

2009

# Worlds Apart: Social Mechanisms of Contrasting Fertility in European American and Native American Populations on the Northern Plains

Janet Mary Bush  
*The University of Montana*

Follow this and additional works at: <http://scholarworks.umt.edu/etd>

---

## Recommended Citation

Bush, Janet Mary, "Worlds Apart: Social Mechanisms of Contrasting Fertility in European American and Native American Populations on the Northern Plains" (2009). *Theses, Dissertations, Professional Papers*. Paper 1198.

This Dissertation is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Theses, Dissertations, Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mail.lib.umt.edu](mailto:scholarworks@mail.lib.umt.edu).

WORLDS APART: SOCIAL MECHANISMS OF CONTRASTING FERTILITY  
IN EUROPEAN AMERICAN AND NATIVE AMERICAN POPULATIONS ON  
THE NORTHERN PLAINS

By

JANET BUSH

Bachelor of Arts, Kent State University, Kent, Ohio, 1977  
Master of Arts, Kent State University, Kent, Ohio, 1983

Dissertation

presented in partial fulfillment of the requirements  
for the degree of

Doctor of Philosophy  
in Anthropology

The University of Montana  
Missoula, MT

Official Graduation Date (May 16, 2009)

Approved by:

Perry Brown, Associate Provost for Graduate Education  
Graduate School

Dr. Kimber Haddix McKay, Chair  
Anthropology

Dr. Gregory Campbell  
Anthropology

Dr. Randall Skelton  
Anthropology

Dr. Rebecca Richards  
Sociology

Dr. Richmond Clow  
Native American Studies

Dr. Sarah Horton  
Anthropology, University of Colorado-Denver

Dr. Nate St. Pierre  
Tribal Planner, Chippewa-Cree Tribe

© COPYRIGHT

by

Janet Bush

2009

All Rights Reserved

Bush, Janet, Ph.D., Spring 2009  
Anthropology

Worlds Apart: Social Mechanisms of Contrasting Fertility in European American and Native American Populations on the Northern Plains

Chairperson: Dr. Kimber Haddix McKay

The purpose of this study was to explore the relationship between fertility and household economy on Montana's Northern Plains. Low fertility and outmigration in European American communities have led to dramatic depopulation of the region. At the same time, isolated Indian reservations in the area have grown in population due to high fertility and return migration.

A mixed methods research approach was used to explore the relationship between fertility and social acceptance of communal household economic strategies. Census data and birth records described differences in fertility and household economy between European American and Native American populations in six Plains Indian reservation counties; inferential tests demonstrated patterns of variation among fertility and economic variables in 37 rural counties. Qualitative ethnographic data were collected in two representative communities, one predominately European American and one predominately Native American, documenting individual beliefs and actions that reflected and reinforced community themes of ideal fertility.

Findings delineated value constellations that supported culturally specific fertility ideals. European American informants idealized delayed parenthood, childrearing within a nuclear family setting, household self-sufficiency, and avoidance of public assistance. In contrast, Native American informants idealized early parenthood, childrearing within an extended family setting, mutually dependent extended family households, and acceptance of tribal assistance without stigmatization.

Analyses of state and tribal TANF programs and teen pregnancy prevention initiatives illustrate culturally specific approaches to public policy that influence fertility behaviors. State and federal programs reinforce dominant culture ideals of delayed parenthood and nuclear family self-sufficiency; they pathologize Native American patterns of family formation by removing parenthood from the context of community. Some tribes have assumed administration of TANF and adapted the program in order to preserve traditional childrearing practices and maintain family-building systems.

## TABLE OF CONTENTS

Chapter 1 – Introduction.....	1
Chapter 2 – Literature review.....	7
Chapter 3 – Historical background.....	21
Chapter 4 – Methods.....	40
Chapter 5 – Quantitative findings.....	55
Chapter 6 – Qualitative findings.....	74
Chapter 7 – Analysis.....	113
Chapter 8 – Conclusions.....	154
References.....	163
Appendices	
Appendix A – Definition of terms.....	180
Appendix B – Interview questions.....	184
Appendix C – Data set for 37 rural counties.....	185
Appendix D – Correlation table for 37 counties.....	187

## TABLES

<i>Table 1.</i> Montana Plains Indian reservation populations; 1980, 1990, 2000.....	36
<i>Table 2.</i> Theoretical and operational levels of research model.....	42
<i>Table 3.</i> County, county seat, reservation and tribe for six Plains Indian communities.....	43
<i>Table 4.</i> Comparison of the means for fertility characteristics for six reservation counties, 1990 through 2007.....	56
<i>Table 5.</i> Comparison of the means for household economic characteristics and community characteristics for six reservation counties, 1999.....	63
<i>Table 6.</i> Correlation between characteristics of fertility and household economy for 37 Montana Northern Plains rural counties, 1999.....	67
<i>Table 7.</i> Summary of stepwise regression analysis for variables predicting birth rate.....	68
<i>Table 8.</i> Summary of stepwise regression analysis for variables predicting median age.....	70
<i>Table 9.</i> Eigenvalues and trace in each root for principle components analysis.....	71
<i>Table 10.</i> Unrotated factor loadings for principle components analysis.....	72
<i>Table 11.</i> Demographic characteristics of small samples of low-income parents and grandparents.....	76
<i>Table 12.</i> Comparison of state and tribal TANF program regulations.....	132

## FIGURES

<i>Figure 1.</i> Model of direct and indirect relationships between independent variable, dependent variable and mediating variable domains.....	5
<i>Figure 2.</i> Birth rates for six Montana Plains Indian reservation counties by race of mother, 1990 through 2007.....	57
<i>Figure 3.</i> Birth rates for six Montana Plains Indian reservation counties by race and age of mother, 1990 through 2007.....	59
<i>Figure 4.</i> Birth intervals for six Montana Plains Indian reservation counties by race and age of mother, 1990 through 2007.....	60
<i>Figure 5.</i> Comparison of parity for six reservation counties, 1990-2007.....	61
<i>Figure 6.</i> Relationship of birth rate to public assistance for 37 rural counties, 1999.....	69
<i>Figure 7.</i> Relationship of median age to grandparent households for 37 rural counties, 1999.....	70
<i>Figure 8.</i> Relationship of median age to use of public assistance for 37 rural counties, 1999.....	71



## CHAPTER ONE - INTRODUCTION

This study asked if household economic practices and community beliefs about childrearing affect fertility in the rural areas of northern and eastern Montana. Depopulation of the rural Northern Plains, the result of low fertility and outmigration in European American communities, is a major demographic event that threatens regional economic viability. Throughout the region, however, isolated Indian reservations are growing in population due to high fertility and return migration. This research project hypothesized that the origins of diametrically opposed population trends among contemporary European American and Native American communities were embedded in fundamental cultural patterns of resident tribes and immigrant settlers on the Northern Plains.<sup>1</sup>

The specific area of inquiry was culturally constructed community endorsement of fertility. The first research objective was to describe quantitative differences in fertility between European American and Native American populations in Montana's rural counties. Beyond the dissimilar birth rates, there was variation in mothers' age, spacing and frequency of births, desired family size, desired age at final childbearing, and choice of natural fertility versus contraception and abortion.

The second objective was to identify the role of household economy as a mediating factor in individuals' fertility choices. In one community, residents affirmed that parents "should be able to afford a family" before having children; in the neighboring community, residents were confident that they will meet the expense of raising children—possibly including children who are not their own. To understand this

---

<sup>1</sup> This paper uses the terms "European American" and "Native American" to describe two research communities. The terms have parallel linguistic structure, are accepted in academic discourse, and denote the historic colonization that gave rise to contemporary dominant culture.

difference, resident preference for communal or self-sufficient economic strategies was investigated.

The third research objective was to test for patterns of variation among quantitative variables of fertility and household economy in Northern Plains counties. The fourth research objective was to use ethnographic data to highlight ideological themes that reinforced each population's social patterns of normative fertility and economy.

I proposed that contradictory population trends in European American and Native American communities reflect culturally specific responses to economic pressure in contemporary Northern Plains communities. Fertility behavior occurs within a framework of culturally constructed norms for household economy, childrearing, and a perception that children assure territorial permanence. Individuals of childbearing age in each ethnic community make fertility decisions within a web of tension created by social support and obligation, economic opportunity and constraint, historic community identity and desire for change. Individuals are motivated to prevent or bear children depending on the likelihood of local relations and institutions to support or penalize them for the outcomes of their reproductive choices.

The logic underlying this study relies on the active influence of human agency. That is, community growth or decline in an economically marginal, geographically isolated, sparsely populated region indicates economic and social decisions made by individuals. The fertility and economic options elected by parents must be examined within the larger context of historical and economic forces that have shaped their cultural communities on the Northern Plains.

Quantitative data were collected by government agencies at county and county census district levels. Qualitative ethnographic data were gathered over a 12-month period in two rural communities, one a county seat and one an Indian reservation. The research communities were located in proximity to one another within a vast expanse of prairie. Their economies were mutually dependent. Town and reservation residents were warily separated by longstanding racism. Both populations were aware of the other's profoundly different interpretation of history, social responsibility, and world outlook.

### Hypotheses

It was predicted that norms endorsing communal household economic strategies would enhance economic resilience in an environment of limited resources, and would therefore support individuals to elect fertility in spite of economic hardship. Further, it was predicted that a community view of childbearing as an investment necessary to ensure territorial permanence (i.e. the community's continued existence in its current location) would create motivation and social support for fertility. The following two hypotheses were drafted:

$H_1$ : In an economically marginal rural area, fertility (the dependent variable) varies in direct relation to household use of communal economic strategies (the independent variable).

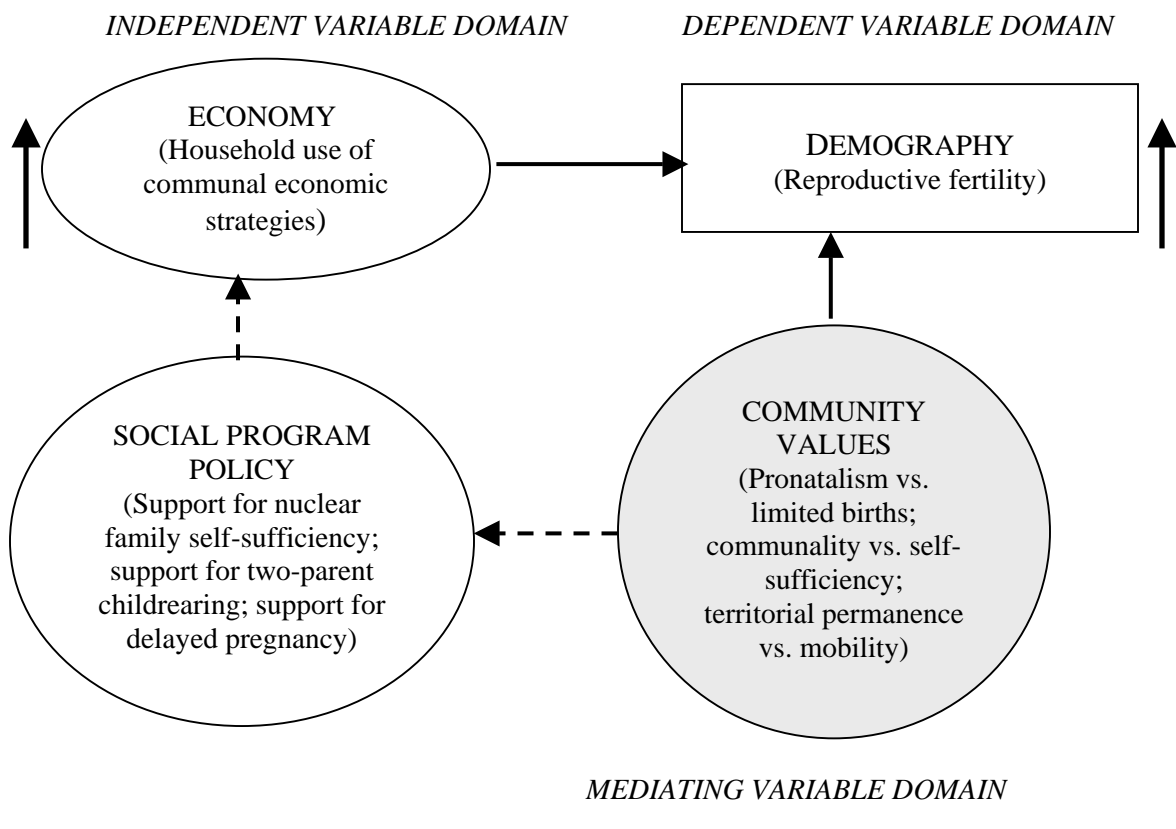
$H_0$ : In an economically marginal rural area, fertility (the dependent variable) demonstrates no relation to household use of communal economic strategies (the independent variable).

*H<sub>2</sub>*: In a community that experiences cultural and territorial instability, pronatalism (the dependent variable) varies in direct relation to community perception of children as an investment in future territorial permanence (the independent variable).

*H<sub>0</sub>*: In a community that experiences cultural and territorial instability, pronatalism (the dependent variable) demonstrates no relation to community perception of children as an investment in future territorial permanence (the independent variable).

Figure 1 illustrates the model of direct and indirect relationships between independent and dependent domains in which the dependent variable domain is fertility, and the independent variable domain is household economy. Community values create a mediating domain in which variables such as pronatalism and self-sufficiency affect fertility directly, while other variables, such as social program policies, impact fertility indirectly through household economy.

Figure 1. Model of direct and indirect relationships between independent variable, dependent variable and mediating variable domains. (Based on Schensul, Schensul and LeCompte, 1999)



### Summary

Contemporary Northern Plains communities are situated within the structural constraints of frontier isolation, historic ethnic conflict, and rural economic transition. In response to these pressures, residents have developed culturally specific social mechanisms and normative behaviors that influence individual fertility choices. Contradictory demographic trends among neighboring European American and Native American communities reflect fundamental differences in immigrant and indigenous perspectives on fertility, economy, and territorial permanence.

The following chapter reviews research literature on fertility, rural household economies, and culturally defined responses to capitalism. It is followed by an account of Northern Plains history intended to demonstrate that the selected research communities were representative of other communities across the region. The next chapter describes methods used to collect and analyze quantitative and qualitative data. Findings are explained in the following two chapters. They are followed by an analysis of two social issues that lie at the intersection of fertility and household economy in each research community: cash assistance to families in poverty, and teen pregnancy. The final chapter includes conclusions, potential applications to public policy, notes on respectful methodology, and personal reflections.

## CHAPTER TWO - LITERATURE REVIEW

This research relied on the previous work of anthropologists, sociologists and historians in three areas of study: determinates of fertility, rural household economic strategies, and culturally specific adaptations of capitalism.

### Determinates of fertility

The theory and methodology applied to the investigation of fertility trends have changed since the early 1940s through the 1960s, when unprecedented global population growth became a compelling area of macro-level study for demographers (Greenhalgh, 1995; Weeks, 2002). The advance of Post-World War II modernization gave rise to demographic transition theory, an irreversible four-stage structural explanation of European and North American population process based on concepts of social Darwinism that was applied indiscriminately (and ethnocentrically) to developing nations (McFalls, 2003). The Princeton University European Fertility Project of the 1960s proposed that fertility change was not related to structural conditions of social, economic or demographic change, but instead was dependent on cultural groupings defined by language, ethnicity or geographical region (Weeks, 2002). This thinking gave rise to theories of ideational fertility change where local ideas about family size, contraception, and the appropriateness of other proximate determinants of fertility are influenced by culture contact and diffusion (Greenhalgh, 1995; Kertzer, 1995).

During the 1960s and 1970s, economists applied theories of consumer behavior to classical fertility analysis creating a new framework for systematic analyses of household choice in childbearing (Becker, 1960; Easterlin, 1975). Their work would later be reassessed for its basis in questionable assumptions that individual rationality and

economic maximization were operative in all reproductive events (Carter, 1995).

However, economic frameworks contributed valuable concepts to discussions of fertility trends and transitions including family earning potential, economic costs and benefits of children, and the role of individual agency (Easterlin, 1975). This led in the late 1970s to the development by John Caldwell of an influential economic approach termed “wealth flows,” which associated reduced fertility in developing countries with reversal in the traditional net flow of goods and services from older to younger generation (Greenhalgh, 1995). W. Penn Handwerker amended wealth flows theory in the mid-1980s to suggest that macrolevel socioeconomic structures such as education and employment were working indirectly through intergenerational wealth flow to influence microlevel reproduction (Handwerker, 1986).

In the 1980s, fertility research benefited from a more nuanced detail of microlevel ethnographic investigation as anthropologists, sociologists, and psychologists explored rich demographic domains of household economy (Arnould and McNetting, 1982; Schmink, 1984), individual agency (Giddens, 1979; Ortiz, 1973; Lave, 1988), and family transformation (Folmar, 1992; Fricke, 1995). An approach labeled “demographic anthropology” emerged to combine mainstream demographic macrolevel analysis with anthropological ethnographic research at the microlevel of individual behavior (Kertzer and Fricke, 1997). The dominance of culture as mediating mechanism for fertility change was at the heart of demographic anthropology research (Kertzer, 1995). Recognition of the formative force of historic political economy, as well as individual agency, was embraced by demographic anthropologists, giving rise to studies of the role of gender, race, and socioeconomic stratification as factors in fertility (Greenhalgh, 1995).



Anthropologists analyzed high fertility communities in response to a range of biological and cultural factors (Brown 1987, Easterlin 1975, Folmar 1992, Robichaux 1992).

Researchers looked for mechanisms by which underlying structural forces and individual behavior, rooted in human agency and influenced by community norms, influenced fertility outcomes (Fricke 1995, Greenhalgh 1994, 1995, Kertzer 1995, Kertzer and Fricke, 1997). Reproductive behavior of unequally privileged individuals was considered in the context of historical events and political conditions, a research perspective that is replicated in this Montana research.

From a political ecology perspective, Tom Fricke described the Nepalese Tamang in the late 1980s as a “pre-transitional” population who did not consciously control fertility (Fricke, 1995). Because some marriages demonstrated a pattern of younger birth mothers and higher fertility, Fricke hypothesized that these were the demographic consequences of culturally motivated political strategies that maintained flow of obligations and labor between stratified groups. In the case of the Tamang and the neighboring Ghale, this reciprocity was created and maintained by marriage within a natural fertility society. While there was no overt manipulation of births and their timing, Fricke found a social pattern of earlier marriage timing and higher fertility in marriages of political importance between members of key patrilineal clans. He concluded that numbers of all children born could be an unintended outcome of fertility decisions made for other culturally relevant reasons. That is, cultural influences unrelated to fertility could indirectly influence individual fertility decisions, regardless of the ideals that contribute to the desired number of children.

Taking a political economy perspective, A. F. Robertson suggested that there are mutual influences between household fertility and larger structural forces. To accommodate the many configurations by which members of different cultures define their relatives, he designated the household (rather than the family) as the domestic unit of reproduction most useful to fertility research (Robertson, 1991). Robertson proposed that households respond to the political and economic demands presented upon their members—producers and dependents alike. At the same time, the reproductive needs of households shape community and state institutions into effective supports for continued reproduction. The plasticity of state social and economic institutions allows them to respond to the needs of households to protect citizens from the disruptive forces of production and consumption. A functional state has an infrastructure that is reactive to the needs of its citizens. Its institutions adapt to meet the economic needs of households and to support the cultural norms that ensure continued domestic reproduction.

As access to birth control and abortion have improved dramatically, and more women in developing countries opt to remain childless, fertility theorists have used rational choice economic theories to explain why parents elect to have children at all. However, the advantages of parenting are rarely economic. More frequently they represent an investment in social capital by which parents extend and strengthen their social networks with family and community members (Schoen, Kim, Nathanson, Fields, and Astone, 1997).

Contemporary attitudes towards fertility have been colored by populations' historic experiences of reproductive trauma and their vulnerability to powerful institutions. Through the 1970s, the U.S. Indian Health Service (IHS) imposed forced

sterilization upon thousands of Native American women. This encroachment was documented by numerous Native American advocates and publications before the General Accounting Office released a study acknowledging that sterilizations had taken place without documentation of informed consent (“Indian Health Service,” 2000). Native American researchers estimated that from 25% to 50% of Native American women ages 15 through 44 lost reproductive capacity during that period. This trauma was experienced in heavily effected communities as genocide (Carpio, 2004). It resulted in the loss of a generation of children, impaired tribal status, and brought socially debilitating impacts to individuals and communities. This violation of contemporary reproductive autonomy has been explained as eugenics-motivated ethnic cleansing and a poverty reduction effort (Carpio, 2004). IHS responded to the crisis by creating stricter guidelines for documenting patient consent, demonstrating institutional disregard for a Native American worldview in which written explanations did not lead to improved understanding, patients did not share physicians health assessments, and clients feared reprisal through loss of government services (Carpio, 2004).

#### *Theories of fosterage*

Child fosterage emerged as a common response to pressing economic constraints, one that resulted in political economic benefits for families and communities. Carolyn Bledsoe’s 1995 study of fosterage practices within Sierra Leone’s system of formal polygynous marriage and informal polyandrous motherhood found that fertility and childrearing were strategies for managing traditional power differentials between family members within a patron-client system of political patronage. In Sierra Leone, families were not defined by biological relationships alone, but were socially constructed. The

value that a mother ascribed to her children varied, based on her relationship to their different fathers. A child's value could be improved by fosterage to the care of a more socially powerful family. The patron gained political status from the donor family's subordination, and profited as well from the value of the child's labor. He reciprocated by offering the protection and advocacy of a patronage relationship (Bledsoe, 1995).

Jessica Leinaweaver's study of Andean child circulation described a longstanding practice of child transfer between households for the benefit of the child, the foster caregiver, the biological parent household, or all of these. In the Andean practice of child fosterage, children circulate in and out of households, developing and strengthening relationships between the involved adults to the advantage of poor households in the politically turbulent region of Ayacucho. Leinaweaver saw fosterage as a resolution of kinship notions with economic need, a flexible strategy that maximized and extended family advantages in times of crisis. Leinaweaver declared that, in fact, the Peruvian government's globalized adoption system undermined its own low-income families and communities by removing their children to international adoption (Leinaweaver, 2007).

Mary Black-Rogers observed the fosterage practices of Round Lake and Sandy Lake Ojibwa or Oji-Cree, as part of a long-range archival study of traditional Algonquian fosterage practices in Northwestern Ontario from 1910 to 1970 (Black-Rogers, 1990). She documented that contemporary Round Lake residents did not distinguish between biological, step and foster relationships. Their fosterage belief system was based not on a child's need of a home, but on a household's need for a child. Foster children were often not orphans. Foster parents expressed their sense of a need for a child of specific gender or age, or for a child to replace the loss of a family member. Black-Rogers speculated that

fosterage practices might have developed as a social mechanism that assisted the transfer of hunting territory over generations. Because archival documents showed foster parents boasting about how many children they had raised, Black-Rogers proposed that fostering might be an Algonquian social tradition that implied positive valuation to the foster parent.

#### Rural household economic strategies

In the 1970s, anthropological studies of households focused on the economic strategies of marginalized rural populations in Latin America. Households were defined as domestic units whose members need not be kin relations and may not always share residence, which act as a locus of economic production and consumption characterized by sharing and redistribution of resources (Schmink, 1984). Rural areas around the world have provided context for anthropological research into the varieties of household structures, relational and decision-making dynamics of families and households, and informal economic exchanges of labor, land and capital within households (Tickamy, 1993). Studies of household composition and function documented household histories, movement of people in and out of co-residence, kin status, relative household positions, and shifting producer and consumer roles (Arnould and Netting, 1982; Foster and Rosenzweig, 2002; Tickamy, 1983).

It was observed that peasant communities in developing nations used economic strategies outside of the formally recognized market exchange of wealth, goods and services to obtain necessities in spite of persistent community poverty (Schmink, 1984; Tickamy, 1983). Sociologists and economists documented informal economic strategies in disadvantaged urban areas of industrial nations (Alessandrini and Dallago, 1987;

England and Farkas, 1986; Himmelweit, 2000; Offe and Heinze, 1992; Quisumbing, 2003; Skolka, 1987; Witte, 1987) and post-industrial agricultural America (Laboa and Meyer, 2001; McGranahan, 2003). Informal economic strategies were recognized as one response that marginal populations made to the inequitable distribution of income and investments (Schmink, 1984).

Informal household economic strategies documented by these researchers include extended family and non-relative households (providing economy of scale), income sources not from wages (including government assistance programs), non-monetary exchange of goods and services (providing necessities without the requirement of monetary investment, bartering), unofficial economy (unreported sale of goods and services, illegal activities, self-provisioning), and return migration (bringing income and skills from employment and/or education gained elsewhere for the benefit of the home community). Some form of each of these strategies is found in contemporary European American and Native American communities on the Northern Plains.

#### European American and Native American capitalism

##### *European American rural entrepreneurial capitalism*

The American rural small town holds cultural significance both as a source of rural identity and a symbol of national identity. Like other traditional cultural properties, rural small towns are a source of shared history and remembrances, the object of deep emotional attachment and comfort (King, 2003). Within the dominant culture, rural towns have emerged as a symbol of values perceived as inherent in the national identity, including authenticity, community, and egalitarian democracy (Tauxe, 1998). Contemporary ethnographies, however, portray a more conflicted picture of American

agricultural communities that reveals social fissures caused by race and class, exclusionism and isolationism.

Fieldwork done in an Indiana agricultural community in the early 1970s by Hervé Varenne described the rural small town not as a cohesive community, but rather an overlapping network of small social groups that included family, friends, churches, service organizations, schools, and professional associations. Residents welcomed neighbors to join their various groups as they explained that most people would not feel comfortable trying to belong. Rural residents described in detail the ways in which local social groups differed from one another despite a surface appearance of community homogeneity. Varenne proposed that the town's structured diversity resulted from polar values of individualism and community in American rural culture, which created intrinsic tension between personal agency and social responsibility (Varenne, 1977).

During the 1980s, economic restructuring of farm ownership occurred and rural manufacturing eroded. Lost farm and other rural jobs, rising poverty, shortfall of affordable housing, increase in residential mobility, and changes in family relationships occurred in agricultural communities across the nation (Falk and Laboa, 2003). Janet Fitchen documented the accompanying social changes that took place in the small towns of upstate New York. She noted that economic change created new conflict for group and individual identities that had been based in community uniqueness, egalitarianism and support of family (Fitchen, 1991). As new social realities threatened traditional assumptions, Fitchen predicted that unstoppable economic changes would force rural residents to embrace urban newcomers, ethnic outsiders, and nontraditional economic

strategies—or watch their communities become undone by declining local fortune.

A North Dakota mining boom in the late 1980s and early 1990s provided an opportunity for Carolyn Tauxe to document one rural town's attempt to accommodate a changing economy. The business class controlled local resources through politics, and local symbolism through advertising. While an influx of new residents and subsequent expansion of housing, transportation and business undermined the traditional rural nature of the town, the Chamber of Commerce redesigned promotional materials to portray a bucolic small town identity for the benefit of the newcomers. Meanwhile, the long-standing residents, whose livelihoods and community engagement had become peripheral to the success of Main Street commerce, became disgruntled and displaced (Tauxe, 1998).

Sonya Salamon's ethnographic study of Illinois farm communities in the 1980s identified two traditional farming methods, yeoman and entrepreneur, which yielded observably different land use and business patterns. The yeoman farmers were German immigrants who believed they had a sacred responsibility to preserve farmland ownership within their families and ethnic community. A farm family's goal was to conserve and accumulate land so that at least one son, and preferably all sons, would inherit and farm contiguous family lands. This belief led to smaller, more diversified farms and risk-averse management strategies. In contrast, the entrepreneur farmers of Anglo heritage had migrated from Eastern states, and viewed land as an economic asset to be managed in the interest of solidifying family wealth. They tended to optimize short-term profits



by land divestiture or consolidation, in response to market forces and personal fortune. Entrepreneurial land use and business strategies demonstrated high value on individual choice; community populations were more scattered and loose knit than yeoman villages, and demonstrated more distinct class differences (Salamon, 1992).

Agricultural settlement of the Northern Plains through the dry-land homesteading movement was similar to the entrepreneur-dominated Midwest in that, for many homesteaders, “kinship links and a shared common past were...initially absent among households” (Salamon, 1992, p. 230). The promise of new trade markets, booming railroad towns, and potential land ownership attracted a population of would-be entrepreneurs.

McNall and McNall (1983) described the Great Plains settlers’ dominant values of individual self-improvement and personal achievement through work. Plains settlers lived in isolated family units and relied on the mutual cooperation of neighbors for economic survival through periods of severe weather and economic instability. However, ongoing daily cooperative business models were not central to Great Plains family and community development. Over time, from the homesteading era through recent political movements for government devolution and welfare reform, American political discourse has reiterated the traditional “pioneer values” of individualism, work ethic, and material wealth (McNall and McNall, 1983; Weaver, 2000).

European American society demonstrated a deeply embedded tradition of individual entrepreneurship through generational migration, a practice that supported

national economic principles of land expansion and industrial production. The economic system depends on the migration of workers through a series of increasingly lucrative labor markets in search of better pay and living conditions (Audas and McDonald, 2004). In contemporary Montana, this tradition persists as workers move up a chain of increasingly more populated communities until they leave Montana for larger cosmopolitan areas (Sylvester, 2003).

*Native American communal capitalism*

Inquiry into Native American household economy must be situated within traditional tribal models of wealth and wealth redistribution. Awareness of culturally constructed notions of nonmaterial wealth is essential to understanding the strategies by which reservation households and institutions respond to the demands of birth and childrearing. While tribal communities have taken on some capitalist elements of the dominant culture's economy, they retain core Native American cultural identities, traditions, values and institutions that have an effect on household economic practices (Champagne, 2000).

Most Native reservation communities don't support individual capitalist activity, accumulation of wealth, and a central focus on production and market enterprise. Values of generosity, redistribution, and egalitarianism continue to prevail among many community members...Native culture and worldviews do not support the values of capitalist accumulation and market participation. (Champagne, 2004, pp. 320-321)

Contemporary tribes use adaptive strategies to maintain cultural traditions and social order during periods of economic adjustment. For example, in reservation economies where the wage labor sector is not secure, it is economically productive to forgo employer-imposed work and time regimens. This permits residents to engage in traditional task oriented labor (such as ceremonies, traditional arts and crafts, births and

deaths, family crises) that take place within kin and social networks, a resource that actually provides more stable economic support (Pickering, 2004). Informal economic activities provide a means of redistributing and augmenting government assistance on isolated rural reservations such as the Lakota Sioux communities of Rosebud and Pine Ridge, South Dakota (Pickering, 2000; Pickering and Mushinski, 2005) and the Mandan, Hidatsa, and Arikara at Fort Berthold Reservation, North Dakota (Berman, 2005).

Broadly stated, the goals of reservation economic development are to enhance tribal sovereignty and empower the community rather than to assist individual entrepreneurs to accumulate wealth. Many tribal entrepreneurs move their businesses out of unsupportive reservation environments (Champagne, 2000). The reservation economy favors a form of collective capitalism whereby community and cultural values guide economic decision-making in favor of group gain rather than individual gain (Champagne, 2000). Because material standards are not central to tribal values, reservation communities appear willing to accept a lower standard of living relative to the overall United States standard in order to preserve traditional tribal cultural values and social order (Champagne, 2000). Pickering documented this perception among the Lakota Sioux:

Accepting a lower standard of living than that of non-Indians living in border towns and urban areas is often viewed as a justified trade-off made willingly in exchange for the social and cultural freedoms of living within the reservation community. A Porcupine woman complains, however, that outsiders chiefly see the reservations as impoverished, even though many Lakotas are happier and doing better with little cash than Americans in wealthier communities. (2000, p. 68)

Ecological anthropologist Sebastian Braun studied tribally owned bison ranching operations on a Lakota reservation and concluded that the traditional communal

economic and land use patterns of Plains Indians are a necessary adaptation to survival in the harsh environment of the Great Plains. Braun noted that communal land tenure is a strategy used today by the few successful European American agriculturalists remaining in the region—corporations and Hutterite colonies. In Braun's view, since the confinement of tribes and development of entrepreneurial private land tenure, the communal land tenure strategy has been almost lost. For indigenous tribes, contemporary bison hunting has become a potent symbol of cultural resistance and permanence, as well as a pragmatic sustainability strategy for the use of natural resources. Braun emphasized that tribal economic development does not share the dominant culture's purely economic standard for success and failure; rather success is judged by a project's ability to engage community members in worthy work and demonstrate local autonomy (Braun, 2008).

## CHAPTER 3 - HISTORICAL BACKGROUND

The purpose of this chapter is to document that the parallel histories of this study's two research communities, one a predominately European American county seat and the other an Indian reservation, are representative of other communities across the Northern Plains.

### European American settlement of the Northern Plains

#### *Influx from fur trade to homesteading*

In the mid-1600s European fur traders penetrated North America as agents of a lucrative commercial market that engaged indigenous tribes in Eastern woodland regions. Over the next 150 years, European missions, trade centers, and military forts marked French, British and Dutch incursion into tribal territories. Tribesmen became trade partners and military allies to colonial powers; tribal populations were decimated by epidemic disease and displaced by war.

European American settlement pushed westward onto the Great Plains by the early 1800s when the United States gained sovereignty over the region through the Louisiana Purchase. In the 1830s the federal government forced removal of Eastern tribes to western territories. The Treaty of Fort Laramie of 1851 confined western tribes to reservations that were later opened to white ownership through the General Allotment Act of 1887 (Clow, 1994). Similar acts by the Canadian government confined indigenous tribes to isolated reserves north of the invisible "medicine line" or international border (Binnema, 1994; LaDow, 2002). Thus the American and Canadian governments appropriated the lands of the Northern Plains for European American ownership.

Montana's northern and eastern counties were settled by European Americans in the late 1800's and early 1900's. The federal government supported railroad expansion into the West through generous land grants. The Northern Pacific Railroad reached Montana in 1881; the Great Northern arrived in 1887; and the Milwaukee Road followed in 1907 (Raban, 1996). Railroad development led to the establishment of "terminus towns," hastily plotted instant cities required every ten to twelve miles to ensure adequate maintenance of railroad operations (Burns, 1982).

Terminus towns needed inhabitants and so, with lobbying from the railroads, Congress passed the 1909 Enlarged Homestead Act. This law provided double-sized claims of 320 acres to homesteaders who established farms on the 'semi-arid land' of the Northern Plains. Railroad companies heavily promoted the homestead offer to urban residents of Eastern and Midwestern states and Europe. Potential immigrants were encouraged by the popularity of the Hardy W. Campbell system of dry-land farming, which proposed that cultivation of semi-arid land would tap deep reservoirs of land-locked moisture via capillary action, changing the immediate atmosphere's ionic charge and creating new rainfall patterns (Raban, 1996). Northern Plains settlers also sought profit in expansion of the livestock industry, whose sales and shipping of beef cattle to Midwestern cities were made possible by completion of the railroads. Discovery of gold and other precious minerals throughout Montana's island mountain ranges and badlands in the 1860s incited a rash of mining claims (Montana Office of Public Instruction, Division of Educational Opportunity and Equity, 2004).

A 1921 “Homesteaders’ Ditty,” quoted from a permanent display in the National Museum of Northern Plains Agriculture in Fort Benton, describes Northern Plains settlement:

Prosperity and Happiness in Montana

Lying between the Midwest and the Pacific were miles and miles of unproductive tracks of three transcontinental railroads, all owned by James J. Hill. With P.T. Barnum’s slogan in mind, “There’s a sucker born every minute,” one of the biggest promotions was organized to fill those miles with people...and his pocket with profit. Joining the railroads for a share of the take were land speculators, banks and state governments, all promising a free utopian life in “a land of milk and honey.” The beckoning sirens of free land and a better life brought thousands who found only flat, endless, windswept plains which had hot dry summers and frigid winters. The country cooperated for the first few years, adding thousands of homesteaders; by 1921 drought, grasshoppers and no market had discouraged many. Some 100,000 had exited—broke, disillusioned and taken in by the scam of the promoters.

Twixt Hill and Hell is just one letter—  
If Hill were in Hell, we’d feel much better.

*Rural depopulation*

Population loss on the agricultural Great Plains began in the 1930s as the region suffered drought and economic depression (Mitchell, 2004), and continued during the 1950s and 1960s urbanization movement (Congressional Quarterly Researcher, 1990). National rural-to-urban trends reversed briefly in the 1970s as population growth in non-metropolitan areas outpaced that of metropolitan areas (Johnson, 2006). Rural population loss resumed in the 1980s and 1990s. It was spurred by decreased agricultural jobs due to farm mechanization and consolidation, and decline in the mining and ranching industries (Mather and D’Amico, 2004; Sullivan, Hellersein, McGranahan, and Vogel, 2004). Depopulating rural counties reflected uneven patterns of selective deconcentration in which remote areas lost population disproportionately to moderately sized communities

with higher population densities (Johnson, 2006). Unlike rural regions with proximity to urban amenities, extremely rural counties lacked large job markets, health care, and other services that attract new in-migrants (McGranahan and Beale, 2002).

When a rural community loses population to outmigration, a demographic chain reaction begins. Migration is selective, that is, not everyone is equally likely to move. Worldwide, young adults ages 20 to 29 are more likely to migrate than people of any other age group, especially if they aren't married (Weeks, 2002). From a young person's point of view, a declining rural community is less likely to offer opportunities for recreation, education, and employment. Furthermore, there can be a stifling feeling that everyone in the community knows one's private business, and young Montanan out-migrants have expressed deep dissatisfaction with social relations in rural small towns (Sylvester, 2003).<sup>2</sup>

As young adults of childbearing age leave a rural community, the median age rises and birth rate declines. There are fewer young families. Schools, long acknowledged

---

<sup>2</sup> A 2001 Montana Bureau of Business and Economic Research study emphasized young people's vulnerability to out-migration. Over one-third of respondents under age 30 said it was unlikely they will still live in the same community five years from now. Forty five percent (45%) of respondents under age 30 planned to leave Montana. Forty percent (40%) of young people cited as their reason for leaving the need to improve their economic situation; 30% were leaving for school; 20% "just wanted to get away." Of the 400 survey participants in Montana, Wyoming, Colorado, North Dakota and South Dakota, 22% "liked everything" about their location. But almost 20% disliked small town attitudes and gossip; a similar number missed urban shopping and entertainment amenities; 15% disliked the climate; and almost 7% were unhappy with lack of economic opportunities (Sylvester and Reichert, 1998).

Key informants articulated this dissatisfaction in their mixed responses to my question, "Is this a good community in which to raise a child?" Community leaders responded positively: "It's a good community because of the size. Kids are relatively safe here....They can wander around and go downtown... and not be afraid of...things that you might be afraid of in a larger area. It's all about being interconnected enough that everybody knows everybody" (Interview 11). "You have a network of family and friends that is meshed together to take care of one another....There's a big rootedness in this community" (Interview 17).

Actually the community has been losing population since 1960. Interviews with low-income mothers who lived in town documented their social isolation. Parents qualified their optimism with statements of doubt such as, "I think there might not be enough...positive activities, for [middle-school and high school-aged children] to do when they approach high school. Because we're a small community we don't have access to different cultural things" (Interview 9).



as a unifying rural institution, consolidate or close (Sanderson, 1941; Tobin, 2005). Small communities experience a loss of community identity, social networks, and jobs. Smaller populations generate fewer county tax dollars and less state and federal allocations for education, health care, and other public services (Audas and McDonald, 2004).

The economy of the Northern Plains experienced the negative effects of population decrease: An increasingly elderly population stressed health and human services; membership in anchor institutions such as churches and community organizations declined; reduced numbers of children in schools forced school closures and consolidations; homes and businesses lost value; and increased geographic and social isolation led to personal depression (Coffman and Antham, 2004).

The last thing that goes is the grain elevator. Shortly before that, the post office. Preceding those, more or less in order, go the hardware store, lumberyard, gas station, grocery, pharmacy, bank and then, most dishearteningly, the schools. Those precious schools. After the kids are gone, it's just a matter of time before Main Street—and what remains of the once cheery little houses rimming it—gets boarded up for good. (Kadlec, 2005, p. 42)

After decades of rural depopulation, many European American communities have disappeared from the Northern Plains. This historic depopulation movement is seldom discussed by national leaders in the United States, but is recognized as a remarkable reversal in domestic policy by Europeans. An article titled “So Who Wants to Live in the Little House on the Prairie?” was published in *The London Independent* in 2005:

Something most unusual happened in Divide County last year. The number of its inhabitants rose by three, to be precise from 2,205 to 2,208. The visitor to this remote corner of north-western North Dakota, it should be said at once, is unlikely to notice the difference. Even after the increase, population density remains at just two per square mile. Here on the Great Plains, modern American man, for all the changes he has wrought “the extermination of the bison, the tearing up of the wild prairie for farming” remains an afterthought. The marks of

his civilization are but the tiniest dots on one of the emptiest, most haunting landscapes on earth.

Locally, however, this statistical blip is a cause of much rejoicing. Whisper it not, but a dismal historical trend may have begun to reverse course. It may be a false dawn. But it could signal a first breakthrough for a campaign to reverse a sad but little-noticed demographic trend of the contemporary US, the depopulation of the Great Plains. (Cornwell, pp. 1-2)

### *National rural economic restructuring*

In the 1970s and 1980s, rural economies reflected a national economic restructuring trend that shifted jobs away from primary production and secondary manufacturing sectors into the tertiary service sector. The 1970s brought emerging global production markets, declining labor unions, rural plant closures, farm consolidation, and reduction in rural land ownership (Falk and Labao, 2003; McGranahan, 2003). Decline in rural employment and worker earnings continued through the 1980s, and increasing rural poverty contributed to outmigration and population loss (Falk and Labao, 2003). Constricting local labor markets reduced opportunity for less educated residents, and often allowed management to channel jobs through social networks or nepotism to more privileged segments of the population (Falk and Labao, 2003; Jensen, McLaughlin and Slack, 2000).

Economic restructuring continued into the 1990s and created crisis conditions for small farmers, including low land values, consolidation of family farms, and mechanization of labor (Falk and Lobao, 2003). The agricultural transition from small household-run family farms to large mechanized corporate farms created changes in rural residence and employment patterns. In 1997, small farms made up 75% of the American farm industry but accounted for only 7% of national sales; 3.6% of the largest farms accounted for more than 50% of national sales (Lobao and Meyer, 2001). By 2000, rural

employment had become dependent on government, manufacturing and retail industries (Ghelfi, 2002). Lobao and Meyer summarized the dramatic shift in United States farm population:

In the early 1900s, more than one of every three Americans lived on farms, a number greater than that at any other point in our country's history. At the century's end, the farm population stood at under 2%, and even for those who remained in farming, almost 90% of household income came from nonfarm sources. (2001, ¶ 2)

The devolution of federal programs to the responsibility of states and counties in the 1980s and 1990s left rural counties without funding for pivotal community health and welfare programs at a time when county tax bases were shrinking, and provided no support for the costly challenge of program implementation in extremely rural areas (Sharp and Parisi, 2000). Federal funding formulas for social programs were based on population numbers, and rewarded densely populated states that could benefit from economy of scale in program implementation (Fitchen, 1991). Federal support to rural areas was concentrated in farm subsidies, and the majority of these supported only 7% of farmers.<sup>3</sup> Otherwise few federal funds were available for rural community capacity and infrastructure development (Johnson and Rathge, 2006).

Studies of government policy development in response to rural out-migration frequently focus on examples from the developing world (Alave, 2004; Wiest, 1981). However, the dramatic exodus from the Great Plains has led some American policy

---

<sup>3</sup> Farm advocates have charged that programs like the USDA Conservation Reserve Program (CRP) remove cultivatable land from production for extended periods of time, negatively impacting farm workers, farm suppliers, and local retail and service businesses while disproportionately benefiting large-scale farms (Goetz and Debertin 1996). USDA research maintains that CRP's negative effects have not persisted as improved recreational opportunities and related economic development grew from wetland and other conservation efforts (Sullivan et al 2004). This argument is lost on Montana's rural residents who have witnessed dramatic population and economic decline while as much as 25% of croplands are retired (Thackeray, 2005).

makers to reexamine federal funding strategies. The current approach, which equates rural welfare with agricultural productivity, “excludes the majority of the rural population from experiencing the political, economic, and social benefits of public sector support” (Bregendahl and Flora, 2003, p. 2).

*Economic change and depopulation in Western states*

During the 1980s, Western states lost high wage jobs in extraction industries such as timber and mining, and rural job markets shifted towards self-employment and service positions (Hamel and Schreiner, 1990). This accelerated the rural population loss that continued through the 1990s in counties with agricultural-based economies (Von Reichert and Sylvester, 1997). Reductions in rural population and increases in median age reduced the overall percentage of earnings from wages or salaries, and increased earnings from investment, rent and transfers (Bureau of Economic Analysis, 2006). The emerging “New West” economy depended on service sector jobs as the largest source of personal income, followed by non-wage income. More than 60% of transfer income was age-related (e.g. Social Security, retirement)—a reflection of the aging rural population (Sonoran Institute, 2006).

Rural regional migration is stimulated by the attraction of location-fixed amenities as well as by economic gain (Knapp and Graves, 1989). Rural natural amenities such as mild climate, streams and lakes, hills and mountains attract population growth, and Montana counties that rated high in natural amenities were able to leverage higher rent prices and lower wages. Montana migrants tended to evaluate potential destinations based on the size of their own hometowns: Rural migrants were more likely to be repelled by

high rents, while metropolitan migrants were more likely deterred by low wages (Von Reichert and Rudzitis, 1994).<sup>4</sup>

In Northern Plains counties, school enrollment plummeted as people of childbearing age left in the greatest numbers. School closures brought loss of community identities, social networks, and good paying jobs (Tobin, 2005). Towns initiated a series of economic development enterprises to create employment and slow population decline. Like residents of other rural regions in America, rural Montanans struggled to secure new jobs in agricultural cooperatives and value-added agricultural production, construction and light manufacturing, cultural heritage and tourism, and corrections (Fort Belknap Indian Community Council, 2005; Larcombe, 2005; MacDonald, 2006; Montana Department of Commerce, Montana Promotions Division, 2005a; Schliesman, 2005). Some regions of the state, including some reservations, experienced economic growth due to a boom cycle of coal, oil and natural gas extraction (Ockert, 2006).

Communities that attempted to capitalize on local history by developing museums and sites to showcase archaeological remains, agricultural machinery, Western art, and frontier society often promoted a grass-roots narration that placed the community's collective identity squarely in Montana's fabled "Wild West" experience:

We invite you to step back in time with us, as much as 100 years ago, into the Sporting Eagle Saloon, a turn-of-the-century honk where cowboys gambled, kicked up their heels and drank good old-fashioned rot-gut. Join us as we saunter along the streets...see an opium den (one of three known to have existed in the

---

<sup>4</sup> An analysis of Canadian rural-urban migration in the 1990's described general migration patterns for an entire nation, whose rural-urban and urban-rural migration patterns were in relative balance and led to little change in proportion of Canadians living in rural areas. The study concluded that migrants moved to improve economic and social circumstances for themselves and their families, especially to obtain better paying jobs. Those who were unemployed and accessing government unemployment benefits were most likely to migrate; they expected to work more and improve their income in their target destinations, but success depended on the nature of their new labor market. Larger economic gains were observed for migrants who moved greater distances (Audas and McDonald, 2004).

early days), a Chinese laundry, an ethnic restaurant and, of course, a bordello. (Montana Department of Commerce Montana Promotions Division, 2005b)

Today 29 of Montana's 56 counties have lower populations than they had early in the 1900s, and some county populations have reduced by half. During the 1990s, 23 agricultural counties continued to lose population even while state population grew by 12.9% (Montana Department of Commerce, Census and Economic Information Center, 2001). At the time of the 2000 U.S. Census, Montana had a total population of less than one million and an average population density of 6.2 people per square mile (Montana Department of Commerce, Census and Economic Information Center, 2001; U.S. Census Bureau, 2000b). Over half (54.1%) of residents lived in urban areas: 26% lived in one of the three urbanized areas (Great Falls, Missoula and Billings) and 28.1% lived in urban clusters of more than 2,500 people. Of the 46% of Montanans who lived in rural areas, less than one tenth (9.6%) lived on farms (Montana Department of Commerce, Census and Economic Information Center, 2000a; Montana Department of Commerce, Census and Economic Information Center, 2000b). Plains counties in the northern and eastern regions of the state demonstrated below average population densities, many with less than one person per square mile (Montana Department of Commerce, Census and Economic Information Center, 2001).

#### Native American expansion and confinement on the Northern Plains

##### *Expansion of Plains trade economy*

Semi-nomadic Native American tribes from the Midwest and Great Lakes regions participated in the lucrative European fur trade that began in the 1600s. They expanded their economic roles from suppliers to traders and middlemen under the influence of French and British contact in the 1700s and 1800s. Aided by possession of European

weapons and ammunition, some interior tribes developed a productive broker role by controlling trade of European goods to tribes in the west, and pelts and hides to Europeans. Eventually the environmentally damaging effects of the fur trade and the population pressures of European colonization compelled resident woodland tribes to relinquish hunting territories and move west in a domino-like process (McMillan, 1994; Clow, 1994).

Once tribes were armed with French and British firearms and transported by horses, they established themselves militarily and politically in the regions of Montana, North Dakota, Manitoba and Saskatchewan (Howard, 1977). The abundant game of Plains river basins offered furs and pelts similar to those of the woodlands, while bison provided the basis for a dramatically different subsistence strategy. In the annual migratory cycle of eastern woodland tribes, small bands hunted by themselves during winter months and drew together periodically throughout the rest of the year to hunt, gather wild plants, trade goods, exchange family members, and socialize (Howard, 1977; Mandelbaum, 1979). Woodland subsistence strategies translated well to the bison economy that exploded onto the Great Plains. Plentiful year-round resources from the skills of bison impoundment and hunting allowed an economic shift from seasonal self-sufficiency to full-year community-wide provisioning.

Historian Beth Ladow wrote that, under the fur trade economy, Plains tribes “transformed the bison hunt from a means of subsistence and small-scale trade into a system of resource extraction for a large trade economy” (LaDow, 2002, p.29). Diverse tribes found a powerful prosperity based on big game hunting. However, by the mid-1800s over-hunting caused severe bison herd reduction. Tribes faced economic and social

crises as species depopulation pushed them into starvation, communicable disease epidemics swept their camps, and military conflict intensified (Hogue, 2004; Clow, 1994).

*Reservation confinement and land allotment*

Tribes came under economic and military pressure from the Canadian and United States governments and European American settlers. The last attempt by a tribal confederacy to resist European colonization in North America occurred north of Montana in the unsuccessful Saskatchewan rebellion of 1885, led by Louis Riel and supported by Metis, Cree, Chippewa and Assiniboine (LaDow, 2004). As bison herds diminished and tribes were prohibited from continuing their hunting tradition of freely crossing the 49<sup>th</sup> Parallel border between the United States and Canada, many adapted to living near government forts to wait for distribution of needed food commodities and annual payments for land cessions (Hogue, 2004). By the late 1800s, European American land hunger, under the cloak of humanitarian civilization, violently forced tribes to cede hunting territories and retreat to government-defined reservations (Clow, 1994; Debo, 1991).

United States government policy isolated reservations from neighboring economies and limited tribes' economic options in repeated attempts to force adoption of the sedentary agricultural lifestyle favored by European American tradition. Congress passed the General Land Allotment Act on February 8, 1887 to oversee the survey of reservation lands, and their distribution to individual tribal members in minimally sized allotments (Champagne, 1994). "Surplus" acreage was made available to European



American landowners, who were able to seize control of coveted reservation assets (Harmon, 1998).

Land, timber, and irrigation waters were removed from reservations to provide resources for European American business interests. As European American settlers encroached on vital tribal resources, tribesmen became dependent on wage labor earnings and government subsidies. Economic underdevelopment and isolation from neighboring markets led to poverty and dependency on government rations (Clow, 1994). Cultural traditions suffered from federal policies that outlawed tribal spiritual practices and mandated boarding school education for Native American children (Talbot, 1994).

#### *Emergence of tribal self-government*

The 1934 Indian Reorganization Act (IRA) promised reservation communities increased home rule. The IRA advocated that tribes adopt a constitution in which the legislative branch controlled nearly all aspects of tribal government. Accountability would be assured by the popular election of council members, popular referenda, and petitioned constitutional amendments (Lopach, Hunter Brown, and Clow, 1998). Tribes that didn't adopt an IRA constitution were required by the Bureau of Indian Affairs to draft similarly structured bylaws (Clow, 1994). Although it did not grant tribal governments control over reservation resources, the IRA initiated a shift in federal policy towards increased self-determination. Greater tribal autonomy in self-government and protection of civil rights continued through the Indian Civil Rights Act of 1968, the Indian Self-Determination and Education Assistance Act of 1975, the American Indian Religious Freedom Act of 1978, and the Indian Child Welfare Act of 1978 (Fixico, 1994; Lopach et al., 1998).

*Contemporary economic conditions of Montana's Plains Indian reservations*

Like reservations across the nation that have been systematically segregated from regional and national economies for generations, Montana's Plains Indian reservations confront persistent poverty and high unemployment (Gonzales, 2000; Northwest Area Foundation, 2005). Reservations are similar to other small rural labor markets where social structures allow limited employment to be channeled to more "desirable" employees, reinforcing unemployment among less fortunate groups (Jensen, McLaughlin and Slack, 2000). Political factionalism and favoritism in tribal government hiring and other activities impede economic development in small, isolated reservation communities (Lopach et al., 1998; Pickering, 2004). Federal policies of racial segregation, economic isolation, and bureaucratic paternalism have undermined tribal control of land and natural resources, lured tribal labor to off-reservation employers, and dissuaded private investment in tribal business (Clow, 1994; Gonzalez, 2000; Trospen, 1994). Because of these conditions, few local businesses are available to serve residents and even wages earned on the reservation are spent off reservation in border town businesses (Miller, 2005).

Reservations demonstrate persistent poverty due to historic isolation of their economies and government regulatory control over their resources (Trospen, 1994). Nationally, they are typified by high unemployment, low household incomes, dependency on family assistance, overcrowded and inadequate housing, and high measures of poor health (Cornell and Kalt, 1998; Gonzalez, 2000). Reservation tribal members are now considered the poorest minority in the U.S. (Cornell and Kalt, 2000).

In contrast to neighboring European American communities, reservation communities in Montana and other Northern tier states have grown steadily since 1970, the first year for which U.S. Census Bureau records exist for reservations (see Table 1). Montana's Native American population is expected to double in the next 25 years due to high birth rates and return migration ("Reservation population," 2005). Montana regional newspapers reported the strong feelings of some reservation residents whose cultural and religious traditions led them to avoid the use of birth control, and to remain on or return to their community of origin in spite of persistent poverty and high unemployment (Miller, 2005). These trends produced young populations in reservation communities at the time of the 2000 U.S. Census. Five of the six Northern Plains reservation counties reported 30% to 46.6% gains in population under age 18. The youngest Native American population was in Chouteau County, home of Rocky Boy's Reservation of the Chippewa Cree Tribe. Chouteau County's Native American population (U.S. Census respondents who identified themselves as one race only) grew by 200% or more between 1990 and 2000 (U.S. Census Bureau, 2003). Younger populations create a high dependency ratio within communities, as productive adults must generate the economic resources necessary to meet the basic needs of dependent children and elders.

*Table 1. Montana Plains Indian reservation populations; 1980, 1990, 2000 (Montana Department of Commerce, Census and Economic Information Center, 2005a)*

	1980		1990		2000	
	1980	Native	1990	Native	2000	Native
	Total	American	Total	American	Total	American
	reservation	reservation	reservation	reservation	reservation	reservation
	population	population	population	population	population	population
Blackfeet	6,660	5,080	8,549	7,025	10,100	8,507
Crow	5,973	3,953	6,370	4,724	6,894	5,165
Fort Belknap	2,060	1,870	2,508	2,338	2,959	2,790
Fort Peck	9,921	4,273	10,595	5,782	10,321	6,391
N. Cheyenne	3,664	3,101	3,923	3,542	4,470	4,029
Rocky Boy's	1,650	1,549	1,954	1,882	2,676	2,578

#### European American and Native American fertility patterns: 1910 to 1980

Early European American population growth was driven by natural increase rather than immigration, as an extremely high birth rate exceeded the death rate. A decline in American fertility began in the mid-1800s and continued into the 1900s, a trend paralleled by a growing secularization movement, increased levels of educational achievement, and popular use of rhythm and barrier contraceptive methods (Leasure, 1989; Weeks, 2002). The subsequent fall of American birth rates below replacement levels in the early 1930s was attributed to the economic insecurity of the Great Depression. American parents continued to have smaller families through the 1940s. In the prosperity that followed World War II, Americans elected earlier marriage and shorter birth intervals, producing the dramatic “Baby Boom” that peaked in 1957. This was followed by a period of declining fertility as the small 1930s-born cohort reached reproductive age. Americans elected smaller family size as the ideal through the social

upheaval and economic changes of the 1970s. In the 1980s, a fertile “Baby Boomlet” was due largely to rising birth rates for women in their thirties and forties (Weeks, 2002).

Native American populations reached their lowest numbers from 1890 to 1900 (Thornton, Sandefur, and Snipp, 1999). Population recovery was underway by 1900 due to diminished threats of epidemic disease and tribal removal, but that recovery did not fully take off until life-expectancy rates rose after World War II (Shoemaker, 1999). From 1910 to 1980, national rates of Native American fertility remained higher than those for European Americans and African Americans, but followed national growth through the post World War II “Baby Boom,” 1970s “Baby Bust,” and 1980 “Baby Boomlet” (Shoemaker, 1999; Weeks, 2002). Fertility varied within the Native American population according to racial and ethnic self-identification (i.e. women who identified themselves in the 1980 U.S. Census as “American Indian” rather than “Multiple Ancestry” or “Indian Descent” demonstrated higher fertility); fertility also varied according to type of marriage (Indian women who intermarried with whites demonstrated lower fertility) (Thornton et al., 1999). As is the case with other social characteristics, variation among tribes defies a simple, single explanation of demographic experience (Shoemaker, 1999).

In the mid-1970s, the protests of Native American physician Dr. Connie Pinkerton-Uri, along with demands by tribal members and Native American publications, led to a federal investigation into forced sterilization of women at Indian Health Services clinics and contract health facilities. In response to high Native American birth rates, IHS had encouraged sterilization as part of family planning services since 1965. However, critics alleged that much sterilization was being implemented without informed patient

consent during Caesarean births, natural labor, and random surgeries such as appendectomies. A 1976 General Accounting Office investigation of IHS records in four of 12 regional service areas over a three-year period documented the occurrence of sterilization without medical cause or with weak documentation of informed personal consent. A series of studies in the early 1970s revealed that physicians (largely European American males) felt motivated to limit births to low-income minority women in order to limit poverty and assist families to attain financial security. During this period, concurrent with the Johnson Administration's "War on Poverty," large numbers of African American and Hispanic women were also sterilized nationwide (Carpio, 2004, "Indian Health Service," 2000).

Sterilization abuse affected Native American communities on many levels: Negative psychological impacts led individuals into marital problems, drug abuse, alcoholism, and social estrangement; communities that suffered severely reduced birth rates also lost tribal prestige and census-based federal funding ("Indian Health Service," 2000). Following the earlier health care strategies of the Bureau of Indian Affairs, which were historically motivated by a federal agenda of assimilation and, later, termination (Campbell, 1989), the mistrust of contemporary Native American communities for IHS reproductive health services may have created *de facto* reduced access to family planning options for tribal members.

### Summary

Historically, households in both European American and Native American communities have been pressed to adapt to difficult economic conditions on the rural Northern Plains. Both contemporary populations rely on family assistance programs, education, and economic development ventures to create jobs, improve local economies, and encourage community vitality. Rural communities face uneven dependency ratios that challenge residents' abilities to secure adequate health care and other services. Because of their contradictory demographic trends, European American communities are stressed by a disproportionately large aging population while Native American communities support a disproportionately large population of young residents. Although both rural populations are historically isolated from health care service centers, contemporary tribal mistrust of Indian Health Services may create additional psychological and social barriers to reproductive health care access.

The next chapter sets forth the methods used in this study to measure and compare contemporary patterns of fertility and household economy in rural Northern Plains populations, and to identify social pressures and cultural traditions that affect individual fertility decisions.

## CHAPTER 4 - METHODS

This research model proposed a mixed methods approach that used both quantitative and qualitative data to test the following primary and secondary hypotheses:

$H_1$ : In an economically marginal rural area, fertility (the dependent variable) varies in direct relation to household use of communal economic strategies (the independent variable).

$H_0$ : In an economically marginal rural area, fertility (the dependent variable) demonstrates no relation to household use of communal economic strategies (the independent variable).

$H_2$ : In a community that experiences cultural and territorial instability, pronatalism (the dependent variable) varies in direct relation to community perception of children as an investment in future territorial permanence (the independent variable).

$H_0$ : In a community that experiences cultural and territorial instability, pronatalism (the dependent variable) demonstrates no relation to community perception of children as an investment in future territorial permanence (the independent variable).

### Data used to test hypotheses

Quantitative data were used to test  $H_1$ , and qualitative data further documented and enriched quantitative findings. Quantitative data from state government records and the federal decennial survey described central tendency and distribution for indicators of fertility (the dependent variable) and household economic strategies (the independent variable) by race, at the level of county census district, for six Plains Indian reservation counties. Quantitative data also measured correlation among fertility and economic variables in 37 rural Montana counties. Qualitative data collected during the course of



ethnographic fieldwork was used to document individual fertility behaviors and economic strategies in two research communities.

The secondary hypothesis was explored using qualitative data that documented individual responses and behaviors regarding the valuation of children as agents of territorial permanence. Table 2 demonstrates the organizational model used to structure data collection and analysis.

(See Appendix A – Definitions of terms.)

*Table 2.* Theoretical and operational levels of research model. (Based on LeCompte and Schensul, 1999)

	Structure	Pattern	Unit	Fact
Domain(s)	Economy, demography			
Factor(s)		Formal/informal economies, reproductive behaviors		
Variable(s)		Values of communality, pronatalism, territorial permanence	Household economic characteristics, fertility characteristics	
Item(s)				<ol style="list-style-type: none"> <li>1) Household size and composition</li> <li>2) Household economic activity (communal strategies, including public assistance)</li> <li>3) Fertility indicators (birth rate, age of mother, birth intervals, size of families, use of birth control, abortion)</li> <li>4) Territorial permanence (outmigration, return migration)</li> <li>5) Perceived value of children</li> <li>6) Perceived value of community permanence</li> </ol>

## Quantitative analysis

### *Sample selection*

In order to compare fertility and economic trends in neighboring populations, a sample of six rural counties was selected. These are the sites of Montana's six Plains Indian reservation agencies. They include 21 county census districts (excluding one district within the boundaries of Glacier National Park). The counties, their county seats, the reservations and resident tribes are listed in Table 3.

Table 3. County, county seat, reservation and tribe for six Plains Indian communities.

County	County seat	Reservation	Tribe(s)
Big Horn County	Hardin	Crow	Crow
Blaine County	Chinook	Fort Belknap	Assiniboine and Gros Ventre
Glacier County	Cut Bank	Blackfeet	Blackfeet
Hill County	Havre	Rocky Boy's	Chippewa-Cree
Roosevelt County	Wolf Point	Fort Peck	Assiniboine and Sioux
Rosebud County	Forsyth	Northern Cheyenne	Northern Cheyenne

To identify patterns of correlation between fertility and household economy across a broader depopulating rural area not limited to reservation counties, a sample containing 37 rural counties was selected. All of these counties are in Montana, and lie east of the Rocky Mountains. Both Cascade County and Yellowstone County were excluded due to metropolitan populations in Great Falls and Billings.

### *Quantitative data collection*

In both  $H_1$  and  $H_2$ , the dependent variable was fertility. Quantitative fertility data are collected annually by the Montana Department of Public Health and Human Services Office of Vital Statistics (OVS), and describe all reported birth events in Montana. Data

sets are available by race and age of mother at the county level. (Unfortunately for this study, fertility data is not collected for reservation communities.) OVS data collected over an 18-year period from 1990 through 2007 documented fertility trends for European American and Native American populations in six rural reservation counties. OVS data also provided a “snapshot” of fertility indicators across 37 rural counties for the year 1999. Quantitative indicators of fertility are listed below:

- a) Annual pregnancy rate per 1,000 women aged 15 through 44;
- b) Annual birth rate per 1,000 women aged 15 through 44;
- c) Annual abortion rate per 1,000 women aged 15 through 44;
- d) Age of mother at birth;
- e) Birth interval between reported and previous births;
- f) Number of children ever born to mother at time of reported birth (i.e. parity).

(See Appendix A – Definition of terms.)

The independent variable in  $H_I$  was communal household economic strategies. Therefore quantitative data on household economic characteristics collected by the United States Census Bureau (USCB) was used. These data were collected in 1999, and released in the 2000 U.S. Census. All variables were sorted by race of head of household by selecting USCB categories of European American (“white”) and Native American (“American Indian Alaska Native”) for self-described “one-race only” heads of households. USBC data were generated at two geographic levels: For analyses of populations within six Plains Indian reservation counties, data sets described county census districts; for analyses of 37 rural counties, data were at the county level.

Quantitative indicators of demographic characteristics and household economic strategies are listed below:

- a) Median age of population;
- b) Median family size;
- c) Median family income;
- d) Median household size;
- e) Median household income;
- f) Per capita income;
- g) Percentage of population living in households that include grandparents and grandchildren;
- h) Percentage of population living in households that include extended relatives,.
- i) Percentage of households receiving income from public assistance;
- j) Percentage of population with income below poverty.

Data from OVS and USCB are interval (e.g. population numbers, households, families, median age, median income), ratio (e.g. birth rates, mean household size, percentage of population by race), nominal (e.g. race, household composition), and ordinal (parity). Data from OVS are based on a count of reported fertility events for the entire state population. Data from the USCB Summary File 1 (SF1) are also based on a count of the entire population. However, Summary File 3 (SF3) data are based on a 1-in-6 sample that has been weighted to represent the total population. Data sources are marked for all variables listed in the following report.

### *Quantitative data analysis*

$H_1$  was tested using the Open Stat 4 program (Version 8, Revision 9) for the following analyses:

- a) Distribution parameter estimates to describe central tendency and distribution;
- b) Independent samples two-tailed t-tests for comparison of means;
- c) Correlation analysis to measure association between variables;
- d) Stepwise multiple regression to express proportion of variance exerted by independent variables (economic characteristics) on the dependent variable (indicators of fertility, birth rate and median age);
- e) Principle components analysis to identify underlying patterns of variation between dependent and independent variables.

The results of quantitative analyses are reported in Chapter 5.

### *Limitations of the quantitative data*

There are some limitations to the quantitative data sets. Nominal categories representing race may not indicate individual affiliation with European or tribal culture. Race of head of households may not indicate the race or cultural affiliation of household members. The “one race-only” category used by USCB does not include multiracial individuals. Not all individuals identified as Native American in the data sets are reservation residents or tribal members. Very low population numbers in rural counties may skew measures of central tendency. I accepted these shortcomings because OVS and USCB provided the most comprehensive quantitative data available on births and household economic characteristics.

## Qualitative analysis

### *Sample selection*

Qualitative data was collected in two communities situated in close proximity to each other. These communities demonstrate the contemporary demographic trends that typify European American towns and Indian reservations on the Northern Plains.

Ethnographic research began in September 2007 through local contacts with whom I had worked previously. Over 12 months, reputational case selection was used to identify 40 family advocates, community leaders, and individuals who were knowledgeable about the needs of families. They comprised a sample of key informants who included preschool, secondary, and post-secondary educators; administrators of state and tribal family assistance programs; professional staff of youth programs; religious leaders; business representatives; health professionals; post-secondary students; and non-professional workers. As a sample, they showed diversity in social stratification by age, educational attainment, income level, residency history, and ethnic background. Each key informant participated in a semi-structured interview lasting from one to two hours.

A second sample of 46 research subjects completed shorter semi-structured interviews from June to August 2008. These subjects met three criteria for inclusion that ensured they had comparable childrearing obligations and financial resources: (a) They were residents of the local communities; (b) they were parents or guardians of at least one young child; (c) they participated in at least one government-funded service for low-income families. This nonrandom sample was constructed by reputational case selection (i.e. subjects suggested by key informants) or chain case selection (i.e. recommended by subjects in similar situations). Its purpose was to provide information about economic

options—formal and informal, family and institutional—available to low-income parents in both communities, and the effects of these options on fertility behavior. The sample included 36 mothers, eight grandmothers/great aunts, and two fathers, and represented three subgroups based on race and residence:

- 1) Fifteen (33%) were European American parent/guardians who lived in town and participated in a state-funded child care program. Of these, 14 were mothers and one was a grandmother.
- 2) Thirteen (28%) were Native American parent/guardians who lived in town and participated in the tribal TANF program. They were enrolled tribal members who had left Northern Plains reservation communities to access education or employment in town. Eleven (11) respondents in this group were mothers; one was a grandmother and one was a great aunt (categorized here as a grandmother).
- 3) Eighteen (39%) were Native American parent/guardians who were residents of the reservation community and participants in the tribal TANF program. At least seven attended classes at the tribal college. Eleven (11) were mothers, five were grandmothers and two were fathers.

The purpose of this sample was not to provide an economic cross-section. Rather, it focused my inquiry on individuals and households who were under pressure to meet children's needs without financial resources. Unlike my sample of key informants, many of whom were professionals and community leaders, the low-income parents provided a viewpoint from which fertility and economic issues were immediate and critical. Low-income parents exemplified the reality of community support for pronatalism, rather than



the spoken ideal. Interviews with low-income parents offered a counterpoint to community boosterism, and therefore provided a valuable research perspective. For this reason I accepted the potential of class bias engendered by economic scarcity in this sample.

### *Qualitative data collection*

Ethnographic data were gathered over a one-year period from September 2007 through August 2008 by three methods: (a) semi-structured interviews with community key informants; (b) semi-structured interviews with low-income parents and guardians who receive public assistance; (c) participant observation in local community events and settings.

*Procedure for ethnographic interviews.* As required by the University of Montana Institutional Review Board, all interview subjects read and signed a release form documenting their assent to the voluntary interview, its assumed harmlessness, and a guarantee of anonymity. Interviews followed a questionnaire that was formally approved by the University of Montana Institutional Review Board. Questions were later reviewed and approved through an informal process with a tribal leader who advocated the right of the tribe to control research within its community.

Long and short interviews introduced questions about community policies and individual practices reflecting pronatalism, ideal fertility, ideal household economic traits, community support for childrearing, the value and cost of children, and local attitudes towards territorial permanence. In both communities, questions were field tested with early key informants. (See Appendix B for interview questions.) Topics that provoked informant discomfort were noted. These included beliefs and judgments about

race, social status, political beliefs, religious knowledge, and sexual attitudes in the local community. In two situations Native American informants expressed reluctance to divulge tribal spiritual beliefs and practices; efforts have been made to avoid inclusion of sensitive information here. At the end of the research period, early key informants were revisited and asked to review conclusions and evaluate the accuracy of documented impressions.

Interviews with key informants took place from September 2007 through August 2008. Interviews lasted from one to two hours. They were conducted in the homes and workplaces of subjects, or in public meeting places. They were tape recorded, and transcribed on the day of the interview.

Interviews with low-income parents and guardians took place from June through August 2008. Most were arranged in advance by program staff or a tribal college instructor. They were conducted in human service offices, college classrooms, and child care sites. Parents indicated their reluctance to be tape-recorded. Instead, a hard-copy form was used to document comments in five areas of inquiry that included fertility history, household composition, employment status, income sources, and sources of support for childrearing. All interview notes were transcribed on the day of the interview.

*Procedure for participant observation.* Neither community provided easy entrée to a white female urbanite as a participant observer. Because of my greater familiarity with European American culture, I elected to enter town life through social contacts with previous acquaintances, new neighbors, and local establishments. I participated in art classes, attended community concerts, volunteered in a hippo-therapy program for children with disabilities, and plunged into the vibrant Saturday morning garage sale

scene. Later I was hired by a regional non-profit to implement evaluative interviews with program participants.

Being less familiar with the reservation community, I took more time to enter the community before beginning interviews there. I attended four semesters of indigenous language, religion and philosophy, and history at the tribal college. I also volunteered as an aide in a Head Start preschool classroom whose teacher was considered an expert source on issues related to traditional parenting. Finally, I wrote a series of grants for a tribal TANF program, whose director envisioned the development of a parenting support program for her clients.

Ethnographic field notes were taken daily. Relevant documents were archived electronically and in hard copy.

#### *Qualitative data analysis*

$H_1$  and  $H_2$  predicted that dependent variables of fertility and pronatalism were affected by independent variables of household economic strategies (self-sufficient versus communal) and perception of children as investments in territorial permanence (children as assurance of community continuity). Therefore this study required an analysis of individual beliefs and community attitudes that affect individual fertility decisions.

Individual responses were hand-coded for concepts of pronatalism (ideal age of parents, ideal family size, ideal birth intervals, value of children, cost of children); household composition (nuclear family, multi-generational, extended family, nonrelatives); sources of parenting support (family members, friends and neighbors, community institutions); sources of household income (wages, transfer income, public

assistance); the value of children (experiential, economic, social, spiritual), and territorial permanence (ideal outmigration, ideal continued residence, ideal return migration, importance of land ownership, value of land).

Similar concepts were grouped into themes that described shared beliefs about the definition of adulthood, the value of children, the role of family and community in childrearing, economic responsibilities and priorities, and the value of community permanence. Correlation of recurring themes within communities was noted, as were differences in thematic patterns between European American and Native American populations. These are described in Chapter 6.

#### *Limitations of the qualitative data*

Entrée to both communities was uncomfortable and confusing until patterns of regional racism, locally constructed history, place-based loyalty, and culturally influenced styles of interpersonal communication became recognizable.

The town was atypical of the outlying communities because its relatively dense population had protected it from severe population loss. It functioned as a micropolitan hub for regional health, education, retail and transportation services. Institutions such as churches and social service agencies that were no longer available in outlying communities were still active in town. The town was a destination for migrants when they left smaller communities; this immigration included the unemployed, workers and retirees. Nevertheless, town residents, public events, politics and media outlets demonstrated a profoundly rural viewpoint that contrasted dramatically with my own urban perspective.

Some viewpoints were underrepresented by members of my sample and were therefore missing from my study. All but one European American subjects, including key informants and low-income parents, were town residents. They did not represent the feelings and attitudes of homestead descendents or farm families who have remained on their land; in this sense the sample was biased towards an entrepreneurial worldview and did not include any yeoman values of family attachment to land or responsibility of inheritance. Neither did most European American informants represent the perspective of the many outmigrants who had left the town to live in more urban communities. In fact, to many of my informants this town *was* an urban center, for they had moved from smaller towns within the region.

The Native American sample included both town and reservation residents. Approximately one-third of the low-income parents interviewed were enrolled tribal members who lived in town; another third were tribal members who lived on the reservation. This cross-section of low-income informants provided insight into cultural domestic patterns that were enacted in both the reservation and town. Most Native American key informants lived on the reservation; only one tribal informant worked on the reservation but elected to live in town. Several informants had lived away from the reservation and returned; several planned to leave the reservation for school or work, but return in the near future. Like the European American sample, the Native American sample lacked representation by outmigrants. Further, because most Native American key informants were reservation residents, this sample might be biased towards tribal traditionalism. The feelings and attitudes of tribal members who chose to leave

community traditions behind in favor of material gain in more urban settings was not represented.

Throughout my fieldwork, I returned to historic and contemporary ethnographies that documented economic, family and childrearing traditions of both Northern Plains farm communities and tribes. These assisted me to better understand new social situations in which I was immersed.

## CHAPTER 5 - QUANTITATIVE FINDINGS

### Description of distribution and central tendency

The quantitative data described differences between European American and Native American populations by comparing indicators of fertility and household economy in six rural counties that included Plains Indian reservation agencies.

#### *Indicators of fertility*

Table 4 records means and standard deviations for fertility indicators, with differences between populations tested by independent samples two-tailed t-tests. Pregnancy rates were significantly lower for European American mothers than for Native American mothers. Assuming no differences in natural fertility between the two populations, this indicated variation in the reproductive behaviors known as proximate determinants of fertility: European American women may delay first sexual activity and/or marriage; they may experience longer or more frequent interruptions in sexual activity (for example, disruption of marriage or sexual relationships); they may have better access to, or be more inclined to use, birth control; they may wait longer for conception due to use of birth control or other factors that could cause decline in fecundability, elect a longer birth interval between children by extended postpartum breastfeeding, extended postpartum abstinence, or birth control methods, and/or limit pregnancies in later life.

The profound difference in pregnancy rates held true at the state level as well. Native American pregnancy rates for 1990 through 2007 averaged 115.7 births per 1,000 women, compared to an average of 69.1 births per 1,000 women for the European American population statewide (Montana Department of Public Health and Human Services, Office of Vital Statistics).

*Table 4.* Comparison of the means for fertility characteristics for six reservation counties, 1990 through 2007. (Montana Department of Public Health and Human Services, Office of Vital Statistics.)

	European American			Native American			<i>p</i> < .05	<i>df</i>
	<i>n</i>	<i>M</i>	( <i>SD</i> )	<i>n</i>	<i>M</i>	( <i>SD</i> )		
Pregnancy rate <sup>a</sup>	18	68.2	(3.5)	18	130.0	(11.3)	*	34
Birth rate <sup>a</sup>	18	60.0	(3.4)	18	119.3	(10.9)	*	34
Abortion rate <sup>a</sup>	18	7.8	(1.3)	18	10.0	(1.5)		34
Pregnancy rate by age of mother in years <sup>b</sup>								
<14	6	.6	(0.3)	6	2.8	(1.0)	*	10
15-17	6	23.2	(5.6)	6	84.3	(14.1)	*	10
18-19	6	97.5	(25.4)	6	245.7	(15.7)	*	10
20-24	6	167.9	(28.3)	6	255.3	(21.9)	*	10
25-29	6	160.8	(19.6)	6	206.2	(38.3)	*	10
30-34	6	92.3	(10.4)	6	115.2	(24.8)		10
35-39	6	34.6	(2.8)	6	49.9	(14.9)	*	10
40-44	6	6.8	(1.2)	6	10.2	(4.0)		10
Birth interval (% of all births) <sup>b</sup>								
Less than one year	6	1.6	(0.4)	6	3.7	(0.7)	*	10
One to two years	6	14.9	(1.8)	6	19.5	(3.3)	*	10
Two to three years	6	15.4	(1.2)	6	13.9	(0.7)	*	10
Three years or more	6	28.0	(3.3)	6	28.4	(2.4)		10
Parity (% of all births) <sup>b</sup>								
One child	6	37.5	(1.2)	6	31.3	(2.0)	*	10
Two children	6	30.6	(2.1)	6	24.9	(1.0)	*	10
Three children	6	17.9	(0.5)	6	19.2	(1.0)	*	10
Four children	6	8.2	(0.8)	6	11.80	(1.1)	*	10
Five children	6	3.1	(1.2)	6	6.6	(1.0)	*	10
Six children	6	1.3	(0.4)	6	3.1	(0.9)	*	10
Seven children	6	.63	(0.4)	6	1.7	(0.6)	*	10
Eight+ children	6	0.6	(0.3)	6	1.3	(0.9)		10

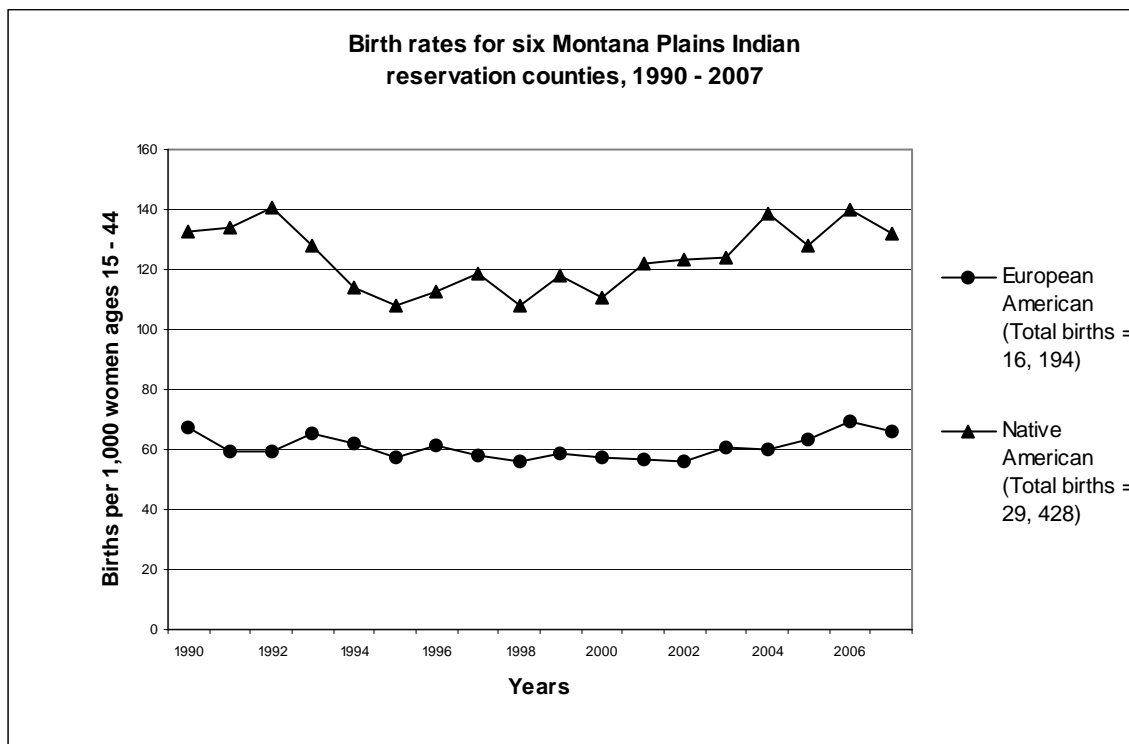
*Note.* All fertility rates are per 1,000 women, ages 15 - 44. <sup>a</sup>Sample includes years 1999-2007. <sup>b</sup>Sample includes rural reservation counties.

\**p* < .05. Independent samples two-tailed t-test.



The trend persisted as European American women demonstrated significantly fewer births per 1,000 women than Native American women in the same counties (see Figure 2).

*Figure 2.* Birth rates for six Montana Plains Indian reservation counties by race of mother, 1990 through 2007. (Montana Department of Public Health and Human Services, Office of Vital Statistics.)



*Note.* Based only on reported pregnancy outcomes. Does not include induced abortions performed outside Montana on Montana residents, early fetal deaths (less than 20 weeks), or miscarriages.

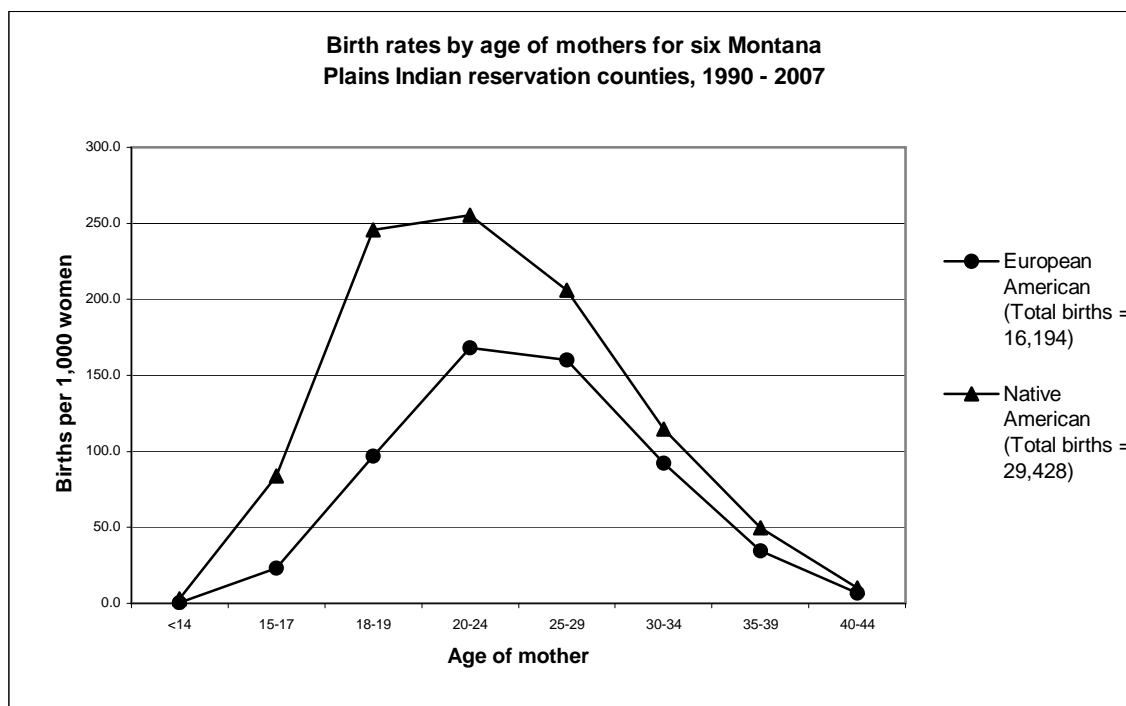
The abortion rates for European American and Native American women were not significantly different over the time period 1990 through 2007 (see Table 4). However, because the mean Native American pregnancy rate was more than twice that of European American women, Native American pregnancies were in fact less likely to end in abortion. Only 7.8% of Native American pregnancies were aborted compared with 11.7%

of European American pregnancies. This may indicate that European American women had better access to, or were more likely to use, an induced abortion.

When age of mother was taken into account, birth rates for European American women were significantly lower than those of Native American mothers in all age categories except 30 - 34 years and 40 – 44 years (see Table 4). The disparity in birth rates was most pronounced for teen births from before age 14 through age 19. The rate of European American births to mothers ages 15-17 was approximately one-fourth that of Native Americans. This reflected a statewide trend of higher rates of early motherhood in reservation communities (Montana Department of Public Health and Human Services, Women's Health Section, 2001). It should be noted that 75% of all births to Native American teen mothers were to women aged 18-19, that is, of legal age.

European American and Native American birth curves projected different trajectories for younger mothers. Native American births gained numbers with teen mothers and peaked in the 20-24 age category; European American births gained numbers as mothers enter their 20s, and also peaked in the 20-24 age category. Birth rates in both populations dropped dramatically after age 30, as illustrated in Figure 3.

Figure 3. Birth rates for six Montana Plains Indian reservation counties by race and age of mother, 1990 through 2007. Montana Department of Public Health and Human Services, Office of Vital Statistics.



Note. Based only on reported pregnancy outcomes. Does not include induced abortions performed outside Montana on Montana residents, early fetal deaths (less than 20 weeks), or miscarriages.

The differences in birth rates by age of mother suggested several potential variables related to proximate determinants: Compared to Native American women in the six reservation counties, European American women in their teens may be less likely to become sexual active or get married; European American women in their teens may have better access to, or be more likely to use, birth control or induced abortion; European American women in their teens may be more likely to experience spontaneous intrauterine mortality, or may elect a longer birth interval through breastfeeding, birth control, or abstinence.

European American mothers were less likely than Native American mothers to space births closely (see Figure 4). Intervals of less than three years were more frequent

in Native American populations. Birth intervals of three years or longer did not differ significantly between populations (see Table 4). Fewer closely spaced birth intervals in European American populations may indicate that those mothers breastfeed for extended periods, extend postpartum abstinence, use birth control, or experience interrupted sexual relations.

*Figure 4.* Birth intervals for six Montana Plains Indian reservation counties by race and age of mother, 1990 through 2007. Montana Department of Public Health and Human Services, Office of Vital Statistics.

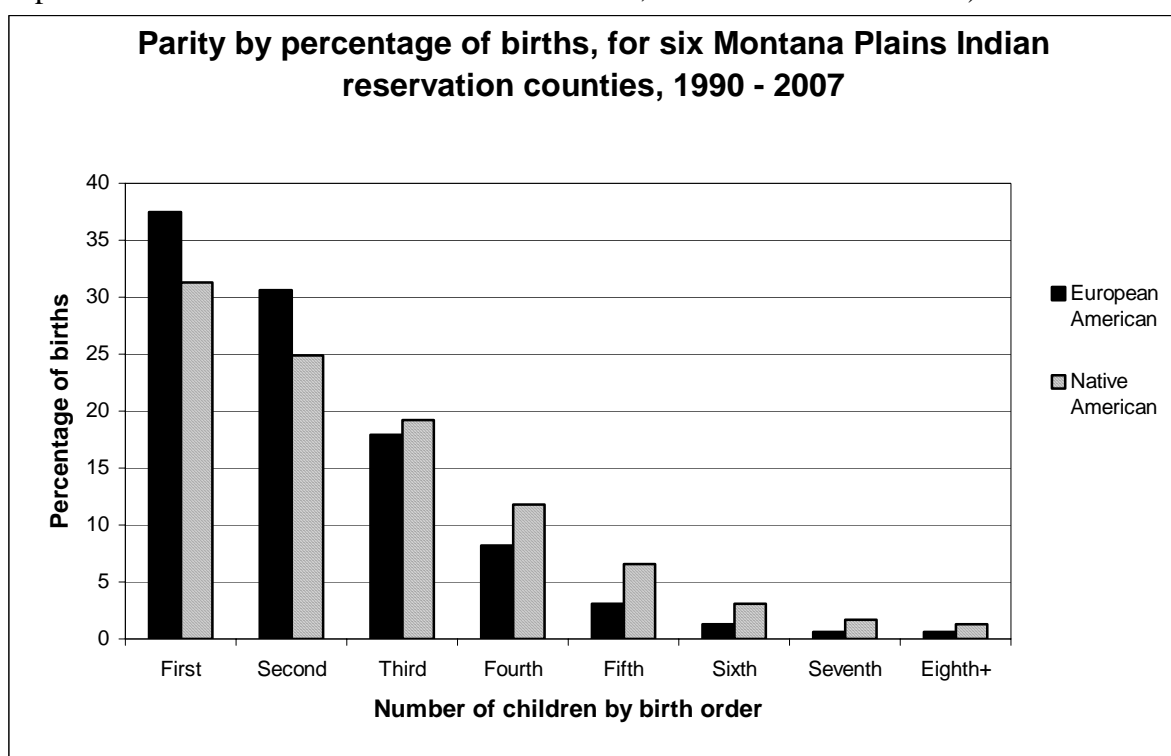


*Note.* Based only on reported pregnancy outcomes. Does not include induced abortions performed outside Montana on Montana residents, early fetal deaths (less than 20 weeks), or miscarriages.

High parity (number of children ever born to a mother) was less prevalent among European American populations (see Figure 5). Percentages of first and second children were higher for European American mothers; percentages of third through seventh children were higher for Native American mothers. There was no statistical difference in

rates of parity for eight or more children (see Table 4). Differences in parity might indicate that European American mothers are more likely to prevent conception of third and subsequent children; to experience decreasing fecundity due to delayed fertility; to experience earlier or medical menopause; or to cease sexual activities in the later stages of their reproductive life.

*Figure 5.* Comparison of parity for six reservation counties, 1990-2007. (Montana Department of Public Health and Human Services, Office of Vital Statistics)



*Note.* Based only on reported pregnancy outcomes. Does not include induced abortions performed outside Montana on Montana residents, early fetal deaths (less than 20 weeks), or miscarriages.

#### *Indicators of household economy*

Previous studies of households in rural areas showed that they often used economic strategies not seen in neighboring urban areas such as expanded household size, household composition not limited to nuclear family members, and household income sources not from wages (Schmink 1984). For the purposes of this study,

quantitative indicators of communal household economy (the independent variable for  $H_1$ ) included multigenerational households, extended family households, and income from public assistance (see Table 5). Additional quantitative variables described family size, household size, median age, and income.

Median age and family size result in part from fertility trends. As birth rates increase, median age decreases. The much higher median age among the European American population reflects decreasing fertility and outmigration of young adults. Conversely, high birth rates among Native American populations generate low median age and larger family size.<sup>4</sup>

Median income was lower in Native American populations, whether it was defined at the household, family or individual level. The differences in income between populations were so strong that Native American median household income remained lower despite larger household size, and family income remained lower despite larger family size. The comparison of income by various measures demonstrated consistently that, in 1999, Native American households were making ends meet with less cash income than neighboring European American households.

---

<sup>5</sup>The youngest community in the nation in the 2000 Census was the village of Bonneau at Rocky Boy's Reservation in Chouteau County, where median age in 1999 was 13 years (Ivanova, 2001).

*Table 5.* Comparison of the means for household economic characteristics and community characteristics for six reservation counties, 1999. (U.S. Census Bureau, 2000.)

	European American			Native American			<i>p</i> < .05	<i>(df)</i>
	<i>n</i>	<i>M</i>	<i>(SD)</i>	<i>n</i>	<i>M</i>	<i>(SD)</i>		
Percent single race population living in household with grandchild <sup>a</sup>	21	1.5	(1.2)	20	8.9	(8.2)	*	39
Percent single race population living in household with extended family relative(s) <sup>a</sup>	21	0.8	(0.7)	20	4.5	(6.0)	*	39
Percent single race population with income below poverty <sup>b</sup>	20	16.3	(7.4)	13	38.5	(8.7)	*	31
Percent of all households with public assistance income <sup>b</sup>	20	2.0	(1.2)	13	7.8	(3.0)	*	31
Median age <sup>a</sup>	21	41.3	(2.9)	20	27.0	(11.1)	*	39
Mean family size <sup>a</sup>	21	3.0	(0.2)	18	3.8	(0.8)	*	37
Mean household size <sup>a</sup>	21	2.5	(0.3)	20	3.12	(1.2)	*	39
Median family income <sup>a</sup>	21	\$36,250	(9,188)	18	\$26,883	(12,571)	*	36
Median household income <sup>a</sup>	21	\$30,752	(7,022)	17	\$22,044	(8,485)	*	36
Per capita income <sup>a</sup>	20	\$16,049	(2,593)	13	\$9,613	(5,017)	*	36

*Note.* *n* = County Census Districts with data reported. <sup>a</sup>SF-1, U.S. Census Bureau, 2000. <sup>b</sup>SF-3, U.S. Census Bureau, 2000.

\**p* < .05, Independent samples two-tailed t-test.

Household characteristics illustrated the economic strategies used by Native American families to adapt to a less cash-rich local environment. For example, household size was significantly larger for Native American populations (see Table 5).<sup>6</sup> This might reflect several converging trends: High birth rates generate greater numbers of children that increase family size and the size of family households; household size may be further increased by the addition of grandparents, extended family members and non-relatives. Larger household size is assumed to imply a broader sharing of expenses and duties across larger social groups.

Native American populations were more likely to live in multi-generational family households. The percentage of European American population in a family households that included a grandchild was 1.5%; Native Americans were almost six times more likely to live in a family household that included a grandchild (8.9%). Native American family households were almost six times more likely to include an extended family relative. Less than 1% (0.8%) of European American family households reported extended family composition, compared with 4.5 % of Native American family households.

Households headed by Native Americans were almost four times more likely to receive income from public assistance than European American-headed households. This reflected the high unemployment and low incomes that confront reservation populations; at the same time, participation in tribal assistance programs demonstrates a Native

---

<sup>6</sup> The 2000 Census value for mean household size may be low, as tribes nationwide have charged the USCB with underestimating their populations. Officials believe that families are reluctant to report all members for fear of violating government regulations for housing and health. The USCB is making an outreach effort in advance of the 2010 Census to assure confidentiality, and urge tribal governments to mobilize their communities to participate in census-taking (Brokaw, 2006). My field notes remind me that a housefire on the reservation during the winter of 2008 displaced a 16-person household.



American tradition of wealth redistribution through shared provisioning and collective ownership of assets (Champagne, 2000; Champagne, 2004).

Rural families with children under the age of five were more likely to live in poverty than those without children, regardless of the community in which they lived (Lichter, Roseigno and Condrón, 2003). However, the data showed that the percentage of Native Americans with income below the poverty level was more than double that of European Americans. By every measure, Native Americans had significantly lower incomes than their European American neighbors (see Table 5).

*Summary of descriptive comparisons*

First, this descriptive analysis showed that Native American populations in Montana's six Plains Indian reservation counties demonstrated higher fertility than their European American neighbors, as evidenced by the following characteristics:

- 1) Native American mothers had higher pregnancy and birth rates.
- 2) Native American pregnancies were less likely to end in abortion.
- 3) Native American mothers were less likely to delay births, and have more children until age 30.
- 4) Native American births were more likely to be closely spaced.
- 5) Native American mothers were more likely to give birth to three or more children.
- 6) Native American populations had lower median ages.
- 7) Native American families were larger.

Second, Native American households in six Plains Indian reservation counties were more likely to demonstrate communal economic strategies than their European American neighbors, as evidenced by the following characteristics:

- 1) Native American households were larger.
- 2) Native Americans were more likely to reside with a grandchild.
- 3) Native Americans were more likely to reside with extended family relatives.
- 4) Native American households were more likely to receive income from public assistance.

Finally, Native American residents of six Plains Indian reservation counties had consistently less income than European American residents, as evidenced by the following characteristics:

- 1) Household income, family income and per capita income were lower for Native Americans.
- 2) Percentage of population with income below poverty was higher for Native Americans.

#### Tests of correlation between fertility and household economy

In order to determine that high fertility in an otherwise depopulating rural area is directly influenced by communal household economic strategies, as predicted by  $H_1$ , I analyzed the relationship between standard measures of fertility and reliance upon communal economy. For these tests I used a data set representing a depopulating rural area of 37 rural counties for the year 1999. I elected to use a larger region not limited to reservation counties to better reflect the broad geographic parameters set forth in  $H_1$ , “an economically marginal rural area.” Because ethnicity is not a direct measure of fertility or

an indicator of economic strategy, I did not include it as an independent variable in this test. (See Appendix C – Data for 37 rural counties.)

### *Correlation*

The strongest positive correlations among the variables analyzed were family size with household size ( $r = .974$ ,  $p = 0.00$ ), and grandparent households with household size ( $r = .913$ ,  $p = 0.00$ ). The strongest negative correlations were median age with family size ( $r = -.916$ ,  $p = 0.00$ ), and median age with grandparent households ( $r = -.861$ ,  $p = 0.00$ ).

The strong correlations generated by household size, family size, and median age indicated possible multicollinearity (tautological influence) between variables as displayed in Table 6.

*Table 6.* Correlation between key characteristics of fertility and household economy for 37 Montana Northern Plains rural counties, 1999. (Montana Department of Public Health and Human Services Office of Vital Statistics, 2008; U.S. Census Bureau, 2000)

	Mean annual birth rate <sup>a</sup>	Median age <sup>b</sup>	Percent living with grand- child <sup>b</sup>	Percent living with extended family <sup>b</sup>	Mean family size <sup>c</sup>	Mean house- hold size <sup>c</sup>	Percent house- holds using public assist. <sup>c</sup>
Mean annual birth rate <sup>a</sup>	1.000*	-.444*	.583 *	.421*	.435*	.404*	.583 *
Median age <sup>b</sup>		1.000*	-.861*	-.846*	-.916*	.905*	-.831*
Percent living with grandchild <sup>b</sup>			1.000*	.880*	.909*	.913*	.834*
Percent living with extended family <sup>b</sup>				1.000*	.852*	.861*	.836*
Mean family size <sup>c</sup>					1.000*	.974*	-.674*
Mean household size <sup>c</sup>						1.000*	.831*
Percent households using public assistance <sup>c</sup>							1.000*

*Note.* Birth rate is per 1,000 women ages 15-44. <sup>a</sup>Montana Department of Public Health and Human Services, Office of Vital Statistics. <sup>b</sup>SF-3, U.S. Census Bureau, 2000. <sup>c</sup>SF-1, U.S. Census Bureau, 2000. \* $p < .05$  Independent samples two-tailed t-test.  $n = 37$ .  $df = 36$ .

### Regression

The primary hypothesis ( $H_1$ ) predicted that in an economically marginal rural area, fertility (the dependent variable) varied in direct relation to household use of communal economic strategies (the independent variable). To analyze this relationship, the dependent variable birth rate was regressed on these independent variables: grandparent households, extended family households, public assistance, and per capita income. The high correlation coefficient between household size and family size ( $r = .974$ ,  $p = 0.00$ ) indicated possible multicollinearity in these two variables; therefore they were not included as independent variables in the regression model. Table 7 shows the results of the regression test; Figure 6 displays the positive linear relationship between birth rate and public assistance.

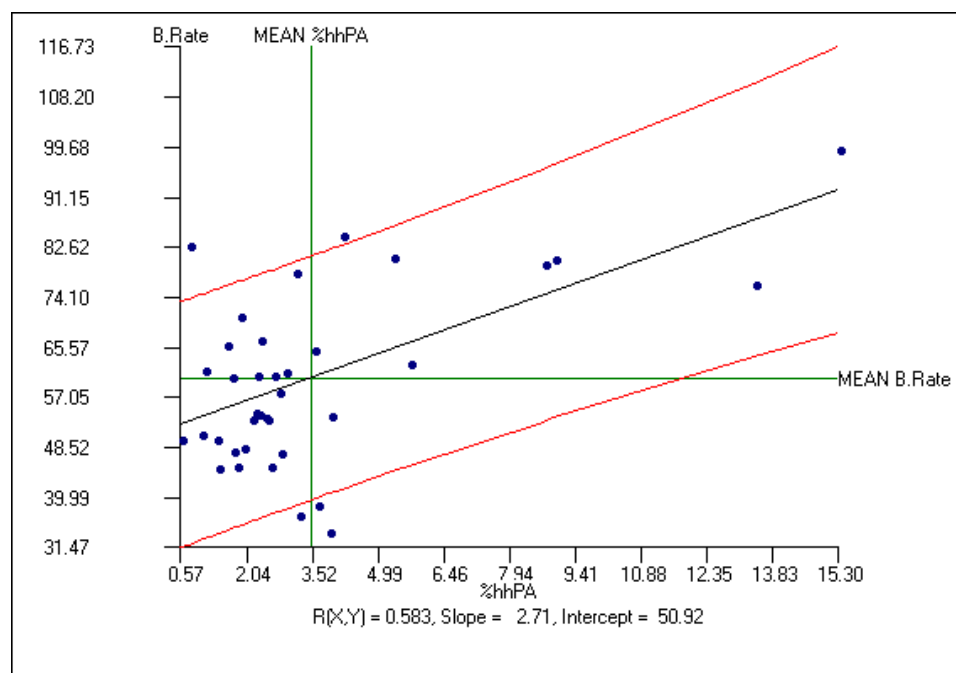
*Table 7.* Summary of stepwise regression analysis for variables predicting birth rate. (n = 37)

Variables	<i>B</i>	<i>SE B</i>	$\beta$
Step 1 (Final Step)			
Percent of all households receiving public assistance	2.7	12.3	.583*

*Note.*  $R^2 = .36$  for Step 1.

\* $p < .05$ . VIF = 1.0. Tol = 1.0.

*Figure 6.* Relationship of birth rate to public assistance for 37 rural counties, 1999. (Montana Department of Public Health and Human Services, Office of Vital Statistics; U.S. Census Bureau, 2000)



Regression results showed that use of public assistance was a significant predictor that accounted for 36% of variance in birth rate. Other independent variables did not meet the criterion for entry, and the stepwise process did not continue beyond Step 1. It should be noted that neither correlation nor regression are indicators of causality.

A second regression measured the influence of the same independent variables (grandparent households, extended family households, public assistance, and per capita income) on the dependent variable median age. It showed that grandparent households and use of public assistance were significant predictors that accounted for 79% of variance in median age. Other independent variables did not meet the criterion for entry, and the stepwise process did not continue beyond Step 2. Table 8 shows the results of the regression test; VIF and Tolerance are within acceptable range for multicollinearity.

Figures 7 and 8 display the negative linear relationships of median age with grandparent households and public assistance.

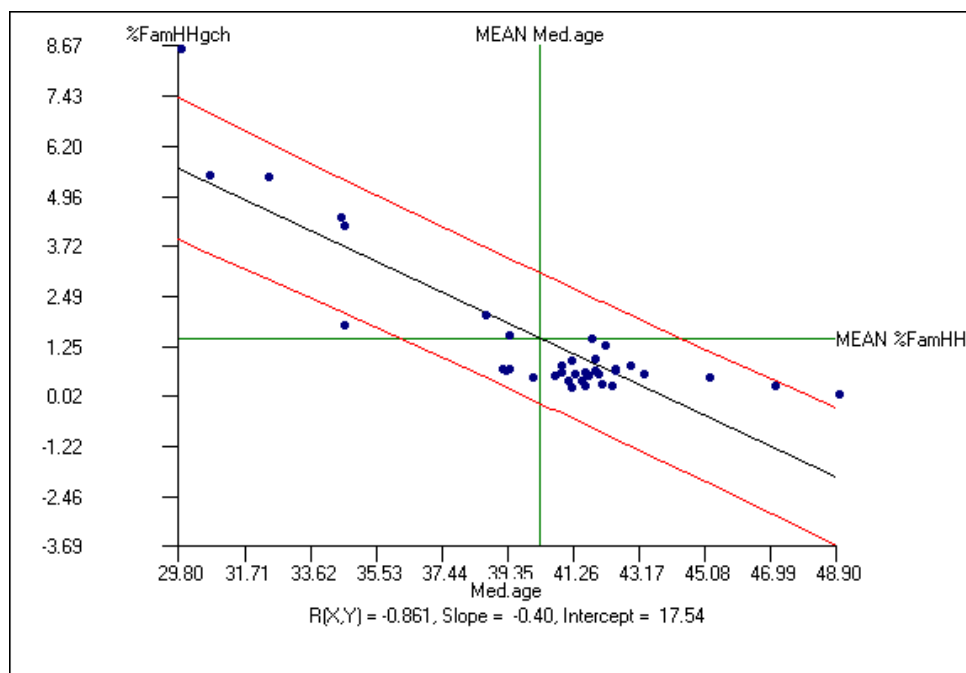
*Table 8.* Summary of stepwise regression analysis for variables predicting median age. (n = 37)

Variables	<i>B</i>	<i>SE B</i>	$\beta$
<b>Step 1</b>			
Percent of family households with grandchild	-1.9	0.19	-.861*
<b>Step 2 (Final step)</b>			
Percent of family households with grandchild	-1.9	0.31	-.550*
Percent of all households receiving public assistance	-0.5	0.18	-.372*

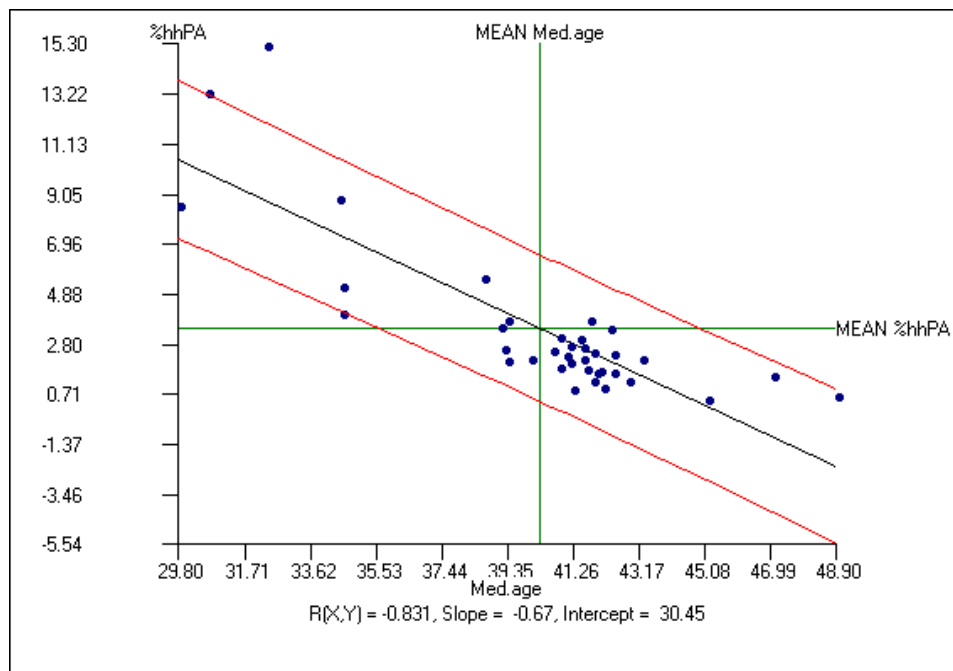
*Note.*  $R^2 = .74$  for Step 1;  $R^2 = .79$  for Step 2.

\* $p < .05$ . VIF = 3.28. Tol = .305

*Figure 7.* Relationship of median age to grandparent households for 37 rural counties, 1999. (Montana Department of Public Health and Human Services, Office of Vital Statistics; U.S. Census Bureau, 2000)



*Figure 8.* Relationship of median age to use of public assistance for 37 rural counties, 1999. (Montana Department of Public Health and Human Services, Office of Vital Statistics; U.S. Census Bureau, 2000)



### *Principle Components Analysis*

A principle components analysis identified underlying patterns of correlation among 10 characteristics of fertility, household economy and race for 37 rural counties in 1999. Ethnicity was included as a variable. (See Appendix D – Correlation table for 37 rural counties). The results are detailed in Tables 8 and 9.

*Table 9.* Eigenvalues and trace in each root for principle components analysis.

<u>Root</u>	<u>Eigenvalue</u>	<u>Trace</u>	<u>Percent</u>
1	7.389	10.000	73.9 %
2	.867	10.000	8.7 %

*Table 10.* Unrotated factor loadings for principle components analysis.

	Factor 1	Factor 2
Birth rate	.597	.593
Age of mother	-.569	-.507
Median age	-.915	.216
Family size	.940	-.260
Household size	.939	-.274
Grandparent households	.960	-.023
Extended family households	.920	-.104
Households on public assistance	.922	.004
Per capita income	-.724	-.239
Native American population	.981	-.003

*Note.* n = 37.

Two factors described 82.6% of total variation. Factor 1 had a high eigenvalue of 7.389 and accounted for 73.9% of variation among variables for the 37 rural counties. Varimax rotation did not change loading values. Factor 1 loaded heavily for Native American population (.981), presence of grandparent households (.960), percentage of households on public assistance (.922), household size (.939), and family size (.940). This factor could be called “reservation community,” for the high loading characteristics describe a relationship between race and household characteristics that is typical of reservations, as demonstrated in the descriptive comparisons above.

The remaining factors were much weaker predictors of variation. Factor 2 had an eigenvalue of .867 and loaded most heavily in a positive direction for birth rate (.593) and in a negative direction for age of mother (-.507). It accounted for 8.7% of variation.



This factor could be described as “early fertility.” The remaining factors did not pass the test of eigenvalue .7 or greater, and so were disregarded.

### Summary

The descriptive statistical analysis showed that significantly higher fertility (indicated by birth rate, age of mother, birth intervals, parity, size of families, and median age) and more frequent use of communal household economic strategies (indicated by larger household size, extended and multi-generational family household composition, and income from public assistance) was a pattern related to Native American populations in six reservation counties.

Inferential tests of correlation showed predictive relationships for birth rate with public assistance, and for median age with grandparent households and public assistance in 37 rural counties. Because a direct relationship was shown to exist between indicators of fertility and communal household economic strategies in the generally depopulating region, I rejected the null hypothesis for  $H_1$ . Based on my quantitative analyses, I accepted the primary hypothesis. The next chapter will use ethnographic data to explicate the mediating influence of culture on patterns of fertility and household economy in Northern Plains communities.

## CHAPTER 6 - QUALITATIVE FINDINGS

The first purpose of this chapter is to describe qualitative findings that support  $H_1$  and provide cultural context for the previous chapter's quantitative results. Therefore, qualitative data will be used to demonstrate that fertility (the dependent variable) varies in direct relation to household use of communal economic strategies (the independent variable) in an economically marginal rural area. These findings, specific to two communities, will underscore the quantitative analyses of Chapter 5 that described data sets of six reservation counties, and 37 rural Northern Plains counties.

The second purpose of this chapter is to investigate  $H_2$ . Qualitative findings will be used to explore the prediction that in a community experiencing cultural and territorial instability, pronatalism (the dependent variable) varies in direct relation to community perception of children as an investment in future territorial permanence (the independent variable).

Ethnographic interviews in two communities explored six concept areas: ideal fertility, the value of children, the cost of children, community support for childrearing, ideal household economic traits, and local attitudes towards territorial permanence. Subjects discussed community social mechanisms that influenced them to elect to have, or *not* to have, children early, frequently, and close together. Culturally specific normative themes emerged, and they parallel the quantitative patterns of fertility and economy documented in Chapter 5.<sup>7</sup>

---

<sup>7</sup> A key informant (European American) cautioned me when I began the local study that I could not expect to find complete agreement between people of the same ethnicity. She emphasized that, within this region, race is not an identifier of any one cohesive ideological community. She predicted much disagreement and discrepancy among my respondents of either race. And this turned out to be very true in matters of religion, politics, education, and popular cultural preferences. But it was absolutely not true when talking about matters of ideal fertility or ideal household economy. Instead, my race-identified interview samples were surprisingly cohesive on these issues.

Low-income parents using public assistance programs (Interviews 40 – 86)

The reflections of low-income parents and guardians of young children were obtained through short interviews with participants of three government-funded early childhood programs and two welfare-to-work cash assistance programs. Most short interview subjects (36 of 46, or 78%) were mothers; eight (18%) were grandmothers; and two (4%) were fathers. Fifteen (33%) were European Americans who lived in town; 13 (28%) were Native Americans who lived in town; 18 (39%) were Native Americans who lived in the reservation community. Demographic characteristics of the samples are described in Table 11.

The sample was not cross-sectional because it included only families who met narrow income eligibility criteria for public assistance (labeled “the poorest of the poor” by program administrators and advocates). I was most interested in the household economic strategies that these parents and guardians employed to meet their families’ basic needs.

Table 11. Demographic characteristics of small samples of low-income parents and grandparents.

	European American		Native American		Native American	
	Town (n=15)		Town (n=13)		Reservation (n=18)	
	<i>n (%)</i>	<i>M (SD)</i>	<i>n (%)</i>	<i>M (SD)</i>	<i>n (%)</i>	<i>M (SD)</i>
<b>Gender</b>						
Male	0		0		2 (11%)	
Female	15 (100%)		13 (100%)		16 (89%)	
<b>Relationship to child</b>						
Mother	14 (93%)		11 (85%)		11 (61%)	
Father	0		0		2 (11%)	
Grandmother	1 (7%)		2 (15%)		5 (28%)	
<b>Age in years</b>						
Mother		27.4 (6.1)		25.8 (4.7)		30.0 (8.7)
Father						35.0 (9.9)
Grandmother		46 (0)		52.5 (3.5)		55.0 (6.2)
<b>Age at first birth</b>						
Mother		20.4 (3.9)		18.6 (2.2)		18.8 (2.5)
Father						24.5 (6.4)
Grandmother		--		17.5 (0.7)		18.4 (2.6)
<b>Number of children</b>						
Mother		2.5 (1.2)		2.8 (1.3)		3.5 (2.4)
Father						3.0 (2.8)
Grandmother		3 (0)		5 (0)		6.0 (3.8) <sup>a</sup>
<b>Economic strategies</b>						
• Mother and child household	3 (20%)		5 (39%)		5 (28%)	
• Mother, father, child household	7 (47%)		3 (23%)		3 (17%)	
• Extended family household	0		3 (23%)		9 (50%)	
• Mother receiving child support	4 (27%)		0		0	
• Child fostered	1 (7%)		5 (39%)		7 (39%)	

<sup>a</sup> Includes two subjects with 10 children each.

Consistent with the economic trends seen in U.S. Census Bureau data, Native American mothers were more likely to have extended family household members. In town, three of 13 Native American mothers (23.1%) lived with mothers or sisters. Half of the reservation parents (nine of 18, 50%) lived with mother, father, sister, or grandmother. None of the European American parents lived with extended family.

Native American families were also more likely to use fosterage. In town, three mothers (23.1%) had fostered a child to a relative, and on the reservation three parents (16.7%) had fostered a child. All of the grandmothers interviewed, including a European American grandmother and two Native American grandmothers in town, and four Native American grandmothers on the reservation, were raising grandchildren who had been fostered to their care.

Native American parents were more likely to live with their mother. Two Native American households in town (15.4%) and seven on the reservation (27.8%) included grandparents. In contrast, none of the European American households was multi-generational.

Regardless of race or residence, grandmothers were the most prevalent form of assistance for all parents. Seven (46.7%) European American parents named the grandmother as a prime source of advice, financial assistance, and—if she lived in town—babysitting. A European American couple, both 24 years old, with two infant sons, relied on his mom as their best source of advice and support. This grandmother ran the family ranch and gave the young parents work for pay when they were short on money. The couple would not accept financial support without working for it. “We mend fence and buck bales,” the mom reported. (Interview 51)

A 32-year-old European American mother of three relied on her husband as her primary support, but called her mother daily for advice and support. “She always gives me her opinion,” she laughed, “She doesn’t hold back.” (Interview 49)

A 32-year-old European American mother received financial help from her parents, but was not happy with the arrangement: “It’s disgusting, but true. At minimum wage, even working full time, you still need the welfare... We’d be lost without my parents.” (Interview 53)

Similar numbers of mothers lived with husbands or boyfriends, regardless of race or residence. In town, seven of 15 (46.7%) European American women and six of 13 (46.2%) Native American women lived with a husband or boyfriend; on the reservation, seven of 16 (43.8 %) women lived with husbands. Four of 15 (26.7%) European American mothers received financial assistance through child support from an absentee father; no Native American mothers reported this type of income or assistance.

One 30-year-old European American single mother emphasized that she teaches her four children to be self-sufficient: “I don’t depend on anyone to help me with my kids because that way I can’t be disappointed by empty promises. Being the only one who is responsible for my daughters makes me stronger, and it makes my ties with them stronger. And it shows them how to take care of themselves and be strong women who don’t need a man.” (Interview 43)

Town residents frequently described a perception of small town safety for children: “It’s a small enough place that everyone knows everyone, and they are watching out for the kids.” (Interview 39) Only one resident described the town as a poor environment for children because it lacked activities for adolescents. Reservation

residents also felt that their community was a positive environment for children. One grandmother (a 60-year-old with 10 children, 35 grandchildren and 16 great-grandchildren) described community closeness: “It is small enough that you know where your kids are all the time. Everyone cares for everyone else’s children, and you know where everybody lives” (Interview 77). Another grandmother (a 59-year-old with 10 children, 11 grandchildren, and two great grandchildren) cited cultural strengths: “Children can retain their culture, language and knowledge of tradition here... family members can be depended on to teach children their language, and take them to ceremonies.” (Interview 74) Four reservation parents or guardians (22.2%) felt that the community was not healthy for children. The negative environmental factors that they listed were depression, drug and alcohol use, violence, and gossip.

In summary, analysis of short interviews with low-income parents brought to light many aspects of normative economic behavior including nuclear family self-reliance, occasional or ongoing reliance on family members or spouse, extended family household composition, and reliance on community services. Constellations of normative behaviors emerged as culturally specific themes in the longer, more in-depth interviews. The remainder of this chapter will excerpt quotes from key informant interviews that illustrated the recurring, culturally specific themes influencing individual choice in fertility and household economy.

European American themes:

Adult self-sufficiency, children as economic liability, and delayed reproduction

*Economic self-sufficiency is a sign of maturity and readiness for parenthood*

In answer to the question, “When is a person old enough to become a mother or father?” the European American response was overwhelmingly, “When they can afford to raise a child.” European American informants viewed economic self-sufficiency as the benchmark transition to adulthood. Young people demonstrated emerging adulthood by their ability to “stand on their own two feet.” This transition might be accompanied by a socially recognized event such as graduation from college, entrance to the military, self-supporting employment, or marriage. Such demonstrable signs of adult status qualified a state of parental preparedness. In interviews with key informants from both communities (Interviews 1—39), the ideal age of mothers and fathers reflected the actual median age of mothers of newborns, which centered on the mid-to late twenties.

I'd say [a first-time mother] should be in her mid-twenties. That gives her time to get an education, gain some maturity. Any age that she is ready to support a child is the right age. Spacing of births, too...this depends on the parents. It depends on the parents' state of mind, if they are ready to support a child. (Interview 9)

I just think it's better to be a little older, because it's very, very difficult to be a parent. When [parents] are on their own, and they develop their coping skills and they're fairly stable financially and with their education or training...[Older parents] are working and they know what their house payment is, or rent, and insurance, and groceries, and gas money, and all those things. (Interview 14)

I think people are marrying later. I think between twenty-five and thirty, thirty-five...would probably be the ages to start a family. Before that, kids are just too young to understand the commitment. (Interview 17)

[The ideal time for people to have a baby is] after they've got their schooling and they're married. That would be in their early twenties, unless they're lucky. (Interview 25)



I think it would be best to wait until you are out of your teenage years and into your mid-twenties...my mom waited until she was twenty-nine, just like me...but my aunts and uncles married at nineteen and had kids and have been married forever. (Interview 29)

Our [European American] cultural ideal...would have all your ducks in a row, your economic ducks in a row and you would have two parents...That might be what everyone strives for, but that's not what happens. (Interview 37)

I would say it still is a good thing in your late 20s, maybe...I think how healthy we are and our income and stuff when we're older. And I think there's some huge benefits to waiting until 30 something until you have a kid...It keeps you young when you have a child when you're a little bit older. (Interview 38)

*A child is an economic liability that must be budgeted*

Another marker of adulthood among European American populations was the ability of individuals to take on economic responsibilities as they occur in adult life. Like other forms of spending or financial risk-taking (e.g. use of consumer credit cards, accumulation of student loans, first house mortgage) the birth of a child was an undertaking of financial liability for which an individual or couple was expected to assume full economic responsibility. Recognition of this risk, and commitment to sacrifice as necessary to live up to the social contract of fiscal responsibility, were factors that ideally limited an individual's fertility choices.<sup>8</sup> The belief that every child is an economic liability acted as a restrictive factor on fertility through delayed pregnancy, low parity and longer birth intervals.

I would say at least a couple kids is all right, but financially... Two is hard for us to have with daycare...we're paying over \$800 a month...So it's a good idea when they're both in school [to] just put that into a CD. Our daycare bill is [equal to] our mortgage payment...If we had another one, one of us would have to quit working. (Interview 18)

---

<sup>8</sup> This dominant culture belief that child and family well-being depends on income level was evident in the 1970s forced sterilization at Indian Health Service clinics, where doctors "believed that Native women, with their low socioeconomic status, could not possibly provide their children with a decent life," (Carpio, 2004) and "applied mainstream U.S. societal standard by placing limits on family size, with the optimum family size set at two children per family." (Velez-I, 1980 in Carpio, 2004)

I've heard a lot of talk from people lately, saying, "Well, families have to be smaller now because you can't afford to support them." You stop and think before you have them, you know, eight children. It's not going to be just the diapers and the preschool entry fee and all that kind of stuff because when you have this child, this child is your responsibility and there's going to be high school and driver's ed and college and all of this time to get them so that they are grown up and able to leave the nest on their own. I think that the people who wait until later in life are considering those sorts of things. (Interview 24)

We knew we wanted more than one [child]. Work factors came in with looking at career and finances, and it became pretty logistic at that point...looking at how old...how far apart they were and such...We were looking at child care costs through the years too, and my career and future...looking at where [her husband] was in his job financially, how stable we were, and knowing that I wanted to work part time...that I wasn't going to have a full income for a number of years probably. And we'd have high child care costs. And thinking what can I do to keep all that [spending] within the same range there...knowing that [budgeting] will be a part of our life for years to come. (Interview 29)

*Young parenthood is ideally postponed*

Because parenthood inherently involved an irreversible social contract and economic obligation to care for and support one's own children, and no individual was encouraged to rush into it prematurely. Until a person was able to honorably and wholeheartedly undertake this commitment, parenthood should be postponed. There was an enjoyable life experience available only to independent young adults, and that fun would be forgone once the fulltime responsibility of childrearing was assumed. In a society that prolonged adolescence and relished the experiences of youth, young adults were not pushed to sacrifice youthful pleasures prematurely. Instead young people were encouraged to plan their lives to include a period of post-adolescent freedom from excessive responsibility. Their plan should postpone parenthood until they had experienced a satisfying independent life and were ready to concentrate on raising a family.

I don't know if it's so much an age, but more where they're at in life. The perfect world would be...out of college...ideally it would be once their education is done or close to done, once they have a stable job so they can get those other stressors out of their life...Just try to eliminate as many stressors as possible before you have children so you can focus on your kids and your marriage. (Interview 18)

It's the...people that [say], "Oops! I got pregnant." And then, "Oops! I got pregnant again." And "Oops!" They have no idea. And then they just go, "Well, I'll have as many babies as God wants me to have." And they just kind of float through life with no plan. (Interview 24)

I find that nowadays there are more young people who are maturing and thinking, "Before I have a family I need a job; I want to have something to offer; I asked her to marry me and before we have children I need to have something to offer." And that's really pleasing me that I'm seeing that in some young people. Not all. Some of them just have no idea. They think life is a party. They go out on weekend and get pregnant. (Interview 24)

I wish boys and girls could all hold off until they get into the world...It would be nice. (Interview 25)

Several options existed to assist young people to delay pregnancy—abstinence, birth control, abortion, adoption—but which of these options was actually accessible depended on the individual's personal belief system and circle of influence. Parental reticence to discuss sexuality and media sexual saturation worked to undermine the ideal of delayed pregnancy. In the rural region of my interviews, the county health department and some parents advocated responsible use of birth control. But the official stance of the public school system, supported by vocal parent sentiment, was that abstinence from sex is the preferred strategy for prevention of unplanned pregnancy. Therefore little information about conception and contraception was made available to adolescents, undermining their achievement of the ideal delayed parenthood.

In high school they [students] only get one hour once a day for five days, sex education in health class with their P.E. teacher...None of them realized that you could come to [public health department] family planning without your parents' consent. None of them knew that the Health Department had free condoms. None of them knew where they could go get answers or even any help. So they're out

there having unprotected sex; they're asking their friends and none of them have the answers themselves. (Interview 18)

They [high school educators] don't even teach abstinence...They don't talk about reproduction properly. The one girl, her boyfriend told her, "Oh, if I just pull out nothing will happen; there's no possible way." Basically she was ill informed enough to think she didn't need protection. [My daughter who is in high school] said there was basically no birth control...She said, "Mom, unless they're like you...unless people have a mother that's young or can look at their child and talk to them, they don't hear it." (Interview 38)

European American informants believed that the ideal of abstinence was undermined by the ever present sexual content of popular culture to which adolescent children were exposed daily. Children were prematurely informed and sexualized by their immersion in media, a modernizing outside influence that parents and educators felt powerless to stop.

It's just expected that that's going to happen; it's just the attitude. When I was growing up, back in the day, AIDS was the big thing. Everyone was just scared to have sex because "You're gonna die" ...you don't hear that anymore...Now all you see is, if you watch any shows with teens on TV, those kids are having sex and it's not a big deal. That's the way it is. (Interview 10)

I believe the onset of all this hypermedia that's going on, it [sexual content] is uncontrollable. I mean, it is out of control. It's like a raging fire and nobody knows how to stop it...It's blatant, it's the middle of the day...all these kids have computers in their rooms and cell phones; they can get anything. So how do you control that? And monitor that? So in the rural communities, this is what they [young people] are relying on: TV and Internet, magazines and newspapers. (Interview 11)

This TV thing and now the Internet thing where the influences for sex are...now, it's normal! The sexual thing is just so normalized. And that it's something that if you're not doing, you should be doing because everybody does it. (Interview 14)

Some parents were reticent to talk about sex with their children. Educators acknowledged that sexuality was an uncomfortable topic for most parents to address. But vocal parents had made it clear to the school board that they didn't want other people to give information about sex to their children. Some educators and parents believed this

information would be construed by children as encouragement to engage in sexual behavior. One educator believed that parents feared their children knowing more than they (parents) did about sex.

Parents [could] know what the kids are being taught and go home and continue the conversation, “I know this is what they talked about; this isn’t what we approve of though.” Instead of saying, “Don’t teach my kids anything.” I would think 90% of parents would be OK with us telling their kids, if parents knew what was being talked about. Then when the kids come home and ask questions, they don’t feel stupid because they don’t know how to answer. (Interview 14)

Initially this taboo on disclosing sexual knowledge to adolescents was a strategy to delay pregnancy, but it may have backfired. In fact, the high school and middle school had many pregnant students that year.

I don’t know if this was just an anomaly, but we have like, twelve kids at the high school that were pregnant and, like, seven at the middle school, sixth to eighth grade. (Interview 10)

This is high numbers. You know, you’d hear occasionally about a couple girls getting pregnant. But this is...it’s almost like a badge of honor this year. It’s just gone crazy. (Interview 11)

*A nuclear family should meet its own needs*

U.S. Census Bureau data showed that European American households were largely composed of nuclear families, and interview subjects endorsed the ideal of the nuclear family as the preferred living arrangement. It was understood that a young person’s goal is to move out of the household of his or her origin (and, if need be, out of the community of origin). In fact this move was considered a benchmark of approaching adulthood. The norm was for new couples, married or not, to establish their own joint household. Some informants speculated that extended families were on the upswing. One cited two examples: (a) An increase in “boomerang” households (i.e. an adult child, often a college graduate, returns to live with parents), and (b) an increase in elders who moved

into children's households rather than enter managed care facilities. But these arrangements were viewed as transitional and not as ideals that would endure the full span of adult life.

A nuclear family also stood alone in its responsibility to meet its own economic needs. Again this was an ideal and although many European American families with young children received financial help from relatives, especially grandparents, this help was sporadic and temporary. For example, grandparents assisted young couples in the purchase of a home; grandparents provided regular (but not daily) child care or diaper purchases; or a grandfather paid a grandchild's tuition to parochial school. I witnessed this form of assistance in families at a variety of income levels, and it was always time limited. Expectations of ongoing support were considered an indication of a sense of entitlement, a characteristic that was frowned upon as irresponsible, self-indulgent and un-adult. To expect others to help meet your nuclear family's financial or dependent care needs was to burden them inappropriately.

People are very individualistic here...families will come together in certain venues but then they're very separate...I like my privacy. And a lot of people are like that...Except for special things like going to church together...But my experience is, once you leave [those] arenas, it's a lot of separateness. (Interview 10)

I don't know if it's a pride thing, but I can't picture any of [my friends] saying, "Hey, I need to borrow your car," or anything like that. Though honestly, I can't see my family doing that either. We are very independent and "I can take care of myself." (Interview 11)

Several subjects recalled a time in the past when families were more likely to congregate and assist one another on a regular basis with problems or events that could not be handled independently. This was consistent with sociological observations on the historic decline of yeoman farming methods, which involved cyclical seasonal

community cooperation in harvest and production, and the rise in entrepreneurial farm methods.

I think it happened in my generation. When I was young I remember going to camp out with three or four other families. And then as we grew, the families just started separating. And I think it's just kind of maintained itself that way. (Interview 10)

My mom...grew up outside of [a neighboring rural community] and she married a farmer and come harvest time she was cooking for forty people. She wasn't cooking for her family. She was feeding these guys, and the neighbors were two and a half miles away. And I think in that venue [extremely rural areas] that mindset still exists. (Interview 10)

They had to depend on each other more back then...my grandparents had the family farm. But when it was harvest time the whole valley came. You know it was quite a bit of work, you couldn't do it on your own and if you didn't have the big tractor they'd come in and do it. I think there was a lot of that, depending on each other. So when something big happened everyone just came together and got it done because there was nothing else you could do. (Interview 11)

I think you know your neighbors more when you're out there. You know them because you depend on them. You may not ever have to, but if something happens—the closest person may be a mile away...These people have been there for generations...I mean, I'm the new person—we moved there 23 years ago. (Interview 25)

But other informants who grew up in extremely rural farm households on the Northern Plains contested the idea that residents of the small rural communities used to be more cooperative in their economy:

I think that it's always been a matter of exploitation of somebody to get the labor done. Whether it be because the drunk doesn't have a place to live so the farmer gave him an old bunkhouse and a room to live while he needed the work done. My family did that. That was in the 60s. I wasn't necessarily taken advantage of other than I went to work at twelve or thirteen being a housekeeper and a cook for people for \$5 a day during the summer. And they were being generous to me because my parents needed the money. (Interview 21)<sup>9</sup>

---

<sup>9</sup> This informant's summer work experience involved a change of residence, and was offered by her employers to help her family after the death of her twin, but she did not consider it "fosterage." Instead, she called it a business arrangement made with the understanding that her family needed money and her mother was struggling to manage the household. She went on to say that "boarding out" an adolescent girl to help

I think people were a lot more self-sufficient when they had farms.... It used to be that if you lived out on a farm and you wanted a new dining room table, maybe the husband would go out into the woods and cut down the trees, and make the lumber, and make the table...And if the wife wanted to do laundry, she had to use lye and whatever other ingredients and make her own soap, and use a washboard, a scrub board, and the Number 2 tin water bucket and wash her own clothes...I think people were a lot more self-sufficient back then, because they had to be. (Interview 24)

*There is a stigma attached to asking for help*

Interviews with European American informants documented a sense of personal failure and shame (“a stigma”) in having to ask for help. When asked who in the European American community was available to help struggling parents, most subjects listed state and community programs. A few mentioned churches and other faith-based organizations (e.g. the Salvation Army), which provide stopgap assistance in the form of clothing, temporary housing vouchers, free holiday dinners and gift baskets, and some services provided by skilled parishioners (e.g. car repair). While many informants were pleased to offer this help, they anticipated a sense of dread and shame should they ever need to ask for it. Middle class key informants suggested that parents in need would prefer to ask their families for help before approaching state or community services. Low-income parents said their relatives were either distant or unavailable to offer more than occasional support.

A single mother with three children worked 40 hours a week at her job and was required as a participant in a self-help housing program to work another 40 hours a week on her house. She received child care assistance, food stamps, WIC and child support. No spouse, family or friends helped her. As she was leaving the child care assistance office she called impatiently to her kids to follow her to the car, “Come on, we have to go visit your new child care. You just get shuttled around like...like chickens.” (Interview 42)

---

with housework was a common economic strategy; her mom and her sister had both done it in order to be able to attend high school in town.



A mother was married with two preschoolers, neither of whom was planned. In answer to the question, “Who helps parents?” she looked stunned. “They help themselves,” she replied. “That is a good thing about this town. People will pitch in and help you if you ask. But you feel bad asking.” She limited her requests to occasional babysitting from her husband’s parents and daily telephone support from her own maternal grandmother. (Interview 43)

Inability to meet one’s own family’s needs was a sign of failure as an adult and a parent. Needing help to meet basic needs, or asking for help from a family member or community service, was a stigmatizing experience.

I suppose there are some people who find it difficult to ask for help...If they didn’t have families to go to, or if their families were financially unable to help them, I’d think they’d go [to social services]. I think they’d go to their family first if their family was in a position to help them. (Interview 14)

Public assistance before they seek out family help. You know, I did that...I wasn’t making any money, and I was a single mom, and...I went and got Food Stamps before I asked my mom for help. (Interview 10)

[Is it difficult to ask for help?] Definitely. Especially if you’re in trouble with legal problems or financial—credit cards or...yeah, it is hard. (Interview 17)

If they have family I would assume they’d go there, but not all do that either because it just depends on if their family is fractured or if they trust...Well, I think parents need to help themselves first. (Interview 18)

I don’t like to ask for help. So that would be really hard. It would have to be my last resort. I don’t think I would be able to go do that and not feel bad. I guess I was raised to work for what you have, so...(Interview 23)

I think most people turn to family and friends for help. Some of them turn more to friends before family, because they want to appear to be independent to their family. They don’t want their family to know that they are struggling. And I think that’s a natural thing. Because if you’re grown up now and you’re trying to do this thing on your own, it’s maybe embarrassing to go and let Dad know you can’t quite do this on your own. (Interview 24)

It was understood that families, especially those with young children, could experience tragedy or havoc that would leave parents unable to function or unable to meet the financial demands of the situation. In this case it was honorable to offer the

support of the community, which might come either through limited use of public services or through targeted community charity.

It's no big deal to put on a fundraiser. I mean, people don't think twice about it. And they don't think anything about going to it. And it's funny because one of my friends...is from [an urban area], and she...spent a weekend with us and we are helping do a fundraiser for this little girl and...the whole place was packed and of course it's Montana so you're having it in a bar. But she said, "I can't believe all the people who are here. Does everybody know this family?" "Uh, no, some people do, some people are just here..." and she goes, "This would never happen in my town"...But I was raised in a small town. I guess it's just one of those things. It's one of those things you do (Interview 15).

Nevertheless, charitable offerings were acknowledged as difficult to accept without feeling "the stigma." And there was a clear disdain for adults who used public services or charity services on a prolonged or ongoing basis. This was considered an evasion of adult responsibility, and was a mark of laziness and willingness to abuse the generosity of others.

[There is] a food pantry that you can go to get food, but I think they have a limitation as to how frequently you can go and how much they'll give. Because they can't just give away free groceries all the time, or people will come to expect it. I think we also have a large amount of people who think it's owed to them, and they shouldn't have to work for a dime..."Well why should I have to work if I can get all my free medical? And they're going to give me Food Stamps. And I deserve this. So I shouldn't have to work for it."

I do know in some instances, and I can't lie when I say certain families having more children, I feel like we're having more burdens...I try to keep those feelings in check. But to be honest with you, it's their history, what they've been able to do with their other children. Are they in a situation where they're going to be able to take care of that child on their own, financially and emotionally? The child itself is innocent, and needs to be taken care of so they can become an asset. And somebody else can do that if we had a way of getting to those children in time. (Interview 18)

When we look back at our background, my husband was a renegade and basically disowned at times from his family. It's not like they're going to help you step up; you either do it or you're out. And I mean it's pretty heartless. And if they like you...if this community likes you and you participate and play the games, you go to the same churches and you speak the same language, speak the code, then you

have a lot of help. But if you're not necessarily a part of that, then you're kind of on your own. (Interview 21)

The strong public censure of asking for help when one wasn't able to support the financial needs of a nuclear family created an atmosphere of risk around the prospect of parenthood. Through this censure, society warned would-be parents that they were expected to assume a weighty responsibility upon the birth of their child, ready or not. The cautionary message functioned to limit fertility by urging delay of pregnancies and reduced parity among European American populations.

*In order to establish self-sufficiency, you may have to leave your hometown.* The rural European American community encouraged its young adults to seek education and employment in more urban areas, even when hopes were slim that they would be able to return to comparable opportunities in their hometown. Historically, the European American immigrant tradition necessitated that a migrant move on without a backwards glance, unburdened by remorse for leaving elders and other relatives who remained behind. Some communities of origin depended on the migrants' new earnings to eventually allow additional relatives or community members to join the migration. Unlike land-based Native American spirituality in which specific places and landmarks were sacred to migrating tribes, Christianity was completely portable. Its philosophy urged communities to create a place of worship wherever they came together in prayer, and permitted individuals to worship in solitude from the rest of the community. In spite of the sadness of separation and displacement that an outmigrant experienced, his religion reassured that God supported him to move forward and that all loved ones would be rejoined eventually in death.

Farmers on the Northern Plains sacrificed greatly through their homesteading experiences to obtain title to their lands, and the contemporary loss of family farms was felt keenly when the demands of economic crisis forced entrepreneur farmers to sell inherited land.

...In rural areas around here it is really tough. Because there are so many people who've got the family farm, and it's been in their family for generations. And they used to have eight or ten or twelve kids, and always somebody would take over the family farm through the next generation and so on, down through time. But now the kids don't want to! And so they move off to the big city and the parents are dying, so they sell the farm. So that's heartbreaking for the family to lose that farm. Because it is a connection with their ancestors, with their past. I have not spoken to anybody who is really, really glad that they lost the farm. It was always a feeling of failure; or that they failed their grandparents because they sold the homestead. Or...you know, just devastation. (Interview 24)

My sample of key informants included only residents of the European American town, and no residents of working farms or ranches. Several of my informants had grown up on farms or ranches, but they could no longer be characterized as belonging to "farm families." It is possible that agricultural families place greater importance on continued ownership and residency of family land than the town residents whom I interviewed.

Although the townspeople mourned depopulation of the region, they also embraced the historic tradition of migration that had powered the European American land expansion on the Northern Plains. By necessity the tradition of land expansion had compelled, and was compelled by, norms that demanded self-sufficiency as a condition of full adult status. This viewpoint undermined the desire of contemporary European American families to resist the strong pull of urbanization, and propelled their young adult children to leave their hometowns. Ultimately, despite strong nostalgia for a rural small town lifestyle (imagined or real), and contrary to family attachments to place and place-based traditions, territorial permanence was not a value that restricted mobility

options for members of European American rural communities. One might say that migration itself, along with the persistent urge to “seek greener pastures,” is inherent in immigrant America’s culturally specific definition of community continuity.

Native American themes:

Children as community wealth, shared childrearing, and natural fertility

*Children are community wealth*

Children in the Native American community were considered a form of wealth given by the Supreme Creator for the benefit of the entire extended family and community. For this reason, community members were expected to value all children, and to demonstrate appreciation by treating them well:

Our people believe that children are the most precious gift you can receive from our Creator, very precious. And they’re holy. These children are on loan to us...to call our sons and daughters. They’re not ours per se...God looks down on us and wants to know how come these children that he loaned to people, why are they crying? If you abuse them too many times in his eyes he could take them away just as easily as he gave them to us. His children are very holy. To us, they’re like angels...If a child is going to cross your path you must stop and let that little child go in front of you first. When a child talks to you, don’t just turn away because you never know—God might be talking to that child. Stay there and listen to that child and see what that child has to say because of its holiness. It represents God. That’s why we hold our children very, very special. (Interview 3)

You know, your grandchildren are only on loan to you. Or your children are only on loan from our Creator. So you value them as much as you value your life, like you value the Creator. So you treat them with every utmost respect. And you are not to harm them in any way, you protect them, and you try to lead them. You try to show them the good way of life, is what we call it. And that involves all our traditional teachings that you gain from your elders or grandparents, typically your grandparents. (Interview 28)

An ungrateful family, or a parent who mistreated a child, might find their child taken back by the Creator. A child’s death might be caused by the immoral behavior of

their parents. Tribal traditions of childrearing recognized an adult's responsibility to honor the gift of a child through good care, good living and appreciation.

The way I was taught, you know how when you say, even when they're in the womb still, "I wish I didn't have this baby." You know, just to get back at their [the pregnant moms'] mates and stuff. And then when the baby is born and the mom's stuck with the baby, "I wish this baby was never born." They say that the spirits hear them, and come get them [the child]. They say spirits will take them, and they're gone. (Interview 12)

The importance of raising and educating children was a daily responsibility for all community members. One reservation school district articulated this responsibility in their mission statement:

Remember that all of us as Elders of the Tribe, grandparents, parents and relatives are the people most responsible for the education of our children about our beliefs and how to live in this world. We are responsible for educating them to acquire the understanding, knowledge, wisdom, and respect for Mother Earth and everything that inhabits her.

*Extended family and community members provide parenting support*

Native American extended family members played primary roles in childrearing. Direct responsibility for primary care was not limited to birth parents and a nuclear family. Aunts, uncles, grandparents, adoptive parents, siblings and cousins shared the responsibilities of caring, nurturing, educating and disciplining children. I learned in my studies at the tribal college that many Plains Indian family systems extend roles of parenting to maternal aunts and paternal uncles, and equate parallel cousins with siblings. In this way a child had extended family that included multiple parents.

It used to be that kids had to obey any adult in the community who disciplined them or told them to stop doing something... The entire community of adults was there to help parents discipline the children. But the tradition of extended family watching over and correcting children is still honored. A child has to obey his aunts and uncles the same as his mom and dad. And an older person is still to be respected by any child, no matter how old that child might be. (Interview 28)

I don't think there was ever a belief that if someone in your family was going to have a baby, that it wasn't a family child...My sister's children—I'm their grandmother. So you're not just an auntie, you serve as their grandmother. And my mother's brothers and sisters are my grandparents. (Interview 26)

The fact that various relatives did not impose exactly the same restrictions and expectations on children's behavior was considered a social asset. The diversity of adult perspectives brought balance and security to a child's upbringing.

From the time they're conceived in a woman's womb until the time that they're seven, they're pure, they're innocent. During that time we don't spank them, hit them from the head on down to the waist. We don't grab their hair, shake them, we don't grab their ears, we don't slap them. We don't hit them because of their holiness and their pureness. (Interview3)

My family members all have their own different mentalities with how a child should be raised. I think sometimes we actually disagree. I'm a little more of a disciplinarian than my sister, or even my brother sometimes. I think they try to be soft. Which is good—I want my boy to feel...sometimes I'm not as soft as I could be, either. So I want him to be able to get that from somebody else, too. They're always there for him physically and emotionally; he always has someone he can lean on. If something in the future were to happen to me, I know he'd be taken care of. (Interview 4)

If a parent is under stress [or] loses their temper during a stressful situation, other family members will step in to defend the child from extreme discipline or punishment. But there are some families that come from dysfunctional homes... they speak harshly and they punish [children] too harshly and use bad words on them...I always get after my kids: "Don't speak harshly...talk to them, talk to them. Calm them down"... And if I catch them doing that, here comes Grandma! (Interview 7)

Values of self-sufficiency as a benchmark of maturity were not relevant to Native American parents and grandparents. A mother or grandmother expected her adult child or grandchild to stay in her home as long as they needed help.

Even if she stayed until she was 30—nobody would have thought poorly of her, because it is the grandmother's role to offer stability to an adult child. (Interview 28)

Some people just push their children when they're eighteen and so, "You're on your own—don't come back." But us Native American people, we don't do that.

That's not our belief. I don't care how old our children get. If I'm eighty years old and my daughter is still alive, she's sixty years old, she still has to listen to me. As long as she's alive, she's going to listen to me. (Interview 3)

Young Native American parents weighed the costs and benefits of life in a European American community where better paying jobs were available versus life in their remote and impoverished reservation community where family members were ready to share in the responsibilities of parenting their child. Many deemed the concrete day-to-day support of family members more valuable than the higher wages that could be earned away from home, where the costs of impersonal child care would diminish earnings and the child's cultural self-knowledge would be sacrificed. Informants described the benefits of raising their children in the community where their relatives lived.

I was in nursing school at another tribal college when I got pregnant. I had the baby at the beginning of January; Spring semester started in February. My boyfriend had to stay home from work with the baby while I went to school, because the daycare options were so bad for an infant. I looked at them and said "No way." Leaving [her baby] to go back to work was the hardest thing I ever did. As soon as the semester ended we moved back here to be near my family. (Interview 6)

I have tons of help. I've got [my aunt] now she's got my baby. Any time if I need a babysitter, she's always there for me. My mom, she's not a babysitter. So she...but if I ever need milk for her or Pampers, my mom's there for me in that way. And then, her dad's also there. So he gets her half the time, and helps financially too. And then his parents have her the days that [my aunt] doesn't pick her up; they pick her up and...yeah. (Interview 32)

I have three [children] and two of them are in school. And one goes to daycare. But...both of my parents are in the house. If I want to go do something, I can. Or if he wants to go do something, he can. So we end up doing something together, then we usually ask his folks to help watch them. (Interview 33)



*Grandmothers play a premiere role in childrearing*

A picture book set out on a child-accessible library shelf in the tribal Head Start classroom was titled, “American Indian Families.” It described the traditional Native American relationship of grandparents for preschool-aged readers:

All of the people older than a child’s parents were called “grandmother” and “grandfather.” They did the most to raise children, since parents were too busy getting food and making everything needed to survive. All of the important things in the world were also called by kin terms to show respect. The fire might be called “grandfather.” The sun was “father,” and the earth “mother” or “grandmother.” (Miller, 1996, p.8)

From birth, children in the reservation community were immersed in a network of caregivers that might include maternal and paternal relatives and adoptive caregivers. A key influence in a child’s upbringing was their grandmother. The special nature of this relationship was evident from many angles—many parents reported living with their children and mother, some parents lived with their children and grandmother, and many caregivers were grandmothers raising grandchildren. This was a significant safety net for parents that was missing in the European American community where grandmothers were employed or enjoying the liberties of retirement. In the reservation community young parents might lack maturity and parenting skills, but they could rely on a grandmother to offer care and support to their children. Older parents experiencing hard times, for example, the death of a spouse or a struggle with chemical dependency, could return with their children to their mother’s home. The female elder offered housing, financial help, childrearing assistance, and general guidance. She might be a maternal or paternal grandmother or aunt, or an adoptive relation. Describing her role as a source of support, stability and wisdom throughout her grandchildren’s lives, one grandmother

explained, "A child knows he or she can always count on their grandmother to share her knowledge. Her support is unconditional." (Interview 28)

One Native American informant speculated that the childrearing role of the Plains Indian grandmother had historic importance, because it allowed younger able-bodied adults to pursue the economically vital work of provisioning and protecting the tribe.

It was a strong belief that the grandparent takes the first child. So the grandparent is supposed to be responsible for raising the first child, no matter what...[This tradition] is reflected in stories that are as early as when they roamed the plains. When Natives roamed the plains, before they had the reservations, the grandparents took the firstborn child and they raised them...I would presume that...had a lot to do with keeping the younger groups' ability to participate in hunting and all those kinds of support for the tribe. But also the fact that they wanted the traditions handed down...that's what it's intended to do. (Interview 26)

The expanded care role of grandmother demonstrated an honored historic and contemporary family structure. The eminent role of grandmother in Native American child rearing is well documented (Bahr, 1994; Douaud and Dawson 2002):

Rather than being without responsibility or right to intervene in the rearing of the new generation, [American Indian] grandparents are both authorized and expected to play a major role. Among the Sioux, a new child is called "little grandmother" or "little grandfather" to help impress on her the important role of the grandparent. This custom also encourages respect for the very young, and is a reminder that the grandparent generation is the model, "that you are going to grow up to be a grandparent some day and, as such, you must remember to keep these things in mind. And mutual respect and affection develop because this is known role for the future as well as the kind one can play at when one is a child. It is a very important thing." (Attneave, 1981, p. 47)

The role of the involved grandmother reflects the multigenerational experience and reciprocal social obligations that tribal life provides. A person's goals and achievements in life will include health, happiness, and responsibility as a family member. If one lives the virtues, eventually they will become wise. Motherhood is a critical component of wisdom and status. These are core values of Native American culture that have not changed with assimilation. Some aspects of economics have changed, but these points of tribal identity have not changed. (Interview 39)

As a woman's age advanced, she became a valuable source of elder knowledge and wisdom to her family. Several informants pointed out that an linguistic root common to many Algonquian languages was the word for a respected elder woman, "nôtikwewiw." The meaning was explained as "she fills the lodge" or "she made a house full of children." Age alone did not confer upon a woman the social status of elder. She could not earn respect simply by virtue of advancing years, but only through her successful application of spiritual principles in the role of mother and grandmother. A woman with many children, grandchildren, and great grandchildren had been deemed worthy of great blessings by the Creator. Significantly, in Algonquian linguistic traditions the term for an elderly woman also signifies the important spirit translated as Earth.

European Americans noted the extended family childrearing practices of their Native American neighbors, and their critical or skeptical comments reiterated the contrast of white self-sufficiency values versus Native American traditions of communality. In the European American community, the later years were normally anticipated as a stage in the life cycle that rewarded a parent's previous hard work in launching her children; the ideal of European American grandparenting was one of retirement from work and detachment from the day-to-day problems of childrearing, a period of earned "time off" (Bahr, 1994). European American informants perceived Native American families who relied on an elder after taking on the adult responsibility of parenthood as manipulative and negligent:

You have the women elders, the grandmas, still supporting their adult children. Some of those kids come to grandma and she gives them her last dime, practically...You have these older women literally supporting all these people that are doing drugs or doing this, who are not giving back. Not giving back to the community, to the survival. The younger ones aren't performing their traditional economic role. Whether these middle-aged mothers want to take care of these

grandchildren, or these elders want to take care of these grandchildren, the community says, “You have to or you are not a good person.” So young people can have babies. Well, why not? (Interview 27)

Leticq, Bailey, and Kurtz report that Montana Native American grandmothers assumed custodial care of grandchildren in order to avoid foster care and out-of-family placement of children by authorities (2008). The psychological pressure of this sudden responsibility results in higher rates of depression among Indian grandparent caregivers, which appears to correlate with income levels, rural remoteness, and availability of social support. The custodial grandparent household has grown in numbers nationally, and multigenerational family groups are living together in higher numbers. Grandparents are providing primary care to grandchildren in response to family crises that impede parents’ abilities, such as substance abuse, mental illness, death, incarceration or military deployment. This trend affects both Native American and European American families in Montana (Leticq et al., 2008). But the degree of variation in grandchild presence between European American and Native American households reflects the influence of a normative tradition of grandparent care in which, unlike European American families, an elder’s life-stage is not expected to be a time of retirement from family responsibilities (Bahr, 1994).

There was no doubt that some reservation grandmothers were burdened with a weighty responsibility of childrearing due to crises that arose in their adult children’s family lives. It is not always tradition or choice that motivates a Native American grandmother to assume the care of grandchildren (Leticq et al., 2008). But the status of grandmother entailed the highest levels of respect and admiration in the reservation

community. This respect is reflected in a contemporary Blackfoot woman's account of participating in the annual Sun Dance encampment:

How else would I know that one of the finest rewards for being an old woman comes from going outside the camp circle early each morning, to face the rising sun and call out the names of all the children, grandchildren, great-grandchildren, and friends, during a prayer that shows the old woman's thankfulness and humbleness before the Creator, and brings cheerful tears into the eyes of all those in the camp who can hear? (Hungry Wolf, 1982, pp. 110-111)

*Fosterage shares the wealth of children*

European American strategies for fosterage and adoption tended to focus on the single outcome of stable placement, preferably within a nuclear family setting in a system whose primary concern was a child's welfare. Other cultural systems have demonstrated the role of fosterage in initiating and cementing valuable social relationships within a local political environment of poverty and uneven empowerment. Examples of fosterage strategies have been observed in West African Sierra Leone and in the Peruvian Andes (Bledsoe 1999; Leinaweaver, 2008). In a long-range study of fosterage in the Ojibwa-Cree settlements of Round Lake and Sandy Lake in northern Ontario, Mary Rogers-Black documented a practice of child fosterage that allowed a family to share a child with a household in need of a child. This might be a relative or community member who lacked help and companionship, who had recently suffered the loss of a family member, or who simply wanted another daughter or a young child to round out their household. Rogers-Black summarized the Oji-Cree fosterage belief, "This, I have learned, is the typically the salient side of the arrangement from the Indian point of view: not only children who need a home, but a home that needs children..." (Black-Rogers, 2000, p. 59).

It was a recorded historic practice among Plains Indian tribes to foster a child every few years to a different household and it was not uncommon for children to move

around their closely-knit community throughout their childhoods (Hungry Wolf, 1982; Black-Rogers, 2000). Black-Rogers quoted an informant who said, “Oh yes, it seems natural [to us]—part of everyday life—to go live with another family for a few years” (Black-Rogers, 2000, p. 63)

A 60-year-old man recounted the story of his family members, an aunt and uncle, who had been unable to conceive a child. But the uncle had not been living a good life. He had a problem with gambling. Another relative, who was expecting a baby with his wife, offered to give the aunt and uncle the child if the uncle could end his bad habit of gambling and live right for at least six months. After six months had passed, the uncle came to his relatives and reminded them of their promise. They gave him the baby who was raised by the aunt and uncle. (Fieldnotes, 2008)

This informant stated that relatives would not hesitate to share the gift of their child within their closely-knit circle of family and community. He agreed that his Montana community shared to some extent the Round Lake fosterage belief that a household could sometimes “need” a child. Fosterage provided a home for a child, and relief for an overstretched parent. But it also replicated a traditional economic strategy and fundamental worldview in a social environment where children were viewed as a gift of wealth, first from the Creator and then from a relative. In a society that measured its most precious wealth in the form of children, fosterage was a form of wealth redistribution. It was consistent with other tribal traditions that discouraged individual wealth accumulation and concentration among a few people, in favor of more egalitarian distribution of economic assets that would assure the security of all community members.

Given the extreme isolation of rural reservations and their limited employment opportunities, wage earnings were not accessible to many community members. In order to guarantee that the basic needs of families were met, the tribe offered a range of social programs that included housing, nutrition, health, and cash assistance. Program benefits

for many of these programs were distributed to families according to their number of dependent children. The presence of a foster child provided access to economic assistance, and I was told that children were sometimes fostered to a household in need of income, for example, an elderly relative. The tribal human service programs met the material needs of households in an uncertain economic environment and, like fosterage itself, replicated traditional tribal wealth values:

The activity of fosterage is an example of tribal generosity, a value that assures wealth redistribution, in action. This easy sharing of care for children reflects the tribe's fluidity in blending families. It is reinforced by social norms, for example, the obligation to care for one's parallel sibling's children as one's own. When no family or services are available to help, the community will come to the assistance of a parent who is in danger of losing his or her children. The community contributes when a family cannot meet their basic needs and no government assistance is available. Younger family members are sent to help elders by providing companionship and housework. This may not be formalized into a live-in fosterage situation, but it is a proper way to provide love and support to needy family members. (Interview 39)

Further, fosterage assured that the community wealth of children remained within the community. It was a preferred alternative to the practice of out-of-community adoption, an abomination, which in the past had been forced on families by state child welfare agencies:

I can speak for myself and my culture... You didn't give children up for adoption. You didn't give them away.... If you didn't want them or you couldn't raise them or whatever, they went to a family member. But they were never given up to strangers or anything like that. Your child was always kept within the community or within your family. I'm not saying that always it's not done; it is done, but very rarely. Usually the child is wanted within the community somewhere. (Interview 8)

The premise that children represented the most valuable social wealth was a difficult one for materially motivated European Americans to accept. Many European American observers attributed the popularity of fosterage to the custodial guardian's self-

interest rather than a love of children. Several times I heard the concern expressed that Native American children suffered when they were forced to serve as “commodities.” European Americans viewed the reservation’s extended family households and shared childrearing practices as signs of permission for teenagers to indulge in irresponsible sexual behavior, and for adults to shirk the responsibilities of self-sufficiency and self-reliance. This demonstrated their misunderstanding of the most basic premises and definitions of Native American wealth and family systems.

Today you have these older women literally supporting all these people that are doing drugs or...who are not giving back...to the community, to the survival. The younger ones aren’t performing their traditional economic role. Whether these middle-aged mothers want to take care of these grandchildren, or these elders want to take care of these grandchildren, the community says, “You have to or you are not a good person.” So young people can have babies. Well, why not? (Interview 27)

One interesting thing that I find in these big houses [on the reservation], everybody taking care of each other, is that the people being taken care of don’t seem to have a feeling of an obligation to make sure they’re paying their fair share...Consequently the person who lets them move in ends up paying for everything. Until then they get mad and they kick everybody out. And then they go on to somebody else... some families take advantage of each other... (Interview 21)

*Extended family childrearing is a component of cultural survival*

Just as continued use of Native American languages and traditions was viewed as a means to maintain cultural identity and social institutions in spite of displacement and colonization (Littlebear, 2004; Reyhner, 1999), so was maintenance of childrearing tradition seen as resistance to the influences of the individualistic, materialistic dominant culture. Extended family childrearing is a key cultural component of indigenous communities. In my research community, where children had a circle of male and female parenting figures that might or might not include their biological father and mother, the



language itself revealed the web of extended parenting. The word for mother's sister translated as "little mother," and father's brother as "little father." Parallel cousins were called brothers and sisters in terms indistinguishable from those describing sanguine siblings.

The picture book in the tribal Head Start classroom described Native American family structure for young children:

American Indians used special terms to talk to or about their relatives. People used these terms because personal names were too sacred to be used in public. These terms could mean more than one person, so that a person had many "mothers" and "fathers." Among the Delaware, "gahes" meant the woman who gave birth to a child and all of her sisters. And along with the man who would be called "father" in English, all of his brothers were also called "nok." (Miller, 1996, pp. 6-7)

Maintaining the closeness of communal childrearing was viewed as crucial to the continuity of cultural traditions. To leave the web of family support was also to lose one's tribal identity:

When you move away [from the reservation] then you have kind of a culture shock because you are on your own. You don't have your relatives right there to depend on...When you're raised that way, you're raised that the family is there for you; you help each other out; you depend on each other. Whereas in the European or white community, you're out on your own and sometimes you're just left that way...the closeness isn't there. (Interview 8)

Our family ties are very strong. I think we get our strength from that...My parents have always told me not to move too far away. They said, "If something happens, you know, we'll be very close by to help out." With us, our culture is so important. If you're too far away, you can't take part in that. I moved back, wanting my kids to know their grandparents...All along I knew I wanted to move back so my children would know their grandparents, because I didn't have grandparents growing up. Plus I wanted them to know their culture. If I didn't bring them back, I don't know how they'd be without having their culture, their identity. (Interview 19)

For me the culture is important because as a young person my parents didn't push the culture on me and my siblings. My siblings are all educated now in the Western way but we felt lost, I guess, in our own ways. So we thought it would be good for us to be home and to learn some of these ways—our language and some

of our traditions. And I think it's important for my son to learn them, especially at a young age so, when he goes off to college or whatever, that he'll be able to have a better understanding of who he is and not feel so lost when he's away from home. I struggled with my identity trying to figure out who I really was. And I think if I'd had that cultural component in my life, things would have went a lot smoother. You know, I'm not saying it would have made things perfect but it would have given me better understanding. I could have avoided a lot of problems in my life. (Interview 4)

Traditionally, my belief is that the involvement of the family support structure is very important. When you leave the reservation, that structure is broken. And so you find that there is no support once you leave the reservation. And I say, I mean...you know they may have...you have your urban Indian centers that you go to and you establish your relationship, but there is nothing compared to your immediate family. The family unit—I think it's probably one of the greatest assets that exists on an Indian reservation. It's part of the culture it's part of the beliefs. It's the only way we're going to have languages survive, or beliefs and customs survive. (Interview26)

Individual cultural identity and the support of family members were tied to location as well as to cultural community. Although Native American individuals left their reservation communities to live in town for the purposes of education or employment, there was a commonly expressed intention to return to the reservation eventually. Relatives at home, especially older individuals whose adult children had moved away, hoped to see the outmigrants return. Some of the rapid population growth among Northern Plains reservations has been the result of return migration, much of it among retirement-aged adults (Mitchell, 2004).

The permanence of family groups within their Indian reservation setting was described as intrinsic to the survival of cultural traditions. No possibility was expressed that traditions might be portable or translatable to non-traditional settings or a non-indigenous community. Territorial permanence itself was not the primary stated concern, but return to the reservation in its fixed location was essential to the permanence of community traditions.

Adding to the urgency of maintaining residence on tribal land was the gift of living in proximity to the reservation's many sacred sites. One Head Start staff member described the orientation of the building's playground, "It faces [sacred site], so that the children can see it every time they come out to play." The instructor at the tribal college reminded his students that the reservation had been provided by the Creator, and would be lost if cultural traditions and language were forgotten. Not only was the traditional community situated in a fixed location, but also the land itself was sacred. The land was a key component of an enduring cultural identity.

Both communities were stressed by isolation, a changing regional economy, and a shifting dependency ratio. However, only the Native American informants expressed the importance of maintaining their community in its current location. While European Americans were saddened by the depopulation trend and the outmigration of young people, these events were viewed as inevitable and to resist them was to resist progress. The recurring European American theme that one might need to move in order to find better work or a better life was universal; no informant contradicted it by wishing a child or relative would stay in the rural community if better opportunities could be found elsewhere. In contrast, no Native American informant expressed the belief that living on the reservation was unimportant compared to career advancement or other opportunities. Relatives might leave for school or work, but it was hoped that they would return. My interviews demonstrated without doubt that the two cultural populations viewed territorial permanence and outmigration very differently.

*Summary of normative themes*

In summary, culturally specific themes guided the fertility, economic, and residency decisions of individuals. Community endorsed beliefs institutions supported or penalized residents for their fertility choices. Cultural themes are summarized below:

*European American themes of fertility and economy*

- 1) Economic self-sufficiency is a sign of maturity and readiness for parenthood.
- 2) A child is an economic liability that must be budgeted.
- 3) Young parenthood is ideally postponed.
- 4) A nuclear family should meet its own needs.
- 5) There is a stigma attached to asking for help.
- 6) In order to establish self-sufficiency, you may have to leave home.

The European American economic ideology of nuclear family self-sufficiency weighed negatively on fertility, encouraging individuals to elect later childbirth and fewer children and to live in smaller households that strived to be economically self-sufficient. Young adults of parenting age were expected to become economically self-sufficient before undertaking the responsibilities of parenting, and in rural areas might have to accomplish this by moving to a more urban setting for education and employment.

*Native American themes of fertility and economy*

- 1) Children are the most important form of community wealth.
- 2) Extended family and community members provide parenting support.
- 3) Grandmothers play a premiere role in childrearing.
- 4) Fosterage shares the wealth of children.
- 5) Family support is a component of cultural survival and individual identity.

- 6) Cultural traditions and family networks are intrinsically linked to the reservation.

Native American economic ideology of shared communal resources weighed positively on fertility, encouraging individuals to elect earlier childbirth and more children, and to live in larger extended family households in which members ideally relied upon one another for mutual economic support. Young adults of parenting age knew that family members would support them if they become pregnant, and that they would have opportunities in their community to continue education and seek employment. If they stayed in the reservation community and couldn't find a job, there would be tribal government and family support available to help them meet their basic needs.

### Conclusions

Throughout my fieldwork on the reservation, I observed overt manifestations of support for childbearing and childrearing that were qualitative indicators of pronatalism. Children were welcomed warmly, in theory and in daily life (for example, infants were regularly present in the tribal college classroom, a situation that is rarely witnessed at the state university). Young parents were not stigmatized or penalized for unplanned pregnancies. Neither was there any sense of exasperation with low-income mothers who repeated unplanned births. Interviews and observations verified that the reservation community endorses and supports childbearing, and is therefore pronatal.

Reservation residents' desire for continuation of the reservation community, and preference for residential stability over outmigration, was also continually represented in

interviews and daily observations. Therefore, the qualitative data verified that members of the reservation community valued territorial permanence.

However, despite asking many questions to expose the connection between pronatalism and territorial permanence, I found no evidence to support my idea that reservation residents view *children* as an investment in future territorial permanence. I repeatedly attempted to get parents from both communities to talk about this idea when I asked them to describe the value of children, but it was not a concept that was spoken. I needed to find evidence of mindfulness of this relationship in order to accept my secondary hypothesis. Without it, based on the data I collected, I accepted my second null hypothesis. In other words, based on my time spent in the community, my carefully constructed interviews, and my observations, I would argue that in a community that experiences cultural and territorial instability, pronatalism demonstrates *no relation* to a community perception of children as an investment in future territorial permanence.

One can infer that attitudes towards territorial permanence might influence residential permanence or migration. It is logical that the reservation community discourages outmigration with its strong value of local residency and its promise of supportive social networks that will mitigate material hardships. Conversely, it is logical that townspeople encourage migration by promoting the material prosperity and social networks to be found in distant locations. However, because I had no evidence that these attitudes were direct factors in fertility, I could not accept  $H_2$  without additional research.

Instead, it appeared that social mechanisms endorsing high fertility include support for households to elect communal economic strategies, and community values of pronatalism (i.e. in support of childbearing). Conversely, social mechanisms proscribing

high fertility included desire for nuclear household economic self-sufficiency, and community values of delayed and limited childbearing.

Having accepted  $H_1$  and rejected  $H_2$ , I will argue in Chapter 7 from a theoretical perspective that individual agency operates strategically to optimize advantage, wealth and security. Individual options for fertility and household economy are constructed by cultural values—delayed reproduction or pronatalism, self-sufficiency or communality, material wealth or spiritual wealth, immigration or territorial permanence—that reflect cultural milieu.

Nevertheless, the continued functionality of normative behaviors depends on the political and economic contexts in which they are embedded, which may be stable over time or subject to uncontrolled change. Rural populations experienced regional economic insecurity during four decades of agricultural restructuring. European Americans responded with outmigration and reduced fertility. My qualitative research suggested that rural European Americans' cultural commitment to full self-sufficiency as a qualification for adulthood limits young people—the population's most likely new parents—from remaining in the community when the local economy can offer only limited access to financial autonomy.

In contrast, Native American communities have a strategy for economic hardship in their construction of multiple generation and extended family households. Large households keep costs down through economy of scale and provide a pool of household resources during times of income insecurity. In an environment of limited economic resources, Native Americans elected high fertility and its accompanying diminished per capita income. How did individual agency optimize wealth and security here?

I found in my studies that assets by which wealth and security are measured differ according to cultural values that are reflected in land use patterns, necessity for mobility, and spiritual beliefs. Native American scholars describe a shared belief that land is not a commodity to be owned by men, and that subsistence takes place within the larger spiritual context of a Supreme Creator's world and enveloping cosmology (Herschfelder and Molin, 2000). In the historic Plains Indian economy of nomadic hunting and trapping, valuable goods were useful or beautiful, and transportable. It is reasonable to assume that the sheer volume of material wealth valued by European Americans was not meaningful by Native American standards. Instead, Native American wealth was buttressed by a broad, flexible network of relatives who assured reciprocal support in a harsh physical environment. Meaningful wealth was amplified when social traditions discouraged individual accumulation of material goods in favor of highly regarded redistribution activities. Excessive material wealth was not concentrated among a few individuals; instead it was constantly shared among the group. The most valued assets were invested when relationships were formed, and leveraged when relationships were reinforced through marriage, adoption, fosterage, or shared childrearing. I will contend in Chapter 7 that Native American children remain a visible and highly regarded indicator of family and community wealth.



## CHAPTER 7 - ANALYSIS

Cultural patterns of institutional response in economic and fertility domains:Welfare and teen pregnancy*Contrasting supports and disincentives for high fertility*

The effects of contrasting ideologies were apparent in the dissimilar responses of European American and Native American communities to two social scenarios in which individual fertility and household economy intersected: (1) Household poverty, and (2) teen pregnancy. State and tribal government programs constructed tangible community responses to these situations through social and health services that provided a tenuous “safety net” for disadvantaged families. Within guidelines established by federal law and regulations, each community designed and implemented an institutional approach to address family needs arising from economic and fertility events. The resulting programs reflected the different cultural ideals, and reinforced individual conformity to each community’s preferred ideals by encouraging normative economic and fertility behaviors.

*The dominant culture ideal of a self-sufficient nuclear family*

History tells us that American frontier farm communities required economic cooperation out of necessity for survival, however, by the nineteenth century American rural society was dividing between yeoman farmers whose traditional agrarianism was centered around family welfare and continuity, and capitalistic farmers whose entrepreneurial interests were individualistic and profit-based (McNall and McNall 1983; Salamon 1992). As entrepreneurial farm methods largely replaced yeoman methods, American rural families demonstrated increased independence, privacy and social flexibility (Salamon 1992). European American rural society, and society in general,

placed increasingly high value on individualism, work ethic, and material wealth, which gave support to political movements for government devolution and welfare reform (McNall and McNall 1983, Weaver 2000).

Dominant political trends in the 1980s and 1990 were towards reduced federal bureaucracies, devolution of formerly federal programs to state and local governments, and fiscal conservatism in taxation and program budgets (Conlan, 1998). One element of this movement was the growing sense that the federal welfare program known as Aid to Families with Dependent Children program (AFDC)—a 1970s outgrowth of the Social Security Act of 1935—had grown unwieldy, was abused by able bodied adults who could be working, and prevented low income families from achieving financial independence (Mead, 2004; Zuckerman, 2004). Researchers documented public antipathy towards cash assistance programs for poor people:

While no one factor can fully account for the public's opposition to welfare, the most important single component is this widespread belief that most welfare recipients would rather sit home and collect benefits than work hard themselves. In large measure American hate welfare because they view it as a program that rewards the undeserving poor. (Gilens, 1999, pp. 2-3)<sup>10</sup>

In the 1990s, conservative theorists argued that the Great Depression's New Deal and WPA projects had framed benefits in a context of compassion, personal responsibility, and the dignity of work (Olasky, 1992). After decades of perceived welfare entitlement and excesses, they urged a return to "industry, thrift and patience, what we might call today the Protestant work ethic" (Soaries, 1990).

Before the push for a Great Society began [in the 1960s], recipients themselves often viewed welfare as a necessary wrong, but not a right. Two gatekeepers—the

---

<sup>10</sup> Later research refuted the validity of the perception that public assistance programs are used by marginalized groups, by showing that 65% of Americans access such a program at least one time between ages 20 and 65 for at least one year, but only 16% will use public assistance for five years or more. (Rank and Hirschl, 2002).

welfare office and the applicant's own conscience—scrutinized each applicant. A sense of shame was relied upon to make people reluctant to accept “the dole” unless absolutely necessary; for those without shame, welfare officials were to ask hard questions and investigate claims. (Olasky, 1992, p. 167)

In the mid-1990s the Republican Congress under the leadership of House Speaker Newt Gingrich worked with Democrat President Clinton to make good on a presidential campaign promise to, “Change welfare as we know it.” (Conlan, 1998; Zuckerman, 2000). The result was the bipartisan federal Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996. PRWORA capped federal funding for welfare by eliminating the guarantee or “entitlement” of AFDC, by which any eligible low-income child had been assured services. Where AFDC had created an open-ended expense for the federal government, PRWORA spending was limited. PRWORA's new and reorganized social programs included Temporary Assistance to Needy Families, Child Care and Development Block Grant, Food Stamp Program, and Social Services Block Grant (U.S. Department of Health and Human Services, Administration for Children and Families, 1996). These were block granted to states at funding levels fixed to reflect 1994 expenditures; states were required to maintain their contributions to welfare at 1994 funding levels or lose federal matching funds. Unfortunately neither rural states across the nation, nor counties across the Northern Plains, could afford to supplement the newly limited federal dollars for needy families (Sharp and Parisi, 2003). One resident of a Montana rural community described the loss of program funding to Northern Plains communities this way:

I watch all the money go into “the funnel”—a triangle from Kalispell to Billings, right down the center of the state: Missoula, Helena, Butte, Bozeman. All the rural counties are left out. They're supposed to make up the difference themselves but they can't. So people have to move. We're caught in a cycle. (Fieldnotes, 2005)

The abiding emphasis on worker self-sufficiency and vilification of public assistance users disinclines European American residents of the Northern Plains from relying on communal economic strategies today. This is in spite of the fact that over the last three decades parenting strategies have become more complex: mothers have entered the workforce in greater numbers (Johnson and Downs, 2005); migration and increased mobility have removed extended family members to distances that made them unavailable to assist parents (Franklin, 2003); child care is expensive and hard to find, and latchkey children are by necessity left unsupervised for parts of the day (Johnson, 2005). Ideals of personal self-reliance extend to absolute parental responsibility for their nuclear family. Parents are responsible to juggle work activities against family time, and to provide food, clothing, transportation, child care, medical care, food, housing and energy. While government programs offer some help to the lowest income families, the new public policy of PRWORA conveys a clear sense that support is temporary and cannot be relied upon over the long term. Entitlement, that is, the guarantee of welfare assistance for any needy child or adult, has not been an option for low-income families in European American communities since the mid-1990s when the AFDC entitlement program was eliminated.<sup>11</sup>

Support in theory for welfare reform was strong in rural communities nationwide, where residents assumed the ability of their small communities to take care of needy residents without government programs, and where government services were considered a symptom of “urban” problems. Many rural residents were unaware of the challenges

---

<sup>11</sup> Although many aging residents of the town depend on government income from Social Security or disability insurance, these benefits are work-related. They are considered earnings, and therefore do not conflict with the rural code of work and self-sufficiency.

that federal devolution of welfare would bring to their communities (Fitchen, 1991). One of my town informants reported that the advent of welfare reform in the mid-1990s was controversial. Local human service providers questioned the ability of persistently poor families to become self-sufficient within the new five-year time limit. There was not enough preschool and infant care available to meet the needs of low-income parents who undertook mandated work activities. The town's welfare caseload numbers declined dramatically as new limits on eligibility and requirements for work participation took effect, further exacerbating the lack of adequate state funding for human services.

*The Native American ideal of mutually responsible extended family*

Like their rural European American neighbors, Native American tribes historically relied on communal economic strategies. The bison economy of the Northern Plains was by necessity a communal venture (Mandelbaum, 1979). The introduction of horses brought the concept of prestige wealth to formerly egalitarian tribes, but tribes retained wealth redistribution processes supported by values that gave status to gift-giving and ridiculed selfishness (Carlson, 1998; Howard, 1977).

There were more than a hundred families in our band when I was young, and I saw much hardship. When we moved camp, many of the families had only dogs to pull their belongings, piled on a travois. Some families had horses, but only a few. The men who had horses chased the buffalo for the others and everyone got some of the meat, which would be hauled into the camp by the dogs. There was no selfishness. It is an Indian custom to share with others. That has always been so; the strong take care of the poor; there is usually enough for all. (Ahenakew, 1995, p. 17)

Tribal values and social order did not emphasize exploitation of social differentiation through wage labor or economic innovation in support of individual wealth accumulation for the purpose of further investment in the marketplace (Champagne 2007). This tradition has endured within reservation communities so that

today economic decision-making is guided by group gain rather than individual gain in a form of collective capitalism (Champagne 2000). Successful reservation enterprises, historic and contemporary, have been owned collectively by the tribe and value has been returned to all tribal members; contemporary examples include tribally owned production and manufacturing ventures, development corporations, and casino-style gaming (Cattelino 2004, Champagne 2007, Champagne 2000, Gonzales 2000, Harmon 1998). Traditional communal processes of wealth redistribution continue to extend scarce economic resources in contemporary reservation communities (Berman 2004, Faiman-Silva 1997, Pickering 2004).<sup>12</sup> By maintaining historic communal economic strategies, contemporary reservation communities preserve their traditional cultural identities and social organizations while adapting economic activities to the structural forces of colonial capitalism (Champagne 2005, Pickering 2000).

Tribal economic traditions, then, provide historic precedent for contemporary communal economic strategies. As documented in U.S. Census Bureau data and ethnographic interviews cited in previous chapters, Plains Indian communities in Montana are more likely than neighboring European American communities to demonstrate extended family households; shared goods and services; income from government programs; and child fosterage.

---

<sup>12</sup> Mandan, Hidatsa and Arikara women of the Fort Berthold Reservation in North Dakota use beading, sewing, cooking, child care, and shared earned and unearned income to enhance and redistribute income within their extended kin networks while receiving TANF cash assistance (Berman, 2004). Choctaw workers in Oklahoma use traditional economic strategies of subsistence and petty commodity production including extended kin residential patterns and reciprocal exchange to supplement low wages and or state public assistance (Faiman-Silva, 1997). Lakota households on South Dakota's Rosebud and Pine Ridge reservations counter economic instability by relying social relations as an important source of informal economic support through household production, intra-household exchange, and self-provisioning (Pickering, 2004).

Comparison of state and tribal Temporary Assistance To Needy Families (TANF)

An excellent example of contrasting European American and Native American concepts of responsibility for supporting families with young children can be found in a comparison of state and tribal programs known as Temporary Assistance to Needy Families (TANF). TANF is a federally funded program created by the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 and, in keeping with the philosophy of government program devolution, states were permitted to devise their own strategies for spending TANF block grants within guidelines set by Congress. Therefore state TANF programs varied in program regulations such as eligibility requirements; types of work support might include education, job training, work experience, or job search activities; levels of child care benefits varied; and states set their own definitions of program non-compliance (U.S. General Accounting Office, 2002). But common to all states were a set of new requirements: Most households were subject to a 60-month lifetime limit on benefits; an annually increasing percentage of caseloads (starting at 25% in 1997) must participate in work activities equivalent to half-time employment or greater each week; and when TANF funds run out the state may place families on a waiting list for services (Pickering, Harvey, Summers, and Mushinski, 2006).

Because employment opportunities for TANF participants in rural job markets are extremely limited, employment is frequently channeled by employers to more “desirable” employees, reinforcing unemployment among some groups based on factors that can include race, ethnicity, class or gender (Jensen, McLaughlin and Slack, 2000). Under TANF, from September 1996 through June 2006, the welfare caseload in Montana

declined by 62%, from 9,800 families to 3,800 families (U.S. Department of Health and Human Services 2007). TANF caseload decrease took place even though local labor markets in rural areas did not improve and the number of families living in poverty remained relatively constant.<sup>13</sup> The trends of welfare caseload decrease with unchanging poverty were mirrored in other rural states across the nation. Low-income rural families increased their reliance on informal networks of family support, provisioning and self-employment through legal and illegal activities, and sporadic wage labor (Pickering et al., 2006).

Montana's TANF program is called FAIM, an acronym for "Families Achieving Independence in Montana." Like other rural states, Montana's caseload decline has been achieved through more restrictive program eligibility, stringent time limits, stricter requirements for work activities, more limited access to education and training, and more limited access to transportation and child care (Zimmerman and Hirschl, 2003).<sup>14</sup> Some program design challenges were inherent in the mandatory work activity requirement for rural communities: work opportunities are limited, often seasonally; post-secondary education and vocational skills training are limited, and access to the child care necessary for infants through school-age children is limited (Rural Policy Research Institute, 1999). Research suggests that rural TANF participants remain eligible for assistance even when

---

<sup>13</sup> 25, 691 Montana families lived below poverty level in 1989 (12.0%); 25,004 Montana families lived below poverty in 1999 (10.5%) (U.S. Census Bureau, 1990; U.S. Census Bureau, 2000b).

<sup>14</sup> Some researchers attribute TANF caseload reduction to a strong economy and meaningful employment support for families; Lawrence Mead links states' ability to reform welfare to political cultural characteristics originally described in 1966 by Daniel Elazar as "moralistic," "individualistic," or "traditionalistic." Mead defines Northern Plains states as either moralistic or a combination of moralistic and individualistic. Mead hypothesizes that moralistic states are most likely to demonstrate successful welfare reform because of their strength in legislative problem solving and their inclination towards more effective administration (Mead, 2004, p.271).



employed, and that rural families are likely to have limited access to full-time, full-year employment (Zimmerman and Hirschl, 2003).

In Montana, the percentage of TANF clients who were Native American rose from 28.7% in 1994 to 45.2% in 2001 (U.S. General Accounting Office, 2002). Increased TANF participation by Native Americans mirrored a national trend that the General Accounting Office attributed to, “scarcity of jobs on reservations; the difficulty residents have accessing work supports they need, for example, job training and child care; and cultural or religious ties to tribal lands and strong ties to families and communities that make it difficult for many American Indians to relocate” (U.S. General Accounting Office, 2002, p. 20).

In recognition of tribal government sovereignty<sup>15</sup> and of the economic challenges facing reservation communities, the 1996 PRWORA law provided that federally recognized tribes could administer their own TANF programs (U.S. General Accounting Office, 2002).<sup>16</sup> Within federally defined guidelines and subject to approval by the U.S. Department of Health and Human Services, tribes were permitted the flexibility to design TANF regulations that addressed the special economic, social and cultural needs of their specific populations. Reservation communities with a population greater than 1,000 and persistent unemployment over 50% were granted the flexibility to extend the 60-month lifetime limit on benefits. Tribes could also define the amount of monthly cash benefits;

---

<sup>15</sup> *Navajo Nation v. Department of Health & Human Services*, 324 F.3d 1133 (9<sup>th</sup> Cir. 2003) determined that TANF is not a contractible program under the self-determination provisions of the Indian Self-Determination and Education Assistance Act of 1975 (McCarthy, 2004)

<sup>16</sup> Eligibility is restricted by law to Federally-recognized Indian Tribes in the lower 48 states and to the designated 12 Alaska Native regional nonprofit associations and the Matlakatla Indian Community in Alaska. (Administration of Children and Families, 2008)

designate acceptable work activities; declare types and amounts of supportive services; and define eligibility of household members (U.S. General Accounting Office, 2002).

Four Montana tribes assumed administrative control of their own TANF programs; these were the Confederated Salish and Kootenai Tribes, the Blackfeet Nation, the Chippewa Cree Tribe, and Fort Belknap Indian Community. Similar to other social aspects of tribal communities, there was not a unified approach to tribal TANF; instead, each tribally administered TANF program is unique.<sup>17</sup> But tribal TANF regulations in general, and TANF regulations in my research community specifically, differed from those of state TANF in ways that reflected tribal economic values as well as the strategic use of available social capital. Some illustrative differences between tribal and state TANF are summarized here:

*Tribal TANF programs serving a reservation with a population of 1,000 and an unemployment rate of 50% may exempt their participants from the 60-month assistance limit (U.S. General Accounting Office, 2002).* Tribal TANF programs in qualifying reservation communities may elect not to impose the 60-month time limit on cash benefits, instead allowing parents and custodial guardians who reside on the reservation to receive TANF monthly cash assistance for as long as they are income eligible, complete required work activities, and remain primary caretakers of an underage child (Administration for Children and Families, 2007; U.S. General Accounting Office, 2002).

If a tribe wants to extend a family's benefits beyond the time limit stated in their plan and

---

<sup>17</sup> Montana tribal TANF programs differ in their eligibility requirements. CSKT requires that at least one family member be enrolled CSFT and all family members live on the Flathead Reservation; BN requires that the family contain only enrolled members of the BN and live on and near the Blackfeet Reservation; CCT requires that the family include at least one child or caretaker relative (excluding step-parents) who is enrolled or eligible to be enrolled in a federally recognized tribe, and reside in Hill County or on Rocky Boy's Reservation; FBIC requires that the family contains at least one member who is enrolled in a federally recognized tribe and live in Blaine County or on Fort Belknap reservation.

approved by the federal Department of Health and Human Services, they must pay for the benefits out of tribal funds. States, on the other hand, may use a required federal match called Maintenance of Effort funds to cover extended benefits (U.S. General Accounting Office, 2002). The tribe that I researched was committed to offering temporary assistance and had elected to maintain a 60-month limit on benefits, which included any months in which TANF benefits were received elsewhere. Families could apply for an extension of benefits based on circumstances of continued need.

*Tribal TANF programs serving a reservation with a population of 1,000 and an unemployment rate of 50% may elect to designate a greater proportion of total caseloads exempt from the time limits.* While state-administered TANF programs must adhere to the 60-month limit on benefits for 80% of participating families, tribal programs may set their own goal subject to approval by the federal Department of Health and Human Services. The tribe that I researched set a program goal allowing no more than 30% of the family caseload to be exempted. Families facing hardship may apply for an exemption from the time limit; legitimate reasons for exemption include domestic violence, incapacity, caring for a disabled child or parent, caring for the other incapacitated parent, hardship, learning disability, single custodial parent with four or more children, and single custodial parent with a child under the age of one. Tribal programs are not eligible for caseload reduction credits, which allow states to decrease the percentage of their caseload involved in work activities when caseloads overall decline (U.S. General Accounting Office, 2002).

*In determining eligibility, tribal TANF programs may create their own definition of caretaker relative.* Montana TANF regulations define caretaker relatives as those

related by blood, marriage or adoption within the fifth degree of kinship to the child (Montana Department of Public Health and Human Services, TANF Program Policy Manual, 2007). In my research community, tribal TANF regulations stated that dependent children must live with a parent or caretaker relative who maintains a home for the child, and exercises care and supervision. However, using a broader definition than that of the state, the tribe recognized relatives by blood, marriage or adoption without naming a degree of kinship to the child, and also included caretaker relatives related by blood or custom, to include certain close family friends as verified by a letter from the tribe. This reflected the widespread practice of child fosterage that occurs without court ordered adoption or placement.

During my fieldwork I heard European American informants express skepticism about the motivations for fostering children to households needing TANF income on the reservation. In one informal discussion a tribal TANF worker acknowledged that the program guards against the commodification<sup>18</sup> of children. Another tribal member explained:

There are of course economic concerns about having more children. Everybody understands that children cost money. Reservation householders know that they have to have enough money to cover basic needs such as housing, food, clothing, transportation, and heat. These economic concerns are a fact of life...budgets are strapped. It is true that people will figure out how to gain financial assistance from available resources like TANF by having more children. Having children here brings significant wealth through eligibility for public services: Basic needs assistance, health care, food stamps and WIC, earned income tax credits, etc. represent the most valued of resources within families and the community at large.

---

<sup>18</sup> Fostering of children would not fit Gregory's (1982) definition of economic commodity exchange because the transferred object (the child) was not defined in value relative to some other alienable object(s) for which it was exchanged. The relationship between parent and foster parent is better defined as one of reciprocal dependence than independence. Given these conditions fosterage may be best defined as gift exchange (Gregory, 1982 in Hunt, 2002, p.106) In the case of child fosterage the idea of enduring reciprocal dependency between adult family members of the tribal community may be difficult for European American outsiders, who idealize adult self-sufficiency, to comprehend or endorse.

But this situation is to be expected because of the history of tribal economies as communal. You could call this arrangement “communism” and not be in error because tribes work on a different system that is more communal than that of the white community. Providing these basic needs services to families is not a bad thing—it is a tribal tradition. Nobody is homeless, there is always a place for a person to stay—there is always a sofa or blanket for everyone. Nobody goes hungry. Part of tribal tradition is generosity and hospitality towards anyone in need, no matter whether they are related to you or not. (Interview 39)

It is worth noting again that tribal populations within the examined reservation counties demonstrated lower household incomes and per capita incomes than European Americans, contesting the idea that Native Americans who foster a child are motivated by the same ideals of financial gain that prompt the earning efforts of their European American neighbors. Numerous ethnographies document Plains Indian historic practice of extensive child fosterage during pre-reservation life (Mandelbaum 1979; Howard 1977; Landes 1938). More recent eyewitness accounts verify that the practice continues in contemporary reservation communities (Hungry Wolf, 1982; Black-Rogers, 1991). Like the tribal TANF program itself, reservation fosterage acts as a system of community wealth redistribution; in the case of tribal TANF, children endow a household with access to fundamental goods and services.

*In defining eligibility, tribal TANF may recognize a non-custodial parent's non-cash contributions to the household in partial fulfillment of state-defined child support requirements.* It is a federal requirement that as a prerequisite to TANF eligibility, all mothers must declare the paternity of their child. This is intended to facilitate the state's collection of child support payment from non-custodial parents. A recent intergovernmental agreement between the tribe I studied and the state of Montana permitted parents to establish a mediated agreement that allowed up to 50% of monthly

child support to be paid by non-cash contributions to the child's household. Non-custodial parents might contribute child care, car repair, traditional provisioning, and/or participation with children in cultural education and events. A committee of tribal elders will oversee the mediated agreement and verify that all parties agreed to the new arrangement. Elder advocates will use traditional methods of conflict resolution to resolve problems between custodial and non-custodial parents. By allowing child support to be delivered through traditional Native fathering activities, and employing culturally specific conflict resolution practices, the tribal community demonstrates that parenting contributions need not be reduced to cash value as they are in the European American community.

*In defining acceptable work activities, tribal TANF programs allow traditional cultural activities and extended post-secondary education.* State TANF programs take a "work first" approach that focuses client activities on employment experience and job search. Nationally in 2001, 43% of adult clients completed from 30 hours of work activities weekly; 60% of these were in unsubsidized employment. In contrast, tribal TANF programs have the flexibility to set minimum hours of work activity per week. Nationally in 2001, 37% of tribal TANF clients were engaged in weekly work activities and only 33% of them were in unsubsidized employment (U.S. General Accounting Office, 2002). In 2008, Montana's state TANF program required 30 hours of work activity per week; the tribal TANF program that I studied required 24 hours per week.

The tribal TANF program attempted to link participants with work through subsidized jobs in private sector and tribal employment, on-the-job training, job search assistance, community service, and vocational training. Many of these activities would

not be countable in state programs (U.S. General Accounting Office, 2002). But given the dearth of employment opportunity in the reservation community, the tribal TANF program accepted limited hours of documented participation in parenting education, health wellness activities, cultural education, cultural events (ceremonies, sweats, dances), and traditional subsistence provisioning.

While not all of the activities tribes count as work lead directly to private sector employment, they may have other benefits. Tribal officials believed that individual TANF recipients as well as reservation communities as a whole benefited when tribal TANF recipients were allowed to participate in alternative work activities. For example, tribal TANF recipients who participated in cultural activities helped to strengthen community ties and preserve tribal traditions. (U.S. General Accounting Office, 2002, p. 28)

State TANF participants are limited in the amount and type of post-secondary educational endeavors that they may count as work activities. While the state of Montana limits most participants to two years in a pre-approved vocational or associates degree programs, tribal TANF allowed educational training leading to a baccalaureate degree. One case manager explained that he encouraged all TANF clients to enroll in the tribal college so that they could receive the most comprehensive package of family support services, including federal postsecondary education grants, TANF stipends for books, TANF cash incentives for honor roll and graduation, access to tribal child care, and tribal-sponsored transportation to classes. Tribal TANF also offered cash incentives for children's educational achievement (honor roll and graduation) and stipends for children's back-to-school clothing. The strong support of tribal TANF for education reflected community sentiment.<sup>19</sup> One tribal leader compared the contemporary economic

---

<sup>19</sup> Tribal colleges have a positive impact on the level of educational attainment for reservation residents. Approximately 5.9% of Montanans 25 years and older have earned an associate degree. All but one Montana reservation demonstrated an average for earned associate degrees above the state average,

value of education to the historic value of the buffalo. Another described the reason for strong support of education this way:

[Children] are our richest resource, and I know that Council prioritized education as the number one priority because we cannot offer them employment or fancy homes or anything like that. But we can offer them education. We have our education system all the way from daycare to post-secondary [education] ... We have to get that parent and that teacher and that student all talking together and agreeing, "This week, this is what we need to do, every day that's what we need to do, to make this work." So that we are sure those kids are successful.  
(Interview 19)

By accepting education as a viable work activity, tribal TANF fueled job creation in a reservation education system that spanned Early Head Start through tribal college, generating jobs for certified teachers and classroom aides, college instructors, administrators, librarians, printers, bookstore clerks, cafeteria workers, and janitorial and support staff. The tribal college was a community resource for cultural preservation, a training site for entry-level jobs in tribal services such as education and social work, and a stepping-stone for students preparing to attend the state colleges.

During my fieldwork, some European American informants expressed skepticism about the value of reservation education programs where local jobs were not available for graduates. A former grant writer for one Montana tribe shared a 2004 community survey in which the annual wages associated with her reservation's education services from pre-K through tribal college totaled over six million dollars, potentially a significant source of wage and benefit income for the reservation. Unfortunately, 60% of certified professional positions were held by community outsiders who took their salaries out of the reservation economy, a trend that deserves close scrutiny from tribal colleges and councils.

---

including 12.4% on the Blackfeet Reservation, and 14.6% on both Fort Belknap and Rocky Boy's Reservations (Polzin and O'Donnell, 2004, p. 4)



Nevertheless, the demand for local education created by the tribal TANF program led to the creation of many good jobs in education services.

*Like state TANF programs, tribal TANF programs are required to demonstrate marriage promotion efforts in spite of the difference between European American and Native American family systems.* PRWORA mandated that TANF activities encourage marriage as a strategy to reduce child poverty and improve child health and development. The federal Administration for Children and Families funded healthy marriage programs in 2002 and 2006; most of these marriage education and counseling programs were adapted from models designed for white, middle-class, educated couples (Ooms, 2007). Researchers have documented the negative impacts of unemployment, incarceration, domestic violence, justice system and child support system on marriage promotion outcomes in low-income urban populations in predominately Hispanic and African American communities (Ooms, 2007); other research has focused on multiple partner parenthood as a barrier to marriage promotion in low-income communities (Roberts, 2008).

Marriage promotion may not be a relevant poverty reduction strategy in Indian reservations where a two-parent nuclear family household is not the ideal family household composition. Some members of my research community saw marriage as a step to be taken later in life after parenting or fostering one or more children with the help of extended family members:

Young mothers generally stay in their mother's household to have the baby. Tribal tradition doesn't hold that the father is integral to raising the child: The woman has a grandfather, father and brothers who will assume male childrearing roles. A young child may have little real relationship with its own father. Young mothers are not pressured to wed, even when they are pregnant. They might have

several children with no husband or partner for years. A later marriage will bring a “new father” to the child’s life. (Interview 39)

Extended family members provided care, protection, guidance, discipline, education, training, and emotional support, fulfilling a constellation of roles that in European American society is primary and unique to parents. Policy research has not recognized the possibility that, in Native American communities, stable ongoing childrearing support from a committed network of extended family and community caretakers might negate many hazards of child development that are associated with single parent households in European American and urban minority communities. The PRWORA-imposed marriage promotion strategy of “strengthening families” does not address the more obvious risk factors of economic isolation and forced assimilation that impact Native American families and children in reservation communities.

PRWORA, and the political environment in which its program funding and guidelines were created, reflect a dominant culture ideal of the financially self-sufficient nuclear family. PRWORA mandates that all TANF programs, whether they are administrated by a state or tribe, must satisfy four overarching purposes:

- 1) To provide assistance to needy families so that children may be cared for in their own homes or in the home of relatives;
- 2) To end the dependence of needy parents on government benefits by promoting job preparation, work and marriage;
- 3) To prevent and reduce the incidence of out-of-wedlock pregnancies;
- 4) To encourage the formation and maintenance of two-parent families.

Because my research demonstrated a Native American preference for early and high fertility, later marriage, and extended family households, it seems legitimate to

question whether a tribe would independently endorse the two latter TANF goals if they were not required by PRWORA guidelines. In a community where early parenthood and delayed marriage are traditional methods of family formation, the imposition of PRWORA Purposes 3 and 4 can be seen as an extension of historic federal policies of forced assimilation. Federal PRWORA policy disregards pronatal tribal values and undermines traditional Native American family systems.

Traditional tribal approaches to childrearing and household economy persist in contemporary reservation communities, and are evidence of Native American family and community resilience. Contemporary trends of early fertility, extended family childrearing, child fosterage and family wealth redistribution demonstrate enduring economic traditions that are based in the tribe's commitment to nurture and safeguard children, whereby children are regarded as a communal responsibility and a shared asset. The tribal TANF program reflected traditional economic ideologies by which wealth is redistributed throughout the community to families in need. Tribal TANF itself could be viewed as a contemporary redistribution system in which the presence of children creates access to resources for households.

We cherish our children because we're told that they are given to us by the Creator for us to raise and love and teach. And they're special, very special. We are taught to honor those children. So we consider them our richest heritage. And that's how the Council feels, too. And that's for TANF, too. It's because that's what's best for the children. They are our richest resource. In my job [at TANF] I tell my staff all the time, "Children cannot speak for themselves." We are their ears. We are fighting for them. (Fieldnotes, 2008)

A comparison of the dissimilar state and tribal TANF program regulations is listed in Table 12.

*Table 12.* Comparison of state and tribal TANF program regulations (Montana DPHHS, 2007)

	State TANF Program	Tribal TANF Program
Length of allowable time limits for cash benefits	All states must use federally set limit of 60 months in an adult client's lifetime.	Does not count months in which cash assistance was received while living on a reservation with 50% unemployment.
Amount of required weekly work activities	From 27 to 33 hours per week in a single parent household; 33 hours per week in a two-parent household.	24 hours per week, all families. Hours can be averaged between two parents; caregivers over age 55 are exempt.
Definition of allowable work activities	Employment, on-the-job training, volunteer work experience, job search activities, job skills training, vocational education training, community service, providing child care to other TANF participant, life skills training, mental health and CDC. "New parent activity" for first three months after birth of baby.	Subsidized and unsubsidized employment, on-the-job training, volunteer work experience, job search activities, job skills training, vocational education training, community service, providing child care to community service participant, life skills training (parenting, counseling); health and wellness activities (includes mental health and CDC), culturally relevant work activities (ceremonies, traditional subsistence).

	State TANF Program	Tribal TANF Program
Allowable education work activities.	GED. Post-secondary limited to no more than 12 months of Short Term Training. When this is exhausted parent may apply for limited slots in Parents As Scholars program for full-time high school, AA or BA program. Minimum GPA 2.0. Must agree to relocate for employment after graduation.	GED (required within first year) and post-secondary (not limited).
Definition of caretaker relative	Related by blood, adoption or marriage.	Tribe may designate close family friend as caretaker relative.
Mandatory child support (CS) payment enforcement	Non-custodial parent must pay court ordered CS monthly.	Tribal courts program allows non-custodial parent to negotiate up to half of monthly CS in non-cash family support activities.
Available supportive services	Child care, employment expenses, miscellaneous fees, shelter expenses, transportation expenses gasoline or fuel expenses.	Employment expenses, miscellaneous fees, shelter expenses, transportation expenses gasoline or fuel expenses, education expenses, academic achievement incentives, school attendance incentives, graduation bonuses, marriage incentive.

The tribal TANF program endorsed the value of mutual support as a strategy for negotiating poverty. This was demonstrated by the comments of a case manager who worked with tribal TANF clients in town:

Sometimes I see a carload of my clients and one of them is driving everyone else; everyone comes pouring out of one car. When I see that I try to schedule their appointments or classes so that they all can come in at the same time. I call over to Salvation Army and see if I can get a gas voucher for the driver because they deserve that. (Fieldnotes, 2008)

Community response to teen parenthood: Dysfunction or spiritual wealth?

Nowhere was the difference in fertility values and economic strategies between European American and Native American populations more evident than in the community response to teen pregnancy and early parenthood. In my first interview in the European American community, my informant linked the topics of fertility and household economy in a comparison of European American and Native American responses to teen pregnancy:

When a baby is born to a teen-age mother in the white community, it is considered a tragedy. They are told not to have it, that it is the worst thing that can happen to a girl. We teach them abstinence...as if that is effective with teenagers. But when a baby is born to a Native American girl, the whole family rejoices. And food! For white people, food is meant to be hoarded; you put it in your cupboard, you put it in your freezer. But for Indian people, food is meant to be shared. Like, hey, come on over and eat this food I got today. (Interview 1)

When the European American town's middle school and high school had numerous pregnant students that year, it was considered a sign of community dysfunction and failure. Some informants viewed it as an embarrassment to a community that took great pride in its efforts to demonstrate a view of young people as social assets, and had declared an agenda of community engagement through multi-disciplined youth

initiatives. They agreed that something wasn't working the way it was intended to, an outcome that was painful to community leaders and a source of derision to other students:

We try to teach these kids about this kind of thing. Healthy relationships, and sexual assault, and just respect yourself and others. You know, focusing on something other than [sexual activity]. Apparently...it isn't working! (Interview 11)

[Teen pregnancy] is so bad that it's the talk of the whole town ...everyone wants to know what's going on at that [high] school? Everywhere I go...the grocery store..."What's going on up there?" My husband comes home from work... "wah wah wah wah" (laughter). Well, I think they just think it's sad. (Interview 14)

I think one of the things about teenage pregnancy is there is a stigma...teenage girls are afraid, so I've seen them not get into care, no prenatal care, and deliver the baby...that's one thing about being in a small town is the stigma. You hear all these things going on, like "Gosh, did you hear about the pregnancies? Oh my gosh." So then if another girl becomes pregnant, she's like "Well, I don't want to say anything, because I'm like one of those..." (Interview 15)

There are eleven girls pregnant in the school system this year. Maybe more. Two or three in middle school. That's bad. On Mother's Day, you know how they [her daughter's friends] are texting each other? One of her smart ass friends texted the rest of the bitches, "Happy Un-Mother's Day" or "Happy Mother's Day to all the girls who didn't get pregnant this year. Good job!" (Interview 38)

In the European American community, young parenthood was a reminder of youthful impulse prevailing over self-control, and lust over abstinence. Residents agreed that young parents are likely to fail to meet the ideals of economic self-sufficiency and relationship commitment. Sadly, young parents would not understand the consequences they had brought upon themselves and their children by their poor choices. But young parents could not expect that anyone would help them manage these weighty consequences, for to do so would be to encourage irresponsible behavior:

It's the parents' responsibility [to decide when a child should be conceived]. Sometimes a decision is not made; it's just an act of lust and being unprotected. And then we get the few [young parents] that, what I see is they make the choice to have a child because they want somebody to love them and they're missing that element of their life so they make that decision prematurely. (Interview 14)

[Young parents] have no clue. They act like its just a little puppy, they have no clue it's another human being...It's really cute for a few days, then the excitement wears off...It breaks my heart that those kids are being set up for failure. (Interview 18)

You know in the 60s you couldn't go to high school if you were pregnant. Now they just go to classes with the other kids. Does it send a message that that type of behavior is accepted? I think it does. But it happened back in the 60s when it wasn't accepted. It always happens. (Interview 25)

What happens is that babies come when babies come. But because everyone might not have their ducks in a row [they are told], "You made your bed; now you lie in it." (Interview 37)

In contrast, within the neighboring Native American populations, young parents were supported by the availability of extended family childrearing support as well as tribal child care options. Young mothers could continue to pursue education, opportunities for employment, and other areas of personal advancement (for example, playing on the high school basketball team). Fosterage allowed young parents to complete their education even if they were required to leave the community. Extended family households provided economic support to parents through the sharing of limited resources. Therefore young Native American parents were not subjected to the negative consequences of early parenthood brought about by the tragedy of limited options. They would not be expected by their families and community to pass up opportunities for individual development in deference to the premature responsibilities of parenthood and marriage that was required in European American society:

My mom helps me [by raising my daughter]. She gets help from her husband and all my brothers. When I was younger it wasn't like I wanted to give my daughter up. I did take care of her until I was nineteen. But in my senior year my mom thought it would be a good for me to go into the Job Corps...Try and get my life together. She would keep my daughter and take care of her...After I graduated...I went back home and...I saw that my daughter, she kind of knew who I was but



not really. But she was like real used to my mom...I guess I resented it for a little bit, but I decided to let my mom raise her. (Interview 34)

Family members and tribal social programs supported young mothers to continue their education, seek employment and eventually find the spouse of their choice. Again, Native American informants were aware of, and offended by, the disapproval that labels young parenthood as an irresponsible mistake:

When a woman has a baby in an Indian family...everyone...is very thankful for the new baby's life, for this new life. And everybody is very happy for the new mother for having the new baby. Even though sometimes maybe that mother is too young, or has a lot of other kids...everybody is still happy for her. (Interview 19)

I wish white people would stop acting as if [young motherhood] is a problem here. A whole community is in place to assist young parents in raising their children ... Of course our young women know about birth control. But generally young adults trust that their family system will provide support for them. Relatives will be there to assist and support them as they raise their young children. Teenage pregnancies and young birth mothers have been a way of life here for generations. (Interview 39)

Several tribal sources noted that a young woman must be taught self-respect and how to care for her own body. Inappropriately early sexuality and violence against women were seen as negative effects of the loss of cultural guidance and education. Adolescent rites of passage that transmitted female knowledge to young women fell out of practice during the boarding school era when young people were forced to separate from family, elders and cultural traditions. Tribal educators and administrators are working to reinstate some aspects of traditional female coming of age practices, including culturally appropriate sex education.

A Colorado study interviewed Northern Plains American Indian youth to learn more about stressors and cultural buffers that might affect their sexual behaviors. They

found that peer pressure and drug use were factors in early sexual activity. Births to older teens were not out of the norm nor were they considered a social problem:

To participants, teen pregnancy was a problem associated with having babies in high school—or earlier; older teenagers were not necessarily too young. High school was seen as a time to be wild, a time without responsibility. Once one had graduated from high school, qualification for parenthood centered on the ability to care for the child, most often described in emotional terms rather than financial ones. According to the participants, support of the family was almost a given for any age of first parenthood. While a teen pregnancy itself was usually not a celebrated event, especially at young ages, the birth of a baby into the family was. Respondents in our discussions routinely noted that the baby was usually absorbed into the larger family network, often with few consequences for the mother or father. (Kaufman, Desserich, Big Crow, Holy Rock, Keane, and Mitchell, 2007, p. 2160)

The prevailing public health research states that young mothers are less likely to get adequate prenatal care and more likely to generate a low income household after the birth of their child, leading young parenthood to be considered a medical hazard, a public health problem, and a cause of child and family poverty (U.S. Center for Disease Control, 2008). Teen pregnancy is considered a matter of public health importance because mothers aged 19 and younger are more likely to drop out of high school and to remain single parents (U.S. Center for Disease Control, 2008). The Center for Disease Control reports that children of teen parents are more likely to demonstrate low achievements in school, be in poor health, be victims of child abuse and neglect, be placed in foster care, be incarcerated during their adolescence, drop out of high school, be unemployed or underemployed as a young adult, and be a teen parent. It is reasonable to suppose that these conditions might be the result of social issues unrelated to maternal age. The medical risks associated with teen pregnancy have included higher infant mortality, low birth weight, very preterm delivery, low maternal weight gain and difficult birth. Studies characterizing adolescent childbearing have focused on the aggregate age group 15 to 19

years, the same target population named in Center for Disease Control teen pregnancy prevention projects. However, relatively little research delineates the health risks based on mother's age, prenatal care, and behavioral risk factors.

Both sociologically and physiologically, young adolescents and older teens differ significantly as maternal populations. An 18 or 19-year-old woman is a legal adult, and in the United States her adulthood represents a universally recognized shift in social status from that of a 15-year-old high school student. Interestingly, this social and legal demarcation holds medically as well. In an analysis of infant mortality across the United States' 1995 cohort of singleton births to mothers aged 12 to 23 years, rates of infant mortality, very low birth weight, and very preterm delivery demonstrated that birth outcomes began to stabilize at age 16 years for each of the three largest racial/ethnic groups (non-Hispanic white, non-Hispanic black, and Mexican American) (Phipps and Sowers, 2002). Similarly, a study of early sexual maturity and fertility among a natural fertility society of foragers in Venezuela showed that first time mothers in early adolescence (ages 14 and younger) suffered four times the infant mortality compared to older adolescent mothers (ages 17 and older). From a perspective of biological investment over a woman's complete reproductive life, taking into account the health risks and provisioning constraints of delayed pregnancy and older motherhood, the optimal childbearing strategy began in her mid-teens (Kramer, 2008).<sup>20</sup> So although PRWORA has intervened to demand that all TANF programs, including tribal TANF,

---

<sup>20</sup> In a cross-cultural study of 22 contemporary small-scale societies, natural fertility among a broad range of hunter-gatherers and horticulturalists manifested a range for mean maternal age at first birth from 16.2 to 25.7 years. Early female puberty correlated with higher mortality, suggesting that fast growth and early development may be a selective response to environmental and genetic pressures (Walker et al, 2006).

adhere to the dominant culture ideal of delayed pregnancy, research does not substantiate universal health risks or sociological risks of mid- to late teen pregnancies.

In 1996, PRWORA endorsed a national strategy of teen abstinence education, created bonus grants for the five states that demonstrated the greatest decline in out-of-wedlock births (to mothers of all ages) without increasing abortion rates, and provided mandatory state programs for teen pregnancy prevention (U.S. Department of Health and Human Services, Administration for Children and Families, 1996). As a result, state and federal governments were mandated to pathologize all early parenthood—regardless of maternal age and social support for parenting—through teen pregnancy prevention projects that are situated within public health and anti-poverty programs.

Furthermore, the federal Center for Disease Control funded a 5-year capacity-building cooperative agreement with national, regional and state organizations to demonstrate science-based approaches to teen pregnancy prevention (Center for Disease Control 2008). One goal for funded projects was to eliminate “disparities” between teen birth rates of racial/ethnic groups by reducing births in minority teen populations (Center for Disease Control 2008).<sup>21</sup> A Teen Pregnancy Fact Sheet stated, “More than 80% of these births [born to mothers aged 15-19 years in 2006] were unintended, meaning they occurred sooner than desired or were not wanted at any time” (Center for Disease Control, 2007, p.4).

These policy positions, and indeed all of the postures taken by the federal government to influence fertility in low income and ethnic communities, ignore the possibility that contemporary post-transition populations might elect to leave

---

<sup>21</sup> African Americans, Latinos, Native Americans and Native Hawaiians demonstrate higher than average birth rates for mothers aged 15-19 years, while Asian/Pacific Islanders and whites demonstrate lower than average teen birth rates (Hamilton and Ventura in U.S. Center for Disease Control, 2008)

reproduction open to natural fertility, thereby welcoming and supporting young parenthood, for cultural reasons that reflect societal views on health, spirituality, or wealth. Given the ethnographic evidence demonstrating their pronatal attitudes and extended family systems formation, it is doubtful that Northern Plains tribes would welcome federal intervention to reduce teen pregnancy rates—especially when the majority of those births are to legally adult mothers aged 18 and 19 years old.

Native American births accounted for only 12.2% of all Montana births from 1990 through 2007, and Native American births to mothers younger than 20 years accounted for only 2.85% of the state’s total. The majority of Native American “teen pregnancies” (60.7%) were to mothers ages 18 and 19, that is, to mothers who were of legal adult status. Only 1.12% of all Montana births were to Native American teenagers under age 18. Yet Montana public health officials dedicate significant professional and public discourse to the “problem” of Native American teen births. Several divisions of the Montana Department of Public Health and Human Services posted reports on maternal and child health risks and/or teen pregnancy in which substantial content was devoted to discussion of Indian reservation birth patterns.<sup>22</sup>

These interpretations of Montana reservation fertility did not consider Native American family and community systems that—unlike those of neighboring European American communities—offered broad parenting support from extended family networks rather than isolating childrearing responsibilities with young parents. Although births to young women of legal and near-legal adulthood were not considered problems in Native

---

<sup>22</sup> For examples, see *Major Prevention Opportunities to Improve Health in Montana* (Montana Department of Public Health and Human Services, Public Health and Safety Division, 2006); *Montana Teen Pregnancy Report: Trends in Teen Pregnancies and Their Outcomes in Montana 1991-2005* (Montana Department of Public Health and Human Services, Women’s Health Section, 2001); and *Teen Pregnancy in Montana* (Montana Department of Public Health and Human Services, Prevention Resources Center, 2001)

American communities, dominant culture bureaucracies transformed them into medical and social crises at both the federal and state levels.

The Colorado study of Northern Plains American Indian youth documented increased sexual “risk taking” behaviors among youth in their late teens and early twenties from 1993 to 2000; risky behaviors included inconsistent condom use and multiple partnerships. The authors noted that condom use might be at odds with “family-building plans” (Kaufman et al., 2007). Native American young adults in reservation communities might choose not to use contraception if their cultural norm for young adult sexual behavior is decidedly pronatal, and does not threaten dire negative social or economic consequences for early pregnancy.

A Center for Disease Control study compared the 1987 reproductive behaviors of Native American women living on a Montana reservation with those of Native American women living in a regional metropolitan center, and found that both populations demonstrated similarly high numbers of children ever born compared with the national fertility rate for European American women. However, proximate determinants differed markedly between reservation and urban Native American women. Those living in the reservation community were more likely to marry later; demonstrated very high levels of contraception use, including 35% female sterilization; and breastfed their children (Warren, Goldberg, Oge, Pepion, Friedman, Helgerson, and La Mere, 1990). These behaviors were inconsistent with those of other high fertility American populations (i.e. urban ethnic minorities). The researchers hypothesized that in the reservation community, “...couples either wanted high fertility, were relatively poor users of family planning methods, or used less effective methods until they had exceeded their desired family

size...after which time the female turned to sterilization” (Warren et al., 1990, p. 69). The authors offered no reason to believe that Indian reservation populations would be less competent in their contraceptive use than urban minority or white populations. A logical and, according to my research, more likely explanation of the Montana findings would be the strongly pronatal culture of Northern Plains tribal communities.

While dominant culture politicians, bureaucrats and researchers ponder the pattern of early pregnancy on reservations, Native American communities continue to marshal support for young parents through traditional family systems, strategically designed services, and a generally pronatal worldview that prioritizes the importance of caring for young children, and raises the status of children’s caretakers:

In the tribal college classroom a young couple’s very young infant cried. The father picked up the tiny baby from its portable infant seat and walked towards the hallway to sooth it. As he passed the instructor’s desk he apologized for the interruption. The instructor insisted vehemently, “Oh no, don’t apologize. Never apologize for the sound of a baby crying. That sound is music to our Creator’s ears. We thank you young people for having these babies. We thank you for this gift you bring to our community.” (Fieldnotes, 2007)

#### Fundamental differences in definitions of wealth: Raising assets

My ethnographic research reflected a consumer choice model by examining the microeconomic level—individual parents and households—to better understand how fertility behavior was motivated by demand for children. Consumer choice theory, led by Lieberstein and Becker’s work on rational agency and child cost-benefits analysis, clarified concepts of the household’s potential earning power; economic outputs of children versus cost per child; and competition for parent’s time between children and economic goods (Becker, 1960 in Easterlin, 1975). This approach was based in the assumption that parents had access to some level of control over birth, and that they acted

in their own self-interest when they elected the general direction (if not specific outcomes) of their fertility behaviors.

Most arguments for the economic value of children are reduced to two features: (a) The labor that a child contributes to the family group or household has economic value, and (b) the care that an adult child will provide for an elderly parent has economic value. These values are commonly assessed as work hours, calories, or saved paid labor in analyses of pre-mechanized, agricultural, and post-industrial societies (Nag, White, and Peet, 1978). In these scenarios, the economic contribution made by a child depends on environmental context. The cost of nourishing and nurturing a child through infancy and early childhood is measured against the potential contribution that children will make if they survive to later childhood. If a child doesn't survive, the costs of repeated pregnancy necessary to replace them must also be assessed (Kramer, 2008).

A child's economic contribution is also dependent on cultural factors, such as gender role or class. A marriageable daughter might not make as valued a contribution to her parents wealth as an heir son (Levine, 1987; Koh and Tan, 2000). There may be differential social values assigned to roles of parenting. A child's value may be increased by a relationship with a patron who allows parents to forge beneficial relationships in an expanded social circle (Holloos and Yando, 2006; Roxburgh, Stephens, Toltzis, and Adkins, 2001).

A.F. Robertson situated microeconomic fertility interests within the larger political milieu and concluded that a well-functioning social community would create social institutions to support the well being of its members and the success of their reproduction. Indeed, reproduction was the primary economic function of the household



(Robertson, 1991). If well being is tied to demonstrable spiritual wealth, and if a family, household, or community demonstrates spiritual wealth through the blessing of many children, then it would be expected that social institutions would support that goal with pronatal norms, recognition of child wealth, support for the work of childrearing, and high status for those who do that work.

In describing the value of children in their contemporary European American rural community, my subjects frequently used a market economy model that related value to the viability of local services (i.e. jobs) or the social functioning of the community (i.e. costs of children's injurious or criminal behaviors vs. benefits of constructive behaviors):

Sometimes the amount of money that programs (like child care centers or schools) are paid by funders depends on the number of children they serve, giving children an economic value. (Interview 9)

I would say children are very valued in this community. We have [a community wide healthy youth initiative]...Because it's proven that the healthier your students and your children are the less at-risk behaviors they will have. So that's been a focal point of our community, to work on raising assets. (Interview 14)

Another part of this youth initiative is that we have "asset builders." And we have a meeting every month and we talk about one of the assets, how we feel it's affecting the community or how we feel we could improve it. How children can be assets to the community and how the community can be assets to family. I definitely think we consider children as assets. Even businesses do a luncheon that supports children as being assets. (Interview 15)

[Children] are seen as an economic asset at the school, and for the community. It's funny though. Our kids in surveys—they don't see themselves as assets. In a survey that we took, they said the community doesn't value them. I don't know why...But some kids don't feel valued. 'Community values youth—only 22% of the youth said that; young people are given useful roles—24%.' (Interview 17)

European American informants also described children as personal assets that brought status, perspective or experience to individual adult caregivers:

They are constant reminders of goodness and innocence...You never know where the inventiveness or progressiveness of our culture will come from, in art, in our

thoughts; something beyond making more money or another machine. Children remind us to play. All children are beautiful. People who can't love can often times love a child; children bring love into the world. (Interview 1)

Some people see children as adornment, something that reflects the parent's identity or status. If the child excels at something. Even the number of children can reflect on the parents, depending on their religious background. For example, a traditional Catholic woman might gain prestige in her community by having many children. Other people get true enjoyment from a child. (Interview 9)

In contrast, the predominant Native American perspective was that children had intrinsic value. Children were not the means to a gain of value, but instead were themselves the highly valued element. In fact, children were viewed as the primary wealth and most critical assets of the family or community:

To us, children are wealth. Children are our wealth. That is how we measure our wealth, not in money or land or jobs or possessions. That is hard for you [white people] to understand. (Interview 19)

Today's economy must support the future of the community. We have all heard of the "seven generations" tradition of planning...Whatever we do today must benefit the children who are to come, and that is an idea that is always in tribal people's minds when they are making decisions. (Interview 39)

In my inquiry on the Indian reservation, children—more than finances, land or materials goods—were designated the primary vehicle of individual, family, and community wealth and status. Although the addition of children to a household reduced per capita financial incomes in a relatively fixed sum economy, pronatal fertility decisions increased household wealth and status. This was documented in the willingness of relatives to assist in raising the children of young parents, in the childless household's desire for a foster child, and in the elevated status of the fertile female elder.

Given that children were a form of wealth, community wealth was directly enhanced by the availability of large family groups (defined by fosterage and friendship, as well as by blood and marriage) that enabled the community to support greater numbers

of children. In addition, because children provided entrée to some tribal wealth redistribution systems, the presence of children led households directly to modest though significant financial gain for adult caretakers.

When extended family members helped parents with living expenses and child care, they provided services that have cash value off the reservation. A person returning to their family on the reservation reclaimed a valuable personal resource that had been left behind. The resource of family was both social and economic, although the financial impact of the improvement might be negligible in the low income, low cash reservation community.

Therefore the presence of children leveraged wealth on two levels: (a) From the Native American wealth perspective, children expanded group wealth by adding their inherent value, enlarging the family network, and demonstrating the household's spiritual worthiness; and (b) from the perspective of the dominant culture marketplace, children provided a direct return of financial value in response to the economic investments made by relatives as, for example, when aunts and uncles offered child care for a teenager's infant, or when a custodial grandparent fostered a grandchild. Because kinship value was not limited to blood or marriage in Native American communities, children related by adoption, fosterage and friendship had the same wealth value as blood descendants.

In A.F. Robertson's view, microlevel fertility decisions are made by individuals in response to political and economic demands, while macrolevel reproductive needs of households shape societal institutions (Robertson, 1991). At the microlevel, individual agency operates to pattern fertility in a way that optimizes immediate benefits and long-range security. Can this materialist perspective be applied when measures of wealth and

definitions of security differ between cultural groups, as they do between European American and Native American groups on the Northern Plains? I argue that a perspective that recognizes the agency of individuals and groups to elect fertility as a strategy of wealth development must recognize culturally specific forms of wealth, so that it can be applied across cultures even when the development of nonmaterial wealth is at stake. It would be easy enough to demonstrate the economically adaptive strategy of pronatalism and child fosterage in Indian reservations based on the access that children provide to TANF and other financially rewarding services. This would explain tribal fertility behavior from a European American perspective, measuring children's value in financial terms. But this would disregard the testimony of my many Native American subjects who repeatedly stated that their wealth system differed from that of their European American neighbors. The Native American informants' desire to raise assets through high fertility was not a reflection of financial interests, but rather one of nonmaterial wealth. Members of my reservation research community elected pronatal fertility behaviors that were in their own *spiritual* self-interest, because spiritual value was their culturally specific measure of worth, security, and future survival.

Life is more precious than materialistic items in the eyes of our Creator. So would you rather have a beautiful house, beautiful furniture, nice car, all those but limit your children to four? Or would you rather be rich with children here, and then rich after this life with our Creator? You'll get to his kingdom through those children. You'll be rich through those children. Yes, that's how our people talk about it. So it depends on how you look upon that word 'rich' or 'wealthy': in the eyes of our Creator, or in the eyes of people? When I say this some people will come back on me. "Oh, what about people who have a lot of children but they can't support them?" Our people say if you have a lot of children and you follow God's laws, then God's going to help you support those children. He'll provide you with a home, clothes and food for those children. And if you follow God, he'll follow you too, he'll follow those children and they will listen to you. They'll be well-behaved people. If you walk accordingly in the eyes of our Creator, he won't forsake you. The number of children is up to him. (Interview 3)

Further in keeping with Robertson's theory that household needs shape government institutions, Native American economies long ago settled upon wealth redistribution as a way to ensure the survival of all members of the community in a potentially hostile environment, regardless of members' clan affiliation or resource limitations. Contemporary tribal programs such as TANF introduce a modern system of wealth redistribution but still reflect the traditional value of children to a household or family. In the same tradition by which grandmothers or other family members work to maximize resources for childrearing, thereby ensuring the ability of the community to keep and raise a child successfully, the TANF program ensures that families can stay within the community to raise their children.

The presence of children creates a spiritual and social asset for a reservation household. Births are perceived as a gift of wealth from the Creator, and they are welcomed and supported. Unlike their European neighbors, young parents are not reproved for childbearing. Instead they are congratulated and helped to continue their development into adulthood through education, employment, new relationship formation, and deeper social engagement within the community. It is understood that these developments do not end with the birth of a baby. As with other forms of consolidated wealth, the tribe uses its social customs of extended family households, shared childrearing, and fosterage to redistribute the wealth of children. By supporting early parenthood, high birth rates, and communal economic strategies the tribe creates options that allow individuals to increase and redistribute personal wealth to family and community.

In summary, for both European American and Native American communities, ideal individual fertility decisions were based on considerations of economic strategy. However, the definition of value differed. In one community, value was based on the free market costs and benefits of children. In the other, value was based on the spiritual value of children. The European American fertility ideal of delayed reproduction and limited births maximized individuals' future wealth potential, which would be measured in financial gain. It encouraged parents to delay birth until their education was achieved, their financial earnings were secured, and their nuclear family household was formed and self-sufficient. European American society's anti-natal strategy potentially enhanced parent prestige, as the reduced expenses of a smaller family would more likely lead to successful self-sufficiency.

The Native American fertility ideal of early reproduction and numerous births also maximized wealth potential. The wealth gain would be measured in children, and would benefit groups rather than the individual parent, reflecting the Native American inclination towards communal over individualistic economy. A pronatal strategy increased the economic assets of family groups by leading to production of the wealth most highly valued in their community. Pronatalism enhanced a family's status by demonstrating their worthiness of spiritual blessing, and by bestowing the ability to share valued wealth through extended family childrearing and fosterage. Although the two cultural populations demonstrated different resources, forms of capital, and indicators of status, they both idealized a fertility strategy that optimized community member ability to acquire and compound their most highly valued assets.

As my informants noted, it is difficult to translate the Native American concept of communal, long-range values of economy into terms that make sense to the individualistic immediacy of dominant culture market capitalism. Definitions of the value of children differ by culture. I have tried to show that this difference is at the root of variation in the two communities' fertility trends. My study of Northern Plains fertility and household economy has led me to conclude that economic determinism must recognize the cultural relativity of economy—that is, that any definition of wealth is culturally specific. This does not diminish the importance of identifying those ways in which cultural systems support subsistence, production, and material comfort. Certainly in the case of the Plains Indians, a nomadic subsistence pattern decreed much material property a burden rather than wealth. Where survival depended on group commitment to provisioning, a large and flexible network of social support and obligation was a more important solution to survival. These traditions, articulated by Native informants, are tens of thousands of years old, and endure in spite of persistent assimilation pressure from the U.S. government and neighboring European American communities. Ultimately, any of my own attempts to impose culturally specific European American definitions of wealth onto Native American economies did not help me to understand the two communities' divergent fertility strategies.

Ecological anthropologist Sebastian Braun identified a parallel confusion of Plains Indian wealth values with European American economy in his analysis of contemporary tribal buffalo herd management patterns:

In a social environment that tends to separate economics from other cultural phenomena and accord economic issues an essential role in social and cultural changes, it is important to keep in mind that economics may carry less weight than symbolism, even in what we might call economic development...the

reduction of contemporary “economic” patterns to pure economics is just as misleading as the interpretation of material evidence of exchange in purely economic terms. This is particularly true for symbolically central aspects of culture. (Braun, 2008, p. 207)

Following Braun’s example, I would describe the value of children as a symbolically central aspect of both Native American and European American cultures. In Native American culture, children are a gift from the Creator to a mutually dependent group; in quantity they represent a sign of spiritual worthiness, and their care will be the responsibility of the entire group. In European American culture, children are controllable consequences of sexual behavior; they are a sign of adulthood and independence from the family of origin, and their care is the responsibility of a self-sufficient nuclear family.

In any community, one can observe the differences between ideals and reality. There were observable differences between fertility ideals and the real life conditions under which children were raised in both research communities. Not all children in the reservation community enjoyed the same degree of family and community support. Neither were all families equally committed to the practice of traditional spirituality. My informants made me well aware of the poverty, drug abuse, and domestic violence that plagued families in the reservation community. At the same time, they remained adamant that the traditional system of family formation was key to the survival of their own identities under the pressures of social problems and cultural assimilation.

In a parallel difference between fertility ideals and real life conditions, not all European American children were raised without the assistance of friends and family. Many informants were highly motivated parents and grandparents who considered themselves gifted by the existence of their family’s children, and shared emotional and



practical support within their circles of family and community relationships. Further, they were often willing to charitably extend that support through churches and public institutions to less affluent families not of their acquaintance. Nevertheless, both low-income and more affluent informants testified that families could not easily rely upon financial support from public or private sources without a sense of failure and stigmatization.

These communities' concurrent fertility trends emerge under contemporary economic pressures as mutually incomprehensible social patterns. The Native American community welcomes natural population growth and provides institutions to support it, regardless of the lack of foreseeable increases in available resources. In contrast, the neighboring European American population's low fertility and high outmigration contradict their desire for local community continuity.

Kertzer's archival study (1995) of a north central Italian village from 1860 through 1921 demonstrated that fertility in that region was class-specific. Birth trends reflected not only family economic conditions, but also deeply embedded local cultural norms about marriage timing and occupation that were slow to change. Similarly, the strong influence of cultural norms on fertility is evidenced in ethnographic observations of reservations and rural towns on the contemporary rural frontier, where European American and Native American communities support contradictory reproductive strategies as cultural norms lead families to elect diametrically opposed fertility responses.

## CHAPTER 8 - CONCLUSIONS

The purpose of this study was to explore cultural influences and social mechanisms that impact fertility in the Northern Plains, where European American towns consistently demonstrate significantly lower birth rates than neighboring Indian reservations. The primary hypothesis proposed that communities of high fertility situated within an otherwise depopulating rural area would demonstrate adaptive economic strategies, specifically more communal household strategies. In conclusion, my findings supported the primary hypothesis, revealing two divergent fertility patterns and two distinct economic strategies.

Informants from the European American community ideally valued economic self-sufficiency as a prerequisite to adult status, and preferred to delay pregnancy well into adulthood. Households were ideally limited to members of the nuclear family, leading to a low incidence of multigenerational and extended family households. Popular opinion stigmatized individual reliance on family or public assistance. When economic advancement was not possible at home, individuals were expected to move to a location that offered better education and employment opportunities so that they would be able to support their own nuclear family independently. Departed relatives were not expected to return. This constellation of values directly supported outmigration of young adults, delayed parenthood, and smaller families with fewer children—all trends that contribute to lower birth rates.

Contemporary European American norms reflect characteristics that were critical to the success of immigrant settlement such as individualism, intolerance of dependence on relatives or community members, and willingness to leave family and community of

origin. Historians describe a frontier tradition of mutual economic reliance among yeoman agriculturalists, but this strategy appears not to have been the daily economic practice of entrepreneurial town residents in the region of my study. As rural communities experienced economic restructuring with the onset of agricultural industrialization, popular political discourse shifted its emphasis from community interdependency to individual self-sufficiency. Under the destabilizing influence of rapidly changing economic conditions, the traditional European American values of individualism and self-sufficiency may have contributed to community demise through the unraveling effects of low birth rates and high outmigration.

More affluent European American informants believed that their town provided a universal safety net of support for families through social networks organized around churches, neighborhoods and children's schools. However, low-income parents anticipated little security or support beyond time-limited institutional programs funded by nonprofit organizations and the state. Programs such as cash assistance and public housing were viewed as temporary stepping-stones to families' economic self-sufficiency.

This study's Native American informants lived both in town and on the Indian reservation. In contrast to their European American neighbors, they ideally valued parenthood as an indicator of adult status and children as a family asset and spiritual blessing. Young parenthood was welcomed, and childrearing duties were extended beyond biological parents. Larger households often included grandparents, extended family relatives and non-relative members. Tribal government continued a cultural tradition of wealth redistribution through contemporary public assistance programs.

Native American informants viewed outmigration as a temporary strategy for economic advancement, one made risky by the implicit loss of valuable social and economic support networks. These norms supported early parenthood, shared childrearing, and retention of young adults within the community—all trends that lead to higher birth rates.

Contemporary family construction described by Native American informants appeared to reflect tribal traditions in which optimal economic benefit was derived from expansive family and community networks whose value strengthened with increased numbers of children. Larger households promoted mutually supportive economic strategies that shared expenses and duties across broader social groups. This was adaptive to local conditions of persistent poverty and high unemployment. The ready support of blood-related and adoptive parents, grandparents, uncles, aunties, siblings and cousins helped young adults to increase the community's most valuable asset, its children.

#### Limitations of the study

The large numbers of factors that influence proximate determinants of fertility defy simple causal explanations. Certainly a more thorough study of fertility trends in the Northern Plains would consider features of family and community structure such as gender roles, social stratification, economic mobility, and structural access to prenatal care and contraceptive options. Limited access prevented this study from examining detailed individual fertility histories and reconstructing total fertility for sample populations.<sup>23</sup> The Northern Plains, with its neighboring enclaves of small towns,

---

<sup>23</sup> An alternative strategy for more detailed investigation of regional demographic trends would be to recruit community members as research interviewers. Community members could more freely explore characteristics of social support or condemnation that influence individual fertility decisions. They would know how to probe more sensitively for the complete information on fertility history that is necessary to define total fertility. It would be the researcher's responsibility to articulate to the community the practical value of knowing this information, so that outcomes could be applied towards an endeavor of value to the community members themselves. For example, articulation of fertility trends and influences could assist

reservations, and Hutterite colonies, are an undeniably interesting research environment for demographic anthropology studies.

The small size of rural populations created sampling hazards when using the fertility and economic data collected by state and federal agencies. A more complete understanding of community geography would have assisted in identifying the most useful levels of data, some of which was available at levels as small as Census Blocks. Because Montana citizens enjoy relatively easy access to state government, it might be possible for future researchers to request differently organized data, for example, fertility data specific to reservation populations.

Some viewpoints may have been inadequately represented by my samples. Because initial access came through contacts in child care and human services programs, key informant interviews and interviews with low-income parents may have been skewed towards the perspectives of women. (Program staff was predominately female, and mothers and grandmothers were the most common client contacts in both cash assistance and state-supported child care programs.) Interview samples in both communities skewed towards informants who had chosen not to outmigrate. European American town residents did not represent the perspective of families who had retained family farm landholdings rather than leverage them as economic assets; instead, town residents represented entrepreneurial traditions of market-driven asset management. Finally, Native American informants did not represent any “non-traditional” outmigrants.

---

community leaders to design more comprehensive parenting support for families, create needed child care services, or fund economic development initiatives that retain young talent within the community.

### Potential applications to public policy

Advocates for low-income parents and for tribal parents could use this research to request adjustments to state and federal program policy, whose evident cultural bias might be considered detrimental to both rural European American and Native American communities. For example, Montana tribes could ask that high fertility among young reservation residents not be pathologized, and that it not be linked to a list of social ills whose relationships are implied but not proven. Montana researchers and policy makers routinely isolate Indian reservation birth rates from those of the general population, highlight them as a social problem and public health risk, and ignore their spiritual significance within the Native American community. Certainly the Montana Department of Public Health and Human Services does not isolate for public scrutiny other social groups that might elect early or high fertility, for example, Hutterite communities or Mormon congregations.

The federal Center for Disease Control and PRWORA efforts to reduce teen pregnancy would better serve Native American populations if they were redirected towards improving tribal and rural access to prenatal and infant health care. In fact, from the perspective of a racial minority member, the federal Center for Disease Control's stated goal of, "working to eliminate racial, ethnic, and other disparities in teen pregnancy" (U.S. Center for Disease Control, 2008, p. 4) could appear discriminatory towards minority groups that demonstrate natural fertility.

Federal TANF reflects a dominant culture ideology of self-sufficiency that is largely irrelevant to tribal communities, a distinction well illustrated by the differences between state and tribal TANF program regulations. Ironically, dominant culture self-

sufficiency ideals may undermine the success of extremely rural European American communities whose frontier economic realities demand different strategies than their urban counterparts. Rural communities around the world have been observed to generate greater informal and communal economic activities related to subsistence, housing, transportation, child care and unofficial economy as adaptations to economic decline. Contemporary European American rural communities might some day ask government programs to allow them greater use of asset-enhancing practices that favor shared economic resources and leveraged social capital.

#### Respectful methodology

As part of an emergent global Indigenous paradigm that counters colonial research methods and challenges dominant culture research findings, Susan A. Miller describes a preferred research methodology:

The primary distinguishing characteristic is that Indigenous projects are designed as service to an Indigenous people or community. Service takes many forms, and even a simple narrative of past events can serve a people's needs. For example, a narrative might refute stereotypes or anti-Indigenous narratives that shape outsiders' treatment of the community and its members. (2008, p. 16)

This research project was designed to improve understanding of culturally specific family building and household economic strategies, in hopes of informing more culturally appropriate policy for government programs serving families with young children. Certainly it was designed and implemented with the goal of doing no harm to individuals or communities. Its outcomes may now be used to refute stereotypes of unhealthy teen pregnancy rates on Indian reservations, or to draft program regulations that encourage low-income families in rural communities to share economic resources. However, the current system of research review at the University of Montana (UM) and

within the tribal community did not present a clear protocol for community-based research (Stoecker, 2008). The UM Institutional Review Board's human subjects review ensured that no individual or group would be harmed as the result of this research. Tribal research protocol was not as clear; however, a tribal official reviewed the research proposal and advised that the research design and content would pose no harm to my informants or the community.

Interview questions were tested with key informants, who identified sensitive topics and privileged knowledge that should not be written or repeated. Segments of this paper that pertain to Native American cultural preservation, tribal history, and the value of children were evaluated by a tribal college instructor before being incorporated into the research. Details of tribal government programs reported here are matters of public record. A tribal member volunteered to work with faculty members as an outside reader of the completed dissertation.

Works cited in this research were read critically in order to avoid underlying racist assumptions towards either research population. Analyses and accounts of Native American economic strategies, fertility behaviors, and historic events written by Native American scholars were cited whenever possible. Analyses of federal, state, and tribal government services attempted to demonstrate real outcomes and limitations rather than stated program goals. Verbal testimony from members of both research populations was given equal weight; areas of disagreement or misunderstanding were noted.

As Miller suggests (2008, p. 18), the ultimate goal of respectful research should be to place the subjects and their communities at the center of the research narrative by describing them in the context of local reality. This research attempted to accurately and



sensitively document the realities, as well as the ideals, of both rural communities. In an effort to repay the generosity of my informants and hosts, I tried to provide service to each community, formally through consistent volunteer work and informally by being a good neighbor. I strive to honor their tolerance and honesty by portraying their statements accurately, with compassion, and without bias.

#### Personal reflections

I cannot now claim to have a thorough understanding of Northern Plains families and communities, European American or Native American. Paradoxically, the more I learned about my research communities, the more questions I had.

Nothing in an academic program can fully prepare a student for the experience of cultural immersion, even when that immersion occurs in a relatively nearby community. The social isolation and small populations of both town and Indian reservation were fundamentally different social environments from my previous urban experiences. Relationships seemed more restrained and communication more guarded than I was used to. Public voices were quieter and opinions more measured; my new friends seemed constantly aware of the detrimental potential of social censure. Eventually I concluded that, although this social pressure might be constrictive, it probably prevented the everlasting havoc that social disruption would bring to a small, unchanging cohort.

This was my first experience as an outside observer within small communities. It took time for me to understand unfamiliar social practices, learn local etiquette, and gain the trust of key informants. At the end of my first year of residence, I came across *Doing Fieldwork: Warnings and Advice* by ethnographic researcher Rosalie Wax (1971). This

old paperback reassures me, when I am embarrassed by my own offensive social behaviors, that I am not alone among ethnographers:

As I proceeded with the four-faceted role of conscientious investigator of scholarly subjects, willing learner, half-accepted friend, and subconscious teacher, I was able to gain skill at the most fundamental technique of all—alleviating suspicion. (This sounds as if fieldwork consists only of learning and applying techniques. I did learn techniques which I then applied consciously and conscientiously. But I also had changed, in the sense that by undergoing this gradual process of instruction and resocialization, I had found out things about [the research subjects] and their situation which made it impossible that I ever again approach or talk to them in the way I had approached and talked to them three or four months before. In this sense I had become a different person, a person who could never go back to being what she had been before.) (Wax, 1971, p. 79)

Ethnography is awkward, as the ethnographer assumes the privilege of observing people in their daily lives with the intent to write about them. I needed to tell the truth, but not tell the secrets; observe the dynamics, but not fan the flames; be respectful and responsible even when the rules of engagement were unfamiliar. I remain grateful to the remarkable people with whom I worked in both communities—kind, generous, funny, intellectually curious, and committed to improving the lives of families and children. I have tried my hardest to accurately and sensitively represent their beliefs and behaviors here. I am honored by their friendship and would like to be invited back.

## REFERENCES

- Alessandrini, S., & Dallago, B. (1987). Introduction. In S. Alessandrini & B. Dallago (Eds.), *The unofficial economy: Consequences and perspectives in different economic systems* (pp. 9-20). Brookfield, VT: Gower Publishing Company.
- Alave, K. L. (2004, September 20). Rural to urban migration putting pressure on government. *Business World*, p.7.
- Arnould, E. J., & McNetting, R. (1982). Households: Changing form and function. *Current Anthropology* 23 (5): 571-575.
- Audas, R., & McDonald, T. (2004). Rural-urban migration in the 1990s. *Canadian Social Trends* 73:17-24.
- Bahr, K. S. (1994). The strengths of Apache grandmothers: Observations on commitment, culture, and caretaking. *Journal of Comparative Family Studies*, 25, 233-248.
- Bascom, J. (2001). "Energizing" rural space: the representation of countryside culture as an economic development strategy. *Journal of Cultural Geography* 19(1): 53-73.
- Becker, G. S. (1960). "An economic analysis of fertility." In National Bureau of Economic Research (Eds.), *Demographic and economic change in developed countries* (pp. 209-231). Princeton: Princeton University Press.
- Berman, T. (2004). All we needed was our gardens: Women's work and welfare reform in the reservation economy. In B. Hosmer & C. O'Neill (Eds.), *Native pathways: American Indian culture and economic development in the twentieth century* (pp. 133-154). Boulder, CO: University Press of Colorado.
- Binnema, T. (1994) Chronology of Canadian Native history, 1500 to 1992. In D. Champagne (Ed.), *The native North American almanac* (pp. 103-138). Detroit, MI: Gale Research.
- Black-Rogers, M. (1990). Fosterage and field data: The Round Lake study 1989. *Papers of the Algonquian Conference*, 01/01/1990. 21:51-71.
- Bledsoe, C. (1995). Marginal members: Children of previous unions in Mende households in Sierra Leone. In S. Greenhalgh (Ed.), *Situating fertility: Anthropology and demographic inquiry* (pp. 130-153). Cambridge: Cambridge University Press.

- Bongaarts, J., & Potter, R. G. (1983) *Fertility, biology and behavior: An analysis of the proximate determinants*. New York and London: Academic Press.
- Brokaw, C. (2006, March 22) Census taking in Indian country—make it personal! *Arizona Republic*. Retrieved February 11, 2009 from <http://nativeunity.blogspot.com/2006/03/census-taking-in-indian-country-make.html>
- Bureau of Economic Analysis, Regional Economic Accounts. (2006). *SQ6N – Compensation of Employees by Major Industry*. Retrieved November 30, 2006 from <http://www.bea.gov/bea/regional/sqpi/action.cfm>.
- Burns, N. (1982). “The collapse of small towns on the Great Plains: a bibliography.” *The Emporia State Research Studies* 31(1): 5-36.
- Campbell, G. R. (1989). The changing dimension of Native American health: A critical understanding of contemporary Native American health issues. *American Indian Culture and Research Journal*. 13(3 & 4): 1-20.
- Caramanica, J. (2009, March 31). Protest from the right side of country. *New York Times*. Retrieved March 31, 2009 from [http://www.nytimes.com/2009/03/31/arts/music/31rich.html?\\_r=1](http://www.nytimes.com/2009/03/31/arts/music/31rich.html?_r=1).
- Carpio, M.V. (2004). The lost generation: American Indian women and sterilization abuse. *Social Justice*. 31(4 ): 40-53.
- Carter, A. T. (1995). Agency and fertility: for an ethnography of practice. In *Situating fertility: anthropology and demographic inquiry*. In S. Greenhalgh (Ed.), *Situating fertility: Anthropology and demographic inquiry* (pp. 55-58). Cambridge: Cambridge University Press.
- Cattelino, J. R. (2004). Casino roots: the cultural production of twentieth-century Seminole economic development. In B. Hosmer & C. O’Neill (Eds.), *Native pathways: American Indian culture and economic development in the twentieth century* (pp. 66-90). Boulder, CO: University Press of Colorado.
- Champagne, D. (2004). In B. Hosmer & C. O’Neill (Eds.), *Native pathways: American Indian culture and economic development in the twentieth century* (pp. 308-329). Boulder, CO: University Press of Colorado.

- Champagne, D. (2005). Rethinking native relations with contemporary nation-states. In D. Champagne, S. Steiner, & K. J. Torjesen (Eds.), *Indigenous peoples and the modern state* (pp. 3-23). Walnut Creek, CA: AltaMira Press.
- Champagne, D. (2007). *Social change and cultural continuity among native nations*. Walnut Creek, CA: AltaMira Press.
- Clow, R. (1994). Northern Plains Indians. In D. Champagne (Ed.), *The native North American almanac* (pp. 276-285). Detroit, MI: Gale Research.
- Coffman, J., & Anthan, G. (2004). Sweeping out the Plains. *Alicia Patterson Foundation Reporter* 21(2). Retrieved October 17, 2006 from [http://www.aliciapatterson.org/APF2102/Coffman\\_Anthan/Coffman\\_Anthan.Html](http://www.aliciapatterson.org/APF2102/Coffman_Anthan/Coffman_Anthan.Html)
- Congressional Quarterly Researcher. (1990). The continuing decline of rural America. In *Editorial research reports 1990*. Washington: CQ Press. Retrieved March 26, 2009, from CQ Press Electronic Library, CQ Researcher Online, <http://library.cqpress.com/cqresearcher/cqresrre1990072000>. Document ID: cqresrre1990072000.
- Conlan, T. J. (1998). *From New Federalism to devolution: Twenty-five years of intergovernmental reform (Revised edition)* Washington D.C.: Brookings Institution Press.
- Cornwell, R. (2005, April 19). So who wants to live in the little house on the prairie? *London Independent*. Retrieved January 3, 2009 from [http://findarticles.com/p/articles/mi\\_qn4158/is\\_20050419/ai\\_nl36161..](http://findarticles.com/p/articles/mi_qn4158/is_20050419/ai_nl36161..)
- Cut Bank Chamber of Commerce. (2005). *Montana's Hutterites*. Retrieved November 1, 2005 from <http://www.cutbankchamber.com/visit/hutterite/htm>.
- Debo, A. (1991). *And still the waters run: the betrayal of the Five Civilized Tribes*. Princeton, NJ: Princeton University Press.
- Douaud, P., & Dawson, B. (2002). *Plain speaking: Essays on aboriginal peoples and the prairie*. Regina, Saskatchewan: Canadian Plains Research Center, University of Saskatchewan.
- Easterlin, R. A. (1975). An economic framework for fertility analysis. *Studies in family planning*, 6(3): 54-63.

- England, P., & Farkas, G. (1986). *Households, employment and gender: A social, economic and demographic view*. New York: Aldine De Gruyter.
- Faiman-Silva, S. (1997). *Choctaws at the crossroads: The political economy of class and culture in the Oklahoma timber region*. Lincoln, NE: University of Nebraska Press.
- Falk, W.W., & Lobao, L.M. (2003). Who benefits from economic restructuring? In D. L. Brown & L. E. Swanson (Eds.), *Challenges for rural America in the twenty-first century* (pp. 152-165). University Park, PA: Pennsylvania State University Press.
- Fitchen, J. M. (1991). *Endangered spaces, enduring places: Change, identity and survival in rural America*. Boulder CO: Westview Press.
- Fixico, D. L. (1994). List of significant U.S. legislation. In D. Champagne (Ed.), *The native North American almanac* (pp. 493-510). Detroit, MI: Gale Research.
- Folmar, S. (1992). Wives roles in fertility decision-making among Nepalese caste-Hindus. *Central Issues in Anthropology* 10(1): 39-50.
- Fort Belknap Indian Community Council. (2005). Open letter to members of the Fort Belknap Indian community. *Fort Belknap News*. 7(8): 24-25.
- Foster, A. D., & Rosenzweig, M. R. (2001). Household division and rural economic growth. *Review of Economic Studies*, 69 (4): 839-869.
- Franklin, Rachel S. 2003. Domestic migration across regions, divisions, and states: 1995 to 2000. *U.S. Census Bureau Census 2000 Special Reports*. Retrieved January 13, 2009 from <http://www.census.gov/prod/2003pubs/censr-7.pdf>
- Fricke, T. (1995). History, marriage politics, and demographic events in the central Himalaya. In S. Greenhalgh (Ed.), *Situating fertility: Anthropology and demographic inquiry* (pp. 202-224). Cambridge: Cambridge University Press.
- Ghelfi, L. M. (2002). Rural earnings up in 2000, but much less than urban earnings. *Rural America*. Retrieved October 10, 2006 from <http://www.ers.usda.gov/publications/ruralamerica/ra174/ra174m.pdf>.
- Giddens, A. (1979). *Central problems in social theory: Action, structure and contradiction in social analysis*. Berkeley: University of California Press.
- Gilens, M. (1999). *Why Americans hate welfare: Race, media and the politics of anti-poverty policy*. Chicago: University of Chicago Press.

- Goetz, S. J., & Debertin, D. L. (1996). Rural population decline in the 1980's: impacts of farm structure and federal farm programs. *American Journal of Agricultural Economics*, 78(3): 517-529.
- Gonzales, A. A. (2000). American Indians: their contemporary reality and future trajectory. In D. L. Brown & L. E. Swanson (Eds.), *Challenges for rural America in the twenty-first century* (pp. 43-56). University Park, PA: Pennsylvania State University Press.
- Greenhalgh, S. (1994). Controlling births and bodies in village China. *American Ethnologist*, 21(1): 3-30.
- Greenhalgh, S. (1995). Anthropology theorizes reproduction: integrating practice, political economic, and feminist perspectives. In S. Greenhalgh (Ed.), *Situating fertility: Anthropology and demographic inquiry* (pp. 3-28). Cambridge: Cambridge University Press.
- Gregory, C. (1982). *Gifts and commodities*. London: Academic Press.
- Hamel, R., & Schreiner, T. (1990). Where have all the cowboys gone? (Montana's population.) *American Demographics* 12(2): 43-44.
- Handwerker, W. P. (1986). The modern demographic transition: an analysis of subsistence choices and reproductive consequences. *American Anthropologist*, 88(2): 400-417.
- Harmon, A. (1998). *Indians in the making: Ethnic relations and Indian identities around Puget Sound*. Berkeley and Los Angeles: University of California Press.
- Hirschfelder, A., & Molin, P. (2000) *Encyclopedia of Native American religions*. New York: Checkmark Books
- Himmelweit, S. (2000). The discovery of 'unpaid work': The social consequences of the expansion of "work." In S. Himmelweit (Ed.), *Inside the household: From labour to care* (pp. 102-119). New York: St. Martin's Press.
- Hirschfelder, A., & Molin, P. (2001). *Encyclopedia of Native American religions*. New York: Checkmark Books.
- Hogue, M. (2004). Disputing the medicine line: The Plains Cree and the Canadian-American border, 1876-85. In Highan, C. & Thacker, R. (Eds.) *One West, two myths: A comparative reader* (pp. 85-108). Alberta: University of Calgary Press.

- Hollos, M., & Yando, R. (2006). Social strata differences in mothers' conceptions of children in postsocialist Hungary: An explanation of fertility decisions. *Ethos*, 34(4): 488-520.
- Howard, J. H. (1977). *The Plains-Ojibwa or Bungi: Hunters and warriors of the Northern Prairies with special reference to the Turtle Mountain Band*. Lincoln, NE: J. & L. Reprint Company.
- Hungry Wolf, B. (1980). *The ways of my grandmothers*. New York: Quill.
- Hunt, R. C. (2002). Economic transfers and exchanges: Concepts for describing allocations. In J. Ensiminger (Ed.), *Theory in economic anthropology* (pp.105-118). Walnut Creek, CA: AltaMira Press.
- Indian Health Service and the sterilization of Native American women. (Summer 2000) (2000). *American Indian Quarterly*. 24(3): 400-419.
- Ivanova, K. (2001, May 23) Indian town youngest in nation. *Great Falls Tribune*, p. 1-A.
- Jensen, L., McLaughlin, D. K., & Slack, T. (2000). Rural poverty: the persisting challenge." In D. L. Brown & L. E. Swanson (Eds.), *Challenges for rural America in the twenty-first century* (pp. 118-131). University Park, PA: Pennsylvania State University Press.
- Johnson, J. O. (2005). Who's minding the kids? Child care arrangements: Winter 2002. *U.S. Census Bureau Household Economic Studies*. Retrieved December 30, 2008 from <http://www.census.gov/prod/2005pubs/p70-101.pdf>>
- Johnson, J. O., & Downs, B. (2005). Maternity leave and employment patterns of first-time mothers: 1961-2000. *U.S. Census Bureau Household Economic Studies*. Retrieved December 30, 2008 from <http://www.census.gov/prod/2005pubs/p70-103.pdf>>
- Johnson, K. (2006). *Rural America undergoing a diversity of demographic change*. Retrieved September 21, 2006 from <http://www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=13795>.
- Johnson, K. M., & Rathge, R. W. (2006). Agricultural dependence and changing population in the rural Great Plains. In Kandel, W.A. & Brown, D.L. (Eds.) *Population Change and Rural Society*. The Netherlands: Springer. Retrieved



- January 3, 2009 from  
[http://extension.usu.edu/files/publications/publication/pub\\_1242829.pdf](http://extension.usu.edu/files/publications/publication/pub_1242829.pdf).
- Kadlec, D. (2005, July 11) Land of the free: despite the real estate boom, towns across America's heartland are giving acreage away. The only catch: you have to live there. *Time*, 166(2): 42.
- Kaufman, C. E., Desserich, J., Big Crow, C.K., Holy Rock, B., Keane, E., Mitchell, C.M. (2007). Culture, context, and sexual risk among Northern Plains American Indian youth. *Social Science and Medicine*. 64: 2152-2164.
- Kertzner, D. I. (1995). Political-economic and cultural explanations of demographic behavior. In S. Greenhalgh (Ed.), *Situating fertility: Anthropology and demographic inquiry* (pp. 29-52). Cambridge: Cambridge University Press.
- Kertzner, D., & Fricke, T. (Eds.). (1997). *Anthropological demography: Toward a new synthesis*. Chicago: University of Chicago Press.
- Knapp, T. A., & Graves, P. E. (1989). On the role of amenities in models of migration and regional development. *Journal of Regional Science*, 29: 71-87.
- Koh, E. M. L., & Tan, J. (2000). Favoritism and the changing value of children: A note on the Chinese middle class in Singapore. *Journal of Comparative Family Studies*, 31(4): 519-28.
- Kramer, K. L. (2008). Early sexual maturity among Pumé foragers of Venezuela: Fitness implications of teen motherhood. *American Journal of Physical Anthropology*. 136: 338-350.
- Landes, R. (1938). *The Ojibwa Woman*. Lincoln, NE and London: University of Nebraska Press.
- Larcombe, J. E. (2005, October 23). Going global: tiny Conrad 'artisanal' food retailer's business sprouts worldwide. *Missoulian*. p. D1.
- Lave, J. (1988). *Arithmetic practices and cognitive theory: An ethnographic inquiry*. Cambridge: Cambridge University Press.
- Leasure, J. W. (1989). A hypotheses about the decline of fertility: Evidence from the United States. *European Journal of Population*, 5: 105-117
- LeCompte, M. D. & Schensul, J. J. (1999). *Analyzing and interpreting ethnographic data*. Walnut Creek, CA: AltaMira Press.

- Leinaweaver, J. B. (2007). On moving children: The social implications of Andean child circulation. *American Ethnologist*, 34(1): 163-180.
- Letiecq, B. L., Bailey, S., & Kurtz, M. A. (2008). Depression among rural Native American and European American grandparents raising their grandchildren. *Journal of Family Issues*. 29(3): 334-356.
- Levine, N. E. (1987). Fathers and sons: kinship value and validation in Tibetan polyandry. *Man*, 22(2): 267-286.
- Lichter, D. T., Roseigno, V. J., & Condron, D. J. (2003) Rural children and youth at risk. In D. L. Brown & L. E. Swanson (Eds.), *Challenges for rural America in the twenty-first century* (pp. 97-108). University Park, PA: Pennsylvania State University Press.
- Lingeman, R. (1980). *Small town America: a narrative history, 1620—the present*. Boston: Houghton Mifflin.
- Littlebear, R. (2004). Introduction. In J. Pease-Pretty On Top (Ed.), *Native American language immersion: Innovative Native education for children and families* (pp. 5-7). Retrieved November 12, 2007 from <http://www.collegefund.org/downloads/ImmersionBook.pdf>
- Lobao, L. & Meyer, K. (2001). The great agricultural transition: crisis, change and social consequences of twentieth century US farming. *Annual Review of Sociology* (Annual 2001): 103-123.
- Lopach, J. J., Hunter Brown, M., & Clow, R. L. 1998. *Tribal government today: Politics on Montana Indian reservations*. Niwot, CO: University Press of Colorado.
- MacDonald, T. (2006). “Completed survey aids park plans.” *Havre Daily News*. Retrieved November 20, 2006 from [http://www.havredailynews.com/articles/2006/11/06/local\\_headlines/local.txt](http://www.havredailynews.com/articles/2006/11/06/local_headlines/local.txt).
- Mandelbaum, D. G. (1979). *The Plains Cree: An ethnographic, historical, and comparative study*. Regina, Saskatchewan: Canadian Plains Research Center
- McFalls, J.A. (2003). Population: A lively introduction (4<sup>th</sup> ed.). *Population Bulletin*, 58: 4. Washington D.C: Population Reference Bureau.
- McCarthy, R. (2004). The Bureau of Indian Affairs and the Federal Trust Obligation to American Indians. *Brigham Young University Journal of Public Law*, 19(1): 1-160.

- McGranahan, D. A. (2003). How people make a living in rural America. In D. L. Brown & L. E. Swanson (Eds.), *Challenges for rural America in the twenty-first century* (pp. 135-151). University Park, PA: Pennsylvania State University Press.
- McMillan, A. (1994). Canadian Native distribution, habitat, and demography. In D. Champagne (Ed.), *The native North American almanac* (pp. 223-240). Detroit, MI: Gale Research.
- McNall, S. G., & McNall, S. A. (1983). *Plains families: Exploring sociology through social history*. New York: St. Martin's Press.
- Mead, L. M. (2004). State political culture and welfare reform. *The Policy Studies Journal* 32(2): 271-296.
- Miller, J. (2001). At Rocky Boy's, a rough economic road. *Native news on the web*. Retrieved November 20, 2006 from [http://umt.edu/journalism/student\\_work/Native\\_News\\_2001/Summer\\_2001/Rocky\\_Boy%27s\\_Reservation/Rocky\\_Boy\\_story.html](http://umt.edu/journalism/student_work/Native_News_2001/Summer_2001/Rocky_Boy%27s_Reservation/Rocky_Boy_story.html).
- Miller, J. (2005, November 6). Surveys say reservations booming. *Missoulian*, p. E1.
- Miller, J. (1996). *A true book of American Indian families*. United States & Canada: Children's Press, Grolier Publishing Company.
- Miller, S. A. (2008). Native America writes back: The origin of the Indigenous paradigm in historiography. *Wicazo Sa Review* (Fall: 9-28).
- Mitchell, J.G. (2004, May). Great Plains. *National Geographic magazine online extra*. Retrieved October 17, 2006 from <http://magma.nationalgeographic.com/ngn/0405/feature1/fulltext.html>.
- Montana Department of Commerce, Census & Economic Information Center. (2000a). *GCT-P1: Urban/rural and metropolitan/nonmetropolitan population: 2000*. Retrieved March 12, 2009 from [http://ceic.mt.gov/C2000/UA\\_UC/sf1urban\\_rural\\_metro.pdf](http://ceic.mt.gov/C2000/UA_UC/sf1urban_rural_metro.pdf).
- Montana Department of Commerce, Census & Economic Information Center. (2000b). *Table P5. Urban and rural, farm and nonfarm*. Retrieved March 12, 2009 from [http://ceic.mt.gov/C2000/UA\\_UC/sf3urban\\_rural\\_us\\_sf3.pdf](http://ceic.mt.gov/C2000/UA_UC/sf3urban_rural_us_sf3.pdf).

- Montana Department of Commerce, Census & Economic Information Center. (2001). *Census 2000 data maps*. Retrieved September 8, 2005 from [http://ceic.commerce.state.mt.us/data\\_maps.htm](http://ceic.commerce.state.mt.us/data_maps.htm).
- Montana Department of Commerce, Census & Economic Information Center. (2005a). *Montana American Indian reservation population: 1970 – 2000*. Retrieved September 8, 2005 from <http://ceic.commerce.state.mt.us/Demog/historic/reservation70-00.pdf>
- Montana Department of Commerce, Census & Economic Information Center. (2005b). *Population Division, U.S. Census Bureau, Table 2: Cumulative estimates of population change for counties of Montana and county rankings: April 1, 2000 to July 1, 2004*. Retrieved September 8, 2005 from <http://ceic.commerce.state.mt.us>
- Montana Department of Commerce, Census & Economic Information Center. (2005c). *U.S. Bureau of the Census 2002 Decennial Censuses of Population, 1890-2000*. Retrieved September 8, 2005 from <http://ceic.commerce.state.mt.us/historicalpopdata.htm>
- Montana Department of Commerce, Census & Economic Information Center. (2007). *Estimates of Population - Population Density: July 1, 2007*. Retrieved February 12, 2009 from [http://ceic.mt.gov/Demog/estimate/pop/County/Density\\_Cty\\_2007.pdf](http://ceic.mt.gov/Demog/estimate/pop/County/Density_Cty_2007.pdf)
- Montana Department of Commerce, Census & Economic Information Center. (2008). *Montana population*. Retrieved December 12, 2009 from <http://ceic.mt.gov/>
- Montana Department of Commerce, Montana Promotions Division. (2006a). *Welcome to Montana's Russell Country: Dinosaurs*. Retrieved December 7, 2006 from <http://www.russell.visitmt.com/dinosaurs/>.
- Montana Department of Commerce, Montana Promotions Division. (2006b). *Welcome to Montana's Russell Country: Havre beneath the streets*. Retrieved December 7, 2006 from <http://www.russell.visitmt.com/listings/9512.HTM>.
- Montana Department of Public Health and Human Services, Prevention Resources Center. (2001). *Teen pregnancy in Montana*. Retrieved January 15, 2009 from [http://prevention.state.mt.us/resource/teen\\_pregnancy.asp](http://prevention.state.mt.us/resource/teen_pregnancy.asp)
- Montana Department of Public Health and Human Services, Women's Health Section. (2001). *Montana teen pregnancy report: Trends in teen pregnancies and their*

- outcomes in Montana 1991-2005*. Retrieved January 15, 2009 from <http://www.dphhs.mt.gov/PHSD/Women-Health/documents/teenpregnancyreport.pdf>
- Montana Department of Public Health and Human Services, Public Health and Safety Division. (2006). *Major prevention opportunities to improve health in Montana*. Retrieved January 15, 2009 from [http://www.dphhs.mt.gov/PHSD/prevention\\_opps/pdf/2006-Major-Prevention-Opps-9-25-06.pdf](http://www.dphhs.mt.gov/PHSD/prevention_opps/pdf/2006-Major-Prevention-Opps-9-25-06.pdf)
- Montana Department of Public Health and Human Services. (2007). *TANF program policy manual*. Retrieved January 14, 2009 from <http://www.dphhs.mt.gov/hcsd/tanfmanual/index.shtml>
- Offe, C. & Heinze, R. G. (1992). *Beyond employment: Time, work and the informal economy*. Philadelphia: Temple University Press.
- Montana Office of Public Instruction, Division of Educational Opportunity and Equity. (2004). *Montana Indians: their history and location*. Retrieved November 9, 2005 from <http://www.opi.state.mt.us/htm>.
- Nag, M., White, B. N. F., & Peet, R. C. (1978). An anthropological approach to the study of the economic value of children in Java and Nepal. *Current Anthropology*, 19(2): 293-306.
- Northwest Area Foundation. (2005). *Ventures program*. Retrieved November 21, 2006 from [http://www.nwaf.org/ProgramsNoHdrImage.aspx?pg=Programs/ventures\\_Opportunity\\_Link.htm](http://www.nwaf.org/ProgramsNoHdrImage.aspx?pg=Programs/ventures_Opportunity_Link.htm).
- Ockert, S., & Lohse, C. (2006). Analyzing Montana's Indian Reservations' Economies. Retrieved December 7, 2008 from <http://ceic.mt.gov/presentations.asp>
- Offe, C., & Heinze, R. G. (1992). *Beyond employment: time, work and the informal economy*. Philadelphia: Temple University Press.
- Olasky, M. (1992). *The tragedy of American compassion*. Washington D.C.: Regnery Publishing, Inc.
- Ooms, T. (2007). Adapting healthy marriage programs for disadvantaged and culturally diverse populations: What are the issues? *Center for Law and Social Policy Brief*,

- Couples and Marriage Series*. (March 2007, Brief No. 10). Retrieved January 8, 2009 from [http://www.clasp.org/publications/couplesmarriage\\_brief\\_10.pdf](http://www.clasp.org/publications/couplesmarriage_brief_10.pdf)
- Ortiz, S. (1973). *Uncertainties in peasant farming*. London: Athlone Press.
- Parrott, S., & Wu, N. (2003, June 3). States are cutting TANF and child care programs. Center on Budget and Policy Priorities (Press release). Retrieved January 13,
- Phipps, M. G., & Sowers, M. F. (2002). Defining early adolescent childbearing. *American Journal of Public Health*, 92(1):125-128.
- Pickering, K. A. (2000). *Lakota culture, world economy*. Lincoln, NE: University of Nebraska Press.
- Pickering, K. A. (2004). Decolonizing time regimes: Lakota conceptions of work, economy and society. *American Anthropologist*, 106(1): 85-97
- Pickering, K., Harvey, M. H., Summers, G. F., & Mushinski, D. (2006). *Welfare reform in persistent rural poverty: Dreams, disenchantments, and diversity*. University Park, PA: The Pennsylvania State University Press.
- Polzin, P. E., & O'Donnell, D. (2004). The economic status of American Indians in Montana. *Montana Business Quarterly*, 42(2): 2-9.
- Quisumbing, A. R. (2003). What have we learned from research on intrahousehold allocation? In A. Quisumbing (Ed.), *Household decisions, gender, and development: A synthesis of recent research* (pp. 1-18). Washington, D.C.: The Johns Hopkins University Press.
- Raban, J. (1996). *Bad land: An American romance*. New York: Pantheon Books.
- Rank, M. R., & Hirschl, T. A. (2002). Welfare use as a life course event: toward a new understanding of the U.S. safety net. *Social Work*, 47(3): 237-249.
- Reservation population rises. (2005, November 6). *Billings Gazette*. Retrieved February 26, 2007, from <http://www.billingsgazette.net/articles/2005/11/06/state/export232197.txt>
- Reyhner, J. (1999). Some basics of Indigenous language revitalization. In J. Reyhner, G. Cantoni, R. N. St. Clair & E. Parsons Yazzie (Eds.), *Revitalizing Indigenous languages* (pp.v-xx). Flagstaff, AZ: Northern Arizona University.
- Robertson, L. F. (1998). Creating the countryside, the politics of rural and environmental discourse. *The Journal of the Royal Anthropological Institute*, 4(4): 810-811.

- Roberts, P. (2008). The implications of multiple partner fertility for efforts to promote marriage in programs serving low-income mothers and fathers. *Center for Law and Social Policy, Couples and Marriage Series Policy Brief*. (March 2008, Brief No. 11). Retrieved January 8, 2009 from [http://www.clasp.org/publications/couplesmarriage\\_brief\\_11.pdf](http://www.clasp.org/publications/couplesmarriage_brief_11.pdf)
- Robertson, A. F. (1991). *Beyond the family: The social organization of reproduction*. Berkeley and Los Angeles, CA: University of California Press.
- Roxburgh, S., Stephens, R. C., Toltzis, P., & Adkins, I. (2001). The value of children, parenting strains, and depression among urban African American mothers. *Sociological Forum*, 16(1): 55-72.
- Rural Policy Research Institute. (1999). *Rural America and welfare reform: An overview assessment*. Rural Welfare Reform Initiative, Rural Policy Research Institute, University of Missouri. Retrieved January 13, 2009 from <http://www.rupri.org/Forms/p99-3.PDF>
- Salamon, S. (1992). *Prairie patrimony: Family, farming, and community in the Midwest*. Chapel Hill and London: The University of North Carolina Press.
- Sanderson, D. (1941). The relation of the school to the sociological status of the rural community. *Journal of Educational Sociology*. 14(7): 401-410.
- Schliesman, R. R. (2005). Community preservation in Montana. *Montana the Magazine of Western History*, 55(2): 78-80.
- Schmink, M. (1984). Household economic strategies: Review and research agenda. *Latin American Research Review*, 19(3): 87-101.
- Schoen, R., Kim, Y. J., Nathanson, C. A., Fields, J., Astone, N. M. (1997) Why do Americans want children? *Population and Development Review*, 23: 333-358.
- Sharp, J. S. and Parisi, D. M. (2000). Devolution: who is responsible for rural America? In D. L. Brown & L. E. Swanson (Eds.), *Challenges for rural America in the twenty-first century* (pp. 353-362). University Park, PA: Pennsylvania State University Press.
- Shoemaker, N. (1999). *American Indian population recovery in the twentieth century*. Albuquerque: University of New Mexico Press.

- Skolka, J. (1987). A few facts about the hidden economy. In S. Alessandrini & B. Dallago (Eds.), *The unofficial economy: Consequences and perspectives in different economic systems* (pp. 35-60). Brookfield, VT: Gower Publishing Company.
- Soaries, B. (1990). The moral foundation of the Civil Rights Movement. *The Heritage Lectures*, 246:5.
- Sonoran Institute. (2006). *You've come a long way, cowboy: ten truths and trends in the New American West*. Retrieved October 22, 2006 from <http://www.sonoran.org/cowboy/10%20Truths%20and%20Trends%20in%20the%20West.pdf>.
- Stoecker, R. (2008). Challenging institutional barriers to community-based research. *Action Research*, 6: 49-67.
- Sylvester, J. (2003). Population on the move: Montanans follow opportunities for education, jobs and happiness. *Montana Business Quarterly*, 41(2): 12-16.
- Sylvester, J. & Von Reichert, C. (2001). How you gonna keep 'em down on the farm? *Montana Business Quarterly*, 39(4): 9-12.
- Talbot, S. (1994). Pluralistic Religious Beliefs. In D. Champagne (Ed.), *The native North American almanac* (pp. 668-285). Detroit, MI: Gale Research.
- Tauxe, C. S. (1998). Heartland community: economic restructuring and the management of small town identity in the central U.S. *Identities*, 5(3): 335-377.
- Thackery, L. (2005, May 8). Land in the rearview mirror. *Billings Gazette*, p. 1.
- Thornton, R., Sandefur, G. D., Snipp, C. M. (1991) American Indian fertility patterns. *American Indian Quarterly* 15(3):359-367.
- Tickamyer, A. R. (1993). Research in rural sociology and development, a research annual: Household strategies (Vol. 5). *Social Forces*, 72 (2): 605-607
- Tobin, P. (2005, March 13). What's driving decline? *Grand Forks Herald*, p. 7.
- Trosper, R. L. (1994). U.S. Indian business and enterprise. In D. champagne (Ed.), *The Native North American almanac: A reference work on Native North Americans in the United States and Canada* (pp. 915-924). Detroit, MI: Gale Research Inc.



- U.S. Census Bureau. (1990). *1990 Census of population, social and economic characteristics (1900 CP-2), Summary Tape File (STF) 3 and STF 4*. Retrieved January 13, 2009 from <http://www.ceic.mt.gov/C2000/SF32000/90mtsf3profile.pdf>
- U.S. Census Bureau. (2000a) *About the profile*. Census 2000. Retrieved January 13, 2009 from [http://www.ceic.mt.gov/C2000/SF32000/SF3places/sfpData/About\\_the\\_profile.pdf](http://www.ceic.mt.gov/C2000/SF32000/SF3places/sfpData/About_the_profile.pdf)
- U.S. Census Bureau. (2000b). *Census 2000 Summary File 1 (SF1) 100 Percent Data, P1. Total Population*. Retrieved April 10, 2006 from <http://factfinder.census.gov/servlet>
- U.S. Census Bureau. (2000c). *Census 2000, Table DP-3. Profile of selected economic characteristics: 2000; Geographic area: Montana*. Retrieved January 13, 2009 at <http://www.ceic.mt.gov/C2000/sf32000/SF3counties/SFData/05030000.pdf>
- U.S. Census Bureau. (2001) *American Fact Finder Glossary*. Retrieved February 12, 2009 from [http://factfinder.census.gov/home/en/epss/glossary\\_a.html](http://factfinder.census.gov/home/en/epss/glossary_a.html).
- U.S. Census Bureau. (2003). *Mapping Census 2000: the geography of U.S. diversity*. Retrieved October 16, 2006 from <http://www.census.gov/population/cen2000/atlas/censr01-107.pdf>
- U.S. Center for Disease Control and Prevention. (2008). *Teen pregnancy fact sheet*. Retrieved January 18, 2009 from <http://www.cdc.gov/reproductivehealth/AdolescentReproHealth/PDF/TeenPreg-FS.pdf>
- U.S. Department of Agriculture Economic Research Service. (2005). *The economics of food, farming, natural resources and rural America*. Retrieved November 27, 2005 from <http://www.ers.usda.gov/topics/view.asp?T=104000>
- U.S. Department of Health and Human Services. (2007). *Indicators of welfare dependence: Annual report to Congress*. Retrieved January 13, 2009 from <http://aspe.hhs.gov/hsp/indicators07/report.pdf>
- U.S. Department of Health and Human Services, Administration for Children and Families. (1996). *Major provisions of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193)*. Retrieved December 23, 2008 from <http://www.acf.hhs.gov/programs/ofa/law-reg/finalrule/aspesum.htm>.

- U.S. Department of Health and Human Services, Administration for Children and Families. (2008). *Division of tribal TANF management fact sheets*. Retrieved January 14, 2008 from [http://www.acf.hhs.gov/programs/ofa/dts/resources/fact\\_sheets.html](http://www.acf.hhs.gov/programs/ofa/dts/resources/fact_sheets.html)
- U.S. General Accounting Office. (2002). *Welfare reform: Tribal TANF allows flexibility to tailor programs, but conditions on reservations make it difficult to move recipients into jobs*. Retrieved December 30, 2008 from <http://www.gao.gov/new.items/d02768.pdf>
- Varenne, H. (1977). *Americans together: Structured diversity in a Midwestern town*. New York and London: Teachers College Press.
- Velez-I, C. G. (1980). "The non-consenting sterilization of Mexican women in Los Angeles," in M. B. Melville (Ed.) *Twice a minority: Mexican American women* (pp. 235-248). St. Louis, MO: C. V. Mosby.
- Von Reichert, C. (1998). Motives for migration: A study of Montana newcomers. *Montana Business Quarterly*, 36(4): 15-19.
- Von Reichert, C. & Rudzitis, G. (1994). Rent and wage effects on the choice of amenity destinations of labor force and nonlabor force migrants: A note. *Journal of Regional Science* 34(3): 445-455.
- Von Reichert, C. & Sylvester, J. T. (1997). Population dynamics in Montana. *Montana Business Quarterly*, 35(4): 10-15.
- Walker, R., Gurven, M., Hill, K., Migliano, A., Chagnon, N., DeSouza, R., Djurovic, G., Hames, R., Hurtado, A. M., Kaplan, H., Kramer, K., Oliver, W. J., Vallengia, C., & Yamauchi, T. (2006). Growth rates and life histories in twenty-two small-scale societies. *American Journal of Human Biology*, 18(3): 295-311.
- Warren, C.W., Goldberg, H.I., Oge, L. Pepion, D., Friedman, J.S., Helgersson, S., & La Mere, E.M. (1990). Assessing the reproductive behavior of on-and off-reservation American Indian females: Characteristics of two groups in Montana. *Social Biology*, 37(1-2): 69-83.
- Weaver, R. K. (2000). *Ending Welfare as We Know It*. Washington, D.C.: Brookings Institution.

- Weeks, J. R. (2002). *Population: An introduction to concepts and issues*. Belmont CA: Wadsworth Thomson Learning.
- Wiest, R. E. (1981). Rural-urban migration and development policy: an attempt at a practical guide. *Current Anthropology* 22: 694-696.
- Witte, A. D. (1987). "The nature and extent of unrecorded activity: a survey concentrating on recent U.S. research," In S. Alessandrini & B. Dallago (Eds.), *The unofficial economy: Consequences and perspectives in different economic systems* (pp. 61-82). Brookfield, VT: Gower Publishing Company.
- Zimmerman, J. N., & Hirschl, T. A. (2003). Welfare reform in rural areas. In D. L. Brown & L. E. Swanson (Eds.), *Challenges for rural America in the twenty-first century* (pp. 363-374). University Park, PA: Pennsylvania State University Press.
- Zuckerman, D. (2000). Welfare reform in America: A clash of politics and research. *Journal of Social Issues* (Winter) pp.587-599. Retrieved January 13, 2009 from <http://www.center4research.org/poverty3.html>

## APPENDIX A – DEFINITION OF TERMS

*Birth interval* Time interval between mother's consecutive births; determined by length of postpartum infecundable interval (influenced by breastfeeding), length of time between postpartum ovulation and conception, and length of a full-term pregnancy (usually nine months) (Bongaarts and Potter, 1983).

*Birth rate* Number of births per 1,000 women of reproductive age, 15 through 44 years (Bongaarts and Potter, 1983).

*Child* Son or daughter by birth, stepchild, or adopted child of householder, regardless of child's age or marital status (U.S. Census Bureau, 2000a).

*Communal economic strategies* Extended family and non-relative households, income sources not from wages, non-monetary exchange of goods and services, unofficial economy, and return migration (Schmink, 1984).

*Composition of household* All people who occupy the housing unit as their usual place of residence. Examples include: married-couple family; male householder, no wife present; female householder, no husband present; spouse (husband/wife); child; custodial grandparent; other relatives and non-relatives (U.S. Census Bureau, 2001a).

*Demography* Domain of size, composition and distribution of human populations as influenced by forces of fertility, mortality and migration (McFalls, 2003).

*Earnings* Algebraic sum of wage or salary income and net income from self-employment; amount of income received regularly before deductions for personal income taxes, Social Security, bond purchases, union dues, Medicare deductions, etc. (U.S. Census Bureau, 2001a)

*Economy* Measures of household engagement in communal strategies for distribution of valued resources.

*Educational attainment* Highest level of education completed; *associate degree* indicates completion of two years of college level work in an occupational or academic program (U.S. Census Bureau, 2001a; U.S. Census Bureau, 2000a).

*Family size* Total people living in one household and related to householder by birth, marriage or adoption (U.S. Census Bureau, 2001a).

*Fertility* Reproduction measured as births per 1,000 women aged 15 through 44 (Bongaarts and Potter, 1983).

*Grandparents as caregivers* Census designation based on a grandchild living in the household for whose basic needs the grandparent (age 30 or older) is responsible for some duration (U.S. Census Bureau, 2000a).

*Household size* Number of people who occupy housing unit as usual place of residence (U.S. Census Bureau, 2001a).

*Householder* Person age 15 or older in whose name the home is owned or rented, or who is listed as Person 1 on the census questionnaire (U.S. Census Bureau, 2000a).

*Household income* Income from all sources to all people who occupy housing unit as usual place of residence whether related to the householder or not (U.S. Census Bureau, 2001a).

*Income sources* Wages, self-employment income; interest; Social Security; Supplemental Security Income; public assistance; retirement; other sources of income received regularly such as Veterans' payments, unemployment compensation, child support, or alimony (U.S. Census Bureau, 2001a).

*Mean family size* Number of people in families divided by total number of family householders (U.S. Census Bureau, 2000a).

*Mean household size* is number of people in households divided by total number of householders (U.S. Census Bureau, 2000a).

*Median age* Divides age distribution; half of all cases fall below and half above the median (U.S. Census Bureau, 2000a).

*Median income* Divides income distribution in half for households and families, based on distribution of total number of households or families including those with no income (U.S. Census Bureau, 2000a).

*Nonrelative* Household member not related to householder by birth, marriage, or adoption, including foster children (U.S. Census Bureau, 2000a).

*Other relative* Household member related to householder by birth, marriage, or adoption, but not included specifically in another relationship category (U.S. Census Bureau, 2000a).

*Parity rate* Number of children ever born to mothers giving birth within a period of time, represented as percentage of total births during that period of time (Bongaarts and Potter, 1983; U.S. Census Bureau, 2000a).

*Per capita income* Average obtained by dividing aggregate income by total population of an area (U.S. Census Bureau, 2001a).

*Poverty* Total income of family compared to 48 thresholds that vary by family size, number of children within family, and age of householder. Classification is applied to entire family (U.S. Census Bureau, 2000a).

*Pregnancy rate* Number pregnancies per 1,000 women of reproductive age, 15 through 44 years; might end in live birth, stillbirth, miscarriage or abortion (Bongaarts and Potter, 1983).

*Pronatalism* Community policy or practice in support of childbearing.

*Proximate determinates of fertility* Seven conditions or behaviors that influence individual fertility (age at first sexual union, frequency of intercourse, use and effectiveness of contraception, spontaneous intrauterine mortality, induced abortion, postpartum infecundability, age at onset of permanent sterility) (Bongaarts and Potter, 1983).

*Public assistance income* General assistance (GA) and temporary assistance to needy families (TANF); does not include supplemental security income (SSI) paid by the Social Security Administration to needy elderly or disabled individuals (U.S. Census Bureau, 2000a).

*Race* For purposes of comparison in this study, two classifications of race were used: (a) *European American* (described in U.S. Census data as *white*), and (b) *Native American* (described in U.S. Census data as *American Indian Alaska Native*). The U.S. Census Bureau category of one-race-alone is based on head of household's self-identification with racial and national origin groupings. Race categories are sociopolitical, not scientific (U.S. Census Bureau, 2000a).

*Size of household* Average household size obtained by dividing number of people in households by total number of households or householders (U.S. Census Bureau, 2001a).

*Territorial permanence* Continued occupation of traditional homelands.

## B – INTERVIEW QUESTIONS

### Part 1: Community pronatalism (parent/guardians, community leaders, key informants)

1. In your opinion, why is this (or is this not) a good community in which to raise a child?
2. In your community, who helps parents raise their children? How do they help? What kind of help do parents need? Whose should help parents?
3. Are children valuable? What are the advantages and disadvantages to having children? What costs are associated with having a child?
4. What are the best ages for mothers and fathers to have children? When are they too young or too old? How far apart should pregnancies be? How old should older brothers and sisters be when a new baby is born?
5. Who makes the decision to have a child? Is there an ideal family size? Is it ever a really good, or really bad, idea to have a child?
6. Is there anyone who absolutely shouldn't have children? Anyone who should?

### Part 2: Household composition (all parent/guardians)

1. Who lives in your household? Is it the same people as last year? Do you think it will change in the coming year?
2. Do you have a job? Where do you work and how long have you been there? Did you have to go to school to get that job?
3. Do you get money from any government programs? Rent? Selling things you make or food you raise? Doing child care?
4. Do other people help with household expenses, help clean, share rides, buy diapers, or otherwise help out regularly?
5. Who is your best source of advice and support?

### Part 3: Optimal fertility (mothers)

1. How old were you at the time of your first birth? How many times have you been pregnant? Did they all end in live births? How many children do you have now?
2. How far apart were your pregnancies? Did you breast feed? Do you try to control whether or not you'll get pregnant?
3. How many children do you think you will have? How old were you (or do you think you will be) at the time of your last birth?



## APPENDIX C – DATA SET FOR 37 RURAL COUNTIES

County	% Population Native American <sup>b</sup>	Birth Rate <sup>a</sup>	Median age of mothers of newborns <sup>a</sup>	% Family households with grandchildren <sup>b</sup>	% Family households with extended family <sup>b</sup>
Big Horn County	59.73	80.10	24.0	8.67	2.57
Blaine County	44.87	81.10	24.0	4.51	2.23
Carbon County	0.68	60.80	28.0	0.67	0.42
Carter County	0.22	45.80	28.0	0.74	0.59
Chouteau County	14.09	34.60	27.0	0.80	0.89
Custer County	1.90	54.80	24.0	1.60	0.95
Daniels County	1.19	66.40	28.0	0.35	0.10
Dawson County	0.96	54.00	25.0	0.50	0.43
Fallon County	0.42	53.80	26.0	0.32	0.81
Fergus County	1.13	48.20	27.0	0.79	0.45
Garfield County	0.00	71.10	29.5	0.63	0.16
Glacier County	59.33	76.60	22.0	5.56	2.51
Golden Valley County	0.48	47.90	29.0	0.38	0.48
Hill County	16.85	85.10	25.0	1.88	0.84
Judith Basin County	0.43	45.70	30.0	0.39	0.39
Liberty County	0.00	54.50	27.0	0.70	0.37
McCone County	1.37	53.70	24.0	0.76	0.46
Meagher County	0.62	50.40	25.0	0.88	0.36
Musselshell County	1.42	67.20	27.0	0.64	1.11
Park County	0.66	61.30	28.0	0.60	0.78
Petroleum County	0.00	61.70	29.0	1.01	0.00
Phillips County	8.24	37.30	25.5	0.85	1.28
Pondera County	13.76	63.30	27.0	2.12	1.07
Powder River County	2.26	62.10	25.0	1.35	0.32
Prairie County	0.92	83.30	24.5	0.17	0.00
Richland County	1.30	58.40	26.0	0.76	0.35
Roosevelt County	54.96	99.60	24.0	5.51	1.93
Rosebud County	31.42	81.20	25.0	4.33	1.26
Sheridan County	1.83	50.40	28.5	0.58	0.15
Stillwater County	0.81	48.70	27.0	0.70	0.63
Sweet Grass County	0.14	51.00	27.0	0.67	0.64
Teton County	1.40	61.20	28.5	0.56	0.57
Toole County	3.30	39.10	28.0	0.80	0.28
Treasure County	1.39	45.50	25.0	1.05	0.58
Valley County	8.26	54.20	26.0	1.52	0.81
Wheatland County	0.58	78.70	24.0	0.49	0.35
Wibaux County	0.94	65.60	33.0	0.37	0.19

<sup>a</sup>1999, Montana Dept of Public Health and Human Services, Office of Vital Statistics. <sup>b</sup>1999, U.S. Census Bureau (SF-1, 2000). <sup>c</sup>1999, U.S. Census Bureau (SF-3, 2000)

County	% Households with public assistance income <sup>c</sup>	Per capita income <sup>c</sup>	Median age <sup>b</sup>	Mean household size <sup>b</sup>	Mean family size <sup>b</sup>
Big Horn County	8.67	\$10,792	29.80	3.17	3.66
Blaine County	8.93	\$12,101	34.40	2.78	3.36
Carbon County	1.70	\$17,204	41.90	2.32	2.86
Carter County	2.56	\$13,280	41.80	2.47	2.99
Chouteau County	3.88	\$14,851	39.30	2.59	3.11
Custer County	2.22	\$15,876	39.30	2.36	2.94
Daniels County	1.56	\$16,055	47.00	2.22	2.84
Dawson County	2.43	\$15,368	41.00	2.37	2.90
Fallon County	2.13	\$16,014	41.10	2.45	2.96
Fergus County	1.73	\$15,808	42.40	2.33	2.91
Garfield County	1.88	\$13,930	41.60	2.38	2.93
Glacier County	13.38	\$11,597	30.60	3.03	3.56
Golden Valley County	2.78	\$13,573	41.50	2.41	2.85
Hill County	4.15	\$14,935	34.50	2.53	3.15
Judith Basin County	1.79	\$14,291	42.00	2.45	3.02
Liberty County	2.29	\$14,882	41.50	2.51	3.11
McCone County	2.47	\$15,162	42.40	2.44	2.89
Meagher County	1.36	\$15,019	42.80	2.37	3.00
Musselshell County	2.31	\$15,389	43.20	2.33	2.91
Park County	2.61	\$17,704	40.60	2.27	2.88
Petroleum County	2.87	\$15,986	41.10	2.34	2.95
Phillips County	3.20	\$15,058	40.80	2.45	3.03
Pondera County	5.68	\$14,276	38.60	2.63	3.18
Powder River County	1.08	\$15,351	42.10	2.48	2.99
Prairie County	0.74	\$14,422	48.90	2.19	2.74
Richland County	2.72	\$16,006	39.20	2.46	3.04
Roosevelt County	15.30	\$11,347	32.30	2.89	3.40
Rosebud County	5.30	\$15,032	34.50	2.81	3.34
Sheridan County	0.57	\$16,038	45.10	2.29	2.87
Stillwater County	1.96	\$18,468	40.80	2.48	2.94
Sweet Grass County	1.02	\$17,880	41.20	2.41	3.00
Teton County	2.26	\$14,635	40.00	2.51	3.09
Toole County	3.60	\$14,731	39.10	2.47	3.09
Treasure County	1.38	\$14,392	41.80	2.41	2.98
Valley County	3.91	\$16,246	41.70	2.38	2.93
Wheatland County	3.11	\$11,954	41.40	2.24	2.86
Wibaux County	3.53	\$16,121	42.30	2.45	3.02

<sup>a</sup>1999, Montana Dept of Public Health and Human Services, Office of Vital Statistics. <sup>b</sup>1999, U.S. Census Bureau (SF-1, 2000). <sup>c</sup>1999, U.S. Census Bureau (SF-3, 2000)

## APPENDIX D – CORRELATION TABLE

Fertility and household characteristics, 37 rural counties, 1999 (U.S. Census Bureau, 2000)

		Birth rate <sup>a</sup>	Age of mother <sup>a</sup>	Median age <sup>b</sup>	Family size <sup>b</sup>	Household size <sup>b</sup>
Birth rate <sup>a</sup>	r	1.00	-.363	-.444	.435	.404
	p*	0.00	.027	.006	.007	.013
Age of mother <sup>a</sup>	r	-.363	1.000	.448	-.398	-.407
	p*	.027	0.00	.005	.015	.012
Median age <sup>b</sup>	r	-.444	.448	1.00	-.916	-.905
	p*	.006	.005	.000	.000	.000
Family size <sup>b</sup>	r	.435	-.398	-.916	1.000	.974
	p*	.007	.015	.000	.000	.000
House-hold size <sup>b</sup>	r	.404	-.407	-.905	.974	1.000
	p*	.013	.012	.000	.000	.000
Percent family households with grandchild <sup>b</sup>	r	.583	-.526	-.861	.909	.913
	p*	.000	.001	.000	.000	.000
Percent family households with extended family <sup>b</sup>	r	.421	-.564	-.846	.852	.861
	p*	.009	.000	.000	.000	.000
Percent all households with public assistance <sup>c</sup>	r	.583	-.443	-.831	.831	.831
	p*	.000	.006	.000	.000	.000
Per capita income <sup>c</sup>	r	-.575	.416	.547	-.622	-.621
	p*	.003	.011	.000	.000	.000
Percent population Native American <sup>b</sup>	r	.911	-.531	-.864	.913	.913
	p*	.000	.001	.000	.000	.000

Note. <sup>a</sup>Montana Office of Vital Statistics, 2008. <sup>b</sup>SF-1, U.S. Census Bureau, 2000. <sup>c</sup>SF-3, U.S. Census Bureau, 2000.

\*p < .05. Independent samples two-tailed t-test. n = 37.

## CORRELATION TABLE, cont.

Fertility and household characteristics, 37 rural counties, 1999 (U.S. Census Bureau, 2000)

		Percent family households with grand- child <sup>b</sup>	Percent family households with extended family <sup>b</sup>	Percent all households with public assistance <sup>c</sup>	Per capita income <sup>c</sup>	Percent Native American <sup>b</sup>
Birth rate <sup>a</sup>	r	.583	.421	.583	-.474	.600
	p*	.000	.009	.000	.003	.000
Age of mother <sup>a</sup>	r	-.526	-.564	-.443	.416	-.513
	p*	.001	.000	.006	.011	.001
Median age <sup>b</sup>	r	-.861	-.846	-.831	.547	-.864
	p*	.000	.000	.000	.000	.000
Family size <sup>b</sup>	r	.909	.852	.831	-.622	.913
	p*	.000	.000	.000	.000	.000
House-hold size <sup>b</sup>	r	.913	.861	.831	-.622	.913
	p*	.000	.000	.000	.000	.000
Percent family households with grandchild <sup>b</sup>	r	1.000	.880	.834	-.644	.957
	p*	.000	.000	.000	.000	.000
Percent family households with extended family <sup>b</sup>	r	.880	1.00	.836	-.575	.911
	p*	.000	.000	.000	.000	.000
Percent all households with public assistance <sup>c</sup>	r	.834	.836	1.00	-.674	.926
	p*	.000	.000	.000	.000	.000
Per capita income <sup>c</sup>	r	-.644	-.575	-.674	1.00	-.680
	p*	.000	.000	.000	.000	.000
Percent population Native American <sup>b</sup>	r	.957	.911	.926	-.680	1.00
	p*	.000	.000	.000	.000	.000

Note. <sup>a</sup>Montana Office of Vital Statistics, 2008. <sup>b</sup>SF-1, U.S. Census Bureau, 2000. <sup>c</sup>SF-3, U.S. Census Bureau, 2000.

\*p < .05. Independent samples two-tailed t-test. n = 37.