1980 to 1999
- Decline 1980 to 1999
- Metropolitan County

Figure 1:

Estimated Population Growth/Decline From 1980 to 1999 in Texas Counties

In accordance with the research design, the goal was to select one study site from each of the following construct types: (1) a city/CDP estimated to increase in population from 1980 to 1999 located in a county estimated to increase in population from 1980 to 1999 and (2) a city/CDP estimated to decrease in population from 1980 to 1999 located in a county estimated to decrease in population from 1980 to 1999. Concomitantly, the intent was to choose study sites that were similar in terms of their recent history of community agency.¹

Based upon this empirical classification, as well as field observations and telephone conversations with Texas Cooperative Extension personnel, two sites were selected for in-depth study (see Figure 2). The city of Stanton (located in Martin County) was chosen to represent the first construct type (i.e., a city/CDP estimated to increase in population from 1980 to 1999 located in a county estimated to increase in population from 1980 to 1999). The second construct type (i.e., a city/CDP estimated to decrease in population from 1980 to 1999 located in a county estimated to decrease in population from 1980 to 1999) was represented by the census defined place of Sanderson (located in Terrell County). Estimated population increases from 1980 to 1999 in Stanton and Martin County were 10.3% and 16.4%, respectively. Population decreases from 1980 to 1999 in Sanderson and Terrell County were estimated at 27% and 24.3%, respectively. Despite their differences with respect to estimated patterns of population growth or decline over recent decades, both sites were alleged to have manifested relatively high levels of community agency during that same time period.²

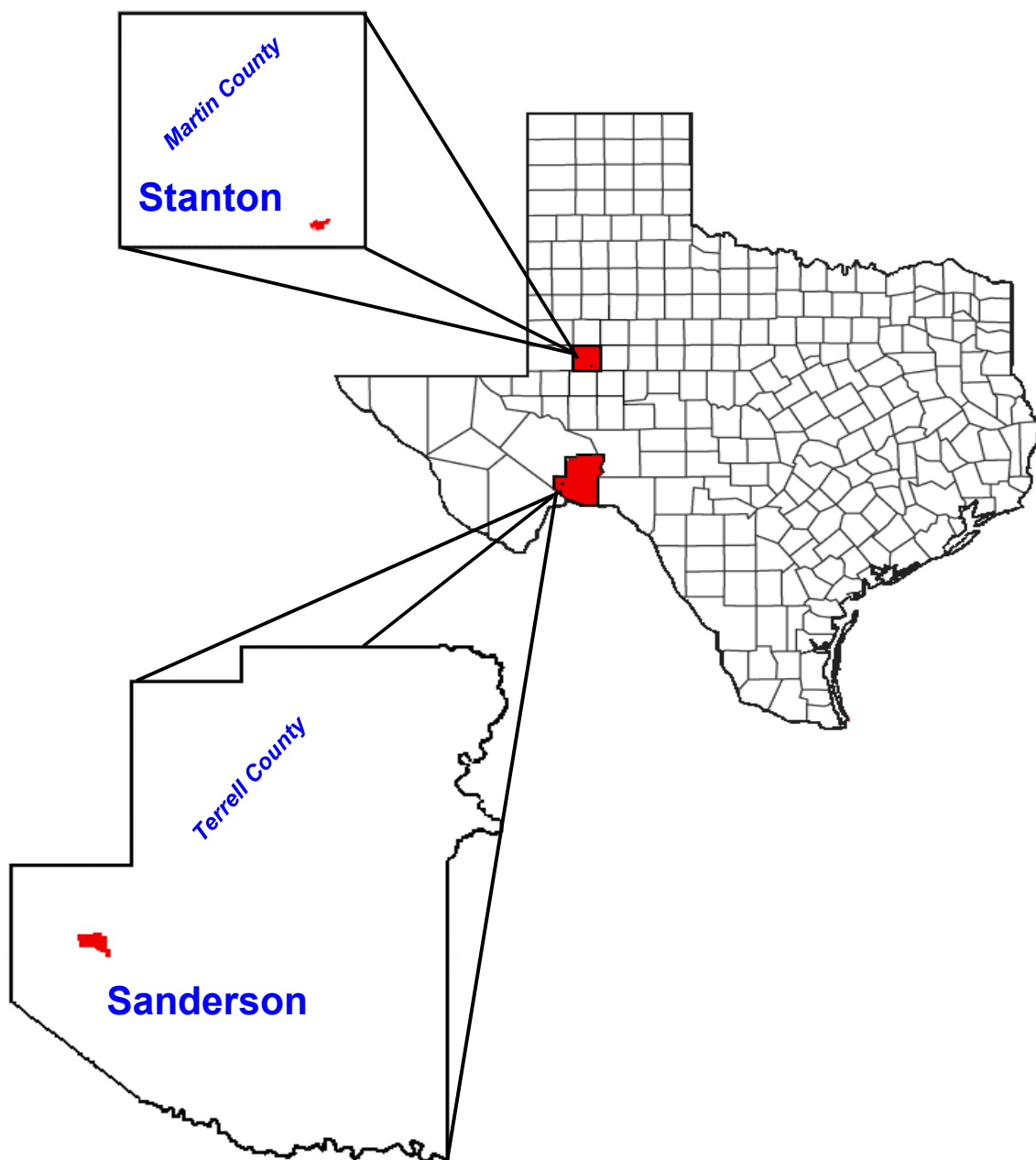


Figure 2: West Texas Study Sites

Selected 1997 Agricultural Characteristics

Table 1 shows selected 1997 agricultural characteristics of the two counties and the state of Texas. Like Texas, Martin County experienced an increase in the number of farms and farm acreage between 1992 and 1997 and, concomitantly, a decrease in the average farm size. The opposite was true in Terrell County. The number of farms and land in farms in Terrell County decreased between 1992 and 1997, while the average farm size in the county increased.

Roughly 194,300 Texas farms produced approximately \$13.8 billion worth of crops and livestock in 1997. Despite the vast changes taking place in the agricultural industry, agriculture has maintained its position as the second largest industry in the state of Texas. As was true at the state level, the market value of agricultural products sold in Martin County increased between 1992 and 1997. Terrell County witnessed a 22.2 percent decrease in the market value of agricultural products sold. Average per farm market value of agricultural products sold ranged from \$54,119 in Terrell County to \$113,116 in Martin County. Both counties experienced an increase in the net cash return from agricultural sales between 1992 and 1997. Average net cash return from agricultural sales ranged from \$4,086 in Terrell County to \$41,526 in Martin County. Martin County had roughly 39% of farms with sales over \$100,000 in 1997, while Terrell County had about 15%.

Table 1. Selected 1997 Agricultural Characteristics of Two Counties and the State of Texas

Characteristic	Martin Co.	Terrell Co.	Texas
Number of farms	353	85	194,301
Percent change 1992 - 1997	9.6	-11.5	7.6
Land in farms (acres)	539,196	1,290,770	131,308,286
Percent change 1992 - 1997	5.2	-7.6	0.3
Average farm size	1,527	15,186	676
Percent change 1992 - 1997	-4.1	4.4	-6.8
Market value of agricultural products sold (\$1000)	39,930	4,600	13,766,527
Percent change 1992 - 1997	31.5	-22.2	14.7
Average market value per farm	113,116	54,119	70,852
Net cash return from agricultural sales (\$1000)	14,659	347	1,988,349
Percent change 1992 - 1997	75.9	252.9	33.8
Average net cash return per farm	41,526	4,086	10,234
Farms with sales of \$100,000 or more	136	13	17,000

Source: 1997 Census of Agriculture

Selected 2000 Sociodemographic Characteristics

Table 2 shows selected 2000 sociodemographic characteristics of the two study sites, their respective counties, and the state of Texas. As shown in Table 2, the population of Stanton increased by 10.5 percent between 1980 and 2000, while the population of Sanderson decreased by 30.6 percent during those two decades. The median age in Stanton was approximately 30 years. In Sanderson, the median age was 43 years. In 2000, roughly one third of the population in Stanton was under 18 years of age. Concurrently, about one fifth of the population in Sanderson was over the age of 65. The percentage of individuals 25 and over with a high school degree and the percentage of residents 25 and over with a college degree were higher in Sanderson than in Stanton (each was lower than the state average, though). With respect to gender composition and average household size, the two sites were quite similar. However, in regard to racial distribution, Sanderson had a larger percentage of whites (exceeding the state average by more than 15%).

Table 2. Selected 2000 Sociodemographic Characteristics of the Study Sites and the State of Texas

Characteristic	Martin County	Stanton	Terrell County	Sanderson	State of Texas
Area and Population					
Area in square miles	916	1.8	2358	4.2	261,797
Persons per square mile	5.2	1420	0.5	205	79.6
Population 1980	4684	2314	1595	1241	14,229,191
Estimated population 1999	5454	2553	1208	906	20,044,141
Population 2000	4746	2556	1081	861	20,851,820
Estimated % change 1980 - 1999	16.4	10.3	-24.3	-27.0	40.9
Actual % change 1980 - 2000	1.3	10.5	-32.2	-30.6	46.5
Age Distribution					
Median age	32.5	30.3	42.0	43.0	32.3
% under 18 years	33.9	35.0	26.5	25.9	28.2
% 65 years and over	13.3	14.4	17.6	20.1	9.9

NOTE: Table continued on next page.

Table 2. Selected 2000 Sociodemographic Characteristics of the Study Sites and the State of Texas (cont.)

Characteristic	Martin County	Stanton	Terrell County	Sanderson	State of Texas
Education					
% 25 and over high school graduate	65.8	59.3	70.9	70.8	75.7
% 25 and over college graduate	11.8	10.2	19.0	16.7	23.2
Other Characteristics					
% female	51.1	53.4	49.2	50.8	50.4
% white ^a	78.9	74.0	88.4	86.8	71.0
Average household size	2.87	2.92	2.44	2.42	2.74

Source: U.S. Census Bureau.

^a Includes persons reporting only one race.

Selected 2000 Economic Characteristics

Table 3 shows selected 2000 economic characteristics of the two study sites, their respective counties, and the state of Texas. Per capita incomes were quite similar in both Stanton and Sanderson (each was lower than the state average). Median household incomes, both lower than the state averages, were higher in Stanton. Unemployment and poverty rates were higher in Sanderson. The occupational distribution of workers was very similar in both sites.

Table 3. Selected 1999- 2000 Economic Characteristics of Study Sites and the State of Texas

Indicator	Martin County	Stanton	Terrell County	Sanderson	State of Texas
Income and Poverty					
Per capita income (dollars)	\$15,647	\$13,634	\$13,721	\$13,714	\$19,617
Median household income (dollars)	\$31,836	\$27,961	\$24,219	\$23,594	\$39,927
% of persons below poverty	18.7	22.0	25.2	26.9	15.4
% of families below poverty	14.9	19.7	21.2	21.8	12.0
Employment					
Employed persons 16 and over in civilian labor force	1803	929	466	360	9,234,372
Unemployed persons 16 and over in civilian labor force	93	37	26	26	596,187
% civilian labor force unemployed	4.9	3.8	5.3	6.7	6.1
% women employed in civilian labor force	42.2	47.4	42.7	46.9	45.1

NOTE: Table continued on next page.

Table 3. Selected 1999- 2000 Economic Characteristics of Study Sites and the State of Texas (cont.)

Indicator	Martin County	Stanton	Terrell County	Sanderson	State of Texas
Occupation					
% management and professional	31.8	24.3	33.0	27.2	33.3
% service	16.9	21.2	20.0	21.4	14.6
% sales and administrative support	21.9	24.1	20.4	22.8	27.2
% farming, fishing, and forestry	5.8	2.6	5.2	1.7	0.7
% construction, extraction, and maintenance	11.5	14.0	12.9	16.7	10.9
% production, transportation, and material moving	12.1	13.8	8.6	10.3	13.2

Source: U.S. Census Bureau.

Data Collection

After selection of the two case study sites, focus groups were conducted in each locality to gain insights into the ways area residents understand the concepts of community attachment and satisfaction. In addition, community key informants were interviewed to help identify the timely and salient local social, economic, political, and environmental issues.

Focus Groups

While the origins of focus groups are rooted in sociology, an overwhelming majority of current applications are in marketing research (Billson 1994; Kitzinger and Barbour 1999; Marshall and Rossman 1999; Morgan 1988). The primary goal of a focus group is “to get closer to participants’ understandings of the researcher’s topic of interest” (Morgan 1988: 24).

Focus groups usually consist of 7 to 12 persons, including a moderator who poses questions and prompts discussion when needed (Lamp 1994). Questioning in successful focus groups should follow a loosely structured interview process (Kingry et al. 1990). This format allows the facilitator to deviate from topics when necessary to explore emerging issues of relevance and importance. Included among the major advantages of focus groups are issues such as high face validity and the fact that they are relatively inexpensive to conduct (Krueger 1988). Additionally, focus groups can provide results quickly and lay the groundwork for future qualitative and quantitative studies.

Following specified protocols on the size of groups and the number of groups needed (see Krueger 1988; Lamp 1994; Morgan 1988), two focus groups were conducted in each study site. Focus groups were held in Stanton on November 13 and 14, 2000, and in

Sanderson on November 15 and 16, 2000. Advertisements were placed in each community's local newspaper to recruit participants. Additionally, flyers advertising the focus groups were posted at the local post offices. Interested individuals were instructed to contact their county Extension agent (phone numbers were provided in the advertisements and on the flyers). The county Extension agent took that interested person's name and passed that information on to the Principal Investigator (PI). The PI then contacted the interested person by telephone and asked if he/she would be willing to participate in an informal meeting with other area residents to discuss issues related to their community. Potential participants were over-recruited by 20 to 25% to allow for "no shows" (Lamp 1994). A personalized letter of invitation was mailed to each potential participant one week before the scheduled session. In addition, each potential participant was contacted by telephone a few days before the scheduled meeting to remind them of the date and time. Each individual who participated in the focus groups was financially compensated with \$20.

Key Informant Interviews

The utilization of key informants has long been central to the basic methodological techniques used by anthropologists (Campbell 1955; Poggie 1972; Tremblay 1957; Young and Young 1961). As a methodologically acceptable and highly practical means of gaining information, the key informant technique has become relatively common in organization analyses (Seidler 1974) and community sociology (Krannich and Humphrey 1986). Key informants provide important knowledge about community characteristics that cannot be measured precisely with secondary data (Claude and Luloff 1995; Fetterman 1989; Krannich and Humphrey 1983, 1986; Theodori et al. 1998).

In May of 2001, interviews with key informants were conducted in both study sites. The informants were surveyed with an instrument designed to identify timely and salient local social, economic, political, and environmental issues. In both sites, the County Judge, one County Commissioner, a representative of a local community development group, and a representative of a local faith-based organization were interviewed. In these interviews, respondents suggested others whom they considered (a) leaders or persons knowledgeable about the community and/or the local issues, and/or (b) instigators of particular actions geared toward the economic and/or social development of the community. These individuals were contacted by telephone in advance and asked if they would be willing to be interviewed. A total of eight key informants were interviewed in each site.

Household Survey

Focus group meetings and key informant interviews were conducted solely for the purpose of collecting information on local issues. The information gathered in the focus group meetings and the key informant interviews assisted in the development of a household questionnaire that not only asked specific questions about community attachment, community satisfaction, and community involvement, but also inquired into a variety of topics uncovered in the focus groups and key informant interviews. Following a modified total design method (Dillman 1978), data were gathered using mail survey techniques. During the spring of 2002, a survey questionnaire was mailed to a randomly selected sample of 498 households in Stanton and to all 423 residential addresses on file with the United States Post Office located in Sanderson.³ To obtain a representative sample of individuals within households, a response from the adult with the most recent birthday was requested. The survey instrument, organized as a self-

completion booklet, contained 38 questions and required approximately 40 minutes to complete. After the initial survey mailout, a postcard reminder, and two follow-up surveys, a 46 response rate was achieved. Overall, this resulted in 428 completed questionnaires between the two sites.

Comparison of selected sociodemographic and economic characteristics between the sample and Census data are shown in Table 4.

Table 4. Selected Sociodemographic and Economic Characteristics of the Sample and Census Data

Selected Characteristics	Stanton		Sanderson	
	Census Data	Sample Data	Census Data	Sample Data
Median age (18 years and older)	43 ^a	49	51 ^a	58
% 65 years and older	14	25	20	35
% female	53	59	51	57
% white	74	77	87	63
% 25 and over high school graduate	59	86	71	88
% 25 and over college graduate	10	25	17	32
Median household income (dollars)	\$27,961	\$40,025 ^a	\$23,594	\$30,018 ^a

^a Median values were computed using the formula for the computation of the median from grouped data (see Blalock 1972: 66-68).

ANALYSES

Objective 1: To provide an increased understanding of the analytical distinctiveness between the concepts of community attachment and community satisfaction.

Review of the Community Attachment and Community Satisfaction Literature

Previous research on community attachment and community satisfaction has generally been subsumed under a larger “quality of life” heading as both concepts are commonly used to tap well-being. It is important to note, however, that researchers continue to struggle over and debate issues surrounding what constitutes community satisfaction and attachment, how each should be measured, and the degree to which each taps different quality of life dimensions

(i.e., affective, behavioral, and cognitive) (Andrews and McKennell 1980; Campbell et al. 1976; Connerly and Marans 1985; Guest and Lee 1983a, 1983b; McKennell and Andrews 1980, 1983; St. John et al. 1986). Below the literature on the dimensions and indicators of these concepts is summarized.

Dimensions and Indicators of Community Satisfaction

Despite Thorndike's (1939) early attempt to measure satisfaction, Davies' (1945) development of a scale to rate attitudes of community satisfaction is generally regarded as the beginning of sociological research on the topic. Since Davies' (1945) initial work on the concept, the community satisfaction literature has remained predominately atheoretical (Allen 1990; Cook 1975; Deseran 1978; Shumaker and Taylor 1983). Empirical work on community satisfaction from the mid-1940s through the decade of the 1970s primarily focused on individuals' satisfaction with objective attributes of the environment, such as community infrastructure (e.g., Davies 1945; Jesser 1967; Johnson and Knop 1970; Schulze et al. 1963). This work was rooted in the assumption that objective measures of local conditions such as services, facilities, and opportunities would provide adequate indicators of community satisfaction. Research on community satisfaction from the 1970s onward has suggested that subjective indicators of satisfaction be added to conceptual models to account for individual perceptions, attitudes, aspirations, and beliefs (Bardo and Bardo 1983; Campbell 1972; Marans and Rodgers 1975; Russ-Eft 1978; Wilkening 1982).

Over the years, researchers have explored several dimensions of the concept of satisfaction. They have examined measures of general satisfaction (Campbell et al. 1976; Filkins et al. 2000; Rigby and Vreugdenhil 1987), domain-specific satisfaction (Campbell et

al. 1976), satisfaction with the environment (Wasserman 1982), satisfaction with services (Fried 1984; Molnar and Smith 1982; Murdock and Schriener 1979; Rojek et al. 1975; Stinner and Toney 1980), interpersonal satisfaction (Fried 1984; Miller and Crader 1979; Stinner and Toney 1980), economic satisfaction (Miller and Crader 1979), residential satisfaction (Fried 1982, 1984), political satisfaction (Fried 1984), and social dimensions of satisfaction (Goudy 1977).

Factors found to be related to community satisfaction included duration of residence (Brown 1993; Campbell et al. 1976; Kornacki 1986; Marans and Rodgers 1975; Miller and Crader 1979; Rojek et al. 1975; Speare 1974; Wasserman 1982), age (Campbell et al. 1976; Filkins et al. 2000; Goudy 1977; Kornacki 1986; Marans and Rodgers 1975; Rigby and Vreugdenhil 1987; Rojek et al. 1975; Speare 1974), income and occupational status (Bradburn 1969), gender (Filkins et al. 2000; Schulze et al. 1963), education (Bradburn 1969; Campbell et al. 1976; Marans and Rodgers 1975; Miller and Crader 1979), family size (Miller and Crader 1979), migration attitudes (Schulze et al. 1963), migrant status (Stinner and Toney 1980), intelligence test scores (Davies 1945), social participation, residential mobility, and residential satisfaction (Jesser 1967), home ownership (Kornacki 1986), proportion of friends living in the community, proportion of adults known in the community, and organizational membership (Goudy 1977), social/spiritual satisfaction (Filkins et al. 2000), and satisfaction with employment (Brown 1993; Filkins et al. 2000). Overall, the findings have been mixed as to the relative importance of these factors as community satisfaction predictors.

Dimensions and Indicators of Community Attachment

Following Kasarda and Janowitz's (1974) work on community attachment, the literature has tended to cluster under two broad theoretical perspectives. Kasarda and Janowitz (1974: 328) termed one theoretical perspective the linear development model "because linear increases in the population size and density of human communities are assumed to be the primary exogenous factors influencing patterns of social behavior." This model, also termed determinist or Wirthian theory (Fischer 1976; Palisi and Canning 1986; Tittle 1989; Goudy 1990), is associated with the writings of Tönnies ([1887] 1957), Durkheim ([1893] 1984), Simmel ([1903] 1950), Redfield (1930, 1941, 1947, 1950), and Wirth (1938).

The other theoretical perspective, generally known as the systemic model, is traceable to the work of several Chicago school sociologists (Park and Burgess 1921; Park et al. 1967; Thomas 1967). This early ecological framework derived primarily from the direct experiences of these authors with the rapid changes of urban Chicago. Under the systemic (or compositional model, see Fischer 1976; Palisi and Canning 1986; Tittle 1989), the local community, although affected by the structure of mass society, is viewed "as a complex system of friendship, kinship, and associational networks into which new generations and new residents are assimilated while the community passes through its own life-cycle" (Kasarda and Janowitz 1974: 328).

Dimensions of community attachment that have been examined in previous studies include community attitudes and sentiments (Austin and Baba 1990; Beggs et al. 1996; Cowell and Green 1994; Goudy 1982, 1990; Guest and Lee 1983a; Kasarda & Janowitz 1974; St. John et al. 1986; Theodori and Luloff 2000), local social bonds (Austin and Baba 1990; Beggs et al. 1996; Cowell and Green 1994; Goudy 1990; Kasarda and Janowitz 1974;

Riger and Lavrakas 1981; St. John et al. 1986), community solidarity (Buttel et al. 1979), interest in community (Theodori and Luloff 2000), physical rootedness (Riger and Lavrakas 1981; Taylor et al. 1985), social interactions, sense of fit in the community, or degree of commonness (Brown 1993; O'Brien and Hassinger 1992), community involvement and community amity (Stinner et al. 1990), and reliability of neighbors in times of need, total number of organizational memberships, and density of acquaintanceship (Barfield 1995).

Empirical examinations of the systemic model have emphasized the effects of individual characteristics, such as duration of local residence (Austin and Baba 1990; Brown 1993; Goudy 1990; Kasarda and Janowitz 1974; St. John et al. 1986; Theodori and Luloff 2000), home ownership and race (Austin and Baba 1990), income and number of children living at home (Riger and Lavrakas 1981), age and level of education (Riger and Lavrakas 1981; Stinner et al. 1990; Theodori and Luloff 2000), social interaction (Theodori and Luloff 2000), and marital status, presence of children, ages of children, and religious status (Stinner et al. 1990) on community attachment. Similar to the findings in the literature on community satisfaction, research results have been mixed as to the relative importance of these variables on community attachment.

Community Attachment and Satisfaction: Separate Yet Related Phenomena

Despite the lack of consensus on the measurement, dimensions, and indicators of community attachment and satisfaction, several researchers (Connerly and Marans 1985; Guest and Lee 1983a, 1983b; St. John et al. 1986) asserted that attachment and satisfaction, although related, have different conceptual bases.

Guest and Lee's (1983a, 1983b) work on neighborhood life demonstrated how the concepts of satisfaction (evaluation) and attachment (sentiment) differ. Guest and Lee (1983a) showed that while satisfaction and attachment were positively correlated, there were noticeable differences in the subjective and objective predictors of each. These and other results led Guest and Lee (1983b: 234) to conclude:

Satisfaction with an area is believed to reflect its utilitarian value for meeting certain basic needs, such as adequate shelter and safety, while sentiment indicates a less rational and more gut-level emotional feeling.

Paralleling Guest and Lee (1983a, 1983b), Connerly and Marans (1985) asserted that neighborhood satisfaction could be distinguished from attachment by the degree to which each relates to the cognitive and/or affective quality of life components. Although neither attachment nor satisfaction exclusively tapped either cognition or affect, attachment, for Connerly and Marans (1985), was viewed as being an indicator of the affective quality of life dimension, while satisfaction was viewed as being an indicator of the cognitive component. Attachment indicated emotions (i.e., happiness, pleasure, feeling at home); a sense of rootedness to a specific place was meant to be equivalent to community attachment. Conversely, satisfaction implied an evaluative judgment of achievements and aspirations.

St. John et al. (1986) also pointed to the conceptual distinctiveness between attachment and satisfaction suggesting that attachment was a function of satisfaction. In their study, St. John et al. (1986) compared the effects of satisfaction with specific neighborhood attributes and integration into the neighborhood on neighborhood attachment. Their findings

indicated that satisfaction or evaluation with neighborhood attributes was a significant indicator of attachment, although integration into the neighborhood had a stronger effect.

Based on their results, St. John et al. (1986: 425-426) concluded:

... that the more socially integrated into a community people are, the greater their attachment to it. However ... that evaluation of certain neighborhood or community attributes also is an important determinant of attachment.

In short, these authors asserted that satisfaction, although correlated with attachment, addressed evaluative factors, while attachment focused on sentiments. Thus, researchers who have used the two concepts interchangeably without providing any theoretical justification have added obscurity to a literature beset with confusion (see Beggs et al. 1996; Buttel et al. 1979; Fried 1982; Stinner et al. 1990; Wasserman 1982).

Measurement of Variables

Community Attachment

In previous research, items measuring sentiments and local social bonds have typically been used to capture attachments to the community (Connerly and Marans 1985; Goudy 1977, 1990; Kasarda and Janowitz 1974; Riger and Lavrakas 1981; Theodori and Luloff 2000; Theodori 2001). Similar items were used as measures of community attachment in this paper.

One single-item measure asked: "How interested are you in knowing what goes on in your community? For purposes of this report, responses were dichotomized as 0 (very

disinterested, somewhat disinterested, neither disinterested nor interested, and somewhat interested) and 1 (very interested). *Throughout the report, this measure is referred to as “interest in community.”*

A second measure was a multi-item index composed of eleven items. Respondents were asked to respond to the following statements: (a) “Overall, I am very attached to this community;” (b) “I feel like I belong in this community;” (c) “The friendships and associations that I have with other people in this community mean a lot to me;” (d) “If the people in this community were planning something, I’d think of it as something WE were doing rather than THEY were doing;” (e) “If I needed advice about something, I could go to someone in this community;” (f) “I think I agree with most people in this community about what is important in life;” (g) “Given the opportunity I would move out of this community;” (h) “I feel loyal to the people in this community;” (i) “I plan to remain a resident of this community for a number of years;” (j) “I like to think of myself as similar to the people who live in this community;” (k) “The future success of this community is very important to me.” Response categories included (1) strongly agree, (2) agree, (3) disagree, and (4) strongly disagree. After reverse coding of items “a” through “f” and items “h” through “k,” a composite community attachment score was calculated by averaging the scores for the individual items. High scores reflected high levels of community attachment; low scores indicated low levels. A principal-axis factor analysis with oblique rotation revealed that these measures of community attachment were unidimensional and explained 55 percent of the variance; Cronbach’s alpha for this scale was 0.93 (Table 5). *Throughout the report, this measure is referred to as “multi-item attachment scale.”*

Table 5. Factor Loadings for Multi-Item Attachment Scale Items

Items	Factor Loading
Overall, I am very attached to this community.	0.84
I feel like I belong in this community.	0.86
The friendships and associations that I have with other people in this community mean a lot to me.	0.72
If the people in this community were planning something, I'd think of it as something WE were doing rather than THEY were doing.	0.74
If I needed advice about something, I could go to someone in this community.	0.72
I think I agree with most people in this community about what is important in life.	0.70
Given the opportunity, I would move out of this community.	0.64
I feel loyal to the people in this community.	0.81
I plan to remain a resident of this community for a number of years.	0.66
I like to think of myself as similar to the people who live in this community.	0.79
The future success of this community is very important to me.	0.66
Eigenvalue	6.49
% of cumulative variance	55.11
Cronbach's alpha	0.93

Lastly, a third item measured social bonds by asking respondents whether or not they (1) strongly disagreed, (2) disagreed, (3) agreed, or (4) strongly agreed with each of the following items concerning their family members and/or friends: (a) "I know enough people to help me with tasks or errands"; (b) "I know someone who will take care of my house while I am away"; (c) "If I am sick, I have someone to care for me"; and (d) "If I need a ride to some place, I have someone to take me." A composite social bonds score was calculated by averaging the scores for the individual items. High scores reflected high levels of social bonds; low scores indicated low levels. *Throughout the report, this measure is referred to as "social bonds."*

Community Satisfaction

Community satisfaction was assessed with both a multi-item domain-specific satisfaction scale and a single measure of general satisfaction. Respondents were asked to rate their satisfaction with the following seven items: (a) “medical and health care services;” (b) “opportunity to earn an adequate income;” (c) “senior citizen’s programs;” (d) “youth programs;” (e) “local shopping facilities;” (f) “recreation facilities and programs;” and (g) “overall physical appearance of the community.” Responses ranged from 1 (completely dissatisfied) to 5 (completely satisfied). A composite domain-specific satisfaction score was calculated by averaging the responses for the seven items. High scores reflected high levels of domain satisfaction; low scores indicated low levels. A principal-axis factor analysis with oblique rotation revealed that these measures of community satisfaction were unidimensional and explained 43 percent of the variance (Table 6). Cronbach’s alpha for this satisfaction scale was 0.83. *Throughout the report, this measure is referred to as “satisfaction with domains.”*

Table 6. Factor Loadings for Domain-Specific Community Satisfaction Items

Items	Factor Loading
Medical and health care services	0.64
Opportunity to earn an adequate income	0.66
Senior citizen’s programs	0.62
Youth programs	0.66
Local shopping facilities	0.68
Recreation facilities and programs	0.69
Overall physical appearance of the community	0.63
Eigenvalue	3.57
% of cumulative variance	42.79
Cronbach’s alpha	0.83

In a general measure, respondents were asked to indicate how satisfied, overall, they were with life in their community. Responses were dichotomized as 0 (very dissatisfied, somewhat dissatisfied, neither satisfied nor dissatisfied, and somewhat satisfied) and 1 (very satisfied). *Throughout the report, this measure is referred to as “overall satisfaction.”*

Indicators of Community Attachment and Community Satisfaction

Building upon previous research, nine individual-status variables that have been associated with levels of community attachment and community satisfaction were included in the analyses. They are as follows:

- Age
 - Age was measured in years.
- Education
 - Education was coded as follows: (1) less than high school; (2) high school equivalent; (3) some college; (4) college degree; and (5) training beyond college.
- Income
 - Income was measured by the following 10 categories: (1) less than \$9,999; (2) \$10,000 to \$19,999; (3) \$20,000 to \$29,999; (4) \$30,000 to \$39,999; (5) \$40,000 to \$49,999; (6) \$50,000 to \$59,999; (7) \$60,000 to \$69,999; (8) \$70,000 to \$79,999; (9) \$80,000 to \$89,999; and (10) \$90,000 or more.
- Gender
 - Gender was dummy coded (1 = male; 0 = female).

- Race
 - Race was dummy coded (1 = white; 0 = other).
- Marital Status
 - Marital Status was dummy coded (1 = married; 0 = not married).
- Length of Residence
 - Length of residence was measured in years.
- Home Ownership
 - Home ownership was dummy coded (1 = own home; 0 = do not own home).
- Employment Status
 - Employment status was dummy coded (1 = employed; 0 = not employed).

Statistical Procedures and Results

Independent Sample t-tests

Independent sample t-tests were employed to ascertain the extent to which the study sites differed in regard to the measures of community attachment and community satisfaction and the indicator variables. As noted in Table 7, there were no differences between the two sites with respect to level of education, gender, length of residence, home ownership, or any of the measures of community attachment. However, in terms of community satisfaction, Stanton residents expressed statistically significantly higher levels of satisfaction with domains and overall satisfaction. Stanton residents also had higher levels of income than residents of Sanderson and were more likely to be younger, white, married, and employed.

Table 7. T-tests for the Community Attachment, Community Satisfaction, and Indicator Variables

Variables	Study Site	
	Sanderson	Stanton
<i>Community Attachment</i>		
Interest in community	4.483	4.445
Multi-item attachment scale	3.045	3.118
Social bonds	3.283	3.304
<i>Community Satisfaction</i>		
Satisfaction with domains	2.077	*** 2.790
Overall satisfaction	3.654	*** 4.341
<i>Indicator Variables</i>		
Age	57.424	*** 51.450
Education	2.920	2.730
Income	4.470	** 5.240
Gender (1 = male)	.428	.410
Race (1 = white)	.633	** .769
Marital status (1 = married)	.618	** .739
Length of residence	29.475	30.997
Home ownership (1 = home owner)	.830	.883
Employment status (1 = employed)	.528	* .644

* p < 0.05; ** p < 0.01; *** p < 0.001.

Pearson’s Bivariate Correlations

Pearson’s bivariate correlations were used to examine the associations between the community attachment and community satisfaction items. In both Sanderson and Stanton, the three measures of community attachment were positively and significantly associated with the two measures of community satisfaction. Pearson’s correlations in Sanderson ranged from 0.145 (the correlation between “interest in community” and “satisfaction with domains”) to 0.562 (the correlation between “multi-item attachment scale” and “overall satisfaction”). In Stanton, the associations ranged from 0.292 (the correlation between “interest in community” and “satisfaction with domains”) to 0.662 (the correlation between “multi-item attachment scale” and “overall satisfaction”). Based upon the weak to moderate

associations, it is proposed that community attachment and community satisfaction *must* be viewed as separate yet related phenomena.

Table 8. Pearson's Bivariate Correlation Matrix (Sanderson)

	1	2	3	4	5
<i>Community Attachment</i>					
1. Interest in community					
2. Multi-item attachment scale	.303** (n = 180)				
3. Social bonds	.137 (n = 195)	.572** (n = 176)			
<i>Community Satisfaction</i>					
4. Satisfaction with domains	.145* (n = 184)	.426** (n = 164)	.237** (n = 178)		
5. Overall satisfaction	.160* (n = 201)	.562** (n = 180)	.429** (n = 194)	.454** (n = 183)	

* p < 0.05; ** p < 0.01.

Table 9. Pearson's Bivariate Correlation Matrix (Stanton)

	1	2	3	4	5
<i>Community Attachment</i>					
1. Interest in community					
2. Multi-item attachment scale	.414** (n = 204)				
3. Social bonds	.262** (n = 222)	.561** (n = 204)			
<i>Community Satisfaction</i>					
4. Satisfaction with domains	.292** (n = 197)	.615** (n = 185)	.377** (n = 195)		
5. Overall satisfaction	.298** (n = 223)	.622** (n = 204)	.353** (n = 221)	.572** (n = 197)	

** p < 0.01.

Bivariate and Multiple Correlation/OLS Regression

The associations between the indicator variables and community attachment and community satisfaction were assessed using bivariate correlations and multivariate ordinary least squares (OLS) regression techniques. The bivariate correlations and OLS regression results are reported in Tables 10 through 19. In each Table, the bivariate correlations are shown in the column labeled “Bivariate r .” Model I in each Table reveals the multivariate regression of the respective community attachment and community satisfaction measure on the indicator variables. This model displayed the net effects of age, education, income, gender, race, marital status, length of residence, home ownership, and employment status.

Two-way interaction terms were then created between each of the indicator variables and checked for statistical significance. Nonsignificant interaction terms were removed one at a time based upon their p -values (each time the highest p -value was removed first). All interaction terms that reached statistical significance were added to the equation (Model II). All models containing statistically significant interactive effects were solved for each of the two-way interactions in the equations using selected values for the variables (the other variables in the models were set equal to their mean values). These estimated scores are shown in Tables 10a, 11a, 12a - b, 13a - d, 14a - f, 15a - e, 16a - c, 17a - c, 18a, and 19a.

Table 10. Regression of “Interest in Community” – Sanderson

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	-.102	-.001	-.002
Education	-.050	-.082	-.094
Income	-.007	-.002	-.001
Gender (1 = male)	-.171*	-.315*	.128
Race (1 = white)	-.030	.027	.080
Marital status (1 = married)	.077	.124	.164
Length of residence	-.048	-.002	.006
Home ownership (1 = home owner)	.057	.233	.173
Employment status (1 = employed)	.153	.311	.292
<i>Interactions</i>			
Gender x Length of residence			-.015*
Constant		4.488***	4.396***
<i>R</i> ²		.075	.114

n = 164

* p < 0.05; *** p < 0.001.

Table 10a. Estimated Scores for “Interest in Community – Sanderson” Solving for the Gender by Length of Residence Interaction

<i>Gender</i>	<i>Length (in years)</i>				
	5	10	15	20	25
Female	4.464	4.469	4.474	4.479	4.484
Male	4.517	4.447	4.377	4.307	4.237

Table 11. Regression of “Interest in Community” – Stanton

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	.038	-.003	.009
Education	-.030	.020	.024
Income	.027	-.001	-.004
Gender (1 = male)	-.097	-.168	-.176
Race (1 = white)	-.055	-.050	-.012
Marital status (1 = married)	.127	.297*	.286*
Length of residence	.158*	.007*	.033**
Home ownership (1 = home owner)	.029	-.096	-.105
Employment status (1 = employed)	-.133	-.253	-.296*
<i>Interactions</i>			
Age x Length of residence			.000*
Constant		4.450***	3.826***
R^2		.087	.116

n = 174

* p < 0.05; ** p < 0.01; *** p < 0.001.

Table 11a. Estimated Scores for “Interest in Community – Stanton” Solving for the Age by Length of Residence Interaction

<i>Age</i>	<i>Length (in years)</i>				
	5	10	15	20	25
25 years old	4.098	4.263	4.482	4.593	4.758
35 years old	4.188	4.353	4.518	4.683	4.848
45 years old	4.278	4.443	4.608	4.773	4.938
55 years old	4.368	4.533	4.698	4.863	5.028
65 years old	4.458	4.623	4.788	4.953	5.118

Table 12. Regression of “Multi-Item Attachment Scale” – Sanderson

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	.232**	.010*	.018**
Education	-.243**	-.118*	-.355***
Income	-.032	.024	-.126*
Gender (1 = male)	-.125	-.266*	-.239*
Race (1 = white)	-.103	.040	.105
Marital status (1 = married)	.008	.081	.069
Length of residence	.326***	.005	.031**
Home ownership (1 = home owner)	.112	.031	-.008
Employment status (1 = employed)	.001	.230	.174
<i>Interactions</i>			
Age x Length of residence			.000**
Education x Income			.046**
Constant		2.421***	2.675***
R^2		.182	.262

n = 151

* p < 0.05; ** p < 0.01; *** p < 0.001.

Table 12a. Estimated Scores for “Multi-Item Attachment Scale – Sanderson” Solving for the Age by Length of Residence Interaction

<i>Age</i>	<i>Length (in years)</i>				
	5	10	15	20	25
25 years old	2.447	2.602	2.757	2.912	3.067
35 years old	2.627	2.782	2.934	3.092	3.247
45 years old	2.807	2.962	3.112	3.272	3.427
55 years old	2.987	3.142	3.297	3.452	3.607
65 years old	3.167	3.322	3.477	3.632	3.787

Table 12b. Estimated Scores for “Multi-Item Attachment Scale – Sanderson” Solving for the Education by Income Interaction

<i>Education</i>	<i>Income</i>				
	< \$9,999	\$20,000 - \$29,999	\$40,000 - \$49,999	\$60,000 - \$69,999	\$80,000 - \$89,999
Less than high school	4.272	4.112	3.952	3.792	3.632
High school or equivalent	3.963	3.895	3.827	3.759	3.691
Some college	3.654	3.678	3.702	3.726	3.750
College degree	3.345	3.461	3.577	3.693	3.809
Training beyond college	3.036	3.244	3.452	3.660	3.868

Table 13. Regression of “Multi-Item Attachment Scale” – Stanton

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	.182*	.002	.012*
Education	-.144	-.062	-.323**
Income	.101	.030	-.194*
Gender (1 = male)	.015	-.077	-.060
Race (1 = white)	.152	.239*	.247*
Marital status (1 = married)	.025	.022	1.299**
Length of residence	.274***	.008*	-.008
Home ownership (1 = home owner)	.088	-.001	.064
Employment status (1 = employed)	-.118	-.034	.383
<i>Interactions</i>			
Age x Marital status			-.019*
Education x Income			.047**
Income x Length of residence			.003**
Marital status x employment status			-.566*
Constant		2.639***	2.979***
<i>R</i> ²		.134	.221

n = 160

* p < 0.05; ** p < 0.01; *** p < 0.001.

Table 13a. Estimated Scores for “Multi-Item Attachment Scale – Stanton” Solving for the Age by Marital Status Interaction

<i>Age</i>	<i>Marital Status</i>	
	Not married	Married
25 years old	2.793	3.257
35 years old	2.913	3.187
45 years old	3.033	3.117
55 years old	3.153	3.047
65 years old	3.273	2.977

Table 13b. Estimated Scores for “Multi-Item Attachment Scale – Stanton” Solving for the Education by Income Interaction

<i>Education</i>	<i>Income</i>				
	< \$9,999	\$20,000 - \$29,999	\$40,000 - \$49,999	\$60,000 - \$69,999	\$80,000 - \$89,999
Less than high school	3.411	3.293	3.174	3.055	2.937
High school or equivalent	3.135	3.111	3.086	3.061	3.037
Some college	2.859	2.929	2.998	3.067	3.137
College degree	2.583	2.747	2.910	3.073	3.237
Training beyond college	2.307	2.565	2.822	3.079	3.337

Table 13c. Estimated Scores for “Multi-Item Attachment Scale – Stanton” Solving for the Education by Length of Residence Interaction

<i>Income</i>	<i>Length (in years)</i>				
	5	10	15	20	25
< \$9,999	3.052	3.027	3.002	2.977	2.952
\$20,000 - \$29,999	2.952	2.957	2.962	2.967	2.972
\$40,000 - \$49,999	2.851	2.886	2.921	2.956	2.991
\$60,000 - \$69,999	2.751	2.816	2.881	2.946	3.011
\$80,000 - \$89,999	2.651	2.746	2.841	2.936	3.031

Table 13d. Estimated Scores for “Multi-Item Attachment Scale – Stanton” Solving for the Marital Status by Employment Status Interaction

<i>Marital Status</i>	<i>Employment Status</i>	
	Not Employed	Employed
Not Married	2.851	3.234
Married	3.197	3.014

Table 14. Regression of “Social Bonds” – Sanderson

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	.037	.002	-.016
Education	-.142	-.097	-.553*
Income	.067	.037	.044
Gender (1 = male)	-.043	-.120	-.090
Race (1 = white)	-.088	.008	1.753*
Marital status (1 = married)	.034	.027	-.560
Length of residence	.170*	.003	.003
Home ownership (1 = home owner)	.071	.076	.895*
Employment status (1 = employed)	.099	.210	-.582
<i>Interactions</i>			
Age x Education			.011**
Age x Race			-.021*
Education x Race			-.265*
Education x Marital status			.180*
Education x Home			-.249*
Education x Employment			.268**
Constant		3.031***	3.703***
<i>R</i> ²		.077	.209

n = 157

* p < 0.05; ** p < 0.01; *** p < 0.001.

Table 14a. Estimated Scores for “Social Bonds – Sanderson” Solving for the Age by Education Interaction

<i>Age</i>	<i>Education</i>				
	Less than high school	High school or equivalent	Some college	College degree	Training beyond college
25 years old	3.989	3.612	3.234	2.857	2.479
35 years old	3.807	3.539	3.272	3.004	2.737
45 years old	3.625	3.467	3.309	3.152	2.994
55 years old	3.442	3.395	3.347	3.299	3.252
65 years old	3.260	3.322	3.385	3.447	3.509

Table 14b. Estimated Scores for “Social Bonds – Sanderson” Solving for the Age by Race Interaction

<i>Age</i>	<i>Race</i>	
	White	Other
25 years old	3.463	3.023
35 years old	3.420	3.189
45 years old	3.377	3.356
55 years old	3.334	3.523
65 years old	3.290	3.689

Table 14c. Estimated Scores for “Social Bonds – Sanderson” Solving for the Education by Race Interaction

<i>Education</i>	<i>Race</i>	
	White	Other
Less than high school	3.541	3.227
High school or equivalent	3.405	3.357
Some college	3.270	3.487
College degree	3.135	3.617
Training beyond college	3.000	3.747

Table 14d. Estimated Scores for “Social Bonds – Sanderson” Solving for the Education by Marital Status Interaction

<i>Education</i>	<i>Marital Status</i>	
	Not married	Married
Less than high school	3.67	3.267
High school or equivalent	3.500	3.300
Some college	3.353	3.333
College degree	3.206	3.366
Training beyond college	3.058	3.398

Table 14e. Estimated Scores for “Social Bonds – Sanderson” Solving for the Education by Home Ownership Interaction

<i>Education</i>	<i>Home Ownership</i>	
	Do not own home	Own home
Less than high school	2.888	3.534
High school or equivalent	3.054	3.451
Some college	3.220	3.368
College degree	3.386	3.285
Training beyond college	3.552	3.202

Table 14f. Estimated Scores for “Social Bonds – Sanderson” Solving for the Education by Employment Status Interaction

<i>Education</i>	<i>Employment Status</i>	
	Not employed	Employed
Less than high school	3.603	3.289
High school or equivalent	3.405	3.359
Some college	3.208	3.430
College degree	3.010	3.500
Training beyond college	2.813	3.571

Table 15. Regression of “Social Bonds” – Stanton

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	-.077	-.006	.016*
Education	.085	.042	-.127
Income	.191*	.042	-.264**
Gender (1 = male)	-.029	-.101	-.173
Race (1 = white)	.016	-.011	.089
Marital status (1 = married)	.115	.022	.058
Length of residence	.144	.010**	.032*
Home ownership (1 = home owner)	.043	-.116	.084
Employment status (1 = employed)	.035	-.059	1.112**
<i>Interactions</i>			
Age x Length of residence			-.001*
Age x Employment			-.024**
Education x Income			.059**
Education x Length of residence			-.007*
Income x Length of residence			.005***
Constant		3.152***	2.840***
<i>R</i> ²		.088	.255

n = 173

* p < 0.05; ** p < 0.01; *** p < 0.001.

Table 15a. Estimated Scores for “Social Bonds – Stanton” Solving for the Age by Length of Residence Interaction

<i>Age</i>	<i>Length (in years)</i>				
	5	10	15	20	25
25 years old	2.952	3.024	3.096	3.167	3.239
35 years old	2.907	2.928	2.950	2.972	2.994
45 years old	2.861	2.833	2.805	2.777	2.748
55 years old	2.816	2.738	2.659	2.581	2.503
65 years old	2.771	2.642	2.514	2.836	2.258

Table 15b. Estimated Scores for “Social Bonds – Stanton” Solving for the Age by Employment Status Interaction

<i>Age</i>	<i>Employment Status</i>	
	Not employed	Employed
25 years old	3.014	3.526
35 years old	2.881	3.153
45 years old	2.749	2.781
55 years old	2.616	2.408
65 years old	2.483	2.035

Table 15c. Estimated Scores for “Social Bonds – Stanton” Solving for the Education by Income Interaction

<i>Education</i>	<i>Income</i>				
	< \$9,999	\$20,000 - \$29,999	\$40,000 - \$49,999	\$60,000 - \$69,999	\$80,000 - \$89,999
Less than high school	2.745	2.627	2.510	2.393	2.276
High school or equivalent	2.472	2.472	2.473	2.474	2.475
Some college	2.199	2.317	2.436	2.555	2.674
College degree	1.926	2.162	2.399	2.636	2.873
Training beyond college	1.653	2.008	2.362	2.717	3.072

Table 15d. Estimated Scores for “Social Bonds – Stanton” Solving for the Education by Length of Residence Interaction

<i>Education</i>	<i>Length (in years)</i>				
	5	10	15	20	25
Less than high school	2.581	2.588	2.594	2.600	2.606
High school or equivalent	2.731	2.702	2.673	2.645	2.616
Some college	2.881	2.817	2.753	2.689	2.625
College degree	3.030	2.931	2.832	2.734	2.635
Training beyond college	3.180	3.046	2.912	2.778	2.644

Table 15e. Estimated Scores for “Social Bonds – Stanton” Solving for the Income by Length of Residence Interaction

<i>Income</i>	<i>Length (in years)</i>				
	5	10	15	20	25
< \$9,999	2.045	1.884	1.723	1.562	1.401
\$20,000 - \$29,999	2.416	2.305	2.194	2.083	1.972
\$40,000 - \$49,999	2.787	2.726	2.665	2.604	2.543
\$60,000 - \$69,999	3.158	3.147	3.136	3.125	3.114
\$80,000 - \$89,999	3.529	3.568	3.607	3.646	3.685

Table 16. Regression of “Satisfaction with Domains” – Sanderson

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	.155	.011*	.023**
Education	.071	-.005	-.231
Income	.170*	.052	-.107
Gender (1 = male)	.057	-.028	.020
Race (1 = white)	.034	-.024	.630
Marital status (1 = married)	.065	.021	.149
Length of residence	.061	-.001	-.012*
Home ownership (1 = home owner)	.147	.162	.212
Employment status (1 = employed)	-.007	.083	.110
<i>Interactions</i>			
Age x Race			-.021*
Education x Income			.046*
Race x Length of residence			.016*
Constant		1.156**	1.385*
<i>R</i> ²		.075	.160

n = 148

* p < 0.05; ** p < 0.01.

Table 16a. Estimated Scores for “Satisfaction with Domains – Sanderson” Solving for the Age by Race Interaction

<i>Age</i>	<i>Race</i>	
	White	Other
25 years old	2.054	1.472
35 years old	2.074	1.702
45 years old	2.094	1.932
55 years old	2.114	2.162
65 years old	2.134	2.392

Table 16b. Estimated Scores for “Satisfaction with Domains – Sanderson” Solving for the Education by Income Interaction

<i>Education</i>	<i>Income</i>				
	< \$9,999	\$20,000 - \$29,999	\$40,000 - \$49,999	\$60,000 - \$69,999	\$80,000 - \$89,999
Less than high school	2.267	2.145	2.023	1.901	1.779
High school or equivalent	2.082	2.052	2.022	1.992	1.962
Some college	1.897	1.959	2.021	2.083	2.145
College degree	1.712	1.866	2.020	2.174	2.328
Training beyond college	1.527	1.773	2.019	2.265	2.511

Table 16c. Estimated Scores for “Satisfaction with Domains – Sanderson” Solving for the Race by Length Interaction

<i>Race</i>	<i>Length (in years)</i>				
	5	10	15	20	25
White	2.018	2.038	2.058	2.078	2.098
Other	2.496	2.436	2.376	2.316	2.256

Table 17. Regression of “Satisfaction with Domains” – Stanton

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	.231**	.011*	.007
Education	-.047	-.014	-.127
Income	.106	-.005	-.284
Gender (1 = male)	.093	-.001	-.033
Race (1 = white)	.296***	.508***	.559***
Marital status (1 = married)	.058	.128	.143
Length of residence	.178*	.006	-.001
Home ownership (1 = home owner)	.110	.112	.220
Employment status (1 = employed)	-.014	.237	.236
<i>Interactions</i>			
Education x Income			.050*
Education x Length of residence			-.007*
Income x Length of residence			.005**
Constant		1.411***	2.445***
<i>R</i> ²		.173	.230

n = 158

* p < 0.05; ** p < 0.01; *** p < 0.001.

Table 17a. Estimated Scores for “Satisfaction with Domains – Stanton” Solving for the Education by Income Interaction

<i>Education</i>	<i>Income</i>				
	< \$9,999	\$20,000 - \$29,999	\$40,000 - \$49,999	\$60,000 - \$69,999	\$80,000 - \$89,999
Less than high school	3.196	3.031	2.865	2.699	2.534
High school or equivalent	2.908	2.842	2.776	2.711	2.645
Some college	2.619	2.653	2.688	2.722	2.756
College degree	2.330	2.465	2.599	2.733	2.868
Training beyond college	2.042	2.276	2.510	2.745	2.979

Table 17b. Estimated Scores for “Satisfaction with Domains – Stanton” Solving for the Education by Length of Residence Interaction

<i>Education</i>	<i>Length (in years)</i>				
	5	10	15	20	25
Less than high school	2.363	2.457	2.550	2.644	2.738
High school or equivalent	2.468	2.527	2.586	2.645	2.703
Some college	2.574	2.598	2.621	2.645	2.669
College degree	2.679	2.668	2.657	2.646	2.634
Training beyond college	2.785	2.739	2.692	2.646	2.600

Table 17c. Estimated Scores for “Satisfaction with Domains – Stanton” Solving for the Income by Length of Residence Interaction

<i>Income</i>	<i>Length (in years)</i>				
	5	10	15	20	25
< \$9,999	3.083	3.009	2.934	2.860	2.786
\$20,000 - \$29,999	2.834	2.810	2.785	2.761	2.737
\$40,000 - \$49,999	2.585	2.611	2.636	2.662	2.688
\$60,000 - \$69,999	2.336	2.412	2.487	2.563	2.639
\$80,000 - \$89,999	2.087	2.213	2.338	2.464	2.590

Table 18. Regression of “Overall Satisfaction” – Sanderson

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	.082	.010	.008
Education	-.083	-.059	-.082
Income	.077	.042	.049
Gender (1 = male)	-.041	-.214	-.186
Race (1 = white)	-.127	-.252	-.209
Marital status (1 = married)	.126	.266	1.435**
Length of residence	.148	.004	.004
Home ownership (1 = home owner)	.128	.237	1.024**
Employment status (1 = employed)	.066	.339	.402
<i>Interactions</i>			
Marital status x Home ownership			-1.485**
Constant		2.655***	2.124***
R^2		.081	.134

n = 162

** p < 0.01; *** p < 0.001.

Table 18a. Estimated Scores for “Overall Satisfaction – Sanderson” Solving for the Marital Status by Home Ownership Interaction

<i>Marital Status</i>	<i>Home Ownership</i>	
	Do not own home	Own home
Not married	2.692	3.716
Married	4.127	3.666

Table 19. Regression of “Overall Satisfaction” – Stanton

Variable	Bivariate <i>r</i>	Model I <i>b</i>	Model II <i>b</i>
<i>Main Effects</i>			
Age	.069	.001	-.001
Education	-.027	-.023	-.284*
Income	.078	.016	-.118
Gender (1 = male)	.009	-.056	-.078
Race (1 = white)	.113	.226	.283
Marital status (1 = married)	.053	.102	.137
Length of residence	.115	.006	.006
Home ownership (1 = home owner)	.032	-.063	-.033
Employment status (1 = employed)	-.034	-.012	.040
<i>Interactions</i>			
Education x Income			.046*
Constant		3.921***	4.573***
R^2		.036	.065

n = 174

** p < 0.01; *** p < 0.001.

Table 19a. Estimated Scores for “Overall Satisfaction – Stanton” Solving for the Education by Income Interaction

<i>Education</i>	<i>Income</i>				
	< \$9,999	\$20,000 - \$29,999	\$40,000 - \$49,999	\$60,000 - \$69,999	\$80,000 - \$89,999
Less than high school	4.614	4.470	4.326	4.080	4.038
High school or equivalent	4.376	4.324	4.272	4.088	4.168
Some college	4.138	4.178	4.218	4.096	4.298
College degree	3.900	4.032	4.164	4.106	4.428
Training beyond college	3.662	3.886	4.110	4.116	4.558

Objective 2: To empirically examine the effects of community attachment and community satisfaction on individual well-being.

Despite the vast literature on community attachment and community satisfaction, surprisingly little theoretical and/or empirical work has been conducted on the effects of community attachment and/or community satisfaction on individual- and/or community-level issues. A review of the literature revealed that a few researchers (e.g., Cowell and Green 1994; Fernandez and Dillman 1979; Schulze et al. 1963; Stinner and Van Loon 1992) have examined the consequences of varying levels of community attachment and satisfaction on a dependent measure by incorporating one or both of these concepts into their work as the primary independent variable(s) of interest. Schulze et al. (1963) uncovered a negative association between community satisfaction and the desire to migrate. Similarly, Fernandez and Dillman (1979) reported that higher levels of community attachment exerted a moderate retarding effect on geographic mobility. Examining the influence of community size preference and six domains of community satisfaction on migration intentions, Stinner and Van Loon (1992) found that regardless of location, migration intentions were determined largely by the level of satisfaction with two domains of community satisfaction – economic opportunity and public services. Cowell and Green (1994) examined factors influencing locations of spending for goods and services among households; they found that residents with higher levels of community attachment spent more locally than those with less community attachment.

More recently, Theodori (2001) examined the effects of community attachment and community satisfaction on one individual-level measure: *perceived individual well-being*. Using data collected in a general population survey from a random sample of individuals in

four communities in Pennsylvania, Theodori found considerable support for his hypothesis that community attachment and community satisfaction are associated positively and independently with individual well-being. Higher levels of attachment to one's community resulted in perceptions of greater well-being. In addition, the greater the residents' satisfaction with their local community, the more likely they were to express greater individual well-being.

The purpose of the following analysis is to replicate and extend previous research on the associations between community attachment, community satisfaction, and individual well-being. In doing so, the hypothesis that both community attachment and community satisfaction are associated positively with self-reported individual well-being is tested.

Measurement of Variables

Individual Well-Being

Individual well-being, in general, refers to a broad array of conditions including access to material resources for meeting daily needs, freedom from threats and oppression, and physical and mental health. Two variables were used in this study to measure perceived individual well-being. One measure consisted of a multiple-item index comprised of a battery of nine items addressing health, depression, and anxiety. Respondents were asked to respond to the following statements: (a) "I generally feel in good spirits;" (b) "I feel depressed;" (c) "I find a good deal of happiness in life;" (d) "things seem hopeless;" (e) "I am very satisfied with life;" (f) "I feel bored;" (g) "I feel I am getting the things I want out of life;" (h) "I feel down in the dumps;" and (i) "I feel the future looks bright." Response categories included: (1) never true; (2) seldom true; (3) sometimes true; (4) often true; and

(5) almost always true. After reverse coding items “b,” “d,” “f,” and “h,” a composite well-being score was calculated by averaging the scores for the individual items. High scores reflected high levels of perceived individual well-being; low scores indicated low levels of perceived individual well-being. A principal axis factor analysis with oblique rotation revealed that these measures of individual well-being were unidimensional and explained 49% of the variance (Table 20). Cronbach’s alpha for this well-being scale was 0.89.

Throughout the report, this measure is referred to as “optimistic attitude.”

Table 20. Factor Loadings for Optimistic Attitude

Items	Factor Loading
I generally feel in good spirits.	0.73
I feel depressed.	0.78
I find a good deal of happiness in life.	0.76
Things seem hopeless.	0.77
I am very satisfied with life.	0.69
I feel bored.	0.68
I feel I am getting the things I want out of life.	0.62
I feel down in the dumps.	0.51
I feel the future looks bright.	0.76
Eigenvalue	4.44
% of cumulative variance	49.37
Cronbach’s alpha	0.89

A second measure captured respondent’s level of happiness. Individuals were asked to rate their level of happiness using the following categories: (1) very unhappy, (2) mostly unhappy, (3) neither happy nor unhappy, (4) mostly happy, and (5) very happy. A similar measure has been used in previous studies (see Campbell et al. 1976; Crider, Willits, and Kanagy 1991; Willits 1995). *Throughout the report, this measure is referred to as “happiness.”*

Statistical Procedures and Results

The effects of community attachment and community satisfaction on individual well-being were assessed using bivariate and multivariate correlation/OLS regression techniques.

Results are reported in Tables 21 and 22. As noted in Tables 21 and 22, there was considerable support at the zero-order level for the proposition that both community attachment and community satisfaction are associated with perceptions of individual well-being. In each study site, the bivariate relationships for each of the community attachment and satisfaction items were positive and statistically significant with the optimistic attitude measure and happiness.

When controlling for the effects of age, education, income, gender, race, marital status, length of residence, home ownership, and employment status, the net effect of each measure of community attachment and satisfaction was positive and statistically significant (as shown by the partial correlation coefficient).⁴ Individuals who were more strongly attached and more highly satisfied with their community were more likely than their counterparts to exhibit higher levels of optimistic attitude and happiness.

Table 21. Zero-Order and Partial Correlations Between Optimistic Attitude and the Measures of Community Attachment and Community Satisfaction

Variables	Zero-order	Partial correlation
<i>Community Attachment</i>		
Interest in community		
Sanderson (n = 155)	.285***	.272**
Stanton (n = 166)	.231**	.247**
Multi-item attachment scale		
Sanderson (n = 145)	.340***	.327***
Stanton (n = 154)	.381***	.407***
Social bonds		
Sanderson (n = 152)	.273**	.253**
Stanton (n = 166)	.277***	.260**
<i>Community Satisfaction</i>		
Satisfaction with domains		
Sanderson (n = 142)	.297***	.264**
Stanton (n = 152)	.276***	.252**
Overall satisfaction		
Sanderson (n = 153)	.333***	.313***
Stanton (n = 166)	.387***	.390***

^a Partial correlations were computed controlling for age, education, income, gender, race, marital status, length of residence, home ownership, and employment status.

** p < 0.01; *** p < 0.001.

Table 22. Zero-Order and Partial Correlations Between Happiness and the Measures of Community Attachment and Community Satisfaction

Variables	Zero-order	Partial correlation
<i>Community Attachment</i>		
Interest in community		
Sanderson (n = 164)	.198*	.165*
Stanton (n = 174)	.166*	.153*
Multi-item attachment scale		
Sanderson (n = 151)	.305***	.276**
Stanton (n = 160)	.269***	.278**
Social bonds		
Sanderson (n = 157)	.296***	.256**
Stanton (n = 173)	.252***	.215**
<i>Community Satisfaction</i>		
Satisfaction with domains		
Sanderson (n = 148)	.230**	.214*
Stanton (n = 158)	.282***	.272**
Overall satisfaction		
Sanderson (n = 162)	.397***	.360***
Stanton (n = 174)	.258***	.252**

^a Partial correlations were computed controlling for age, education, income, gender, race, marital status, length of residence, home ownership, and employment status.

* p < 0.05; ** p < 0.01; *** p < 0.001.

Objective 3: To empirically examine the effects of community attachment and community satisfaction on community action.

Most researchers who have incorporated measures of community-level action into their study designs either have used them as surrogates for community attachment and/or satisfaction or examined the effects of community action on community attachment and/or satisfaction, not the reverse (Beggs et al. 1996; Brown 1993; Buttel, Martinson, and Wilkening 1979; Fernandez and Dillman 1979; Goudy 1990; Kasarda and Janowitz 1974; Rojek, Clemente, and Summers 1975; Stinner et al. 1990; Theodori and Luloff 2000; Wasserman 1982).

Community-Level Action Measures as Dependent Community Attachment and/or Community Satisfaction Variables

Kasarda and Janowitz (1974), Goudy (1990), Fernandez and Dillman (1979), Stinner et al. (1990), and Beggs et al. (1996) used community-level action variables as their dependent measures of community attachment. In an investigation of 100 local authority areas in England, Kasarda and Janowitz (1974) examined the impact of population size, population density, and three additional independent variables – length of residence, social class, and stage in life-cycle – on ten measures of community attachment. Three of the community attachment items captured local sentiments. The remaining seven attachment items measured local social bonds. One of the seven social bonds items measured the degree of respondents' participation in formal associations within the local community.

Goudy (1990) replicated Kasarda and Janowitz's (1974) research on community attachment with data on respondents from 27 communities in Iowa. Following Kasarda and Janowitz (1974), Goudy (1990) included population size and density, length of residence, age

in life-cycle, and income as independent variables. Goudy (1990) measured community attachment with four questions on social bonds and three questions on local sentiments. Like Kasarda and Janowitz (1974), Goudy (1990) included organizational membership as an indicator of social bonds.

Utilizing data collected in two Washington state head-of-household surveys administered in 1970 and 1974, Fernandez and Dillman (1979) examined the effects of community attachment on geographic mobility. Four measures of community attachment were used in their analysis. The authors termed two of the measures “perceptual indicators” and two of them “behavioral indicators.” The behavioral indicators of community attachment included the number of memberships in voluntary associations and time spent in community service activities.

In an analysis of a weighted subsample of 415 residents in 91 communities in nonmetropolitan Utah, Stinner et al. (1990) examined the relationships of community size, five social position variables, and three dimensions of community attachment. In their investigation community attachment was measured with four items. These included “community satisfaction,” “friendship density,” “friendship concentration,” and “social participation.” The social participation variable was measured by the number of voluntary association memberships of the respondent.

Beggs et al. (1996) used data from telephone interviews conducted with 594 residents in three towns located in two adjacent southwestern Louisiana parishes to estimate the effects of length of residence, four social position variables (i.e., gender, race, education, and income), life cycle stage, and local community context on three dimensions of community attachment – an interpersonal dimension, a sentiments dimension, and a participation

dimension. The participation dimension was measured with four domain-specific measures of organizational participation. Respondents were asked whether or not they were members of school groups, church groups, community groups, and/or interest groups.

Community-Level Action Measures as Independent Variables

Other researchers (e.g., Brown 1993; Buttel et al. 1979; Rojek et al. 1975; Theodori and Luloff 2000; Wasserman 1982) used measures of community-level action as either independent or control variables in their community attachment and/or satisfaction studies. Using data collected on 1,166 heads of households in four counties in north central Illinois, Rojek et al. (1975) factor analyzed satisfaction with 15 local services. Four service dimensions emerged. These included: medical services (satisfaction with hospital-medical facilities, medical doctors, and dentists); public services (satisfaction with streets/roads, water supply, fire and police protection); educational services (satisfaction with elementary school, high school, neighborliness, and churches); and commercial services (satisfaction with shopping facilities, recreational facilities, job opportunities, and educational services for the physically and mentally handicapped). They then correlated 11 economic, social, and demographic variables with each dimension of community satisfaction. The total number of organizational affiliations was one of the 11 independent variables examined.

Buttel et al. (1979) analyzed the issue of size of place and community attachment using data collected on 548 Wisconsin adults. They related eight independent variables to their two measures of community attachment. Included among the eight independent variables was a measure of organizational membership. Three years later in a reexamination of the Buttel et al. (1979) study, Wasserman (1982) used national survey data to examine the

relation of size of place and nine additional independent variables to community attachment and satisfaction. As in the Buttel et al. (1979) study, organizational membership was included as one of the ten independent variables.

Brown (1993) used data from 311 individuals in two rural Missouri communities to examine issues surrounding community satisfaction and attachment in mass society. Like Rojek et al. (1975), Buttel et al. (1979), and Wasserman (1982), Brown (1993) also used organizational membership as an independent variable. More recently, Theodori and Luloff (2000) addressed the question of community attachment using data gathered from 1,491 individuals in four Pennsylvania agricultural communities exhibiting varying levels of urbanization. Two measures of community-level action were included as independent variables in their analysis. First, a question concerning the number of hours, on average, ordinarily spent in a normal month attending or taking part in any kind of organized or planned group activity or event (not associated with work) that involved other members of the community was asked. A second item measured whether or not the individual, along with others, participated in a community improvement activity, such as a cooperative building project or a fund-raising effort.

One reason why the associations of community attachment and satisfaction to community-level issues such as community action remains underinvestigated may reflect the lack of a theoretical perspective. For example, in a study of the relationships among community attachment, community involvement, and types of communication, Rothenbuhler et al. (1996) developed a structural equation model linking community attachment and involvement to newspaper use, local television news use, age, education, number of children in the home, localism, and population density. In the development of their model,

Rothenbuhler et al. (1996) suggested that an important conceptual relationship between community attachment and involvement exists; however, they did not specify a path between the two concepts. According to the authors, "... there is no theory or evidence on which to base a causal order between these variables" (Rothenbuhler et al. 1996: 451).

Despite the lack of a formal theoretical perspective, the extant literature does offer guidance about the likely causal connections of community attachment and community satisfaction to action at the community level. In a survey of black residents in Harlem, Saegert (1989) uncovered a positive association between place attachment and efforts to maintain and improve the quality of life in residential buildings and the neighborhood at large. In Saegert's (1989: 312) view, "Attachment to place anchors people in their buildings and neighborhood and shores up commitment to working cooperatively for a supportive environment." Earlier, Florin and Wandersman (1984) reported a negative association between satisfaction and participation in a block-level organization in their study of 421 adult residents in Nashville, Tennessee. While they never formally stated a hypothesis, Florin and Wandersman (1984) assumed that an individual's satisfaction with the block, or "encoded view" as they referred to it, might influence their probability of participation. Their assumption was that individuals with greater levels of satisfaction would be less likely to participate in a community development project. Their measures included satisfaction with the block as a whole and satisfaction with specific aspects of the block, such as housing conditions, street conditions, safety, and quietness.

Drawing upon Saegert's (1989) place-level analysis and Florin and Wandersman's (1984) block-level research, the following two hypotheses were tested. First, it was hypothesized that attachment to the community is positively associated with action at the

community level. The second hypothesis was that community satisfaction is negatively associated with community action. The underlying theoretical assumptions in this paper are similar to those of Florin and Wandersman (1984) and Saegert (1989). Higher levels of attachment to the community are expected to lead to higher levels of community action, while higher levels of community satisfaction are expected to lead to lower levels of action at the community level.

Measurement of Variables

Community-Level Action

Following a field theoretical perspective on social organization (Kaufman 1959, 1985; Wilkinson 1970, 1991), it is proposed that social interaction is the essential feature of community. Distinguishing between individual-level and community-level social interactions within local populations is thus a critical issue. Individual-level social interactions include, for example, activities such as visiting or meeting with family, close friends, and neighbors within the community. Conversely, community-level interactions include activities such as participating in a community improvement project or working with other members of the community to try and solve local problems. While individuals live and interact in localities, the aggregation of all interactions that take place in a given locality does not constitute community interaction (Wilkinson 1989). Unlike individual-level interactions, community-level interaction “relates to shared territory, contributes to the wholeness of local social life, and seeks to improve the well-being of the local society as a whole” (Wilkinson 1989: 339).

In this study, community-level action was assessed by asking respondents whether or not they had ever (a) attended a public meeting or town or school affairs in their community; (b) worked with others in their community to try to solve community problems; and, (c) participated in any type of community improvement activity. Response categories included (0) no and (1) yes. Because of the high correlation among the items, a principal-axis factor analysis was used to explore a reduced dimension for measuring community-level action. One factor emerged from the analysis, explained approximately 54% of the variance among these items, and had a Cronbach's alpha of 0.77 (results not shown). Hence, a composite community involvement score was calculated by summing the responses for the three items. Scores ranged from 0 to 3.

Statistical Procedures and Results

The effects of community attachment and community satisfaction on community-level action were assessed using bivariate and multivariate correlation/OLS regression techniques.

Results are reported in Table 23.

As noted in Table 23, the bivariate and net effects of "interest in community" and the "multi-item attachment scale" were positive and statistically related to community-level action in both study sites. Only in Stanton did the community attachment measure of "social bonds" reach statistical significance. In regard to community satisfaction, the bivariate effect of "satisfaction with domains" reached statistical significance in Stanton; however, the effect dropped to nonsignificance when the controls were added to the model.⁵ Neither measure of community satisfaction reached statistical significance in Sanderson (in either the bivariate or multivariate models).

Table 23. Zero-Order and Partial Correlations Between Community-Level Action Index and the Measures of Community Attachment and Community Satisfaction

Variables	Zero-order	Partial correlation
<i>Community Attachment</i>		
Interest in community		
Sanderson (n = 161)	.295***	.330***
Stanton (n = 167)	.281***	.291***
Multi-item attachment scale		
Sanderson (n = 149)	.204*	.215*
Stanton (n = 154)	.277***	.235**
Social bonds		
Sanderson (n = 154)	.107	.128
Stanton (n = 166)	.233**	.193*
<i>Community Satisfaction</i>		
Satisfaction with domains		
Sanderson (n = 145)	.012	-.027
Stanton (n = 153)	.220**	.136
Overall satisfaction		
Sanderson (n = 159)	.099	.088
Stanton (n = 167)	.087	.034

^a Partial correlations were computed controlling for age, education, income, gender, race, marital status, length of residence, home ownership, employment status, optimistic attitude, and happiness.

* p < 0.05; ** p < 0.01; *** p < 0.001.

Objective 4: To use the results to develop a refined model that will aid in designing new approaches to rural community development.

Key findings from this study are as follows. First, the results from the Pearson's bivariate correlation analyses associated with Objective 1 suggest that community attachment and community satisfaction are two *related but separate* concepts. Previous researchers who have used the two concepts interchangeably without providing any theoretical justification have added obscurity to a literature beset with confusion (see Beggs et al. 1996; Buttell et al. 1979; Fried 1982; Stinner et al. 1990; Wasserman 1982). Furthermore, as shown in the OLS regression analyses (Tables 10 through 19), different indicator variables were associated with community attachment and community satisfaction in the two study sites, and, more importantly, failure to check for statistical interactions in the OLS regression analyses would have led to somewhat misleading conclusions about the effects of the indicator variables on the measures of community attachment and community satisfaction. In short, the way in which certain variables relate to community attachment and/or community satisfaction differed depending upon the level or value of other variables in the model (see Tables 10a, 11a, 12a - b, 13a - d, 14a - f, 15a - e, 16a - c, 17a - c, 18a, and 19a).

Second, the results from the analyses associated with Objective 2 indicate that there was considerable support at both the bivariate and multivariate levels for the proposition that community attachment and community satisfaction are associated with individual well-being. Individuals who were more strongly attached and more highly satisfied with their community were more likely than their counterparts to exhibit higher levels of optimistic attitude and happiness.

Third, the results from the analyses associated with Objective 3 indicate that while it appears that community satisfaction does not affect community action, these data indicate that community attachment is more or less positively associated with action at the community level. Only in Sanderson did the community attachment measure of “social bonds” fail to reach statistical significance.

Lastly, this report ends by providing a conceptual foundation for an operational definition of community development. Time and again, community development has been prescribed as a popular means of improving the social, economic, and environmental quality of life for residents of a community. As encouraging as the notion of community development sounds, the *practice* of community development suffers from a lack of systematic theory and a clear understanding of what the community is and how it develops. In order for community development strategies to be viewed as a useful and practical means of improving community well-being, especially in rural areas, researchers, community developers, and Cooperative Extension personnel must enhance their knowledge and understanding of community development and the ways in which communities develop and persist in a society characterized by increasing urbanization, globalization, and demographic change.

Community development can be defined as *a process of building and strengthening the social and economic viability of the community*. As a process, community development involves purposive, positive, and structure-oriented actions, and exists in the efforts, as well as in the achievements, of people working together to address their shared interests and solve their common problems.

Four principles underlie the process of community development (Wilkinson 1991).

They include:

- 1) Community development is *purposive*.
 - It is the intentional consequence of people interacting to initiate and maintain community.
- 2) Community development is *positive*.
 - The purposive intentions of the actors revolve around a shared commitment to improving their community.
- 3) Community development is *structure oriented*.
 - The purposive and positive actions of actors are direct attempts to establish and/or strengthen the community as an interlinking and coordinating structure of human relationships.
- 4) Community development exists in the *efforts* of people and not necessarily in goal achievement.
 - Simply stated, community development is purposive action undertaken with positive intentions at improving community structure.

From this perspective, the essence of community development lies in the doing – the working together toward a common goal – not necessarily in the outcome. Trying to purposively alter the structure of the community in a positive manner is enough to qualify as community development. From this point of view, community development refers to the creation and maintenance of *community* as a social characteristic of a local population.

As with all forms of social interaction, community development does not always occur harmoniously. Embedded in the process of community development are numerous social, economic, political, and environmental issues which can, and frequently do, become manifest and negatively impact success. More often than not, community development involves conflict, confrontation, negotiation among competing interests, marginalization, disfranchisement, and/or challenges for leadership.

In short, community development is not a given. It takes purposive, positive, structure-oriented efforts for a community to “develop.” The process of community development depends in large part on the intentional actions of people working together to try to improve their community. From this perspective, the *action* itself **is the *development***; or, stated in another way, the ***development is the action*** – *the working together toward a shared goal, while consciously seeking community as a collective experience.*

As evidenced by this study, higher levels of attachment to one’s community results in increased levels of community action. Several researchers have noted (e.g., Grisham 1999; Lloyd and Wilkinson 1985; Luloff and Wilkinson 1990; Martin and Wilkinson 1984) that action at the local level is a critical resource for successful community development. Thus, based upon the conclusions of this investigation, knowledge about individuals’ levels of attachment and the potential effects on community-level action is undoubtedly important when it comes to designing and implementing robust community development activities. **Researchers, community developers, public leaders, Cooperative Extension personnel, and other practitioners working in the area of community development should identify and include in local development initiatives those residents who express strong attachments to their community.**

ENDNOTES

¹ Community agency refers to individuals' attempts to direct or mediate social and/or economic changes that influence residents' well-being at the community level.

² Evidence of community agency was based upon personal communication with county Extension personnel and community leaders in both study sites (Autumn 2000). In each site, county Extension personnel and community leaders asserted that during the preceding decade several local groups/organizations and concerned citizens persistently engaged in locally-oriented actions with the intent to improve the overall well-being and quality of life in the community.

³ In January of 2002, an informational letter was first mailed to a randomly selected sample of 500 households in Stanton and to the 423 residential addresses in Sanderson. The informational letter, which was printed in English on one side and Spanish on the other side, informed residents that their household was randomly selected for participation in an upcoming community study. Moreover, the letter indicated that although participation in the study would be entirely voluntary, completion and return of the questionnaire would automatically enter their household into a drawing for \$200.00. Included with the letter was a pre-paid addressed postcard. Residents were instructed to return the postcard if they preferred to receive a copy of the questionnaire printed in Spanish. Instructions on the postcard were printed in both English and Spanish. One household in Stanton and one in Sanderson asked for and received a copy of the questionnaire in Spanish.

Eleven of the 500 initial informational letters were returned as undeliverable from the Stanton site. Those eleven households were replaced with randomly selected new addresses. Two of the eleven were returned as undeliverable; they were not replaced. Hence, the sample size of 498 in Stanton.

⁴ Partial correlation coefficients for age, education, income, gender, race, marital status, length of residence, home ownership, and employment status are not shown. Results can be obtained from the author.

⁵ Partial correlation coefficients for age, education, income, gender, race, marital status, length of residence, home ownership, employment status, optimistic attitude, and happiness are not shown. Results can be obtained from the author.

REFERENCES

- Allen, L.R. 1990. "Benefits of Leisure Attributes to Community Satisfaction." *Journal of Leisure Research* 22: 183-196.
- Andrews, F.M. and A.C. McKennell. 1980. "Measures of Self-Reported Well-Being: Their Affective, Cognitive, and Other Components." *Social Indicators Research* 8: 127-155.
- Austin, D.M. and Y. Baba. 1990. "Social Determinants of Neighborhood Attachment." *Sociological Spectrum* 10: 59-78.
- Bardo, J.W. and D.J. Bardo. 1983. "A Re-examination of Subjective Components of Community Satisfaction in a British New Town." *The Journal of Social Psychology* 120: 35-43.
- Barfield, M.A. 1995. *Gender and Community: Are There Differences in Community Satisfaction and Community Attachment Between Men and Women?* Master's Thesis. Starkville, MS: Mississippi State University.
- Beggs, J.J., J.S. Hurlbert, and V.A. Haines. 1996. "Community Attachment in a Rural Setting: A Refinement and Empirical Test of the Systemic Model." *Rural Sociology* 61: 407-426.
- Billson, J.M. 1994. *Conducting Focus Groups: A Manual for Sociologists on the Use of Focus Groups as a Tool in Social and Market Research*. Washington, D.C.: American Sociological Association.
- Blalock, H.M. 1972. *Social Statistics*. New York: McGraw-Hill Book Co.
- Bradburn, N.M. 1969. *The Structure of Psychological Well-Being*. Chicago, IL: Aldine.
- Brown, R.B. 1993. "Rural Community Satisfaction and Attachment in Mass Consumer Society." *Rural Sociology* 58: 387-403.
- Buttel, F.H., O.B. Martinson, and E.A. Wilkening. 1979. "Size of Place and Community Attachment: A Reconsideration." *Social Indicators Research* 6: 475-485.
- Campbell, A. 1972. "Aspiration, Satisfaction, and Fulfillment." Pp. 441-466 in *The Human Meaning of Social Change*, edited by A. Campbell and P.E. Converse. New York, NY: Russell Sage Foundation.
- Campbell, A., P.E. Converse, and W.L. Rodgers. 1976. *The Quality of American Life: Perceptions, Evaluations, and Satisfactions*. New York, NY: Russell Sage Foundation.

- Campbell, D.T. 1955. "The Informant in Qualitative Research." *American Journal of Sociology* 60: 339-342.
- Claude, L.P. and A.E. Luloff. 1995. *Comparative Case Studies: Coudersport, Austin, Liberty, Emporium*. A.E. & R.S. Research Report 252. College of Agricultural Sciences. Department of Agricultural Economics and Rural Sociology, The Pennsylvania State University.
- Connerly, C.E. and R.W. Marans. 1985. "Comparing Two Global Measures of Perceived Neighborhood Quality." *Social Indicators Research* 17: 29-47.
- Cook, A.K. 1975. *Factors Related to Community Satisfaction and Community Attachment*. Pullman, WA: Washington State University, Unpublished Ph.D. Dissertation.
- Cowell, D.K. and G.P. Green. 1994. "Community Attachment and Spending Location: The Importance of Place in Household Consumption." *Social Science Quarterly* 75: 637-655.
- Crider, D.M., F.K. Willits, and C.L. Kanagy. 1991. "Rurality and Well-Being During the Middle Years of Life." *Social Indicators Research* 24: 253-68.
- Davies, V. 1945. "Development of a Scale to Rate Attitude of Community Satisfaction." *Rural Sociology* 10: 246-255.
- Deseran, F.A. 1978. "Community Satisfaction as Definition of the Situation: Some Conceptual Issues." *Rural Sociology* 43: 235-249.
- Dillman, D.A. 1978. *Mail and Telephone Surveys: The Total Design Method*. New York, NY: John Wiley and Sons.
- Durkheim, E. [1893] 1984. *The Division of Labor in Society*, translated by W.D. Halls. New York, NY: Free Press.
- Fernandez, R.R. and D.A. Dillman. 1979. "The Influence of Community Attachment on Geographic Mobility." *Rural Sociology* 44: 345-360.
- Fetterman, D.M. 1989. *Ethnography: Step By Step*. Newbury Park, CA: Sage Publications.
- Filkins, R., J.C. Allen, and S. Cordes. 2000. "Predicting Community Satisfaction Among Rural Residents: An Integrative Model." *Rural Sociology* 65: 72-86.
- Fischer, C.S. 1976. *The Urban Experience*. New York, NY: Harcourt Brace Jovanovich, Inc.

- Florin, P.R. and A. Wandersman. 1984. "Cognitive Social Learning and Participation in Community Development." *American Journal of Community Psychology* 12: 689-708.
- Fried, M. 1982. "Residential Attachment: Sources of Residential and Community Satisfaction." *Journal of Social Issues* 38: 107-119.
- _____. 1984. "The Structure and Significance of Community Satisfaction." *Population and Environment* 7: 61-86.
- Goudy, W.J. 1977. "Evaluations of Local Attributes and Community Satisfaction in Small Towns." *Rural Sociology* 42: 371-382.
- _____. 1982. "Further Consideration of Indicators of Community Attachment." *Social Indicators Research* 11: 181-192.
- _____. 1990. "Community Attachment in a Rural Region." *Rural Sociology* 55: 178-198.
- Goudy, W.J. and V.D. Ryan. 1982. "Changing Communities." Pp. 256-263 in *Rural Society in the U.S.: Issues for the 1980s*, edited by D.A. Dillman and D.J. Hobbs. Boulder: Westview.
- Grisham, V.L. 1999. *Tupelo: The Evolution of a Community*. Dayton, OH: Kettering Foundation Press.
- Guest, A.M. and B.A. Lee. 1983a. "Sentiment and Evaluation as Ecological Variables." *Sociological Perspectives* 26: 159-184.
- _____. 1983b. "The Social Organization of Local Areas." *Urban Affairs Quarterly* 19: 217-240.
- Jesser, C. 1967. "Community Satisfaction Patterns of Professionals in Rural Areas." *Rural Sociology* 32: 56-69.
- Johnson, R.L. and E. Knop. 1970. "Rural-Urban Differentials in Community Satisfaction." *Rural Sociology* 35: 544-548.
- Kasarda, J.D. and M. Janowitz. 1974. "Community Attachment in Mass Society." *American Sociological Review* 39: 328-339.
- Kaufman, H.F. 1959. "Toward an Interactional Conception of Community." *Social Forces* 38: 8-17.
- _____. 1985. "An Action Approach to Community Development." Pp. 53-65 in *Focus on Community*, edited by F.A. Fear and H.S. Schwarzeller. Greenwich, CT: JAI Press.

- Kingry, M.J., L.B. Tiedje, and L.L. Friedman. 1990. "Focus Groups: A Research Technique for Nursing." *Nursing Research* 39: 124-125.
- Kitzinger, J. and R.S. Barbour. 1999. "Introduction: The Challenge and Promise of Focus Groups." Pp. 1-20 in *Developing Focus Group Research: Politics, Theory and Practice*, edited by R.S. Barbour and J. Kitzinger. London: Sage Publications.
- Kornacki, J.J. 1986. *Toward a Framework for Analysis in Small Town Research with a Test for Community Satisfaction*. East Lansing, MI: Michigan State University, Unpublished Ph.D. Dissertation.
- Krannich, R.S. and C.R. Humphrey. 1983. "Local Mobilization and Community Growth: Toward an Assessment of the 'Growth Machine' Hypothesis." *Rural Sociology* 48: 60-81.
- Krannich, R.S. and C.R. Humphrey. 1986. "Using Key Informant Data in Comparative Community Research: An Empirical Assessment." *Sociological Methods and Research* 14: 473-493.
- Krueger, R.A. 1988. *Focus Groups: A Practical Guide for Applied Research*. Newbury Park, CA: Sage.
- Lamp, E.J. 1994. "Focus Group Interviewing: Theory and Practical Application." Pp. 29-57 in *Conducting Focus Groups: A Manual for Sociologists on the Use of Focus Groups as a Tool in Social and Market Research*, edited by J.M. Billson. Washington, D.C.: American Sociological Association.
- Lloyd, R.C. and K.P. Wilkinson. 1985. "Community Factors in Rural Manufacturing Development." *Rural Sociology* 50: 27-37.
- Luloff, A.E. and K. P. Wilkinson. 1990. "Community Action and the National Rural Development Agenda." *Sociological Practice* 8: 48-57.
- Martin, K.E. and K.P. Wilkinson. 1984. "Local Participation in the Federal Grant System: Effects on Community Action." *Rural Sociology* 49: 374-388.
- Marans, R.W. and W. Rodgers. 1975. "Toward an Understanding of Community Satisfaction." Pp. 299-352 in *Metropolitan America in Contemporary Perspective*, edited by A. Hawley and V.P. Rock. New York, NY: Sage.
- Marshall, C. and G.B. Rossman. 1999. *Designing Qualitative Research*. Thousand Oaks, CA: Sage.
- McKennell, A.C. and F.M. Andrews. 1980. "Models of Cognition and Affect in Perceptions of Well-Being." *Social Indicators Research* 8: 257-298.

- _____. 1983. "Components of Perceived Quality of Life." *Journal of Community Psychology* 11: 98-110.
- Miller, M.K. and K.W. Crader. 1979. "Rural-Urban Differences in Two Dimensions of Community Satisfaction." *Rural Sociology* 44: 489-504.
- Molnar, J.J. and J.P. Smith. 1982. "Satisfaction with Rural Services: The Policy Preferences of Leaders and Community Residents." *Rural Sociology* 47: 496-511.
- Morgan, D.L. 1988. *Focus Groups as Qualitative Research*. Newbury Park, CA: Sage Publications.
- Murdock, S.H. and E.C. Schriener. 1979. "Community Service Satisfaction and Stages of Community Development: An Examination of Evidence From Impacted Communities." *Journal of the Community Development Society* 10: 109-124.
- O'Brien, D.J. and E.W. Hassinger. 1992. "Community Attachment Among Leaders in Five Rural Communities." *Rural Sociology* 57: 521-534.
- Palisi, B.J. and C. Canning. 1986. "Urbanism and Social Psychological Well-Being: A Test of Three Theories." *Sociological Spectrum* 6: 361-378.
- Park, R.E. and E.W. Burgess. 1921. *Introduction to the Science of Sociology*. Chicago, IL: The University of Chicago Press.
- Park, R.E., E.W. Burgess, and R.D. McKenzie. 1967. *The City*. Chicago, IL: The University of Chicago Press.
- Poggie, J.J., Jr. 1972. "Toward Quality Control in Key Informant Data." *Human Organization* 31: 23-30.
- Redfield, R. 1930. *Tepoztlan a Mexican Village: A Study of Folk Life*. Chicago, IL: University of Chicago Press.
- _____. 1941. *The Folk Culture of Yucatan*. Chicago, IL: University of Chicago Press.
- _____. 1947. "The Folk Society." *American Journal of Sociology* 52: 293-308.
- _____. 1950. *A Village That Chose Progress: Chan Kom Revisited*. Chicago, IL: University of Chicago Press.
- Rigby, K. and A. Vreugdenhil. 1987. "The Relationship Between Generalized Community Satisfaction and Residential Social Status." *The Journal of Social Psychology* 127: 381-390.

- Riger, S. and P.J. Lavrakas. 1981. "Community Ties: Patterns of Attachment and Social Interaction in Urban Neighborhoods." *American Journal of Community Psychology* 9: 55-56.
- Rojek, D.G., F. Clemente, and G.F. Summers. 1975. "Community Satisfaction: A Study of Contentment with Local Services." *Rural Sociology* 40: 177-192.
- Rothenbuhler, E.W., L.J. Mullen, R. DeLaurell, and C.R. Ryu. 1996. "Communication, Community Attachment, and Involvement." *Journalism & Mass Communication Quarterly* 73: 445- 466.
- Russ-Eft, D. 1978. "Identifying Components Comprising Neighborhood Quality of Life." *Social Indicators Research* 6: 349-372.
- Saegert, S. 1989. "Unlikely Leaders, Extreme Circumstances: Older Black Women Building Community Households." *American Journal of Community Psychology* 17: 295 -316.
- Schulze, R., J. Artis, and J.A. Beegle. 1963. "The Measurement of Community Satisfaction and the Decision to Migrate." *Rural Sociology* 28: 279-283.
- Seidler, J. 1974. "On Using Informants: A Technique for Collecting Quantitative Data and Controlling Measurement Error in Organization Analysis." *American Sociological Review* 39: 816-831.
- Shumaker, S.A. and R.B. Taylor. 1983. "Toward a Clarification of People-Place Relationships: A Model of Attachment to Place." Pp. 219-251 in *Environmental Psychology*, edited by N.R. Feimer and E.S. Geller. New York, NY: Praeger Publishers.
- Simmel, G. [1903] 1950. "The Metropolis and Mental Life." Pp. 409-424 in *The Sociology of Georg Simmel*, edited by K.H. Wolff. New York, NY: The Free Press.
- Speare, A., Jr. 1974. "Residential Satisfaction as an Intervening Variable in Residential Mobility." *Demography* 11: 173-188.
- St. John, C., D.M. Austin, and Y. Baba. 1986. "The Question of Community Attachment Revisited." *Sociological Spectrum* 6: 411-431.
- Stinner, W.F. and M.B. Toney. 1980. "Migrant-Native Differences in Social Background and Community Satisfaction in Nonmetropolitan Utah Communities." Pp. 313-331 in *New Directions in Urban-Rural Migration: The Population Turnaround in Rural America*, edited by D.L. Brown and J.M. Wardell. New York, NY: Academic Press.
- Stinner, W.F., M. Van Loon, S.W. Chung, and Y. Byun. 1990. "Community Size, Individual Social Position, and Community Attachment." *Rural Sociology* 55: 494-521.

- Stinner, W.F. and M. Van Loon. 1992. "Community Size Preference Status, Community Satisfaction and Migration Intentions." *Population and Environment* 14: 177-195.
- Taylor, R.B., S.D. Gottfredson, and S. Brower. 1985. "Attachment to Place: Discriminant Validity, and Impacts of Disorder and Diversity." *American Journal of Community Psychology* 13: 525-542.
- Theodori, G.L. 2000. "Levels of Analysis and Conceptual Clarification in Community Attachment and Satisfaction Research: Connections to Community Development." *Journal of the Community Development Society* 31: 35-58.
- Theodori, G.L. 2001. "Examining the Effects of Community Satisfaction and Attachment on Individual Well-Being." *Rural Sociology* 66: 618-628.
- Theodori, G.L. and A.E. Luloff. 2000. "Urbanization and Community Attachment in Rural Areas." *Society and Natural Resources* 13: 399-420.
- Theodori, G.L., J. Melbye, and A.E. Luloff. 1998. "Rural Economic Development and Individual Well-Being." Paper presented at the 61st Annual Meeting of the Rural Sociological Society. Portland, OR.
- Thomas, W.I. 1966. *On Social Organization and Social Personality*. Chicago, IL: The University of Chicago Press.
- Thorndike, E.L. 1939. *Your City*. New York, NY: Harcourt, Brace and Company.
- Tittle, C.R. 1989. "Influences on Urbanism: A Test of Predictions From Three Perspectives." *Social Problems* 36: 270-288.
- Tönnies, F. [1887] 1957. *Community and Society: Gemeinschaft and Gesellschaft*, translated and edited by C.P. Loomis. New York, NY: Harper & Row, Publishers.
- Tremblay, M.A. 1957. "The Key Informant Technique: A Nonethnographic Application." *American Anthropologist* 59: 688-701.
- Wasserman, I.M. 1982. "Size of Place in Relation to Community Attachment and Satisfaction With Community Services." *Social Indicators Research* 11: 421-436.
- Wilkening, E.A. 1982. "Subjective Indicators and the Quality of Life." Pp. 429-441 in *Social Structure and Behavior: Essays in Honor of William Hamilton Sewell*, edited by R.M. Hauser, D. Mechanic, A.O. Haller, and T.S. Hauser. New York, NY: Academic Press.
- Wilkinson, K.P. 1970a. "Phases and Roles in Community Action." *Rural Sociology* 35: 54-68.

- _____. 1970b. "The Community as a Social Field." *Social Forces* 48: 311-322.
- _____. 1972. "A Field-Theory Perspective for Community Development Research." *Rural Sociology* 37: 43-52.
- _____. 1989a. "The Future for Community Development." Pp. 337-354 in *Community Development in Perspective*, edited by J.A. Christenson and J.W. Robinson, Jr. Ames, IA: Iowa State University Press.
- _____. 1989b. "Community Development and Industrial Policy." *Research in Rural Sociology and Development* 4: 241-254.
- _____. 1991. *The Community in Rural America*. New York, NY: Greenwood Press.
- _____. 1995. "Social Forces Shaping the Future of Rural Areas." Pp. 65-83 in *Investing in People: The Human Capital Needs of Rural America*, edited by L.J. Beaulieu and D. Mulkey. Boulder, CO: Westview Press.
- Willits, F.K. 1995. *Centre County: Today and Tomorrow, Public Perceptions, 1995*. Bellefonte, PA: Centre County Government.
- Wirth, L. 1938. "Urbanism as a Way of Life." *American Journal of Sociology* 44: 1-24.
- Young, F.W. and R.C. Young. 1961. "Key Informant Reliability in Rural Mexican Villages." *Human Organization* 20: 141-148.