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Women Affected by U.S. Welfare Reform: Considering Health and its Relationship to Public Policy

by

Shawn Kneipp

A dissertation submitted in partial fulfillment
Of the requirements for the degree of

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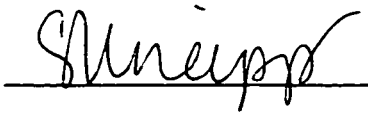
Signature 

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Abstract

Women Affected by U.S. Welfare Reform: Considering Health and its Relationship to Public Policy

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The concept of environment is considered fundamental to the paradigm of nursing. Nurse scientists, however, often do not consider how public policy (other than "health" policy) in the broader socioeconomic environment affects health. Adopting an ecological health framework proposed by Milio (1981), this research examines how welfare policy influences the lives and health of women.

Using secondary analysis as the research method, data from the Washington State Family Income Study were examined to determine whether there were differences in the psychosocial health of women leaving welfare for paid employment and those remaining on welfare. An additional question asked of the data was whether the Family Support Act (FSA) of 1988 (which provided childcare and extended health insurance benefits to women) was effective in increasing women's participation in job training and educational programs. Propensity score matching and multiple imputation procedures were applied to adjust for restrictions in the data set.

No differences in psychosocial health were found between women leaving welfare for paid employment and those remaining on welfare (p =>.05 on all measures), although the psychosocial measures used limit the interpretation of this finding. Prior studies indicates the life circumstances of women leaving welfare for paid employment rarely improves, and, may even become more difficult. In this context, this finding is consistent with previous research.

As a policy intended to increase participation in job training and employment programs, the FSA was found to be effective (p =.001, OR = 2.16) in increasing participation. With respect to this policy, although support services for women were provided, there were also constraints imposed on women's lives.

The implications for nursing include broadening the concept of environment to include the socioeconomic and political environments, and considering methods such as secondary analysis as valid for use in the policy research arena. Increasing involvement in public policy research by nurses is imperative, as a better understanding of how policies such as those directed toward welfare reform influence women's health.

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I. INTRODUCTION

The concept of environment is considered fundamental to the paradigm of nursing; however, it remains narrowly construed within the discipline. Nursing theory, research, and practice has overwhelmingly represented the environment as the immediate surroundings of individuals or groups, keeping our efforts and analyses at the microlevel. Recently, however, some nurse scholars (Butterfield, 1990; Chooporian, 1986; Kleffel, 1991; Nelson, 1994) have called attention to the macrolevel environment, which encompasses the larger social, economic, and political spheres that dictate the form of the microlevel. As these scholars suggest, and what is argued for in this dissertation, is an expanded definition of the environment that considers the broader social, economic, and political domains as necessary and legitimate areas for nursing inquiry and intervention.

Extending this general position, closer examination of public policies outside of the realm of "health policy" needs to occur within nursing. While the effects of a variety of public policies on health remain unknown for several reasons, the lack of conceptual frameworks in health care disciplines that consider the consequences of policy not officially classified under the rubric "health" figures prominently. The work of Nancy Milio (1981), that did explicate a nursing framework comprehensively examining the role of public policy in either supporting or not supporting health, is seldom referred to in nursing discourse that focuses on the environment. Milio's work is significant in that it situates the way public policy shapes the life experiences of people within the context of health, and ought to be more central to such discussions. The ecological approach used by Milio to examine the effects of the environment on health through public policy is used as the theoretical framework guiding this inquiry, which explores how welfare policy influences the lives and health of women subjected to it.

The term "welfare" in the United States is often inaccurately used as a synonym for the former program Aid to Families With Dependent Children (AFDC), now Temporary Assistance to

Needy Families (TANF). AFDC was only one form of public assistance that falls under the broader category of "welfare" (however, AFDC and welfare will be used interchangeably throughout this study).[1] As the most controversial source of public assistance, welfare is an issue that predominantly affects women, and exists where the social expectations of women, the economic structure of the nation, and public policy intersect. Women relying on welfare provision for survival find themselves economically and socially marginalized. Deleterious health consequences have been consistently associated with poverty and marginalization, although the direction of the relationship remains unclear (Hall, Stevens, & Meleis, 1994; Nelson, 1994). Moreover, women (particularly single-mothers and their children) are overrepresented among the poor, following a sustained trend popularized as "the feminization of poverty."

As a profession committed to improving the health of vulnerable groups, nursing must ask what it is that continues to drive women to disproportionately be among the poor. A number of realities about women's lives are fundamentally grounded in public policies that make them especially vulnerable to poverty. In an effort to better understand why women are subjected to poverty, and how public policy perpetuates women constituting the majority of the poor, the categorization of social services along gender axes is central in relation to the development of political theory and practice. Applying gender as a major organizing category for policy, how welfare policy shapes women's lives and health is illuminated in relation to the social, economic, and political structures at the macrolevel of environment.

Major studies of welfare reform initiatives have consistently overlooked any effects on health as irrelevant to the policy objective at hand, which is most often determining whether programs were successful in reducing the number of recipients, for how long, and at what cost.

---

[1] It is acknowledged here that there are many forms of "welfare" besides the former AFDC program and what is now TANF. A number of policies provide income support in the form of welfare assistance, but are not identified or negatively labeled as such. Some examples of this include funding to support corporate development, federally funded financial assistance to attend college, and a number of other subsidies that support science, ongoing research and development, in addition to other forms of assistance.

From a public policy perspective, this follows a cost-effectiveness evaluation approach, which neglects how changes in one policy area may in turn affect outcomes of other social programs. An example is considering how Medicaid expenditures may be affected as people's living conditions and health is altered through legislative changes in welfare. Investigators in the policy research arena who criticize a cost-effectiveness approach as being unduly limiting instead advocate for using benefit-cost analyses, considered more comprehensive in evaluating programmatic effects. This policy distinction is important in that the latter approach is consistent with the ecological health framework introduced into nursing by Milio (1981). Thus, similarities exist between policy and nursing research perspectives, providing a familiar point of reference for nurse investigators studying macrolevel environmental effects on health, particularly with respect to specific public policies.

The question of how health may be affected by welfare policy remains one of vital importance for nursing, as an abundance of literature substantiates a relationship between socioeconomic status, psychosocial stress, physical symptoms, and health. This question is of equal importance in the policy arena, as expansive views of policy consequences often remain out of sight. The methods available for exploring this question are numerous, each with strengths and limitations that require serious consideration.

Not unlike researchers in many other fields, policy researchers favor experimental methods whenever possible. However, several methodological, ethical, and practical factors often make experimental methods inaccessible. In such situations, alternate methods are fully capable of producing findings useful for decision-making in the policy arena. Moreover, the issue of welfare policy in relation to women's health lacks prior exploratory or descriptive studies, calling into question the suitability of conducting highly controlled, large-scale studies as initial approaches for examining this subject. An alternative method frequently employed in the policy arena, and to be used for this study is secondary analysis.

Although secondary analysis has been used by social scientists for many years, nurse scientists have not utilized this method as often as might be expected. Large, existing data sets are a plentiful source of information and are widely available to researchers today. This study provides an example of secondary analysis using existing longitudinal data collected for the Family Income Study (FIS) in Washington State between 1988 and 1992. The FIS data provide a rich source of information from which to examine some psychosocial aspects of women's health in relation to welfare policy. Both the advantages and disadvantages of employing secondary analysis are described along with the findings of the study. Additional considerations for utilizing social science for policy making are discussed as well as what the implications of the study are for nursing practice and research. Finally, the need for nursing research in the policy arena and specific recommendations for future nursing research are further discussed.

Statement of the Problem

During the final year of data collection for the Family Income Study in 1992, 36.9 million people, or 14.5 percent of the nation's population, lived below the official government poverty level, and had increased by 1.2 million people since 1991 (U.S. Department of Commerce, 1992). Of those living in poverty, single-mothers and their children constituted the vast majority, accounting for 34.9 percent of families as compared to male-headed households (15.6 percent) and married-couple families (6.2 percent) (U.S. Department of Commerce, 1992). Since that time, 38.1 million people, or 14.5% of the population lived below the federal poverty level in 1994, with 38.6% consisting of single-mother families (U. S. Department of Commerce, 1996). These statistics become particularly disturbing when meaning is ascribed to the actual lives behind the numbers -- when considering what it means to be poor in one's day-to-day existence in this society.

As a discipline that cares for the health of others, nursing should consider what it means to be poor. This implores that we question what drives women to be disproportionately poor, as well

as contemplate what the circumstances of women are who endure poverty status. It means furthering our understanding of how the environment influences health, and, in turn, how interventions made in the public policy arena have the potential to improve the environmental circumstances of those we care for. Although numerous studies support a relationship between poverty, health, and employment, there have been no studies examining the relationships between making the transition from welfare to paid employment and women's health.

Research Purpose and Objectives

The purpose of this study is to describe the health, employment, and job training and education participation characteristics of women affected by AFDC policy from 1988 to 1992. The specific objective of this study is to examine differences between women who left welfare for paid employment from one year to the next and those who continued to receive AFDC in relation to (a) self-efficacy, (b) self-esteem, (c) sense of control, (d) depression, and (e) perceived emotional support.

A secondary aim of this research was to determine whether the Family Support Act (FSA) implemented in 1990 was effective in increasing participation in job training and educational activities as originally intended.

II. Review of the Literature

A number of diverse perspectives contribute to thinking about women's health in relation to public policy from a nursing framework. Consequently, the subject matter taken up in this proposal is substantively complex, and informed by both theoretical and empirical literature from a variety of disciplines. Therefore, this section will review literature relevant to: 1) the role of the environment and interventions within the discipline of nursing, 2) political and feminist theory with respect to women's positions in society, 3) gender and public welfare programs, 4) the relationship between socioeconomic status, poverty, and health, and, 5) policy studies of welfare programs. Conjointly, these seemingly unrelated issues come together to more fully illustrate a coherent whole with respect to women's health and welfare policy.

Nursing and Concern for the Environment

Thoughtful regard for the role of environment in nursing originated with Florence Nightingale's arrival at Scutari in 1854 (Kalisch & Kalisch, 1986; Nightingale, 1860). Her arrival marked the beginning of her quest to formally define and regulate nursing as a distinct field responsible for improving the surroundings of patients, which she believed enabled optimal healing and well-being. As nurse historians contend, women were and are presumed to have the natural attributes suitable for tending and giving proper order to the immediate milieu of those needing care (Reverby, 1987). Despite nursing's development into a professional discipline, there is the consistent proclivity to align it with and define it by ideological virtues of womanhood and femininity, which has included tending directly to the needs of others.

Although the historical alignment of nursing with femininity has contributed to preserving features of caring necessary for nursing to function as a human service, it has reciprocally constrained what nursing perceives as encompassing "the environment" to the immediate surroundings of individuals or groups. The resulting narrower vision of what comprises the environment is important on two accounts: 1) in a definition sense, where nursing considers what

external factors may influence health, and, 2) in an intervention sense, where nurses believe a particular aspect of the environment is within their jurisdiction to intervene or within their ability to modify the environment in a manner consistent with enhancing health. What is paramount in distinguishing between the two is that one must necessarily follow the other: prior to intervening, what to carry out interventions on must be defined. Consequently, within nursing, the restriction of defining the environment as that which exists primarily within the immediate milieu has bound it as well to confining its interventions in overwhelmingly individualistic terms.

Archetypal Definitions of Environment within Nursing

Although nursing has devoted a substantial amount of attention to the influence of the immediate environment on health, it has given only meager consideration to the multidimensionality -- or various levels -- of the environment. As a result, no nomenclature has been developed within nursing to discuss the presence of the environment beyond the family or community. Definitions proposed by Bronfenbrenner (1977) will be used to distinguish between the tiers of environment referred to throughout this dissertation. Bronfenbrenner uses an ecological systems approach to describe the relations between person and environment, and divides the entirety of environment into the following four distinct categories: the microsystem, mesosystem, exosystem, and macrosystem.

Although Bronfenbrenner (1977) uses the suffix "system" to describe the different aspects of environment, "level" is being used here instead, because the definitions reflect characteristics of proximity. For instance, the microsystem is referred to as the microlevel, indicating this level is closest in proximity to a person -- or the immediate setting in which a person experiences everyday life. The microlevel environment consists of familiar places such as the home, school, or workplace. Expanding on the concept of the microlevel, the mesolevel comprises the interrelations between the microlevels. The exolevel refers to major social institutions operating at a local level (generally in geographical terms). It can be described as a mediating level, as it is

simultaneously structured by the macrolevel, yet determines what occurs at the microlevel. Finally, the macrolevel environment comprises "the overarching institutional patterns of the culture or subculture, such as the economic, social, educational, legal, and political systems," which are concretely manifested in everyday experiences at the microlevel (Bronfenbrenner, 1977, p.515).

Over the past decade, earnest critiques regarding the restricted conception of the environmental domain within nursing have been written. Some scholars have looked to ecological frameworks such as Bronfenbrenner's (1977) for an advanced explanation that more comprehensively reflects the influence environment has on health. Chooporian (1986) asserts that, even though the concept of environment has been accepted as central to the nursing paradigm, nurse theorists have elaborated little on the concept outside of what constitutes an individual or group's immediate setting. As a result, nurse scientists, educators, theorists, and practitioners have been deficient in considering what factors contribute to unfavorable or favorable health outcomes. She astutely observed that nurses continually bear witness to the deleterious effects of a particular social policy, economic policy, or prescribed ideology in health and human terms, yet we consistently fail to trace the elements of a problem back to its social or political roots. Chooporian argued persuasively for the need to open our consciousness to and reconceptualize the environment within nursing to include the social, political, and economic worlds that underlie the dynamics of health.

Kleffel (1991), intrigued by Chooporian's (1986) tenets, conducted a comprehensive review of nursing theory and research, seeking to determine the conceptual scope of environment within the discipline of nursing. The findings of Kleffel's review supported Chooporian's criticism, indicating the vast majority of nursing discourse related to the environment is restricted to the microlevel.

Like Chooporian (1986) and Kleffel (1991), Butterfield (1990) argued that nursing develop its conceptual understanding regarding the influence the societal context has on health. In addition, Butterfield proposed nurses become familiar with critical social theory as an approach to further develop our understanding of the social and economic controls that limit the choices of the least powerful in our society. Since that time, both critical social theory and feminist theory have appeared increasingly in nursing discourse as consciousness-raising methodologies that probe power relations and ideology in the broader societal context (Campbell & Bunting, 1991).

Restructuring Interventions to Include the Macrolevel Environment

The articles by Chooporian (1986), Kleffel (1991), and Butterfield (1990) not only criticized the narrow definitions of environment within nursing, but also the characteristic focus of the individual -- rather than the environment -- as the object requiring intervention or therapeutic measure. Nursing has taken an approach to interventions concerning the environment that centers on an individual or group's capacity to adapt to the environment, as opposed to making attempts to adapt the environment to the needs of people. In expanding the arena in which nursing interventions can occur, Chooporian (1986) called for nurses to take on activist roles that require we engage ourselves in social movements, work to alter the economic base of institutions that perpetuate disparity, and involve ourselves more fully in political affairs in the United States.

Finally, although Kleffel (1991) and Butterfield (1990) similarly criticized nursing interventions as being narrowly construed in mainstream nursing scholarship, both acknowledged the contributions of Nancy Milio to the discipline. What is unique about Milio's (1981) work is her explicit reference to public policy, which differs from the more ambiguous inference to the political arena at-large. It is Milio's framework that I now examine in more depth with respect to public policy interventions.

Milio's Ecological Framework for Enhancing Health Through Public Policy

As told in her hallmark book 9226 Kercheval: The Storefront That Did Not Burn (Milio, 1971), Milio's early community health nursing experiences in Detroit confronted her squarely with the effect socioeconomic status has on health. In a book that followed, she argued extensively for using a strategic approach to many of the health problems in the U.S. by designing public policy that is supportive of peoples' health (Milio, 1981). Milio claimed policies in the U.S. concerned with health are ineffectual, cost-inefficient, and narrowly examined, having been developed around the "classifications of diseases and symptoms, which are responses to environments" (Milio, p.77). Drawing support from numerous studies in the social science literature, she recommends a more rational approach that includes analyzing an array of public policies for their effects on health, and then designing policies supportive of efforts aimed at health promotion and disease prevention, what she termed an ecological health framework.

The distinguishing feature of Milio's (1981) work from that of current policy-related discourse in the nursing literature is her clear recommendation that all public policies be evaluated for their actual or potential influence on health, as opposed to only those policies specifically designated as being within the realm of "health policy." As a point of clarification, Milio alternated between using the term "health policy" and "health-making policy," which appear to be used interchangeably. Her references to "health policy" are an overarching, broad term, used to describe any policies that have the potential to influence health. Her use of this term is not meant to confine a particular type of policy to one formal authoritative doomain versus another (such as education policy as opposed to health policy).

Similar to Bronfenbrenner (1977), Milio (1981) considers the entirety of environment, including the many levels and all contained within them (schools, places of work, availability of daycare, state and federal regulations, etc.,) when identifying determinants of health. Note this is in contrast to identifying problems solely associated with the accessibility of health services.

Using this framework, she shows that all aspects of the environment are shaped by policy-making. Milio's mindfulness of how the political structure and health intersect was expressed in the following:

> "The obligation of health policy, if it is to serve the health interests of the public, does not extend to assuring every individual the attainment of personally defined "health." In a democratic society that seeks at least internal equanimity, if not humaneness and social justice, the responsibility of government is to establish environments that makes possible an attainable level of health for the total population. This responsibility includes the assurance of environmental circumstances that do not impose more risks to health for some segments of the population than for others, for such inequality of risk would doom some groups of people -- regardless of their choice -- to a reduction in opportunities to develop their capacities" (Milio, 1981, p.5).

As Milio (1981) suggested, the ideals of a democratic society seem inconsistent with the real options available to people necessary for maintaining optimal health. With respect to understanding the dynamics that underlie women's lives, health, and public policy, we need to further understand how, historically, the social, political, and economic environment has exerted its influence through policy, ideology, and dominance.

Feminist Theoretical and Methodological Perspectives: Addressing Essentialism and Difference

In this postmodern era, researchers committed to a feminist agenda that conceptualize women as the unit of analysis in their work are compelled to address the theoretical and methodological challenges identified by recent feminist scholars. Before moving to the next section of literature that reviews the relationship women have to social policy, it is necessary to present the perspective taken in this research endeavor. Concern about assigning women to essentialist categories and rendering critical differences invisible is central to this ongoing debate. Because I take up "women" in relation to welfare as the subject of this project, this section provides both an overview of feminist argument focusing on the problematics surrounding essentialism and difference, and provides rationale for the position I take on the issue with respect to this research.

Essentialist Categories and their Deconstruction

Early feminist theorizing sought to reveal aspects of culture and history that failed to account for differences in gender. Paralleling theoretical efforts, the more visible grassroots political push of the women's movement during the 1960s and 1970s was an attempt to unveil the voice of the "Other" in relation to men and allow the voice of women to be heard (Nicholson, 1990). However, what was soon recognized was the universal notion of "the voice of women" failed to represent all women. During this era, and to a lesser extent, what continues today, this voice spoke nearly exclusively for middle to upper class white women at the expense of excluding poor women, women of the working class, Black women, Asian women, Hispanic women, and those who did not personally identify with the message being given "for them" by leaders of the feminist movement (Davis, 1989; hooks, 1984). Whether believed to be intentional or unintentional, neglecting the perspectives of women who were not middle- to upper class whites boded poorly for the movement as a political struggle by fragmenting the perception of unity so necessary for implementing legislative change by marginalized groups.

Essentializing women on both theoretical and methodological fronts remains a locus of concern in popular feminist scholarship. Attempts to delineate categories of being that are clear and can be defined by essential traits have been strongly criticized by philosophical deconstructionists as incomplete, inaccurate, and ethnocentric. Paralleling reductionism in science, essentialism is widely believed to hold demeaning and even patriarchal views of women, and has been associated with feminist standpoint theory (Young, 1994). Postmodern feminist scholars have implicated feminist standpoint theory as being particularly essentializing.

Standpoint theory emerged in the context of social science, and has been further developed and endorsed by feminists coming from the Marxist tradition (Hartsock, 1983). In general, standpoint theorists argue that because women have historically held social positions, had role expectations, and had life experiences different from that of men, they occupy a unique

location from which to view and interpret the world in comparison to men. As Longino (1993) noted, feminist standpoint theory has, however, had various expressions, "ranging from the romantic idea that women come, by nature or social experience, to be better equipped to know the world than are men to the more modest proposal that a social science adequate for women must proceed from a grasp of the forms of oppression women experience" (p.202). Although diverse in its representations, a postmodern interpretation of any form of feminist standpoint theory is likely to consider it totalizing, universalizing, and essentialist.

While certain pitfalls undoubtedly exist when referencing women as a unified category of individuals whose similarities take precedence over difference, there are equally dangerous traps awaiting the now widely accepted logical extreme of the postmodern argument that difference must supersede commonalities in all feminist theoretical and methodological projects. The exclusive use of a postmodern orientation is rather paralyzing, however, both discursively and politically. Susan Bordo (1990) makes this point when she asks, "just how many axes can one include and still preserve analytical focus or argument?" (p.139). Further, while some scholars (Spelman, 1988) recommend privileging one set of categorizations (such as race, ethnicity, religion, or class) over the category "woman," this approach also presumes unity and stability, and does not challenge the universalizing tendencies that can occur within these alternate categories. Given the debate between the different factions of feminist scholarship, is there no situation in which it is appropriate to talk about women as a group? As noted by Young (1994), how to confront the pragmatic and political concerns regarding women's lives using an entirely postmodern point of view is left unaddressed by postmodern feminist critiques of essentialism.

Considering Women as a Social Collective

How does a feminist social science proceed, then, when confronted with the dilemma of being required to approach a subject matter from either an essentialist point of view or an endless deconstruction of categories? Young (1994) proposed an orientation to intellectual discourse that

uses categories and explanations, and develops accounts and arguments associated with specific practical and political problems. From this orientation, any theorizing about women is specifically tied to the practical problems confronted. Young calls this pragmatic theorizing, and distinguishes the theorizing done in this sense from totalizing theory. As she made clear, pragmatic theorizing "is not concerned to give an account of a whole . . . but rather it is driven by some problem that has ultimate practical importance" (p.718). Additionally, there are a number of other reasons to consider women as a social collective, and they will be briefly presented below.

In arguing for the role of pragmatic theorizing, Young (1994) cited two important reasons for conceptualizing women as a collective. The first is that an individualist ideology of deconstructed accounts of women shares a similar perspective to that of liberal individualism, which denies the realities of groups and can obscure oppression. Second, denying a reality of a social collective of women continues to privilege those who benefit from a division of (or incoherent account of) women. Most importantly, Young provided a non-essentializing definition for conceptualizing women as a social collective (for pragmatic theorizing) that is differentiated from an essentialist perspective:

> "An essentialist approach to conceiving women as a social collective treats women as a substance, as a kind of entity in which some specific attributes inhere. One classifies a person as a woman according to whether that person has the essential attributes of womanness, characteristics all women share . . . Conceptualizing gender as seriality avoids this problem because it does not claim to identify specific attributes that all women have. There is a unity to the series of women, but it is a passive unity, one that does not arise from the individuals called women but rather positions them through the material organization of social relations as enabled and constrained by the structural relations of enforced heterosexuality and the sexual division of labor. The content of these structures varies enormously from one social context to the next" [italics added] (p.733).

It is Young's (1994) perspective of addressing women as a social collective that I adopted for this research. Within the context of welfare reform, there are clearly differences between all women who have utilized the AFDC program and women who live in poverty. Conceptualizing women as a social collective for this study avoids the discursive and scientific paralysis that can

be associated with a purely postmodern view, while at the same time allowing for an analysis of how women are socially and materially situated within the context of welfare policy.

Referencing Women in Political Theory and Practice

Feminist political science scholars have illustrated that women's historic relationship to governance in public life has been one unequivocally of exclusion from public spaces and relegation to private lives (Phillips, 1991). While a thorough review of political science history and theory is not necessary, what will be discussed is a summary of notable political theory as informed and critiqued by feminist writers concerned with the influence it has had and its meanings continue to have on women's experiences. Such a review provides a critical historic backdrop to current ideologic debate regarding women's lives, the welfare state, and welfare reform policy.

As Milio (1981) suggested, the ideals of a democratic society seem inconsistent with the options available to people much of the time. Indeed, contradictions inherent to both the theory and practice of democracy are traceable to the ancient Greeks, who could conceive of a democratic society founded on ideals of equal representation, yet paradoxically exclude women, slaves, and others from citizenship (Phillips, 1991). Feminists have scrutinized political thought and practice for presuming that "natural" qualities of women made them unsuitable for participating in public life, or, for that matter, being granted the rights that citizenship conferred.

Pateman (1989) revealed the majority of political theorists feared the consequences of women's involvement in political life would be perilous, as women were perceived to have a lesser sense of morality or justice as men. Even as democratic theory was developed, contested, and debated over a period of centuries, the question of women's unsuitability for the public domain would remain dormant, suppressed, or ignored until early feminists plead their case for the right to vote.

Consent and the Social Contract

Social contract theorists significantly influenced evolvement of the participatory forms of democracy practiced in Greece into the contemporary, liberal form (Dahl, 1989). Monarchies reigned in the 1600s and were justified by patriarchal, familial birthright, referred to as patriarchalism. Growing social unrest with the rationale for such a paternal order to ruling led discontented political philosophers to contest claims of birthright, by contending all men are born free and equal. Social contract theorists further argued that if all men were indeed born free and equal, then the domination (or political right) of one man over others could not be upheld on birth right alone; the only way to legitimately establish a social order, they claimed, is through an agreement between those who believed a governing relation ought to occur (Pateman, 1991). Reasoning that people consider themselves better off living under a structured society than in a "state of nature" (considered chaotic and hostile), Hobbes proposed individuals enter into a social contract, whereby people could better ensure their safety, and meet their desires and needs. By 1700, acceptance of patriarchalism was no longer.

Pateman (1988; 1989), however, pointed out that patriarchy was far from being cast from the social order; rather, another form of patriarchy took its place. Hobbes stood apart from other contract theorists in that he believes women and men are inherently equal in the state of nature, whereas the others conclude men are granted superiority as a natural fact of human existence (Hobbes, 1994). Pateman (1991) was critical, however, of Hobbes's failure to remain consistent in this view when describing how all individuals are brought into the original social contract when only men are capable of giving consent and acquiring the exclusive privilege of political right. Hobbes used a somewhat complex argument to reconcile this dilemma, appealing to the popular definition of the "family." Consisting of a master and his servants, the head of the "family" (the man) gives his consent to enter all family members into the original social contract. According to Pateman (1991), obtaining active consent for the original contract was the primary circumstance

that challenged Hobbes's ability to remain theoretically consistent, given that all individuals to follow are born into the contract, and consent passively. How, then, were all women subsumed into a family in the "state of nature" so the requirement that all persons enter the original social contract is not violated? Essentially, Hobbes concluded that, in the state of nature, as soon as women have children they are unable to protect themselves from violent encounters in the same equal manner they were when childless, because they must now care for their infants. Further reasoning that the fathers of the children have an incentive to protect their young (based on the assumption that the children will be useful to them someday), men offer to protect women and their children in exchange for their servitude, thus creating a family. Under these circumstances, women have no choice but to protect themselves through such relationships, and are essentially forced to consent to private domination by a man. Hobbes referred to this arrangement as a "private body politic" (1994).

While Hobbes believed he had resolved his dilemma, Pateman (1991) found it highly problematic he does not consider that surely some women witnessing the domination as a consequence of childbearing would avoid childbearing altogether. Based on Hobbes's own line of argument, women would be able to avoid sexual relations in the state of nature due to their ability to ward off offenders on the same grounds as men. Therefore, a band of women without children could exist, necessitating an alternative method of entering them into the original social contract. What Hobbes would propose in this situation remains an unknown. Pateman (1991) thus noted that patriarchy continued to exist primarily via women being relegated to servitude within the family both in Hobbes's theoretical construction of social contract, and in practice, after the acceptance of a social contract as a means of governance. Conventional political theorists disagree that Hobbes's promotes any form of patriarchy, however, citing his acceptance of women sovereigns as evidence (Curley, 1994).

The Influence of Locke and Rousseau on Political Thought

Much credit is given to John Locke for refining contract theory to include both consideration for private property and the majority vote (Scott-Kakures, Castagnetto, Benson, Taschek, & Hurley, 1993). Perhaps most importantly, Locke brought attention to the fact that different types of social relationships coexist -- some being private and others political (or public). This paved the way for the formalization of the division of labor based on gender and the public or private sphere as an acceptable element of liberal democratic theory and practice.

Considered to have made novel contributions to political thought in the 1700s, Jean Jacques Rousseau's political views dissented from his predecessors in a number of meaningful ways. Unlike Hobbes and Locke, Rousseau argued that it is not in the state of nature that people engage in ceaseless, violent competition or have conceptions of private property existing in themselves; rather, the concept of property is a social invention that creates stratification, inequality, competition, and violence (Scott-Kakures, et al., 1993). Despite Roussseau's bold, progressive stance on social relations, he did not depart from conventional views about women.

Rousseau fundamentally believed that women very much contribute to building and maintaining a "good society" by playing a feminine role and being safeguarded against the corruption inherent in the public sphere by remaining in the private domain. Many feminist scholars consider Rousseau's writings to be oppressive to women (Okin, 1988; Pateman, 1988; Pateman, 1989). Lange (1991), however, pointed out that Rousseau places a high value on the roles that both men and women bring to society. Nevertheless, Rousseau clearly supported the separation of public and private spheres based on gender -- the consequences of which women, and, particularly feminists, have struggled with for years in their efforts to bring about greater gender equality in all areas of life through both social change as well as change in public policy.

Putting Theory into Practice: The Separation of the Public and Private

The women's movement drew attention to and presented a sophisticated argument against what was presumed the unproblematic division between the public and private domain (Phillips, 1991). The term "the personal is political" became a popular phrase, whereby feminists asserted the trivialization of women's problems in the public sphere would no longer suffice. They drew attention to the ways in which relations within the private household were irrefutably influenced by any number of public policies, and, reciprocally, that household responsibilities effectively prevented the majority of women from participating in the political arena in any meaningful way (Phillips, 1991). Moreover, feminists openly criticized the glaring contradictions present in proud claims of democracy while the primary experiences of many women in the home most accurately reflected authoritarian rule (Okin, 1989).

In addition to the absolute dichotomization of the public and private spheres, the failure to adopt Rousseau's recognition of the equal inherent value of work done in each has since plagued women's lives. As Okin (1989) made clear in examining how justice, gender, and the family intersect, "the heavy weight of tradition, combined with the effects of socialization, still works powerfully to reinforce sex roles that are commonly regarded as of unequal prestige and worth" (p.6). Ward (1990) pointed out, although primary caregivers are predominantly women, their work has remained invisible both in human and monetary terms, to the extent that it is not recognized as contributing to society via inclusion in the Gross National Product. Furthermore, the negligible perceived worth of women's work is not only bound within the walls of the household, but also found in the labor market (Evans & Nelson, 1994; Hooyman & Gonyea, 1995).

Labor Market Unpredictability and Emergence of the Welfare State

In comparison to other countries, the United States is a latecomer as a welfare state. A welfare state is defined here as a nation that provides public protection through government

programs for vulnerable groups determined at-risk in the private economy (Block, Cloward, Ehrenreich, & Piven, 1987). Government sources of income support for people have been made available only within the past century in the U.S., shortly after the economy underwent a transformation from agricultural to a capitalist, industrial market. Sharp market downturns and economic disturbances often created massive unemployment and hardships for people who had no other means of supporting themselves. When this occurred, or when wages were scaled below a level consistent with survival, people mobilized in protest and demanded aid. As Piven and Cloward (1977; 1987) contended, relief programs were often instituted to restore social order and quiet those who became "unruly" in their demands.

Employer opposition to aid for the poor has been swift and powerful as well, as "the very idea of social provision [is] dangerously subversive of market ideology" -- part of which is to compel workers to sell their labor "on whatever terms the market [offers]" (Piven & Cloward, 1987, p.11). Yet, in those cases where the market fails, such as when people are unable to sustain themselves on the wages the market offers or manage their lives to any practical degree because of market constraints on their efforts, then in attempting to realize its democratic principles, a welfare state intervenes to protect the public. Piven and Cloward (1987) reminded us that conflicts over public supports are not only ideological. At the core of these conflicts remains "broader class conflicts over power in market relations" (Piven & Cloward, p.11).

Conservative policy analysts offered a very different explanation for the rise of the welfare state. Charles Murray (1984), for example, suggested a very comfortable "white" elite was responsible for creating many of the social welfare programs during the 1960s. He argued that the creation of social welfare served primarily the interests of a new class of white, college educated professionals who would be required to administer the program and manage the people they were designed for. Thus, from Murray's perspective, the primary beneficiaries of social

welfare programs are the members of this new class -- not the poor or marginalized claimed to be served by such programs.

Scholars such as Linda Gordon (1994), who have analyzed the welfare state from a feminist perspective, acknowledge the emergence of a welfare state was influenced by the political activism of many elites, without implicating them as acting mainly out of self-interest. Gordon also recognized, however, that poor people offered their interpretations of the problems of poverty, and protested against impoverishment by way of bread riots and other means of collective civil disobedience leading to the development of a welfare state. Perhaps most instructive, in her analysis of how the welfare state was structured, Gordon pointed to the importance of the opposite of noise: silence. She stated "silences cannot be ignored: They remind us of hidden assumptions and of the existence of the powerless, the unmobilized, and the alienated. And the quietness of some groups makes the demands of others relatively louder" (1994, p.211). Moreover, several feminist scholars who have examined market relations and relief policies from a gender perspective have argued gender bias is endemic in social welfare policies, and plays an important role in the continuing debate over welfare, as well.

The Gender Division of Public Welfare Programs

The term "welfare" is generally inappropriately and misleadingly equated with the program Aid to Families with Dependent Children (AFDC) in popular political discourse. In actuality, there are several public economic relief programs supported by federal funds -- Social Security Retirement Income (SSRI), Unemployment/Workmen's Compensation (UC), Medicare, Medicaid, and Supplemental Security Insurance (SSI) (disability insurance), among others. The assumptions underlying the gender segregation of these programs piercingly illustrate the position women have been subjugated to in relation to their status and "worth" as citizens, and follow the logic of separate public and private spheres authored by social contract theory. As Nancy Fraser stated: "what integrates the two sets of programs is a common core of

assumptions concerning the sexual division of labor" (1989, p.149). One set of public welfare programs tends to be extended to individuals (men) and the other set to households (women), based on the distributive principles that underlie each (Sapiro, 1990). In general, the majority of SSRI benefits and UC are extended to men, whereas the majority of AFDC benefits go to women (U.S. Department of Commerce, 1993).

Feminist scholar Linda Gordon (1988) criticized the work of Piven and Cloward (1977) for failing to acknowledge gender as a major organizing category driving the dynamics of poverty. She suggested the omission of a gender analysis in the provision of welfare services distorts our conception of welfare policy on many levels (Gordon, 1990).

Elaborating on this observation, Barbara Nelson (1990) used a combination of historical research methods to advance theoretical understanding surrounding the creation of a two-channel welfare state based on gender. More specifically, Nelson examined the first two official programs to be adopted widely by states: Workmen's Compensation and Mother's Aid. Workmen's Compensation was established as a social insurance program for primarily industrial-related injuries, with its hallmark being the routinization of eligibility criteria. Of primary importance for a gender analysis, Nelson argued, are the straightforward decision criteria used in the Workmen's Compensation program, which reflects the social legitimacy awarded to beneficiaries as deserving of their benefits. This is in direct contrast to the standard used for Mother's Aid.

Unlike its Workmen's Compensation counterpart, Mother's Aid was not mandated or administered on a state level; rather, it was optional, with local funding sources and local norms determining who would receive benefits. Nelson (1990) explained how this led to both eligibility criteria and receipt of benefits that were means-tested and highly variable according to local convention. Conceptually, those applying for Mother's Aid were subject to tight social controls, initially being evaluated on the basis of whether they were morally fit, and then through monitoring

of their behavior – neither of which recipients of Workmen's Compensation were subject to. On a related note, Sapiro (1990), and Fraser and Gordon (1994) framed the theoretical discussion of the two-channel welfare system in terms of dependency, where ideology about women places them in the precarious situation of being viewed as inherently dependent, but loathed because of it, given that rugged individualism and independence are revered characteristics in this society. Moreover, a number of social scientists and economists have proposed additions to and changes in federal policies during the rise of a welfare state in the U.S. (such as the provision of Social Security Retirement Income, federal unemployment compensation, and Aid to Families with Dependent Children) have reinforced the gender segregation of welfare programs.

Disturbingly, many of the fundamental assumptions regarding appropriate gender roles that literally structured the earliest versions of UC and AFDC remain embedded in current policy. Male-centered welfare programs such as SSRI and UC were developed to support men who, while working in the turbulent, capitalist-based labor market may be unable to support themselves and their families for a specified period of time (Gordon, 1990). Such androcentric programs are considered entitlements. Entitlements presuppose there are "proper" and "uncontested" grounds (or rights) to make a claim for some benefit. Thus, men's contributions to society through paid labor and participation in the public realm are the grounds for making entitlement claims to these programs. This is in stark contrast to the "feminized" social welfare programs, primarily being AFDC and now TANF.

Female-centered programs were not designed or intended to be entitlement programs – rather, they were formed as a means-tested benefit for widowed mothers or mothers deserted by their husbands (Gordon, 1990). In a discussion of the politics of interpreting the needs of women on welfare, Fraser (1989) argued that means-tested applicants do not present with a set of uncontested grounds to make their claims for benefits; in these programs, women are not positioned as citizens contributing to the social good through unpaid domestic labor or the work of

childrearing. Sapiro (1990) further maintained women do not present themselves as individuals at all – they generally must present themselves as mothers in need. In this context, women act as mere conduits to the children, who are targeted as the real beneficiaries.

Economic and Social Marginality: Health Repercussions and Public Policy

Women and children constitute the vast majority of those living in or at the edge of poverty today based on current U.S. standards (U.S. Department of Commerce, 1992). Present statistics, however, reflect a trend in which women were becoming the largest percentage of the poor at an accelerate rate, a phenomenon labeled "the feminization of poverty" by sociologist Diana Pearce (1978; 1979; 1990). Increasingly, this trend received greater attention in the form of feminist, economic, and social analysis in the literature pointing to the political nature of women's economic positions[2] (Nelson, 1984; Pearce, 1990; Sidel, 1986). In particular, the social and economic situations of female-headed families make them most likely to be among the poor. A number of realities about women's lives are fundamentally grounded in public policies, and make them especially vulnerable to poverty, including the lack of accessible child care, the continued burden of performing the majority of unpaid labor in the home, the responsibility of caring for elder or ill family members, and the continued disparity in earnings, among others (Fraser, 1994; Gimenez, 1994; Gordon, 1990; Hooyman & Gonyea, 1995; Sidel, 1991; Sidel, 1996).

The ideology supporting the beliefs about women who receive welfare continues to marginalize them socially, as well. As Piven (1990) noted, many of the feelings of contempt toward such women are based on a series of beliefs about the alternatives available to them that

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[2] Giminez (1994) correctly asserted that it would be erroneous to one-sidedly discuss the trends in poverty over the past two decades as having affected only women as a group. Indeed, men (particularly black men and those in the working classes) were also rapidly joining the ranks of the poor, and, when examining the salient issues surrounding women in poverty, one must include the economic downturns suffered by their male partners, as well. Moreover, the class and ethnic differences within the category "women" are equally important differences to take into account when discussing "the feminization of poverty" as a process that may mistakenly be assumed to be befalling *all* women, regardless of race, class, or ethnicity.

are both misleading and simplistic. "Dependence" is considered shameful when women depend on public aid for their sustenance, yet, what is consistently unacknowledged is that neither the option of a relationship with a breadwinning "other" or working in the private labor market make them any less dependent on someone or something else (as we all are). Moreover, welfare recipients are frequently scorned for their reproductive practices and discriminated against along lines of race in addition to gender (Mink, 1990). Whereas some women have found avenues in the system that maximize meeting their needs while minimizing ostracization (Fraser, 1990), many struggle daily to preserve feelings of self-worth in the face of a society that loathes them. In addition to economic adversity, social marginalization impacts health, too.

Defining Health

Before reviewing the literature on the relationship between socioeconomic status and health, a conceptual definition of health is in order. The definition of health provided by Milio (1981) and the conceptualization of health used in this study are reviewed.

In her work advocating an ecological health framework, Milio (1981) describes health as not a "state", but rather a response of people to their environments. A healthy response to one's environment, she argued, allows people to "go about their daily activities without personal restrictions" (p.3). Correspondingly, illness occurs when people's response to their environment prevents them from "pursuing their usual round of life" (Milio, 1981, p.3). She further explained to what degree someone is healthy or ill depends on a variety of perspectives. For example, from the perspective of the individual, one is likely to consider oneself ill when normal activities cannot be carried out. From a physician's viewpoint, specific physical or biochemical signs must meet the criteria of a diagnostic category before being regarded as ill. Thus, Milio's definition of health accommodated different perspectives. She did not refine the conceptual basis of health to any further degree. What was clear, however, was her view that health is predominantly determined by the environment in which people live and the resulting patterns of behavior they follow.

Although conceptually consistent with her support for an ecological health framework, Milio's (1981) specific definition of health required elaboration for the purpose of this study. While she asserted that individuals provide their own, subjective accounts of health, Milio constrained the ability of individuals to define their own health beyond what alters their daily activities. Therefore, there was no flexibility to conceptualize health beyond functional status.

For this study, health is defined more broadly than Milio (1981) proposed. Health is multidimensional, reflecting the complexity of human beings. This definition of health has been defined as holistic within the nursing discipline and encompasses physical, psychosocial, spiritual, and emotional dimensions that are interrelated. From this perspective, measuring health status may also occur along any one of more of these dimensions.

Research on Health and Socioeconomic Status

As an ecological framework suggests, an abundance of research in the social sciences supports a correlation between poor health and poverty (Wilkinson, 1996). Research has shown people living in poverty experience not only economic hardship, but also social stigma, oppressive life conditions, significant degrees of constant stress, a lower sense of self-esteem, depression, a sense of hopelessness, and lower over-all health status (Sidel, 1986; Sidel, 1991; Sidel, 1996; U.S. Department of Health and Human Services, 1993). Studies by the U.S. National Center for Health Statistics have shown that health disparities between people living in poverty and those with higher incomes are present in nearly every dimension of health and well-being (U.S. Department of Health and Human Services, 1990). It is well-documented that those who are poor both perceive their health to be poorer and indeed have higher rates of morbidity and mortality than their non-poor counterparts (Greywolf, Ashley, & Foleey, 1982; National Center for Health Statistics, 1987; Nelson, 1992; U.S. Department of Commerce, 1992; U.S. National Center for Health Statistics, 1990; Waldron, Herold, & Dunn, 1982). Moreover, women who are poor have less access to health care services and are screened for the early detection of disease

less often than women with higher incomes (U.S. Department of Health and Human Services, 1992; U.S. National Center for Health Statistics, 1990).

Specifically, with respect to living in poverty by way of the welfare system, a study done by the University of Michigan Institute for Social Research examined the effects of a reduction in welfare benefits in the state of Michigan on the well-being, social role, and attitudes of women receiving AFDC when new legislation was implemented (Sarri, Beisel, Boulet, Butler, Churchill, Lambert, et al., 1984). Nearly 90 percent of the participants reported experiencing crises on a regular basis directly related to their economic situation, and clearly expressed how "the lack of money took the greatest toll on [their] mental and physical health (Sarri, et al., 1984, p.205). Findings from the Families in Stress Project (FSP) were similar. The FSP was a study of 43 low-income families in the Boston area, the majority of whom were receiving welfare (Belle, 1982). In the FSP study, Makosky reported strong associations between high feelings of stress and anxiety, self-esteem, and depression (Makosky, 1980). Additionally, in that sample, 23% of the respondents rated their health to be poor or very poor.

Numerous studies have examined how repeated psychological stress can lead to low self-esteem, a diminished sense of well-being, depression, and/or physical illness (Abraham, Neese, & Westerman, 1991; Hauenstein, 1991; Holmes & Masuda, 1974; Jemmott & Locke, 1984; Kendler, Kessler, Neal, Heath, Phil, & Eaves, 1993; Lazarus & Folkman, 1984; McEwen & Stellar, 1993; Mechanic, 1976).[3] Yet another serious health problem of endemic proportion that directly relates to the choices available to women is that of partner abuse (Moss, 1991).[4] Women living

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[3] As noted by Belle (1982), however, the majority of research done regarding the effects of life event stress had not addressed issues specific to the stressful conditions present within the everyday context of women's lives and how these may be associated with their mental health. This issue will be examined more closely in the methods section of this study.

[4] "Partner abuse", as it is being used here, is perhaps more popularly referred to as domestic violence, wife battering, or spouse abuse. I am using "partner abuse" here as a more inclusive term that also represents emotional or psychological abuse, abuse that occurs within homosexual relationships, and removes it conceptually and politically from the "domestic" sphere, which is generally thought of as a place the state ought not interfere.

under the most dire economic and socially-proscriptive circumstances have far fewer options available to leave abusive relationships than those more fortunate -- and available options are greatly influenced by a variety of policies that configure women's lives.

While all of these health issues touch a myriad of women, the subject matter of recent welfare reform debate is virtually void of any consideration for the consequences changes in legislation will have on women in terms of their health. As argued earlier, nursing as a discipline must reconceptualize the environment to include an array of public policies as legitimate areas of inquiry in considering determinants of health and as areas for intervention.

Recent Efforts to Reform Welfare

The most recent welfare reform occurred with The Personal Responsibility and Work Opportunity Reconciliation Act of 1996. Passage of this Act by Congress eliminated the program Aid to Families with Dependent Children (AFDC), and created block grants to be provided to states for the new welfare program Temporary Assistance for Needy Families (TANF) (U.S. Ways and Means Committee, 1996). The TANF program has more stringent work requirements for recipients than AFDC did, limits the number of years families can receive financial assistance to a cumulative of five years, and eliminates illegal immigrants from eligibility for the program. Although the subject of this research is welfare policy, it is not an analysis specific to the most recent enactment of TANF. Rather, this work looks historically to themes in welfare reform policy that may affect women's health. Because the data used for this study were obtained between 1988 and 1992, the legislation most recently referred to is the Family Support Act (FSA) of 1988, as it has the most direct bearing on the life circumstances of women during the period of the Family Income Study. This section, therefore, provides an overview of the most relevant concepts and assumptions in welfare policy with respect to that period of time.

Throughout the tides of numerous attempts at welfare reform during the 1970s and 1980s, there has been increasing emphasis given to reforming welfare with work, which today continues to have the most widespread endorsement, coupled with limiting the amount of time benefits can be received. During this time, many states have implemented a variety of demonstration projects meant to move people from "welfare to work." In addition, these programs have been evaluated for their overall effectiveness through local, state, and federal research efforts. This section presents an overview of the most noteworthy study in the context of public policy research, how policy operates at the microlevel of environment, and how it affects women's lives and health.

Studies of Welfare Reform: Findings from the Manpower Demonstration Research Corporation Analysis

The most comprehensive evaluation to date of the welfare-to-work programs was carried out by the Manpower Demonstration Research Corporation (MDRC). It was conducted between 1982 and 1988 and analyzed 13 program evaluations, with the findings intended to direct future legislation (Gueron & Pauly, 1991). The significant outcome measures of interest in the MDRC analysis included: 1) net cost per participant, 2) amount of earnings, and 3) amount of AFDC payments. In public policy evaluation research terms, the MDRC evaluation was fundamentally a cost-effective analysis, as opposed to a benefit-cost analysis, which differ in their implications (Berk & Rossi, 1990). Cost-effective analyses evaluate only the costs of a program in relation to the degree it achieves its central purpose. Conceptually, it assumes the program is an isolated entity, that is, it does not look to factors outside the program that may be influencing the outcome of interest; nor does it look for effects the outcomes may have in other programs or in other aspects of society (Plotnick, 1994). In contrast, benefit-cost analyses strive to measure both the benefits and the costs of a program or policy beyond the boundaries of its principal outcome (Gramlich, 1990). Thus, from both a policy research and ecological nursing standpoint, current considerations for welfare reform efforts can be viewed as deficient with respect to examining the

repercussions such policies may have on health in human, other potential programmatic, and/or financial terms.

In particular, there are several support services that have been debated with respect to their necessity in assisting women to become self-sufficient without receiving AFDC, such as daycare and transportation provisions, length of time Medicaid coverage should be granted, and the type of job training required. Most programs extend subsidized child care and continue Medicaid coverage during the job training/search period and for one year afterward, while the form of job training differs significantly, depending on the state and recipient characteristics (Gueron & Pauly, 1991). A continuum of job training programs exists, ranging from a minimum of basic job search activities to a maximum of two- or four-year college preparation. While some criteria are used to decide which form recipients will receive, this remains highly variable. In terms of welfare-to-work programs (including job training and support services) the MDRC study found that 1) nearly all of the programs led to earnings gains for participants, and 2) programs that included higher cost services (the most education and support services) had greater average earnings.[5]

Despite some of the short-term successes of such programs, what remains highly problematic in the current trajectory of reform efforts are: 1) the likelihood of market failure for long-term, full-time employment in lower-skilled jobs, 2) the lack of benefits in lower-skilled jobs (including healthcare), 3) enduring neglect in establishing policies to make daycare accessible, and, 4) continuing gender-bias inherent in public relief programs when markets recess. Research has shown, for instance, that people prefer paid work over AFDC (Gueron, 1987), that the lack of private health insurance is a significant determinant of welfare reentry (Davidson & Moscovice, 1989), only about one-third were able to stay off welfare for several years (Webster & Weeks,

1995), of those who left welfare for paid employment, approximately one-half remained at or below 125 percent of the federal poverty line (Weeks, 1993), and, up to 90 percent of women applying for welfare benefits do not meet the requirements to receive unemployment compensation (Gordon, 1988).

Summary

Our lives fundamentally revolve around the policies that shape them. In particular, for women who currently receive or are at-risk for needing income support, covert gender biases historically rooted but currently present in U.S. social policy sabotage their attempts at self-sufficiency on many levels. As a result, many continue to live within economically impoverished and socially marginalized conditions. From an ecological health framework, nursing must recognize how such conditions affect the health of the women we care for -- and, perhaps more importantly, understand where some of the origins for the disparity lie. Within the public policy domain, there is a place and need for nurses to contribute to the knowledge base from which policy decisions are made by comprehensively examining policies for their health implications, as well as advocating for policies that create environments supportive of people's health and well-being.

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[5] Also of importance is the fact that earnings impacts did not occur when financial and staffing resources were too low or when programs were operated in a rural, very weak labor market. The most consistent and largest improved earnings occurred in the most disadvantaged groups (those identified as long term public assistance recipients and not yet having earned a high school diploma) (Gueron & Pauly, 1991).

III. Methods

To date, studies of the former program Aid to Families with Dependent Children (AFDC) have focused on identifying factors most effective in reducing the number of recipients through work incentives and/or job training and education programs. From a public policy research perspective, this follows a cost-effectiveness evaluation approach, which overlooks how work incentives or job training programs may in turn affect outcomes of other social programs. From a nursing perspective, this oversight is demonstrated in the virtual absence of studies involving AFDC that attempt to ascertain whether women's health status changes as their socioeconomic and life circumstances are altered through welfare policy revisions. Given the ample amount of literature substantiating the relationship between socioeconomic status, psychosocial stress, and health, it is reasonable to suggest that any changes in health status occurring alongside alterations to AFDC policy have possible implications for other publicly funded programs, such as Medicaid.

Comprehensive evaluations that take health effects into account are not only more consistent with an ecological health standpoint in nursing (Milio, 1981), but also represent benefit-cost analyses in the policy arena (Gramlich, 1990). Such analyses are considered more inclusive than cost-effectiveness studies in estimating the "true" social cost of government policies, as they attempt to measure externalities (Schmid, 1989). Comprehensiveness, however, presents an array of methodologic and practical difficulties, and is often the reason for limiting the scope of evaluations to the outcomes specific to individual policies or programs. Nevertheless, the question of how health may be affected by welfare policy remains one of vital importance for nursing, as one of its central concerns is with how the environment influences health. It is of equal importance in the policy arena, as expansive views of policy consequences often remain out of sight.

The fundamental reason for this study was to begin an exploration of relationships between welfare policy and women's health. Of particular interest was the effect WWJTPs have on the life circumstances of women, and, in turn, how their health was influenced. Using recent longitudinal data, this study also examined child care and health insurance provision aspects of AFDC policy in relation to women's health. Though the data available did not include all the information one would ideally want, they provided the ability to observe how welfare policy and women's life circumstances were related to health.

The organization of this chapter reviews general issues related to conducting a secondary analysis of longitudinal data. More specifically, the problem of missing data is discussed along with an innovative method for substituting missing values. A significant amount of attention is given to the reliability and validity of the measures used in the FIS. Statistical procedures for analyzing the data and answering the research questions are also described. Lastly, the relationship between available databases, methods, nursing research, and policy development is discussed.

Research Purpose and Objectives

The purpose of this study was to describe the health, employment, and childcare arrangement characteristics of women affected by AFDC policy.

The general objectives of this study were:

1. To explore differences between women who left welfare for paid employment from one year to the next and those who continued to receive AFDC in relation to (a) self-efficacy, (b) self-esteem, (c) sense of control, (d) depression, and (e) perceived emotional support.

2. To determine whether the Family Support Act (FSA) implemented in 1990 was effective in increasing participation in job training and educational activities as originally intended.

Optimal Study Design

The optimal design for a study that seeks to determine the health effects of welfare policy would control extraneous environmental factors, establish causality, and thwart threats to internal and external validity (McLaughlin & Marascuilo, 1990). In relation specifically to the objectives at hand, controlling the environment to the greatest degree possible is one of the key factors in determining causality (Campbell & Stanley, 1963). Accomplishing this demands standardizing precisely the implementation of legislation in heterogenous geographical areas representative of the entire population. The implementation process, however, rarely lends itself to rigorous standardization at the point of service delivery (Williams, 1980). Therefore, in terms of meeting the criteria of experimental design within the policy research domain, it is most useful to conduct studies prior to imposing legislation. This approach, although more amenable to experimental methods, has as its primary limitation obtaining the same results in the less controlled, everyday implementation environment as that demonstrated through tightly controlled research.

Practical Constraints of the Randomized, Controlled Study

Clearly, randomized controlled trials require abundant resources in terms of money and human labor. The recruitment process, training of research staff, repeat measurement, retention efforts, ongoing quality assurance monitoring, data management, and data analysis all contribute to the resource-intenseness such a design demands to yield valid findings. For the purpose of the doctoral dissertation completed by this investigator, a design such as the one just proposed was inaccessible in terms of time, expertise required, and availability of funding. As previously mentioned, no exploratory or descriptive studies that examine women's health in relation to welfare policy have been done, making the leap to an experimental or quasi-experimental design a potentially risky one.

The following section presents an alternative method for examining questions relevant to women's health and welfare policy in the form of secondary analysis. The major issues

confronting researchers considering this approach are illustrated in an example using a longitudinal, large data set evaluating certain characteristics of public assistance recipients in Washington State (primarily those receiving AFDC). Lastly, a discussion of the relationship between nursing research, available databases, methods, and policy development is presented.

Alternative Method: Secondary Analysis of Existing Data

Having a number of advantages that are well documented, secondary analysis as a research method has been used by social scientists for many years (Kiecolt & Nathan, 1985). Large, existing data sets are a plentiful source of information and are widely available to researchers today (Stewart & Kamins, 1993). Despite this, nurse scientists have not utilized this method as often as might be expected (Jacobson, Hamilton, & Galloway, 1993). However, endorsement of secondary analysis as a sound, practical means for answering nursing research questions have appeared recurrently in the literature (Gleit & Graham, 1988; Herron, 1989; Jacobson, et al., 1993; McArt & McDougal, 1985).

As with any other method, there are both strengths and limitations of secondary analysis that need to be carefully weighed by the investigator. Within the context of policy research as an applied endeavor, one of the primary advantages of this method is its efficiency in terms of time and research dollars (Stewart & Kamins, 1993). These same efficiency gains can benefit nursing science, as well, particularly when a better understanding of or an answer to a problem is urgent, and at a time when funding for primary research is becoming increasingly scarce. The limitations of secondary analysis are discussed as this study is described in more detail. In general, however, the disadvantages include: data sets lacking complete and accurate information, the inability to detect errors as a result of interviewing, coding, and/or data entry, measurement problems, and the likelihood that not all of the variables of interest to the researcher will be found in any one data set (Kiecolt & Nathan, 1985). Additional consideration must also be given to the purpose of the study, the funding source, the expertise of the researchers conducting the study,

and the timing of the study (i.e., what was happening or different at that time that may influence the results) when using secondary data sets (Stewart & Kamins, 1993).

The Family Income Study Data

At the request of the Washington State Legislature in 1987, the Washington State Institute for Public Policy was commissioned to conduct "a longitudinal study over time of a sample of public assistance recipients or persons at risk of becoming eligible for assistance, to determine the causes of public dependency and the impact of changes in the economy or of public programs on dependency, work, or other relevant behaviors of the sample population" (Washington State University Social and Economic Sciences Research Center, 1993). Funded by the Washington State DSHS and the Washington State Legislature, the Family Income Study (FIS) was conducted by the Social and Economic Sciences Research Center at Washington State University. It was designed as a five-wave longitudinal panel survey (with data collected between 1988 and 1992 at yearly intervals, each interval being referred to as a wave), and included 2,100 Washington State residents (the vast majority of whom were women). Although the purpose of the FIS was not explicitly to evaluate health, a number of health indicators were measured over the course of the study, making this data set suitable for meeting the research objectives outlined previously.

Human Subjects Review

The FIS was subject to Institutional Review Board Approval criteria prior to data collection in 1988. Characteristics of this data set subjected it to an exempt status according to both federal and university criteria. The FIS data is publicly available and the information obtained on the

participants can in no way be linked to the personal identity of the participants. All data are coded with arbitrary, numerical identifiers.[6]

The FIS Sample Design and Participant Selection

Two probability samples of Washington State households were selected to include: 1) a Public Assistance sample consisting of households on public assistance in March 1988, and, 2) an At-Risk sample, consisting of households determined to be at-risk of public assistance dependency. The primary objective of the sampling design was to achieve statewide representation.

The Public Assistance (PA) sample was selected using a two-stage stratified method, with the sampling frame being derived from a DSHS list of AFDC recipients in March, 1988. To meet the goal of statewide representation, a set of weights were developed for use with the PA sample. The At-Risk (AR) sample was selected using multi-stage area probability sampling, with the probability of an at-risk household being selected proportional to its likelihood of needing public assistance.

For the Public Assistance sample, participants consisted of the adult recipient if 16 years of age or older. If the recipient was not 16 years old, then the legal guardian was interviewed. Selection of the At-Risk participants within each household targeted women between 16 and 45 years of age with at least one child under 16 years of age living in the household. In waves two through five, sample modifications were made primarily through including a separate split-off sample. Split-off samples were constructed from households where the wave one participant left the original household or could not be re-interviewed, and other members of the household were interviewed in waves two through five (and thus designated as split-offs). For the purpose of this

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[6] The standard Human Subjects review requirement qualifies for exemption under the PHS 416-1 guidelines, category 4, page 19, and is consistent with the University of Washington guidelines found in the University Handbook, Chapter 2, Section 2, which follows Federal Regulations Title 45, Part 46.101(b) where the research utilizes publicly available information, and/or research that lacks all personal identifiers.

study, no split-off sample participants were included in the analyses. For a detailed explanation of the sampling procedures and weightings used, see Heeringa (1988).

Response Rates

The total completed interviews in wave five included 1,383 of the 2,114completed during wave one, or a 66% retention rate. Response rates from year-to-year were 90% or higher -- an admirable number given the mobility of the study population. Nonresponses were categorized according to the reasons for not being able to contact participants, or for their refusal to continue to participate in the study.

Questionnaire Characteristics and Interviewing

The questionnaire used was a three-part instrument designed to obtain information about the following: family economics, labor market behavior, public assistance history, household composition, educational experiences, and psychosocial characteristics of respondents. Information from Part I and II of the questionnaire was obtained through face-to-face interviews in wave one, and by telephone and interview in waves two through five. Face-to-face interviews continued through all five waves if participants did not speak fluent English, and were aided by an interpreter. Part III of the questionnaire contained the psychosocial measures, and was completed and mailed back to the data entry department solely by participants. Major changes to the questionnaire design occurred primarily in wave five, where questions about the participants and their children's past abuse history, criminal histories, controlled substance use, pregnancy, fertility, and school completion were added.

A disadvantage of using this data set is the lack of complete information about study procedures. The FIS data book does not explain, for instance, what procedures were followed to ensure both the face-to-face and telephone interviewers had been appropriately trained in interviewing techniques and ways in which to accurately use the questionnaire as a tool for gathering information. Nor was any information regarding quality assurance mechanisms that

should have been used to ensure ongoing study procedures were carried out correctly. As a result, this absence of information must be treated as a potential threat to internal validity (instrumentation effects) (McLaughlin & Marascuilo, 1990).

Missing Data

Longitudinal studies are vulnerable to high rates of attrition and missing data (McLaughlin & Marascuilo, 1990). With respect to this secondary analysis, the retention rate for each year of the FIS was greater than 90 percent, with a cumulative retention rate of 66 percent at the end of the fifth year (Washington State University, 1993). Although this is admirable given both the migratory character and known low participation rates of populations in the lower socioeconomic strata, inherent problems remain when one-third of the original respondents have one or more points of missing data (Crawford, Tennstedt, & McKinlay, 1995). This section better describes the patterns of missing data for the subsample utilized in this study, and the statistical methods used to adjust for the drop-out bias that often accompanies attrition in longitudinal studies.

For this study, only women participants of the FIS were selected for inclusion. Men were not included in analyses because 1) the research questions are specific to women's' health, and, 2) the prior Aid to Families with Dependent Children (AFDC) program (what has more generally been referred to here as "welfare") has been overwhelmingly represented by women and children (U.S. Department of Health and Human Services, 1993). The latter is consistent with national federal funding guidelines requiring a justification for excluding a particular gender in studies "unless a clear and compelling rationale shows that inclusion is inappropriate with respect to the health of the subjects or the purpose of the research" (U.S. Department of Health and Human Services Public Health Service, 1995, p.10).

The women-only subsample includes 1848 (out of a total of 2114) respondents for the first year. By the end of the fifth year, 622 (34%) had at least one or more years of missing data, with an additional 150 (12%) missing some portion of only psychosocial data throughout the study.

Missing data were examined for patterns that may be attributed to bias by examining frequency tables, histograms, plots, and comparing groups using paired t-tests between respondents with 1) no missing data Years 1-5, and 2) any missing data in Years 1-5 in Year 1 for the variables to be used in the analyses. Year 1 data was used for tests of significance because it is the only year data are completely available to compare differences between groups that had missing data in years 2 through 5 and those that had no missing data years 1 through 5 (i.e., you cannot compare missing versus non-missing groups in years 2-5, because the data are not available). The results of the t-tests are shown in Table 1. In addition, differences between means for several variables were compared on complete case data present in Years 1 and 5 (Table 2).

TABLE 1: Differences Between Participants with No Missing Data and Participants with Missing Data, by Select Measures: Family Income Study Data (n = 1848 women)

Variable	Group 1 Means, All Data Present Years 1-5	Group 2 Means, Any Missing Data Years 1-5	*p* Value*
Income	13,480	13,252	NS
Education	11.9	10.9	<.001
Number of children	1.8	1.4	<.001
Age	32	43	<.001
# of months of welfare use in prior year	7.3	5.8	<.001
For those who reported any welfare use: # of months of welfare use in prior year	10.6	10.6	NS
# Hrs/week worked	3.6	2.5	<.001
Any employment prior year: # of months employed for others	7.71	7.09	.03
# Hrs/week in school or job training	4.4	3.5	NS
Age of youngest child (under 18)	6.7	8.4	.05
Depression	20.3	19.2	.004
Self-efficacy	21.1	20.5	.041
Self-worth	25.3	24.3	.001
Sense of control	20.9	19.7	<.001
Self-esteem	46.4	44.9	.008
Emotional support	21.3	20.6	.042
Material support	15	13.9	.002

*t-tests based on data from Year 1 (Group 1=no missing data years 1-5, Group 2=any missing data years 1-5). NS=*p* value >.05, not significant.

There were significant differences between the two groups on the majority of variables examined. Unexpectedly, there were no significant differences in income, which would be expected to be higher for the group without missing data (as those with a higher socioeconomic status tend to participate more often and for a longer duration). There were also no significant differences between the two groups in the number of hours per week in a school or job training program.

For those variables on which the groups differed significantly, differentiating between statistical and "practical", or "research" significance is in order. The likelihood of analyses reaching statistical significance is increased as the sample size increases (Sirkin, 1995). Statistically significant findings, however, need to be evaluated for their practical importance or usefulness when applied to the problem at-hand.

Examples of this are evident when examining two of the variables in Table 1: education and income. On average, the mean number of years of education for Group 1 (no missing data) is one year higher than for that of Group 2 (any missing data). Although a one year difference may not initially seem relevant, there are two important points to consider with respect to the actual means of education level in Group 1 (~12) and Group 2 (~11). The first is to essentially consider the two groups as differing in terms of whether they were high school completers (Group 1) or not (Group 2). A number of studies have shown that high school completion is a pivotal factor for determining future job status and earnings (and thus, very likely welfare use, as well) (Gueron & Pauly, 1991; Washington State Institute for Public Policy, 1995). Therefore, one would expect data from years 2-5 to be biased toward lower rates of AFDC/welfare use (as the "any missing data" group would likely have higher rates of AFDC/welfare use). Another way of interpreting this difference is to incorporate the findings of past research related to welfare use and job training, which shows that both completing high school and each additional year of education beyond high school increases the likelihood of maintaining employment and increasing earnings (Gueron & Pauly, 1991). Thus, the "mere" one-year difference in education levels between Groups 1 & 2 is not only statistically significant, but practically significant, as well.

That there was no significant difference in Year 1 income between Groups 1 and 2 is also of interest. As previously mentioned, it is typically the case that people with lower incomes tend to either refuse to participate in studies when initially samples, or drop out of longitudinal studies. If this were the case for this sample, one would expect much higher incomes in Year 1 for Group

1 (those with no missing data Years 2-5). Outliers could be responsible for skewing Year 1 means higher than expected, but this does not seem to be the case when the medians of Year 1 data are also compared ($9134.00 for those with no missing data, and $9174.00 for those with some missing data years 2-5). One possible explanation is the process used to select the sample.

This study used a sampling procedure specifically designed to select those already on AFDC/welfare, and those at high risk (based on geographical information) for requiring public assistance in the future. When this is considered, it would be expected that income levels were low for the majority of participants in Year 1. In the comparison to follow, income levels do differ when examining attrition from another perspective.

Another method of examining the importance of patterns of missing data is to compare the Year 1 and Year 5 respondents on selected variables (Table 2).

TABLE 2: Differences in Family Income Study Data, by Select Measures for Years 1 and 5

Variable	Year 1 Available Data Mean (Median)	Year 5 Available Data Mean (Median)	Paired t-test Results *p* Value
Income	13,296 (9180)	21,330 (15,525)	< .001
Education	11.4 (12)	12 (12)	< .001
Number of children	2.4 (2)	2.5 (2)	.082
Age	43.3	31.8	< .001
# of months of welfare use in prior year	6.9 (10)	3.2 (0)	< .001
# Hrs/week employed	3.1 (0)	5.2 (3)	< .001
# Hrs/week in school or job training	19 (18)	15 (12)	.041
Age of youngest child (under 18)	7.6	8.7	< .001
Depression	20.3	19.4	< .001
Self-efficacy	21.6	21.5	.796
Self-worth	25.7	25.3	< .001
Sense of control	20.7	21.3	< .001
Self-esteem	47.3	46.7	.023
Emotional support	21.5	20.9	.001
Material support	15.3	14.5	< .001

Some of the information regarding missing data is more striking when comparing the initial respondents in Year 1 with those who remained in Year 5, as opposed to comparing those with missing data and those without any missing data based entirely on Year 1 figures (Table 2). Respondents differed significantly on the majority of variables examined. It appears that the respondents who remained in Year 5[7] had much higher incomes, were high school graduates, and were on welfare about half the number of months of those who responded the initial year of the study. In contrast to the data in Table 1, the data in Table 2 support the premise that indeed

missing data between Year 1 and Year 5 did not occur at random. That is, individuals who dropped out of the study after Year 1 appear to be from a different population than those who remained in the study through Year 5[8].

Multiple Imputation for Dealing with Missing Data

The problems with conducting data analyses when values are missing are well documented in the statistical literature (Little, 1992; Little & B., 1989; Rubin, 1987). The two most common methods used in research to handle missing data are the complete case analysis, which drops all cases having missing values, or mean substitution, which replaces the missing values with a value estimated by a simple average or by a regression equation (Polit & Hungler, 1991). These approaches are extreme, however, and do not substantively evade biased inferences, because a major assumption for both is that data are missing at random, an assumption rarely able to be met (Rubin & Shenker, 1991). The complete case analysis method is wasteful because observed values are deleted, which both reduces the power of statistical procedures and decreases the variance. Although the method of mean substitution uses all cases and retains statistical power, it substitutes an unknown value (the missing value) with estimates that are treated as if they are known with certainty (Greenland & Finkle, 1995). Thus, mean substitution also underestimates variance, leading to invalid inferences by having confidence intervals that are too small.

An alternative method has more recently been described by Rubin & Shenker (1991), where missing values are imputed multiple times, providing estimates with more variability and valid confidence intervals than traditional techniques. Multiple imputation seeks to restore statistical power by capturing the information available in the partially observed cases while

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[7] There were 34 women in the subsample who had missing data for one or more years of the study, and then re-entered the study in a subsequent year. These respondents were excluded from the "Missing Any Data" versus the "No Missing Data" group comparisons provided in Table 1. However, any or all of the them may be included when comparing Year 1 with Year 5 data for patterns of missingness.

[8] For the vast majority of participants, once they did not respond to the study in one of the five years, they did not return at a later time (or re-enlist in a subsequent year). Only 11 participants returned to the study after having had an entire year of non-participation (or entire year of missing data).

accounting for the fact that some of the cases have missing values. Therefore, multiple imputation is somewhat of a compromise between the two more common extreme methods of complete case analysis and mean substitution.

Before describing multiple imputation in more detail, an example of how single imputation underrepresents uncertainty is in order. Rubin & Shenker (1991) illustrate this point by comparing the nominal and actual values of a confidence interval and significance level for a regression analyses using a large sample that presumes 30% of the data are missing, as shown in Table 3.

TABLE 3: Example of the Performance of Single Imputation, with 30% Missing Values

Confidence Interval for Scalar Parameter			
Nominal	90%	95%	99%
Actual	77%	85%	94%
Significance level for 10-component parameter			
Nominal	10%	5%	1%
Actual	57%	45%	25%

As shown in the Table 3, with single imputation confidence intervals are inflated, and perhaps more importantly, Type I errors are far more likely to occur when nominal versus actual significance levels are compared.

Imputing multiple values for missing data corrects the underestimation of significance levels and the overestimation of confidence intervals seen in single imputation by imposing a higher degree of uncertainty in the process. Essentially, each missing value is replaced with $M > 2$ (typically near 5) possible values (Rubin & Shenker, 1991), which are predicted from the rest of the observed data using linear regression techniques (Greenland & Finkle, 1995). Referring back

to Rubin (1991) and Table 3, when $M = 3$ imputations are performed, the actual and nominal values for confidence intervals and significance levels are the same.

In general, two models for multiple imputation are available: ignorable or nonignorable models. An "ignorable" model for nonresponse assumes that a nonrespondent is the same as a respondent with respect to missing information. Using variables from the FIS data as an example, this model would presume that if participant (P_1) has missing data for annual income, but matches on other pre-determined important characteristics ($X_{1, 2, 3, ...}$) as a participant with complete data (P_2 and P_3), then the value for the item of missing data (Mx_1) of P_1 would be exactly that of the observed value for P_2 and P_3. Typically, imputations are repeated for each missing value approximately five times (referred to as repetitions). The following table presents data for both the ignorable and nonignorable models that may be used in two repetitions for multiple imputation:

TABLE 4: Fictitious Multiple Imputation Data Example Using Actual FIS Variables

Variable ($X_{1, 2, 3, \ldots}$)	P_1	P_2	P_3
# of children	2	2	2.2
Participant's age	27	26	27.5
# of months of welfare use	6	6	6.5
Age of youngest child	2	2.5	2
# hours in job training/educ	Missing (Mx)	110	100
# months employed	7	7	7.5
Income	$11,252	$11,600	$11,000

For the ignorable model, the missing value for P_1 would be replaced using data from the closest "match" (P_2) for the first repetition, thereby having the value 110 imputed. The second repetition uses the next nearest "matched" participant (P_3) to impute the value of 100. As mentioned, repetitions are carried out approximately five times, with the result being five complete data sets, each with independently imputed values for those previously missing.

The nonignorable model for multiple imputation does not assume that respondents and nonrespondents are similar in all regards. In this model, variability is introduced in the imputation process by accounting for values of characteristics that are known to differ between those participants with missing data and those without missing data. For example, suppose it was known from prior examination of the data that participants who "dropped out" of the study the fifth year typically had 20% fewer hours in job training than those who responded in Year 5 (based on Year 4 data). If one participant (P_1) did not respond at all in Year 5, and another participant (P_2) responded all five years, then "matches" for P_1 would be found in Year 4, and missing data for Year 5 would be imputed using the known discrepancies between responders and

nonresponders. For instance, referring back to Table 4, for the variable "number of hours in job training the previous year", the first repetition "matching" P_2 would impute the value 110 less 20%, or 88 for that variable. The second repetition would also adjust for responder and nonresponder differences, adjusting the P_3 value of 100 less 20%, to impute the value of 80. In this example, however, values for every missing piece of data would need to be imputed for Year 5, as P_1 did not respond at all in that year. Again, typically five repetitions would be carried out, then having five complete data sets with imputed values to use for analyses. Further examples of multiply-imputed data are provided in the next chapter.

Psychosocial Measures in the FIS

Discerning the appropriateness of measures used in the FIS has been the most formidable task of conducting this secondary analysis. Conceptually, the measures are well described in the literature and coherent (Gecas & Schwalbe, 1983; Pearlin, 1989; Pearlin, Lieberman, Menaghan, & Mullan, 1981). No information, however, is provided in the FIS data book that describes the reliability or validity of the instruments, and the references cited have generally been void of this information, as well. Consequently, measures were evaluated for their reliability and stability using Crohnbach's alpha correlation coefficients and a method developed by Heise (Heise, 1969).

The Gecas Self-Evaluation Scale

This scale was used to measure self-efficacy, self-worth, and self-esteem for all five years. Self-efficacy refers to whether one feels competent or effective in dealing the social and physical environment. The self-worth component of the scale reflects moral aspects of self-evaluation, such as whether one considers oneself as "good", or "worthy." Self-esteem refers to the overall approval or disapproval one has of oneself, being composed of the sum of self-efficacy and self-worth (Gecas & Schwalbe, 1986). Self-efficacy and self-worth are each represented by six items, totaling 12 items on a semantic differential, 5-point scale. Self-esteem is then indexed by

multiplying the mean of the 12 self-efficacy and self-worth items by 12. Although this instrument has been used in a number of studies, the samples have primarily consisted of men and adolescents, which brings into question the reliability and validity of the tool when used with women (Gecas & Seff, 1989; Gecas & Seff, 1990; Schwalbe, Gecas, & Baxter, 1986; Seff, Gecas, & Ray, 1992). Two versions of the tool have been used: one with 12 items and one with 14 items.

The content validity of the 12-item scale has been confirmed by factor analysis in a sample of adolescents and their parents (Gecas & Schwalbe, 1986). No evidence of validity has been presented that uses contrasting groups or convergence; however, in the second through the fifth waves of the FIS, Rosenberg's Self-Esteem Scale was added to the questionnaire, making a convergence comparison of the self-esteem index in the Gecas Self-Evaluation Scale possible through the FIS data (McLaughlin & Marascuilo, 1990).

Test-retest reliability was conducted in one study (n = 208, all men) for the Self-Worth and Self-Efficacy subscales, which were r =.85 and r =.91 respectively over a two-week interval of time (Gecas & Seff, 1989). Test-retest reliability, however, assumes the factor being measured has not changed between testing at time one and time two, which may not be the case for self-efficacy, self-worth, and/or self-esteem in the FIS population, which was measured on a yearly basis.

Pearlin's Depressive Symptomology Scale

Pearlin et. al., (1981) conceptualized depression as a global indicator of stress. This scale, although it measures symptoms of depression prominent in people undergoing psychiatric treatment, is not designed to identify depression based on current clinical standards. Rather, the purpose of this tool is to detect stressors in the social and economic environment, as "depression may be especially sensitive to a distinctive kind of experience, namely, undesired experience that is both enduring and resistant to efforts aimed at change" (Pearlin, et al., 1981, p.342).

Moreover, Pearlin and colleagues assert that the relationship between stress and depression is indirect, with the erosion of self-esteem as a mediating factor.

The Pearlin Depressive Symptomology Scale contains 10 item statements with responses scored on a 4-point scale. The only article found that addressed test-retest correlation coefficients used longitudinal data, and had a four year period of time between time one and time two measurements (Pearlin, et al., 1981). In contrast to the aforementioned instruments, this scale has been used with a sample of over fifty percent women. No factor analysis or other information could be found in the literature on the development of the instrument.

Rosenberg Self-Esteem Scale

For reasons not provided in the data book, Rosenberg's Self-Esteem Scale was added to Part III of the questionnaire in waves two through five. One could speculate that the investigators became aware of the possible deficiencies inherent in using the Gecas Self-Evaluation Scale to measure indices of self-esteem in this population during the first year of the study. Whatever the reason, Rosenberg's Self-Esteem Scale has been found to be both reliable and valid, and has been used in a number of studies with samples of women similar to those in the FIS (Aston & Lavery, 1993; Burns, Doremus, & Potter, 1990; Goldsmith, 1986; Higgins, Clough, & Wallerstedt, 1995). In addition, adding this scale theoretically provided an established tool against which the Gecas Self-Evaluation self-esteem index could have been evaluated and compared by convergence, whereby evidence of its validity can be attained (McLaughlin & Marascuilo, 1990). Unfortunately, Crohnbach alpha coefficients for the years the Rosenberg Self-Esteem Scale was included in the FIS study were inconsistent from year to year (Year 2= .78, Year 3=.36, and Year 4 = -.04). Crohnbach alphas for Year 5 of the Rosenberg Self-Esteem Scale were unable to be calculated, as the data set contained no variable for item number 10. The reasons for the poor performance of this scale in this sample are unknown, but it is speculated that significant errors in coding occurred in Years 3, 4, with obvious errors in coding in Year 5.

The Heise Method for Estimating Reliability and Stability of Measures

The reliability of an instrument is concerned with how consistently it measures the concept of interest (McLaughlin & Marascuilo, 1990). Testing for reliability estimates the amount of random error in the instrument or measurement technique. In general, there are three aspects of reliability: stability, equivalence, and homogeneity. For the purposes of this study, equivalence estimates were not appropriate; rather, reliability via stability and homogeneity estimates is presented.

Test-retest correlations were used to estimate the stability of the instruments over a period of 3 years. Typically, test-retest methods evaluate an instrument initially and then approximately 2 weeks thereafter to obtain reliability coefficients (McLaughlin & Marascuilo, 1990). However, when conducting a secondary analysis, an investigator has only what he or she is given in terms of instrument appraisal. In this case, psychosocial measures were obtained every year, making the typical 2-week retest time sequence impossible to attain. This situation presents the additional problem of the likelihood that the psychosocial states being measured had changed during the course of each year, which will be reflected in expected changes in the distribution of scores over the course of the study.

In order to reduce the effect of this type of temporal instability on test-retest correlations, a method developed by Heise (1969) was used. This method provides reliability estimates that separate measurement error and true-score instability, and has been used by other nurse researchers (Knapp, Porter, & Dunbar, 1997; Mitchell & Woods, 1996). Output statistics for the Heise method include a reliability coefficient for the instrument and three between-occasion stability coefficients for the construct. High reliability coefficients are desirable, with generally accepted values of .70 for newly developed instruments and .80 for established instruments providing evidence of reliability (McLaughlin & Marascuilo, 1990). Other researchers, however, consider reliability coefficients of .60 to be sufficient for making group comparisons, but

not acceptable for making decisions about a particular individual (a good example would be comparing how men versus women score on an instrument to evaluate group differences as opposed to using an instrument to select individuals for admission to university programs). Stability coefficients using the Heise method are useful for determining whether the construct being measured represents a state or a trait -- an important point, which will be further, discussed (Knapp, et al., 1987).

The formula $r_{xx}=r_{12}r_{23}/r_{13}$ was used to assess test-retest reliability for each psychosocial measure for Years 1, 2, and 3. Zero-order (or bivariate) correlations calculated between data for Year 1 with Year 2, Year 2 with Year 3, and Year 1 with Year 3 are presented in Table 5. The Heise test-retest reliability formula was then applied to the correlations, with the results in Table 6.

TABLE 5: Zero-order Correlations between Psychosocial Measures, Years 1-3*

	W1	D1	Ef1	C1	Es1	W2	D2	Ef2
Worthw1 (W1)								
Depressw1 (D1)	-.19							
Efficaw1 (Ef1)	.56	-.37						
Contrlw1 (C1)	.24	-.48	.39					
Esteemw1 (Es1)	.86	-.33	.90	.36				
Worthw1 (W2)	**.49**	-.17	.32	.16	.44			
Depresw2 (D2)	-.14	**.61**	-.27	-.39	-.24	-.21		
Efficaw2 (Ef2)	.31	-.33	**.58**	.33	.52	.57	-.41	
Contrlw2 (C2)	.20	-.41	.34	**.56**	.31	.27	-.56	.47
Esteemw2 (Es2)	.45	-.29	.52	.28	**.55**	.87	-.36	.90
Worthw2 (W3)	**.50**	-.20	.29	.18	.44	**.58**	-.21	.39
Depresw3 (D3)	-.12	**.58**	-.28	-.33	-.23	-.15	**.63**	-.35
Efficaw3 (Ef3)	.29	-.31	**.54**	.34	.49	.38	-.35	**.65**
Contrlw3 (C3)	.17	-.43	.32	**.52**	.29	.23	-.48	.39
Esteemw3 (Es3)	.44	-.29	.48	.29	**.52**	.54	-.32	.59
	C2	Es2	W3	D3	Ef3	C3	Es3	
Esteemw2 (Es2)	.42							
Worthw2 (W3)	.28	.54						
Depresw3 (D3)	-.42	-.29	-.24					
Efficaw3 (Ef3)	.45	.59	.59	-.45				
Contrlw3 (C3)	**.64**	.35	.32	-.48	.53			
Esteemw3 (Es3)	.41	**.64**	.88	-.39	.90	.48	1.00	

*All pairs significant at $p < 0.01$. Values in bold used for reliability and stability estimates.

TABLE 6: Test-Retest Reliability of Psychosocial Measures, Heise Method*

Worth
r =(.49)(.58)/.50 = .284/.50 = .57

Depress
r =(.61)(.63)/.58 = .384/.58 = .66

Effica
r =(.58)(.65)/.54 = .377/.54 = .70

Contrl
r =(.56)(.64)/.53 = .358/.53 = .68

Esteem
r =(.55)(.64)/.52 = .352/.52 = .68

* $r_{xx} = r_{12}r_{23}/r_{13}$

Using this method, all measures had relatively moderate test-retest reliability over 3 years. The most reliable measure was the Self-Efficacy portion of the Gecas Self-Evaluation Scale, with a corrected reliability of r =.70. The reliability coefficient of .70 was much higher than the zero-order correlations between Years 1 and 2 and 1 and 3 of r_{12}=.58, r_{23}=.65, and r_{13}=.54, indicating that controlling for expected changes over time is important when evaluating the performance of a scale. The Self-Esteem index from the Gecas Self-Evaluation Scale (.68) and the Sense of Control index from the Pearlin's Self-Efficacy Scale (.68) indicated lesser degrees of reliability, although the corrected reliabilities were generally higher than the zero-order correlations (r_{12}=.55, r_{23}=.64, and r_{13}=.52 for Esteem; r_{12}=.56, r_{23}=.64, and r_{13} =.52 for Control). Least reliable was the Self-Worth index of the Gecas Self-Evaluation Scale (.57) and Pearlin's Depression Scale (.66), neither of which differed much from the zero-order correlations (r_{12}=.49, r_{23}=.58, and r_{13}=.50 for Self-Worth; r_{12}=.61, r_{23}=.63, and r_{13}=.58 for Depression).

Stability estimates were obtained using the Heise (1969) method, as well. The formulas $s_{12}=r_{13}/r_{23}$, $s_{23}=r_{13}/r_{12}$, and $s_{13}=r_{213}/r_{12}r_{23}$ were applied to the zero-order correlations calculated for the psychosocial variables from Year 1 through Year 3 in order to measure the amount of change in the variable values during the three Years. Stability of the data was calculated between Year 1 and Year 2 (s_{12}), between Year 2 and Year 3 (s_{23}), and between Year 1 and Year 3 (s_{13}), with the r in the formula referring to the zero-order correlations. Results of the stability estimates are shown in Table 7.

TABLE 7: Stability Estimates of Psychosocial Measures, Years 1-3, Heise Method*

Worth
s_{12} = .49/.58 = .844
s_{23} = .50/.49 = 1.02
s_{13} = .25/(.49)(.58) = .25/.284 = .88
Depress
s_{12} = .58/.63 = .92
s_{23} = .58/.61 = .95
s_{13} = .34/(.61)(.63) = .34/.38 = .89
Effica
s_{12} = .54/.65 = .83
s_{23} = .54/.58 = .93
s_{13} = .291/(.58)(.65) = .291/.377 = .77
Contrl
s_{12} = .52/.64 = .81
s_{23} = .52/.56 = .93
s_{13} = .27/(.56)(.64) = .27/.358 = .75
Esteem
s_{12} = .52/.64 = .81
s_{23} = .52/.55 = .95
s_{13} = .27/(.55)(.64) = .27/.352 = .77

*($s_{12}=r_{13}/r_{23}$, $s_{23}=r_{13}/r_{12}$, and $s_{13}=r_{213}/r_{12}r_{23}$)

The results show that for all of the scales and subscales, and between each measurement period, the stability estimates were quite high (all being .75 or above). This indicates that the construct of the measures represent traits rather than states (Knapp, et al., 1997). The theoretical relevance this has for the current study is further discussed in Chapter 4.

Homogeneity (Internal Consistency) of Psychosocial Measures

Homogeneity is the aspect of reliability that refers to the extent to which items in an instrument are measuring the same attribute (McLaughlin & Marascuilo, 1990; Polit & Hungler,

1991). Crohnbach's alpha coefficient is the statistical test most commonly used, with coefficients between .80 and .90 representing an instrument that cohesively measures a construct, yet is able to distinguish important subtleties between items (Polit, 1996). Some investigators criticize the use of Crohnbach's alpha to determine internal reliability, however, arguing that even if an instrument has a coefficient of .80, only .802, or 64% of the variability within the measure represents cohesiveness, with the remaining 46% attributable to measurement error. Results of the Crohnbach alpha coefficients for the psychosocial instruments used in the FIS are presented in Table 8.

TABLE 8: Crohnbach Alpha Reliability Coefficients for Psychosocial Measures: Family Income Study Data, Year 1

Self-Worth .74
Self-Efficacy .70
Self-Esteem .83
Sense of Control .47
Depression .83

Most internally consistent were measures of self-esteem (r =.83) and depression (r =.83), followed by self-worth (r =.74) and self-efficacy (r =.70). Least internally consistent was the instrument measuring sense of control (r =.47). These results indicate that the instruments measuring self-esteem and depression indeed measure a unitary attribute with individual items each contributing uniquely to the total score (McLaughlin & Marascuilo, 1990; Polit & Hungler,

1991). Although not attaining the optimal level of .80, measures for self-worth and self-efficacy had Crohnbach alpha coefficients of .74 and .70 respectively, indicating the instruments modestly reflected a unitary concept. The Sense of Control instrument was not found to be internally consistent, having far more measurement error than cohesiveness.

Two approaches were taken in an attempt to improve the reliability and/or internal consistency of the instruments. The first was to select individual items from each of the scales that captured the essence of the scale, and then calculate reliabilities. The items selected from each scale are identified in Table 9, with the resulting reliabilities using the Heise method. Individual items were not selected for the Self-Esteem scale or the Symptoms of Depression scale, as there were no items that independently represented the characteristic of interest.

TABLE 9: Selected Items from Family Income Study Scales with Reliabilities, Using the Heise Method

Gecas Self-Evaluation Scale: 5-point scale	
Self-Efficacy Item: Confident - Lack Confidence	
	$r = .41$
Self-Worth Item: Worthy - Worthless	
	$r = .57$
Pearlin's Sense of Control Scale: 4-point scale	
Sense of Control Item: Little control over things	
	$r = .28$

As presented in Table 9, this approach did not result in improved reliabilities for any of the scales.

The second approach was to conduct a factor analysis to determine whether the scales were behaving differently for this sample, which is possible given that only the Pearlin Depressive Symptomology Scale had been used with a sample containing 50% women. The Gecas Self-Evaluation Scale (which measures self-efficacy, self-worth, and self-esteem) has only been reported to have been used with employed men. Results of the factor analysis for the Gecas Self-Evaluation Scale are presented in Table 10.

TABLE 10: Results of Factor Analysis for Gecas Self-Evaluation Scale

Principal components analysis
Rotated factor matrix:

Item*	Factor 1	Factor 2	Item Description
x3	.04864	.66717	Powerful-Powerless
x4	.25213	.67162	Honest-Dishonest
x5	.69179	.17262	Good-Bad
x6	.11990	.76399	Confident-Lack confidence
x7	.69690	.21331	Kind-Cruel
x8	.64882	.05489	Strong-Weak
x10	.61903	.26571	Dependable-Undependable
x11	.55764	.39292	Wise-Foolish
x13	.65515	.23979	Do most things well-Few things well
x14	.55254	.45930	Generous-Selfish
x15	.47218	-.07086	Worthy-Worthless

*Items italicized and underlined are self-worth items, those unitalicized are self-efficacy items.

The factor analysis on this sample did indeed identify a scale having two separate conceptual schemes, however, the self-worth and self-efficacy items did not load as expected conceptually. Generally, loadings with an absolute value of .70 are most desirable, but those of

.30 or greater are considered large enough to be meaningful (Polit & Hungler, 1991). The majority of the items clearly load on one factor. Two items (x11 and x14) load fairly high on both factors. For this reason, these two items were removed, and the items were reassigned to the scales as follows: the self-worth subscale contained x5, x7, x8, x10, x12, and x15, and the self-efficacy subscale contained x3, x4, x6, and x13. The reassignment of the items also necessarily changed the composition of the self-esteem scale, as it is defined by the self-worth and self-efficacy scales. Crohnbach's alpha reliability coefficients were then conducted on the reorganized scales, with minimal or no improvement in the coefficients (self-efficacy, r =.70; self-worth, r =.74; and self-esteem, r =.78). Reliability coefficients on the reorganized scales using the Heise method also yielded no significant improvement over the original scale structure (self-efficacy, r = .55; self-worth, r =.74; and self-esteem, r =.72).

The Sense of Control Scale factor analysis identified this scale as having two factors, rather than it representing a unitary concept. Results are shown in Table 11.

TABLE 11: Results of Factor Analysis for Pearlin's Sense of Control Scale

Principal components analysis Rotated factor matrix:			
Item	Factor 1	Factor 2	Description of Item
x16	.71413	-.14597	Can't solve problems
x17	.74380	.10840	Being pushed around
x18	.03879	.83768	Little control
x19	.78340	-.01572	Can do anything
x20	.05224	.84739	Helpless dealing w/problems
x21	.58964	.22023	Future depends on me
x22	-.53595	-.05258	Little to do to change important things

Two items load on a second, unidentified factor (items x18 and x20). Of these two items, item x18 (have little control over things), was previously identified as the one question that represents the essence of the Sense of Control Scale. The single-item reliability for this scale fared far worse than the original structure of the scale, however (r =.28 as compared to r =.68, respectively). Therefore, because the majority of items loaded on the initial factor and the single-item performed far worse than the original scale, no attempt was made to reorganize the scale into any other conceptual format.

Finally, factor analysis of the Depressive Symptomology Scale (with the exception of the last item) identified a unitary construct, with nearly all items loading very high on the first factor, as shown in Table 12.

TABLE 12: Results of factor analysis for Pearlin's Depressive Symptomology Scale

Principal components analysis

Rotated factor matrix:

Item	Factor 1	Factor 2	Description of Item
x23	.61181	-.00412	Lack enthusiasm for doing anything
x24	.76146	.09163	Have a poor appetite
x25	.71386	.11877	Feel lonely
x26	.54266	-.27490	Fell bored in doing things
x27	.68465	-.09528	Lose sexual interest/pleasure
x28	.75787	.18371	Have trouble sleeping
x29	.83434	.06922	Cry easily or feel like crying
x30	.61943	-.05530	Feel downhearted or blue
x31	.73054	-.02174	Feel tired
x32	.06212	.94216	Feel hopeless about the future

Although item x32 certainly seems to represent the construct of depression in the same manner as the other items, it did not load as expected on the first factor. Pearlin has used this scale in a large sample (n = 2,300), 58% of which were women, and had a test-retest reliability of .38 (Pearlin, et al., 1981). Using the Heise method, the reliability of this instrument was unchanged whether item x32 was included or not, both versions having a reliability of r =.66. Moreover, the Crohnbach's alpha coefficient remained relatively constant using either version of the scale, with r =.83 (all items) and r =.86 (less item x32).

In review, the self-efficacy and self-esteem portion of the Gecas Self-Evaluation Scale, the Pearlin's Symptoms of Depression Scale, and the Pearlin's Sense of Control Scale had reliabilities using the Heise method of >.66. The original versions of these scales will be used in the statistical analyses of the data. The self-worth portion of the Gecas Self-Evaluation Scale was least reliable, with r =.57 using the Heise method, and this instrument will not be used in the analyses. Neither factor analysis nor use of single-items from the scales (where appropriate) significantly improved the internal consistency or reliability coefficients for any of the measures.

Statistical Procedures for Data Analysis

In this section, statistical procedures to be used for answering the research questions will be described. At the analysis phase of a study, confounding variables are controlled through essentially two general strategies: 1) controlling for the association between the confounder and the outcome, or 2) controlling for the association between the confounder and the treatment assignment. The former is typically used, and corresponds to usual multivariable regression analysis techniques. The latter represents a way of controlling for the association between confounders and the treatment assignment through propensity scoring, which will be adopted for use in this analysis (Stone, Obrosky, Singer, Kapoor, & Fine, 1995). Propensity scoring allows researchers to test for exposure effects in observational studies by controlling for systematic differences between the exposed (treatment) and unexposed (control) groups (Drake & Fisher,

1995). This procedure has been used to control for pretreatment differences and obtain unbiased estimates of treatment outcomes in several nonrandom epidemiological and health care studies (Connors, Speroff, Dawson, Thomas, Harrell, Wagner, et al., 1996; Drake & Fisher, 1995; Robins, Mark, & Newey, 1992; Stone, et al., 1995).

Propensity scoring first involves identifying variables related to an exposure and estimates the probability of being exposed given a set of conditions (covariates). Regression techniques are then applied and provide the probability of assignment to a specified treatment (or exposure) given the covariates selected. Treatment assignment using propensity scoring corresponds to treatment assignment within a randomized clinical trial, as groups are comparable with the exception of the exposure effect (Stone, et al., 1995). Detailed accounts of the propensity score procedure can be found elsewhere in the literature as described by Rosenbaum and Rubin (1983; 1984).

To answer the first research question, propensity score procedures were used to match women who left AFDC in Year 1 for paid employment in Year 2 and women who remained on AFDC in both Years 1 and 2. To determine the effect of making this transition on psychosocial health, paired t-tests were performed.

To answer the second research question, a multiple imputation procedure was conducted to restore missing data. Following this, logistic regression techniques were used to determine what the effect of the FSA welfare policy change was on the participation rates of women in job training or educational programs. Detailed accounts of the statistical analyses for all of the data are presented in the following chapter.

IV. Results

The data for this study were derived from the Washington State Family Income Study (FIS) as previously described. A total sample of 1848 women who responded in Year 1 of the FIS was selected for the study. All descriptive findings are based on Year 1 data, as this year had the most complete information from all participants.

In this chapter, characteristics of the sample are presented using frequency distributions, measures of central tendency, and measures of variability of pertinent variables. At other times, test statistics that compare mean differences between specific groups are presented to better describe the more salient characteristics of the sample. Percents are reported as valid percents when there are missing data. Basic demographic information such as age, race, marital status, number and ages of children, and income are presented initially, followed by descriptions of involvement in education or job training programs, the type of child care services utilized, and health characteristics of the participants and their children. The conclusion of the chapter provides detailed information regarding the findings of the two research questions, with a discussion of the relevancy of the findings proceeding in the final chapter.

For many of the analyses that follow, three categories of women were constructed to examine differences between groups: 1) those who received no AFDC and were working all 12 months prior to enrolling in the study (n =202), 2) women who received from one to six months of AFDC in the prior year (n =136), and 3) women who received AFDC seven to 12 months out of the previous year (n =709). These categories were created because of the predominant interest of this study in examining differences between AFDC receipt and employment.

In constructing the categories in this manner, a group of 288 women are excluded from descriptive analyses that compare differences between participants who received AFDC and those who were employed. The demographics of this group portrays that they contribute little when comparing AFDC receipt and employment differences: none received any AFDC or worked

during the year, the majority were married (58%), only 10.4% were involved in any education or job training activity, the majority had no children (65%), and reported a mean income of $17,496 per year. This group of women are included, however, in many other demographic findings, and are included in the analyses used to answer the second research question.

Description of the Participants

The majority of the participants were white women (80.2%) in their late 20's or early 30's, with a mean age of 31.5 years (Tables 13 and 14). Non-white women accounted for approximately 20% of the sample. These figures are consistent with the race composition of women in Washington State (white, 89.3%; African American 3.1%; Native American 1.9%, and Asian/Pacific Islander 5.7%) (Washington Women's Education Foundation, 1997). Most of the sample had been divorced (32%), although a significant portion had never been married (27.1%) or were currently married (25.1%).

TABLE 13: Ages of the Participants: Family Income Study Data, Year 1 (n = 1848 women)

Age Category (in years)	n	Percent
17-19	81	4.4%
20-25	362	19.6%
26-30	407	22%
31-35	314	17%
36-40	203	11%
41-45	131	7.1%
46-50	81	4.4%
51-55	52	2.8%
56-60	50	2.7%
61-65	55	3.0%
66+	111	6.0%

All participants:

Mean	31.5
Median	29.8
Standard Deviation	9.34
Possible Range	17-61

TABLE 14: Race and Marital Status of Participants: Family Income Study Data, Year 1 (n =1848 women)

Race		
White	1482	80.2%
Black	109	5.9%
American Indian	84	4.6%
Asian	59	3.2%
Other	104	5.6%
Mixed	7	.4%
Marital Status		
Married	377	25.1%
Separated	201	13.4%
Divorced	482	32.0%
Widowed	36	2.4%
Never Married	408	27.1%

Number and Ages of Participant's Children

The vast majority of women in the FIS sample had at least one child (n =1493, or 81%). The mean number of children for all those who had at least one child was 2.13, with a median of 2. When examining the differences in the number and ages of children by mother's AFDC use and employment status, it is clear that those who received AFDC during the previous year had not only more children (on average, approximately one more), but children that were younger, as well, primarily of preschool age. As indicated in Table 15, there was a significant difference between the mean number of children of women employed all 12 months and receiving no AFDC (1.09) and those receiving AFDC either less than half or more than half of the year (mean for both groups, 2.0) ($F = 60.15$, $p = .05$).

These findings represent the employment-or-welfare dilemma many women face with respect to the lack of financial assistance for child care (beyond one year) after leaving welfare for employment when their children are not yet old enough to attend public schools. In this sample, the median age of the youngest child under 17 for women who received any AFDC was 3.7 (mean, 4.9), while it was 6.2 (mean, 7) for those who were employed the entire year (Table 16).

TABLE 15: Differences in the Number of Children, by AFDC[~] Receipt and Employment Status* Family Income Study Data, Year 1

Variable, Group	n[a] (n)[b]	Percent (Valid)[c]	Mean	Median	SD[d]	Range	p value*
All women	1848 (1494)	81%	2.13	2.0	1.21	0-9	.000
Group 1 Received no AFDC, employed all 12 months	202 (201)	99.5%	1.09	1.0	1.26	0-5	
Group 2 Received AFDC 1-6 months	136 (132)	97%	2.0	2.0	1.19	0-8	
Group 3 Received AFDC 7-12 months	709 (705)	99.4%	2.0	2.0	1.18	0-9	

~AFDC=the former Aid to Families with Dependent Children program.

[a] n = number of women in each group.

[b] (n)=number of women in each group with valid responses.

[c] Percent in group with children.

One-way ANOVA. F = 60.15. Tukey's multiple comparison procedure confirms Groups 1 and 2, and Groups 1 and 3 significantly different at the .05 level.

[d] Standard deviation.

These findings were consistent with other studies of welfare use and employment status in various parts of the country (Quint, Polit, Bos, & Cave, 1994; Sarri, et al., 1984). Women who had a child during the previous year were more likely to receive AFDC ($X^2 = 34.5$, $p = .000$) (Table 17).

TABLE 16: Differences in the Age of the Youngest Child, by AFDC[T] Receipt and Employment Status, Family Income Study Data, Year 1 (n =1848 women)

	No AFDC, Employed all 12 Months Group 1 n = 104		*AFDC Receipt 1-6 Months Group 2 n = 131*		*AFDC Receipt 7-12 Months Group 3 n = 679*		*F*	*P**
	M	SD	M	SD	M	SD		
Age of youngest child	6.8	4.3	4.5	4.6	4.7	4.1	12.53	.000

*One-way ANOVA. Tukey's multiple comparison procedure confirm Groups 1 and 2, and Groups 1 and 3 significantly different at the .05 level.

[T]AFDC= Aid to Families with Dependent Children program.

TABLE 17: Birth Rate Differences, by AFDC[T] Receipt and Employment Status Family Income Study Data, Year 1 (n =1848 women)

	No AFDC, Employed all 12 Months Group 1 N = 201	*AFDC Receipt 1-6 Months Group 2 N = 133*	*AFDC Receipt 7-12 Months Group 3 N = 707*	X^2	*p**
Percent of women who had a child born during the year	2.9%	24%	18%	34.5	.000

[T]AFDC = the former Aid to Families with Dependent Children program.

*Chi-square test.

Income and Material Support by AFDC Receipt and Employment Status

In this section, participant's income is examined in a number of ways. Because income has been demonstrated to be highly correlated with health status, is such a significant factor in determining how people construct their daily lives, and often reveals the manner in which race, gender, and class intersect, this variable is examined by both employment status and race.

Few women in the FIS reported being employed all 12 months of the previous year in Year 1 (13% of the sample). As shown in Figure 1, the mean number of months employed by all participants for each of the five years of the study was under six. In addition, the majority of participants in Year 1 were receiving AFDC (see Figure 2). AFDC receipt decreased during the course of the study from a mean of seven months in Year 1 to a mean of three months in Year 5. The change in the number of women receiving AFDC during the course of the study was also striking, declining from a median of 10 months in Year 1 to no AFDC receipt in Years 3, 4, and 5. These changes are most likely attributable to patterns of missing data (for full discussion of missing data see Chapter 3 and multiple imputation section later in this chapter).

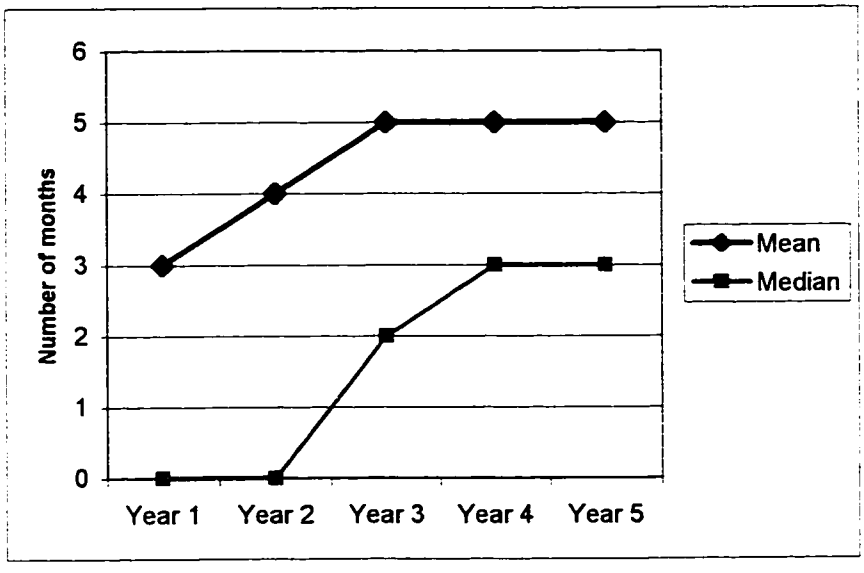

Figure 1: Total Number of Months Employed: by Year, Family Income Study (n = 1848)

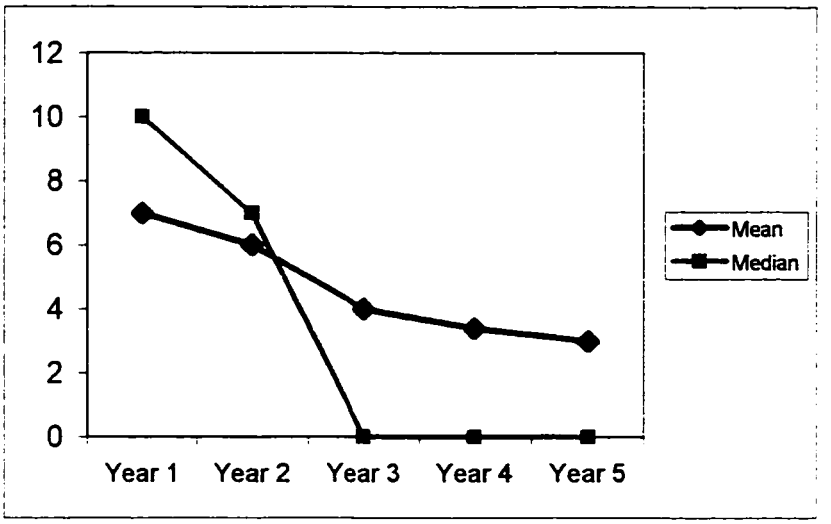

Figure 2: Total Months of AFDC Receipt: by Year, Family Income Study Data (n = 1848 women)

The mean income for all women in the FIS study in Year 1 was $13,296, with a median yearly income of $9180 (Table 15). As expected, incomes for women employed all 12 months had mean incomes ($25,288) significantly higher than that of women who received AFDC the majority of the year and were not employed ($8,729), and women who received AFDC from one to six months during the year ($9,411) ($F = 379.08$, $p = .05$) (Table 18 and Figure 3). Interestingly, women who received AFDC from one to six months or six to 12 months during the previous year actually had slightly lower median incomes ($7677 and $8181, respectively) than women receiving AFDC the entire year ($8329). One feasible explanation for this is the lapse in time from applying for welfare benefits and actually receiving financial assistance (anywhere from one to three months), during which time many women have no source of income whatsoever (Edin & Lein, 1997).

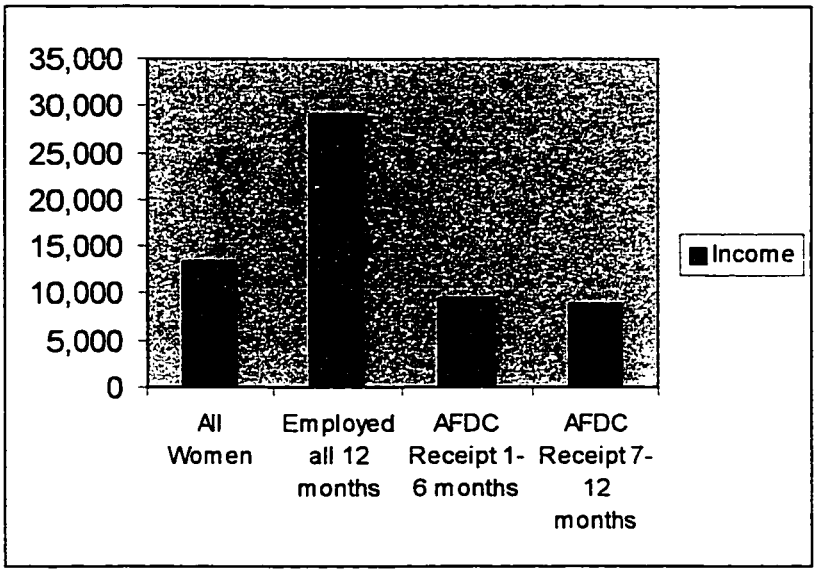

FIGURE 3: Total Income* by AFDC Receipt and Employment Status, Family Income Study (FIS) (n =1848)

TABLE 18: Differences in Total Income (in U.S. Dollars, 1987), by Employment/AFDC[~] Receipt Family Income Study Data, Year 1 (n =1848 women)

Variable, Group	n[a] (n)[b]	Percent (Valid)[c]	Mean	Median	SD[d]	Range	p value*
Income.							
All women	1848 (1603)	87%	13.296	9180	11,679	2-115,599	.000*
Group 1 Received no AFDC, employed all 12 months	202 (178)	88%	29,032	25,288	17,943	4,940-115,599	
Group 2 Received AFDC 1-6 Months	136 (124)	91%	9,411	7,677	7,527	1,204-61,656	
Group 3 Received AFDC 7-12 months, not employed	709 (656)	93%	8,729	7,866	4,016	1,608-42,468	

* One-way ANOVA, $F = 379.08$. Multiple comparison Tukey confirms groups 1 and 2, and groups 1 and 3 significantly different at the .05 level.

~AFDC=the former Aid to Families with Dependent Children program..

[a] n =total number of women in group.

[b] (n)=number of women who responded to this question. Of note is the high rate of non-response in the entire sample to questions about income when compared to the amount of missing data of other, less-sensitive questions in year 1 (n =245 of 1848 and n =~18, respectively), which is typical of surveys. Although roughly 90% responded in this study, high non-response to income questions reflects the distrust of low-income women and women on welfare in disclosing income information for fear of being reported to authorities and then penalized via benefit reduction (see Edin & Lein, 1997).

[c] Percent of women within group attending school or job training program (valid percent).

[d] Standard deviation.

When comparing income by the percent of the federal poverty level in 1987, the majority of women in this sample fall below 100% of the poverty level, with a median of 81% (Table 19). Mean income by percent of the federal poverty level changes significantly, however, when comparing women who were employed all 12 months previously (310%) to those who received

AFDC from one to six months (86%) or seven to twelve months during the year (78%) (F = 422.91, $p < .05$).

TABLE 19: Differences in Total Income by Percent of Federal Poverty Level (1987), by Employment/AFDC[~] Receipt: Family Income Study Data, Year 1 (n =1848 women)

Variable, Group	n[a] (n)[b]	Percent (Valid)[c]	Mean	Median	SD[d]	Range	p value*
Income: All women	1848 (1603)	87%	108	81	90.33	0-1229	.000*
Group 1 Received no AFDC, employed all 12 months	202 (178)	88%	310	271	206.8	42-1229	
Group 2 Received AFDC 1-6 Months	136 (124)	91%	86	72	61.9	10-432	
Group 3 Received AFDC 7-12 months, not employed	709 (656)	93%	78	77	31.1	13-451	

* One-way ANOVA, F = 422.91. Multiple comparison Tukey confirms groups 1 and 2, and groups 1 and 3 significantly different at the .05 level.

~AFDC=the former Aid to Families with Dependent Children program.

[a] n =total number of women in group.

[b] (n)=number of women who responded to this question. Of note is the high rate of non-response in the entire sample to questions about income when compared to the amount of missing data of other, less-sensitive questions in year 1 (n =245 of 1848 and n =~18, respectively), which is typical of surveys. Although roughly 90% responded in this study, high non-response to income questions reflects the distrust of low-income women and women on welfare in disclosing income information for fear of being reported to authorities and then penalized via benefit reduction (see Edin & Lein, 1997).

[c] Percent of women within group attending school or job training program (valid percent).

[d] Standard deviation.

A higher proportion of African American women were employed all 12 months (20.3%) than those who were white (15.4%), Asian/Pacific Islander (14%), or Native American (6%) (irrespective of AFDC receipt). However, a chi-square test found no significant differences

({2= 1.85, p =.17) between the proportion of white women employed all 12 months (15.4%) and African-American women employed all 12 months (20.3%).[9]

Income by Race Regardless of AFDC Receipt or Employment Status

Overall, as shown in Table 17, there were significant differences in income by race (without respect to employment status or AFDC receipt) (F = 3.68, p = .011). White women reported the highest mean income ($13,925), with Tukey's multiple comparison demonstrating this to be significantly higher than that of Native Americans ($9,536) ($p$ = .05). African-American and Asian/Pacific Islander women reported more similar incomes ($12,172 and $12,897, respectively), and were not significantly different by statistical criteria. Moreover, for all women in the FIS sample, median incomes by percent federal poverty level in each racial group fell below 100% (whites, 88%; African-Americans, 80%; Native Americans, 83%; Asian/Pacific Islanders, 77%, see Table 20). Reexamining this variable by comparing the means of each group provides a contrasting representation of the degree of poverty in this sample, with white participants reporting a mean income by percent federal poverty level of 141%, African-Americans 115%, Native Americans 83%, and Asian/Pacific Islanders 110% (F = 6.26, p = .000). As expected, Tukey's multiple comparison demonstrated a difference between whites and Native Americans at the .05 level of significance.

[9] Only whites and African-Americans were compared in the chi-square analysis, as there were too few Native Americans and Asian/Pacific Islanders to be included.

TABLE 20: Income Differences, by Race (in U.S. Dollars, 1987), Family Income Study Data, Year 1 (n =1848 women)

Variable, Group	n[a] (n)[b]	Percent (Valid)[c]	Mean	Median	SD[d]	Range	p value*
Income							
White	1482 (1283	87%	13,925*	9,460	12,099	2-96,340	.011*
African-American	109 (95)	87%	12,172	8,497	13,735	770-115.599	
Native American	84 (73)	87%	9,536*	8,244	4,953	364-27,800	
Asian/pacific Islander	59 (53)	90%	12,897	8,880	9,489	2,585-43,882	
Income by Percent Federal Poverty Level							
White	1482 (1283)	87%	141*	88	134	0-1096	
African-American	109 (95)	87%	115	80	145	10-1229	
Native American	84 (73)	87%	83*	74	46	4-350	
Asian/Pacific Islander	59 (53)	90%	110	77	91	11-491	

* One-way ANOVA, F = 3.68 for income, and F = 6.26 for income by percent poverty level. Multiple comparison Tukey demonstrates significant differences between groups 1 and 3 at p7.05 level. WStandard deviation.

[a] n =total number of women in group/racial category.

[b] (n)=number of women who reported income within specified group.

[c] Percent of women reporting income (valid percent).

[d] Standard deviation.

Income by Race for Participants Employed all Year

Of women employed all year, white and Asian/Pacific Islander women had higher median earnings ($25,814 and $22,719, respectively) than did African-Americans ($17,965) or Native Americans ($13,726). Comparisons of the yearly income by racial group, however, show that African-American women in this sample had higher earnings ($30,258) than whites ($29,346), Native Americans ($13,726), or Asian/Pacific Islanders ($22,220). No significant differences in mean income occur when examined by race ($F = .757$, $p = .52$) (Table 21). Based on the sampling design, relatively few participants were employed all 12 months in the previous year and did not receive any AFDC (ranging from approximately 2-11%). As outlined in Table 21, there were too few respondents in the Native American ($n = 2$) and Asian/Pacific Islander ($n = 5$) categories to conduct a reliable or robust ANOVA. A t-test was then performed between whites ($n = 159$) and non-whites ($n = 19$) who were employed all year without receiving AFDC, with no significant mean differences in annual income ($t = .51$, $p = .617$) or income by percent of federal poverty level ($t = .66$, $p = .519$) found.

Reflecting the median income distribution, Asian/Pacific Islander and white women had median incomes at least twice that of the federal poverty level (236% and 281%, respectively), while their African-American counterparts had incomes 184% of the federal poverty level, and Native Americans having incomes less than the federal poverty level (108%) in 1987.

Given that the mean and median distributions for whites and African-Americans were inconsistent, and that these were the only two racial categories with any representative numbers of respondents for comparison, these two groups were further compared using a chi-square. A dichotomous income variable was created using the median income of African-American women ($17,965) as the discriminant value, and the proportion of black ($n = 12$) and white ($n = 159$) women either above or below this value were compared. No significant differences were found

(p =.198).

TABLE 21: Differences in Income of Women Employed Entire Year with no AFDC[~] Receipt, by Race (in U.S. Dollars, 1987): Family Income Study Data, Year 1 (n =1848 women)

Variable, Group	n[a] (n)[b]	Percent (Valid)[c]	Mean	Median	SD[d]	Range	p value*
Income							
White	1482 (159)	10.7%	29,346	25,814	17,052	4940-85,408	.52
African-American	109 (12)	11%	30,258	17,965	29,809	9411-115,599	
Native American	84 (2)	2.4%	13,726	13,726	5079	10,134-17,317	
Asian/pacific Islander	59 (5)	8.5%	22,220	22,719	11,227	7,738-38,993	
Income by Percent Federal Poverty Level							
White	1482 (159)	10.7%	314	281	198	42-1076	
African-American	109 (12)	11%	307	184	330	51-1229	
Native American	84 (2)	2.4%	108	108	51.6	71-144	
Asian/Pacific Islander	59 (5)	8.5%	251	236	146	97-491	

[~] AFDC=the former Aid to Families with Dependent Children program.

*One-way ANOVA, F = .757 for income, and F = .794 for income by percent poverty level. No significant differences were found between groups, very likely because of the exceedingly small number of respondents in the Native American (n =2) and Asian/Pacific Islander (n = 5) groups. T-tests of mean income by "white" (n =159) and "all other" (n =19) categories were also insignificant (p =.617 for income, and p =.519 for income by percent of federal poverty level).

[a] n =total number of women in group/racial category.

[b] (n)=number of women who worked all year without receiving Aid to Families with Dependent Children within specified racial category.

[c] Percent of women who worked all 12 months and reported income within specified group (valid percent).

[d] Standard deviation.

Income data for women employed all year in the FIS sample are very similar to that found in Washington State. When compared to national estimates, women employed all year in the FIS had higher median earnings in 1987 ($25,288) than female-headed households employed all year in 1989 in the U.S. ($19,638) (U.S. Department of Commerce, 1993). These comparisons hold only for white women when examined by race, however, with white women in 1987 in the FIS and nationally from 1989 reporting median earnings of $25,814 and $19,871, respectively (both employed all year). Median annual earnings for African American women employed all year in the FIS were much more similar to national estimates ($17,965 and $17,871 respectively) (U.S. Department of Commerce, 1993). National comparisons of Native Americans and Asian/Pacific Islanders were unable to be made, as U.S. Census Bureau statistics do not examine income by these racial/ethnic categories.

Child Support Received

In terms of total yearly income, 80% of single women with children under 18 years old in the FIS received no child support payments during the previous year (Table 22). Of single mothers with children under 18, 67% received AFDC all 12 months, with 42% reporting being employed at least one month out of the previous year either part- or full-time. Only 35% of women who reported being employed during the entire previous 12 months received any child support payment during the previous year (mean, $73 per year). For those women who received AFDC all 12 months, 82% reported receiving no child support payment during the prior year which is consistent with laws allowing the state to collect child support payments from the non-custodial parent if AFDC is received. No data from the FIS are available to estimate how much child support was collected by Washington State from the non-custodial parent of children whose mothers received AFDC.

Statistically significant differences were found when examining the amount of child support received by AFDC receipt and employment status (Table 23). Women employed all year and received no AFDC (Group 1) reported a higher mean child support payment ($658) than either women receiving AFDC from one to six months during the year (Group 2, $142, p =.05) or those who received AFDC from seven to 12 months during the year (Group 3, $115) (F = 26.75, p =.05).

TABLE 22: Material Support and Child Support Received, Family Income Study Data, Year 1 (n =1848 women)

Variable	*n*	*Percent Valid*	*Mean*	*Median*	*Standard Deviation*	*Range*
Perceived degree of material support received (all sources)	1442	78%	15.38	14	5.68	10-40
Amount of child support received by single mothers with children less than 18 years of age (in dollars)	1119	61%	234	0	1026.58	0-21,600

TABLE 23: Differences in Child Support Received, by AFDC[+] Receipt and Employment Status Family Income Study Data, Year 1 (n =1848 women[a])

	No AFDC, Employed all 12 Months Group 1 n = 103		*AFDC Receipt 1-6 Months Group 2 n = 131*		*AFDC Receipt 7-12 Months Group 3 n = 672*		*F*	*P**
	M	SD	M	SD	M	SD		
Child support, in U.S. dollars, 1987	658	1633	142	461	115	481	26.75	.000

[a]In this analysis, only women with children included.
*One-way ANOVA. Multiple comparison Tukey confirms Groups 1 and 2, and Groups 1 and 3 significantly different at the.05 level.
[+]AFDC= Aid to Families with Dependent Children program.

Perceived Material Support

To establish the degree of material support received, a scale measuring this variable was included in the FIS, and included all sources of material support. Overall, women perceived they receive very little support in material terms, with a mean of 15.4 on a 10-40 point scale (Table 22). No significant differences were found when mean material support scores were compared by AFDC receipt and employment status ($F = 1.19$, $p = .304$) (Table 24). Although no national or state-level figures are available for comparison, an abundance of qualitative data support the perception of low-income women and women receiving AFDC as having to struggle constantly to provide even the most basic necessities for themselves and their children (Edin & Lein, 1997; Sarri, et al., 1984).

TABLE 24: Differences in Perceived Material Support[a], by AFDC[+] Receipt and Employment Status, Family Income Study Data, Year 1 (n =1848 women)

	No AFDC, Employed all 12 Months Group 1 n = 104		*AFDC Receipt 1-6 Months Group 2 n = 131*		*AFDC Receipt 7-12 Months Group 3 n = 679*		*F*	*P**
	M	SD	M	SD	M	SD		
Perceived material support	14.7	5.8	15.7	5.6	15.4	5.7	1.19	.304

[a]Based on 10-40 point scale.
*One-way ANOVA.
[+]AFDC= Aid to Families with Dependent Children program.

Education Level

The educational level characteristics of the FIS sample are summarized in Table 25 and Figure 4. The majority of women had completed at least 12 years of education (58.4%) upon entrance into the FIS study, with a mean of 11.2. Of those with 12 years of education, 40%

reported having a high school diploma, while 14% had completed their GED. High school completion or GED attainment for the FIS sample is somewhat low (54%) when compared to other data sources of educational attainment in Washington State in 1990, which report approximately 17% of women age 25 and older lacked either of these (Washington Women's Education Foundation, 1997). This difference, however, may be accounted for in the fact that many women in the FIS are in their early 20's, and are currently working toward high school or GED completion. Of note is the 4% discrepancy between women who completed 12 years of education and those who neither attained a high school diploma or a GED. Although the reasons for the 4% discrepancy are unknown, it may be that those particular respondents have been required to repeat years at some point in their basic education.

Thirty five percent of women in the FIS sample had no type of degree (including high school diploma), a much higher proportion than that found in Washington State in 1990 (16.5%) (Washington Women's Education Foundation, 1997). This difference reflects the sampling design of the FIS, which targeted AFDC recipients, a significant number of whom have not completed high school or received their GED.

Of those reporting 13 or more years of education (27.5%), 4% received an associate degree, 4% a baccalaureate degree, and 1% had a master's degree (9%, total). No respondents reported having doctoral degrees, and 3% indicated they received some other type of degree above high school completion (Table 25, Figure 4). This leaves 18.5% unaccounted for, although they may represent the 15% of women who reported being involved in but not yet completed their education through high school, a community college, or a four-year college (Table 25).

TABLE 25: Level of Education, by Year and Degree, Family Income Study Data, Year 1 (n =1848 women)

Variable		n	Percent (Valid)
Years of education completed by respondent:			
		1814	100%
	0 Years	25	1.4%
	1-8 Years	144	7.9%
	9 Years	152	8.4%
	10 Years	196	10.8%
	11 Years	237	13.1%
	12 Years	561	30.9%
	13 Years	179	9.9%
	14 Years	175	9.6%
	15 Years	58	3.2%
	16 Years	52	2.9%
	17 Years	35	1.9%
Mean	11.2		
Median	12		
Standard Deviation	2.68		
Range	0-17		
Highest degree earned:			
	No degree	639	35%
	High school diploma	727	40%
	GED	248	14%
	Associate	82	4%
	Baccalaureate	74	4%
	Master	10	1%
	Doctoral	0	0%
	Other	56	3%

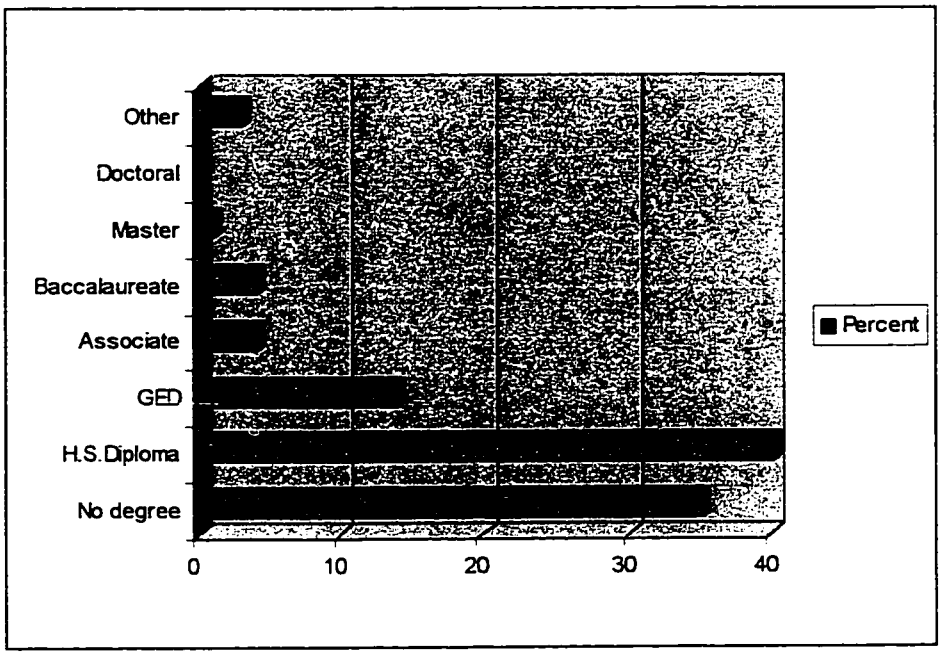

FIGURE 4: Highest Degree Earned, Family Income Study, Year 1

Involvement in Educational and/or Job Training Programs

As Table 26 indicates, approximately one-quarter (27.9%, n = 416) of the FIS sample reported currently attending some type of educational, school, or training program. Of these, 16% of the sample (n =215) classified themselves as being more specifically involved in some form of vocational training. Unfortunately, vocational training was not well-defined in the FIS literature, but has been described elsewhere as being either a degree or a non-degree program and is generally related to training programs available through the Job Opportunity and Basic Skills Training (JOBS) program (see Chapter 1).

Of the respondents who reported being currently involved in job training, the majority were enrolled in an education program within a community college setting (n = 176, 11.7%), followed

by other training (n =161, 10.7%), high school (n = 29, 1.9%), and a four-year college (n = 21, 1.4%) (Table 26). Once again, the criteria for selecting respondents to belong to any one type of program were not very specific, having women choose for themselves what category best describes their current type of training. Given this, one cannot conclude that all women involved at the community college level were pursuing an associate degree, or that all women enrolled in a program at a four-year college were pursuing a baccalaureate degree, and so forth. Most troublesome is the high rate of participation described only as "other," which does not allow for analyses of a participant's prospective earning potential if she were to complete a particular type of program or degree.

TABLE 26: Number and Percent of Participants Involved in Educational and/or Job Training Programs, by Type, Family Income Study Data, Year 1 (n =1848 women)

Variable		n	Percent (Valid)
Number of women in school, training, or education program (any type)		416	27.9%
Participants involved in vocational education program at any time during previous year		215	16%
Current involvement in education program, by type:			
	High school	29	1.9%
	Community college	176	11.7%
	4 year college	21	1.4%
	Other training	161	10.7%
Number of women who attended community college during previous year		182	14%

The majority of studies involving welfare-to-work initiatives categorize work training programs loosely, often referring to them as either "job search" or "education and training" activities. As noted in the Manpower Demonstration Research Corporation Study (MDRC) -- a meta-analysis of several welfare-to-work demonstration studies -- emphasis was placed on the outcome of earning gains from employment, the number of AFDC recipients who left welfare, and the cost of various programs to the state (Gueron & Pauly, 1991). Clear descriptions specifying what various forms of job training or job search activities entailed were notably absent, and were probably inconsistent across state demonstration projects. This precludes the ability to identify or even begin to standardize what form of education or training is required for participants to earn an hourly wage necessary for achieving the goal of economic self-sufficiency.

One approach to determine the "amount" of training that participants in the FIS were receiving is by describing the number of hours involved in a school or training program during the previous year. Total hours alone, however, is not readily interpreted in terms of a meaningful amount of training. Therefore, as noted in Table 27, total hours spent in a job training program the previous year were further categorized by the number of full-time weeks of study or training represented. For example, a woman who reports having attended 130 hours of training in the previous year then falls under the category "2- to <4 full-time weeks equivalent," which indicates that if women in this category attended a training or educational program full-time (40 hours per week), they would have attended the equivalent of between two and four weeks of a program in the previous year (Table 27).

The majority of women who reported being involved in a school or job training program attended between two and six months of the full-time equivalent during the previous year (n =141, 34%). Following this, 21% (n =87) reported having attended for less than two weeks (in full-time equivalent hours). Although most ideal in terms of earnings potential and attaining economic self-sufficiency, few women (n =67, 16%) were able to attend school or training for six to 12 months

(in full-time equivalent hours). Another 13% attended between two to four weeks, and five women reported attending greater than 2080 hours (the full-time, year-round equivalent).

TABLE 27: Hours Women Involved in Educational and/or Job Training Programs, by Full-Time Equivalent, Family Income Study Data, Year 1 (n =1848 women)

Variable	n	Percent (Valid)	Mean	Median	Standard Deviation	Range
Hours spent in school or training program during the previous year:	416	23%	129.60	0	341.13	1-2353
1-79 Hours (Less than 2 full-time weeks equivalent)	87	21%				
80-159 Hours (2- to <4 full-time weeks equivalent)	54	13%				
160-319 Hours (4 to < 8 full-time weeks equivalent)	62	15%				
320-959 Hours (2 to <6 full-time months equivalent)	141	34%				
960-2080 Hours (6 to at least 12 full-time months equivalent)	67	16%				
2081-2353 Hours (Greater than 12 full-time months equivalent)	5	1%				

Involvement in Educational and Job Training Programs by AFDC Receipt and Employment Status

Significantly more women who received AFDC during the majority of the previous year were involved in an educational or job training program at any given time (n =177, 30%) than those women who received no AFDC and were employed all 12 months (n =29, 14.6%) (X^2 =12.86, p =.001). A further description of the intensity of involvement in school or job training is provided below using both total hours during the year as well as number of hours per week.

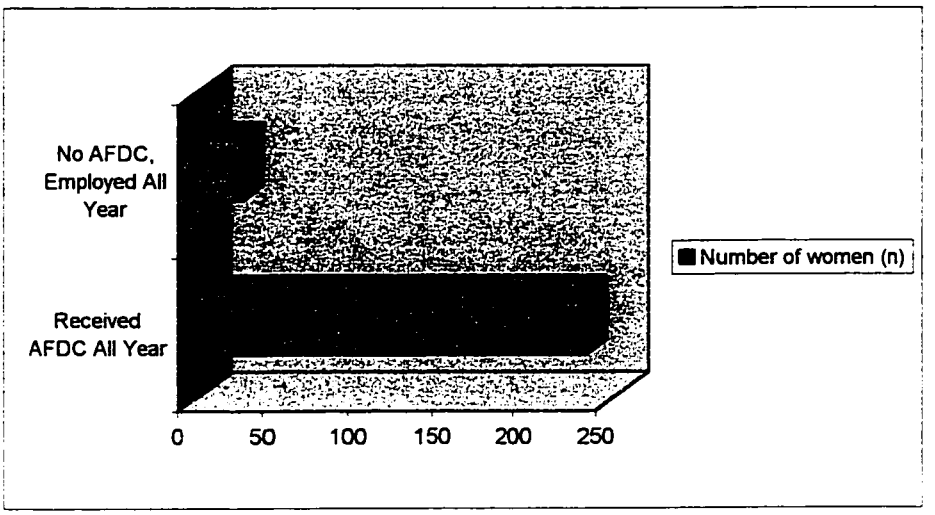

FIGURE 5: Involvement in Job Training Programs by AFDC Receipt and Employment Status: Family Income Study, Year 1 (n = 1848)

Total Hours per Year Involved in School or Job Training Program

The mean number of hours involved in educational or job training program activities was more than twice as high for those who received AFDC the majority of the year (571.8) than for those employed all year and received no AFDC (262.4) (F =9.13, p =.03) (see Figure 6). Women who received AFDC from one to six months during the year had an average of 382 hours in

school or job training program during the year, although this group was not found to differ significantly from the others (Table 28).

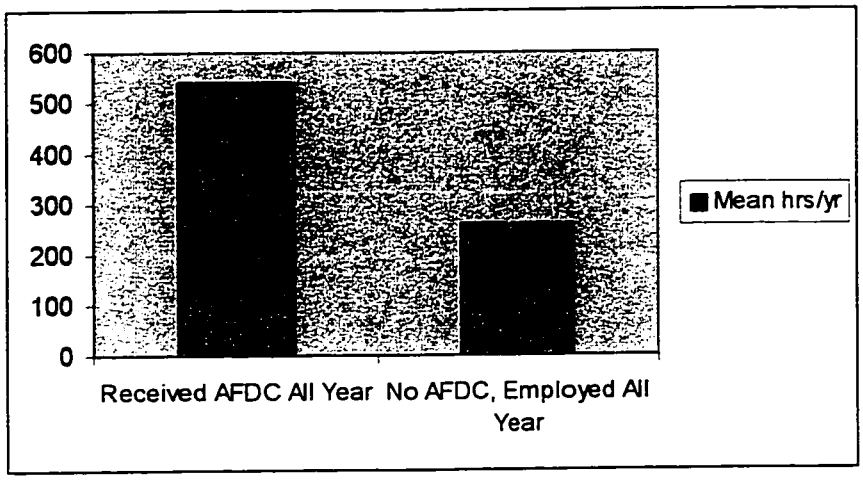

FIGURE 6: Hours per Year Involved in Job Training/Educational Activity, by AFDC Receipt and Employment Status: FIS Data, Year 1

TABLE 28: Differences in Total Hours Per Year Women Involved in Educational and/or Job Training Programs by AFDC[-] Receipt and Employment Status, Family Income Study Data, Year 1 (n =1848 women)

Variable, Group	n[a] (n)[b]	Percent (Valid)[c]	Mean	Median	SD[d]	Range	p value*
Total hours in school or job training program during the previous year:							.03*
All women	1848 (417)	22.6%	500.6	350	504.7	1-2353	
Group 1 Received no AFDC, employed all 12 months	199 (29)	14.6%	262.4*	148	322	1-1161	
Group 2 Received AFDC 1-6 Months	136 (28)	20.6%	381.6	241.5	365	1-1174	
Group 3 Received AFDC 7-12 months, not employed	709 (177)	30%	571.8*	392	561.9	1-2353	

*One-way ANOVA, $F = 9.13$. Multiple comparison Tukey confirms Groups 1 and 3 significantly different at the .05 level.

[-]AFDC=the former Aid to Families with Dependent Children program.

[a] n =total number of women in group.

[b] (n)=number of women within group attending school or job training program.

[c] Percent of women within group attending school or job training program (valid percent).

[d] Standard deviation.

Number of Hours per Week Involved in Education or Job Training

The pattern of involvement in school or job training activities was very different when examined by the numbers of hours per week. Women who received AFDC from one to six months during the year (Group 2) had the highest number of mean hours (22.9), followed by those receiving AFDC the majority of the year (Group 3, mean =18.7), and those employed all 12 months but receiving no AFDC (Group 1, mean = 14.8) (Table 29, Figure 7). One-way ANOVA

and multiple comparison Tukey confirmed a significant difference ($F = 3.66$, $p = .027$) between Groups 1 and 2 only. Thus, although substantially more hours per year were spent in school or job training by women receiving AFDC the majority of the year than women employed all year who received no AFDC, similar numbers of hours per week were spent in an educational activities.

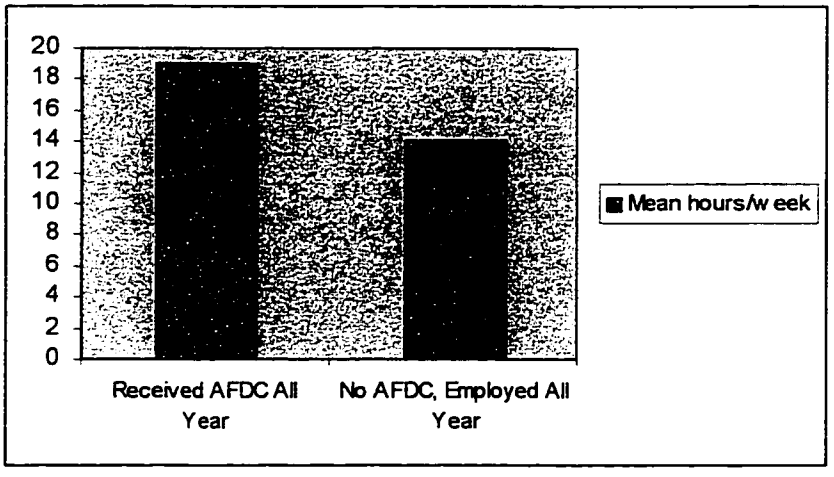

FIGURE 7: Hours per Week Involved in Job Training/Educational Program, by AFDC Receipt and Employment Status, FIS Data, Year 1 (n = 1848 women)

TABLE 29: Differences in Hours per Week Women Involved in Educational and/or Job Training Programs, by Employment/AFDC~ Receipt: Family Income Study Data, Year 1 (n =1848 women)

Variable, Group	n[a] (n)[b]	Percent (Valid)[c]	Mean	Median	SD[d]	Range	p value*
Hours per week spent in school or training program:							.027*
All women	184 (409)	22%	19.2	18	11.3	1-51	
Group 1 Received no AFDC, employed all 12 months	202 (28)	13.9%	14.8*	12.5	12.1	2-40	
Group 2 Received AFDC 1-6 Months	136 (28)	20.6%	22.9*	25	11.6	3-44	
Group 3 Received AFDC 7-12 months, not employed	709 (175)	24.7%	18.7	17	11.2	1-51	

*One-way ANOVA, F = 3.66. Multiple comparison Tukey confirms Groups 1 and 2 significantly different at the .05 level.
~AFDC=the former Aid to Families with Dependent Children program.
[a] n =total number of women in group.
[b] (n)=number of women within group attending school or job training program.
[c] Percent of women within group attending school or job training program (valid percent).
[d] Standard deviation

The participation rate in job training or educational activities of women receiving AFDC in the FIS sample (approximately 20-25%) is slightly lower than participation rates in other areas of the country. The MDRC study of welfare-to-work programs found approximately 38% to 64% of all eligible AFDC recipients were involved in various programs in a nine to 12 month period in various demonstration study sites throughout the U.S., as noted in Table 30.

TABLE 30: Percent of AFDC* Eligibles Ever Involved in Specified Activities Within Nine or Twelve Months After Random Assignment, for Seven Welfare-to-Work Programs

	Arkansas[a]	Baltimore	Cook County	San Diego	San Diego SWIM	Virginia	West Virginia
Activity Measure:	Job search, work experience	Multi-component	Job search, work experience	Job search, work experience	Job search, work experience, education, training	Job search, work experience	Work experience
Participated in any activity (%)	38	45	38.8	46.4	64.4	58.3	N/A[b]
Participated in job search activities (%)	27.3	24.7	36.1	44.1	50.6	51	N/A[b]
Work experience (%)	2.9	17.5	7.3	13	19.5	9.5	23.9
Other services, including education and training (%)	N/A[b]	17.3	4.1	N/A[b]	24.3	11.6	N/A[b]

Source: Gueron, J. & Pauly, E (1991). *From Welfare to Work: A Manpower Demonstration Research Corporation Study*. New York: Russell Sage Foundation, p.130.

[a] West Virginia's program consisted almost exclusively of work experience.

[b] N/A under participation components indicates that such components were not available in the program.

*AFDC=the former Aid to Families with Dependent Children program.

One may speculate the lower participation in educational or job training activities of employed women reflects that this group had already completed the education necessary to either obtain a degree and/or the skills essential for finding and maintaining well-paying, stable employment. More careful examination of the data, however, does not support this. The majority had 12 years of education or less (59%, n =128), with 20% having not completed high school,

50% reporting their highest degree a high school diploma, and 8% having a GED. Only 8% had an associate degree, and 10% a baccalaureate degree. It seems, then, that women employed in the unskilled labor market are either not interested or unable to attend job training or educational activities that have the potential to increase their earnings.

Sociologic field work by Edin & Lein (1997) contributes much to further our understanding of the educational and employment experiences of low-income women. After interviewing numerous women in different areas of the country that had relied on welfare or low-paying jobs, they found that the majority of low-income women who were employed in the unskilled or low-skilled labor market routinely cycled from job-to-job when layoffs, cutbacks, or other circumstances required it. Overwhelmingly, it was the belief of women who worked in this sector that the only means of increasing their earnings and maintaining stable employment was by returning to some form of job training and/or furthering their education. They cited several obstacles in doing this, however, while being employed more than part-time, such as: 1) inflexible hours for balancing work, class times, or both, 2) daycare or child care inaccessibility during the hours classes are held (or so they could work in the evening/at night and attend classes during the day), 3) lack of financial assistance to pay for tuition, 4) lack of financial assistance with child care expenses so they could then pay for their tuition, 5) the lack of time for adequate studying and then doing poorly in school, and 6) the literal ablation of the time they felt so important in spending with their children and carrying out their parental responsibilities.

The majority of women involved in educational or training programs in the FIS sample were receiving AFDC benefits all year. Several women in Edin & Lein's (1997) study fully intended to return to complete or enhance their education, but felt it would be necessary to wait until their children were at least in elementary school and able to care for themselves to some extent when left home alone. Many women who were currently employed in the low-wage labor force, however, were either planning or contemplating returning to full AFDC receipt in order to obtain

the training and education they so astutely perceived would be required to make ends meet in the future. Despite the associated humiliation, lack of respect, and loss of self-esteem many women felt about returning to welfare use, this route, they agreed, was the most logical and most available one to take.

Child Care and Health Characteristics of Participants' Children

Of low-income employed women and women who receive AFDC and are not employed, the vast majority shares an omnipotent concern for their children. In the last decade, attempts to reform the AFDC program have recognized this, and have addressed the issue (albeit not sufficiently) by including this as a concern in major studies of welfare and extending child care subsidies for an additional year after leaving AFDC for employment. A liberal, individualistic framework continues to shape the norms and expectations of economic independence for single parents (primarily women) in a labor market unwilling to negotiate these norms in order to allow for someone to adequately care for the children. This point is relevant with respect to describing certain aspects of caring for children that have been previously shown to influence AFDC receipt, employment patterns, and the ability to attain an education (Edin & Lein, 1997; U.S. General Accounting Office, 1997). The incompatibility between having a primary responsibility to care for one's children and the expectations of the labor market are particularly relevant to women's lives (see Fraser, 1994 for a comprehensive discussion).

Type of Child Care Used

Table 31 outlines the various forms of child care arrangements used by women in the FIS. Predominantly, women reported a child's elementary school as the most frequently used site for child care (n =158, 24.3%). Following this, 14% of women reported nonrelatives as caregivers (n =94), 11.4% reported the other parent (n =74), while another 11.4% (n =74) that a grandparent provides child care while they are away.

Of particular interest is the extremely low utilization of daycare (3.5%), nursery or preschool (2.8%), or licensed home care (8.8%), which together account for merely 15.1% of all arrangements reported. The importance of this finding cannot be underscored, because: 1) recent government studies have clearly outlined the glaring deficiencies in the supply of child care arrangements available given the current demand and the projected increased demand as a result of the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (U.S. General Accounting Office, 1997), and 2) despite this, the child care initiatives put into place with the most recent welfare reform efforts have been hastily presumed adequate to move large numbers of women into the workforce. Field interviews with women on welfare have repeatedly supported that lack of available and affordable child care is one of the major obstacles to working (Edin & Lein, 1997; Sarri, et al., 1984). Moreover, the issue is not resolved with only increasing the availability of any type of child care. Prevailingly, mothers voice the safety of their children as an overriding, omnipresent concern. Thus, the quality of child care is as much at issue here as the quantity.

TABLE 31: Type of Child Care Used, All Participants: Family Income Study Data, Year 1 (n =1848 women)

Type of Child Care	n	Valid Percent
Other parent	74	11.4%
Sibling, at least 15 years old	7	1%
Sibling, less than 15 years old	9	1.4%
Grandparent	74	11.4%
Other relative	49	7.5%
Nonrelative	94	14.4%
Licensed home care	57	8.8%
Employer sponsored daycare	3	.4%
Daycare center	23	3.5%
Nursery/preschool	18	2.8%
Kindergarten	20	3.1%
Elementary/secondary school	158	24.3%
Cares for self	18	2.8%
Mother works at home	25	3.8%
Child cared for at work	14	2.2%
Other arrangement	8	1.2%

Illness Patterns and Hospitalization Rates of Children

Twenty-five percent of the sample reported that their youngest child suffered from some type of chronic illness (n =347). Of women with a child under 17 years of age, those receiving AFDC seven to 12 months out of the year had the highest percentage of children with a chronic illness (28%), while only 16% of women employed all 12 months reported that their youngest child had a chronic illness (Table 32). Thus, a significantly greater proportion of women receiving

AFDC had chronically ill children, nearly twice that of those who were able to remain employed all year (X^2 =10.32, p =.006).

It is unclear from these data whether having a chronically ill child precluded employment, or whether those children whose mothers were receiving AFDC were somehow less healthy. Theoretical support for both explanations abound, but empirical studies remain inconclusive (Schram, 1995). The indeterminate nature of this statement has an extensive history, and reflects one of the most elusive questions social scientists have been asking for years: the direction and causality of the relationship between poverty and health status.

TABLE 32: Differences in the Number of Women with Chronically Ill Children, by AFDC* Receipt and Employment Status: Family Income Study Data, Year 1 (n =1848 women)

	No AFDC, Employed all 12 Months Group 1 n = 99	AFDC Receipt 1-6 Months Group 2 n = 122	AFDC Receipt 7-12 Months Group 3 n = 636	X^2	P*
Women reporting a child with a chronic illness, by percent and (n)	16% (16)	16.4% (20)	27% (172)	10.32	.006

*AFDC = the former Aid to Families with Dependent Children program.
*Chi-square test.

There were no statistical differences between the number of acute illnesses of the youngest child according to AFDC receipt or employment status, with an average of approximately 3.4 illnesses (F = .445, p = .64) (Table 33).

TABLE 33: Children's Acute Illnesses Differences, by AFDC^ Receipt and Employment Status, Family Income Study Data, Year 1 (n =1848 women)

	No AFDC, Employed all 12 Months Group 1 n = 104		AFDC Receipt 1-6 Months Group 2 n = 131		AFDC Receipt 7-12 Months Group 3 n = 679		F	P*
	M	SD	M	SD	M	SD		
Number of acute illnesses	3.26	4.17	3.34	8.52	3.70	4.58	.445	.641

*One-way ANOVA. Tukey's multiple comparison procedure confirms no groups significantly different at the .05 level.

^AFDC= Aid to Families with Dependent Children program.

No differences in the hospitalization rates of the youngest child were found when examined by AFDC receipt and employment status of women (F = 1.37, p = .255) (Table 34). The majority of women reported their youngest child had not been hospitalized during the previous year (>88%, all groups).

TABLE 34: Differences in Children's Hospitalization Rates, by AFDC^ Receipt and Employment Status, Family Income Study Data, Year 1 (n =1848 women)

	No AFDC, Employed all 12 Months Group 1 n = 104		AFDC Receipt 1-6 Months Group 2 n = 131		AFDC Receipt 7-12 Months Group 3 n = 679		F	P*
	M	SD	M	SD	M	SD		
Number of times youngest child hospitalized in prior year	.079	.271	.563	3.21	.275	2.17	1.37	.255

*One-way ANOVA. Tukey's multiple comparison procedure confirms no groups significantly different at the .05 level.

^AFDC= Aid to Families with Dependent Children program.

Health Characteristics of the Participants

Studies of AFDC receipt that take into consideration any aspect of women's health are sparse. A number of reliable, self-report health measures could have been adopted into the FIS if nurse researchers were consulted in the design of the study, which would have obtained an appreciable amount of information about the health status of women as they weave their way in and out of the welfare system and (predominantly) the low-wage labor market. The purpose of the FIS was determined by the Washington State Legislature, and its only interest was in what factors create the need for long-term public assistance receipt, and what factors are most likely to eliminate this need. The importance of including health as an area of study in future policy research that predominantly affects women will be further discussed in the next chapter.

The primary measures of health included in the FIS pertained to the psychosocial health of women, and the ability of such measures to better inform our understanding of the well-being of the participants in the study should not be underscored. A minimal number of modest measures of insurance coverage were also included in the FIS. Additionally, a gross measure of health care utilization (hospitalization rates for participants) was included in the study. All of the health characteristics of the participants are presented here.

Hospitalization Rates of Participants

Unfortunately, whether the participant had been hospitalized in the previous year was the only indicator of health service utilization for women in the FIS. In general, fewer women who were employed all year reported being hospitalized than participants receiving any AFDC. As Table 35 and Figure 8 demonstrate, a significantly higher proportion of women receiving AFDC from one to six months reported being hospitalized (36.3%) than those receiving AFDC from seven to 12 months (25.3%) or those working all year who received no AFDC (8.4%) (X^2= 39.20, p = .000). Whether an illness impedes the ability to maintain employment or requires leaving paid employment in order to have health insurance coverage (via AFDC receipt and Medicaid) is

ambiguous from these data, although both are equally plausible and supported by previous research (Davidson & Moscovice, 1989; U.S. Department of Commerce, 1992).

One question was asked of FIS respondents regarding the primary reason that they were currently on welfare. In examining the reasons provided in the one- to-six month AFDC receipt group (who had the highest hospitalization rate), none of the women reported an illness or needing health insurance as the foremost reason for needing welfare. Of women in this category (n =49), the principal reason for requiring AFDC was becoming pregnant or having a child (28.6%), followed by being unable to pay for all of their living expenses (14.3%), loss of a job (10.2%), and become divorced or separated (8.2%). Although an illness was not specifically indicated as a major reason for needing AFDC, it may well be that women were indeed concerned about going without health insurance for themselves and their children if they had continued employment in the low-wage sector of the labor market, as previous research has indicated (Edin & Lein, 1997).

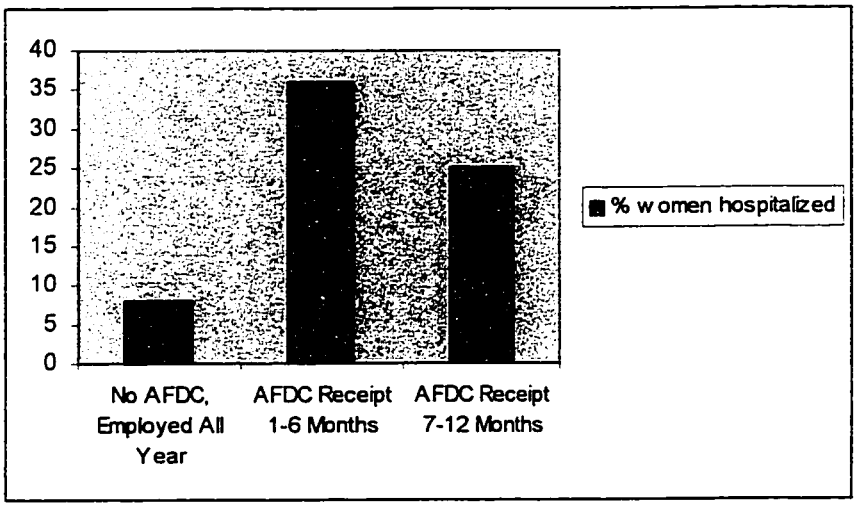

FIGURE 8: Hospitalization Rates of Participants, by Employment Status and AFDC Receipt Family Income Study Data, Year 1

TABLE 35: Differences in Hospitalization Rates, by AFDC* Use and Employment Status Family Income Study Data, Year 1 (n =1848 women)

	No AFDC, Employed all 12 Months Group 1 n = 202	AFDC Receipt 1-6 Months Group 2 n = 135	AFDC Receipt 7-12 Months Group 3 n = 707	X^2	p*
Women reporting being hospitalized in previous year, by percent and (n)	8.4% (17)	36.3% (49)	25.3% (179)	39.20	.000

*AFDC= Aid to Families with Dependent Children program.

Health Insurance Characteristics

Interviews with women cycling on and off AFDC have indicated that medical insurance coverage (Medicaid) when receiving AFDC was an extremely important factor when considering whether to leave welfare for employment (Edin & Lein, 1997). Similarly, Davidson and Moscovice (1989) found the lack of private health insurance from employment was a significant and quantitatively important determinant of welfare reentry. As indicated in Table 36, women who received any AFDC were far more likely to have health insurance through the Medicaid program (71.9% and 94.4%) as women who did not receive AFDC and were employed all year (7.2%) (X^2 = 738.2, p = .000). Under the Omnibus Budget Reconciliation Act of 1981, individuals eligible for AFDC were categorically eligible for Medicaid, although both FIS and national data report only 71.4% AFDC recipients also report having Medicaid, reflecting a rather large discrepancy between qualifying and actually receiving benefits (U.S. Department of Commerce, 1993).

TABLE 36: Percent Women Having Health Insurance Coverage, by AFDC* Receipt, Employment Status, and Type of Health Insurance: Family Income Study Data, Year 1 (n =1848 women)

	No AFDC, Employed all 12 Months Group 1 n = 195	AFDC Receipt 1-6 Months Group 2 n = 135	AFDC Receipt 7-12 Months Group 3 n = 706	X^2	P*
Women with health insurance, by percent and (n)				738.2	.000
Other than Medicaid:	88.3% (160)	36.8% (14)	35% (14)		
Medicaid:	7.2% (14)	71.9% (135)	94.4% (666)		

*AFDC= Aid to Families with Dependent Children program.

What is most surprising about these data is that 88.3% of women who worked all year reported having private health insurance (other than Medicaid). Many studies indicate that women lose Medicaid coverage when they leave welfare and enter low-wage employment (Edin & Lein, 1997; Sarri, et al., 1984; Sidel, 1991; Wolfe & Hill, 1992). Moreover, even after the Family Support Act of 1988 was fully implemented (which extended Medicaid to all AFDC recipients who left welfare for employment for one additional year), it remained unlikely that private or employer-sponsored health insurance would be provided as a benefit for those in the low-wage market after one year of work (Davidson & Moscovice, 1989). If access to health insurance is offered in the low-wage employment market, it is generally through a discounted premium each month, which remains unaffordable for many employees.

With respect to the importance of having health insurance, using data from the Survey of Income and Program Participation (n =1647 single mothers) Wolfe and Hill (1992) found that the likelihood of leaving AFDC for paid employment was far lower for women who reported themselves to be in "poor health" than those in "good health," because of the importance of

maintaining health insurance for themselves. Providing health insurance to children (regardless of the single-mother's income or Medicaid eligibility) of women receiving AFDC was the most significant determinant of whether they would increase their participation in the paid labor market (Wolfe & Hill, 1992).

Psychosocial Health Characteristics of Participants

The primary outcome variable of one research question is how the psychosocial health of women may be affected by a change in welfare receipt or work status; therefore, the distribution of these characteristics is of fundamental interest. Presented in Table 37 are the results of statistical analyses for the psychosocial variables measures in three groups: women who were employed all year and received no AFDC (G1), women who received AFDC from one to six months during the previous year (G2), and women who received AFDC the majority of the year (from seven to 12 months) (G3). Women in all groups had relatively high mean scores of self-esteem, sense of control, self-efficacy, and perceived emotional support, given the ranges of each scale. In contrast, median depression scores were more mid-range in relation to the possible range for this scale. The limitations of the scales used in the FIS are best described in Chapter 3, and will be addressed again in the following chapter.

With the exception of depression (where women who were employed all year had lower mean scores), univariate F tests of significance show that women who were employed all year (G1) had higher mean scores on each psychosocial variable than women who received AFDC the majority of the year (G3) (p =.000 for each comparison). Because the majority of the psychosocial variables are highly correlated (r = .90 for some, Table 37), a multivariate analysis of variance test of significance was conducted to account for the multicolinearity within the dependent variables. There was overall significance between the groups when the dependent variables were considered simultaneously (p = .000 for Pillais, Hotellings, and Wilks, Table 378).

The value of Wilks' lambda (.88115) demonstrates that approximately 12% of the proportion of the variance between each group are explained by differences in psychosocial health.

TABLE 37: Correlation Coefficients for Select Psychosocial Variables: Family Income Study (FIS) Data, Year 1 (n =1848)

	ESTEEMW1	DEPRESW1	EFFICAW1	EMOSUPW1	CONTRLW1
ESTEEMW1	1.0000	-.3264**	.9045**	.1247**	.3642**
DEPRESW1	-.3264**	1.0000	-.3704**	-.2178**	-.4781**
EFFICAW1	.9045**	-.3704**	1.0000	.1201**	.3927**
EMOSUPW1	.1247**	-.2178**	.1201**	1.0000	.2063**
CONTRLW1	.3642**	-.4781**	.3927**	.2063**	1.0000
INCOMEY1	.1263**	-.2503**	.1242**	.1781	.1975**
EDUCATW1	.1389**	-.1975**	.1384**	.1699**	.1968**
TOTCHDW1	-.0580*	.1146**	-.0422	-.1006**	-.0311
TOTADCY1	-.1280**	.2577**	-.1276**	-.1880**	-.1271**
TOTOTHY1	.1095**	-.1445**	.1208**	.0995**	.1620**
SCHHRSY1	.0443	-.0437	.0506*	.0353	.1032**

* - Signif. LE .05 ** - Signif. LE .01 (2-tailed)

While there are statistically significant differences between each group on each psychosocial variable, whether they are practically or meaningfully significant remains dubious. This incongruity is described in detail in Chapter 3 with respect to the sensitivity and stability of the measures, and whether the instruments best depict state or trait characteristics (Knapp, et al., 1997). Careful examination of Table 38 reveals this, as the mean differences between the two groups vary by only one to five points on scales that have 21 to 48 point ranges. Figure 9 also illustrates that, although the differences in psychosocial scores may be statistically significant, they appear relatively constant between groups, with perhaps the exception of depression and self-esteem. The importance of this finding will be revisited in the next chapter.

TABLE 38: Differences in Psychosocial Health Characteristics, by AFDC* Receipt and Employment Status: Family Income Study Data, Year 1 (n =1848 women)

Variable	No AFDC, Employed all 12 Months Group 1 n = 196		AFDC Receipt 1-6 Months Group 2 n = 129		AFDC Receipt 7-12 Months Group 3 n = 658		Univariate F test Results (ANOVA)	
	M	SD	M	SD	M	SD	F	p
Self-esteem Possible Range: 12-60	49.35	4.96	48.02	6.36	46.62	6.48	15.52	.000
Sense of Control Possible Range: 7-28	22.17	3.29	20.92	3.22	20.04	3.37	31.67	.000
Depression Possible Range: 10-40	17.23	5.17	20.41	6.41	21.81	6.25	43.18	.000
Self-Efficacy Possible Range: 6-30	22.76	3.14	22.02	4.17	21.10	4.08	14.53	.000
Perceived Emotional Support Possible Range: 8-32	23.55	5.41	21.03	5.71	21.03	5.94	23.95	.000

MANOVA Results Test Statistic	Value	F	P
Hotellings	.13462	13.125	.000
Wilks	.88115	13.125	.000
Pillais	.11909	12.372	.000

*AFDC = the former Aid to Families with Dependent Children program.

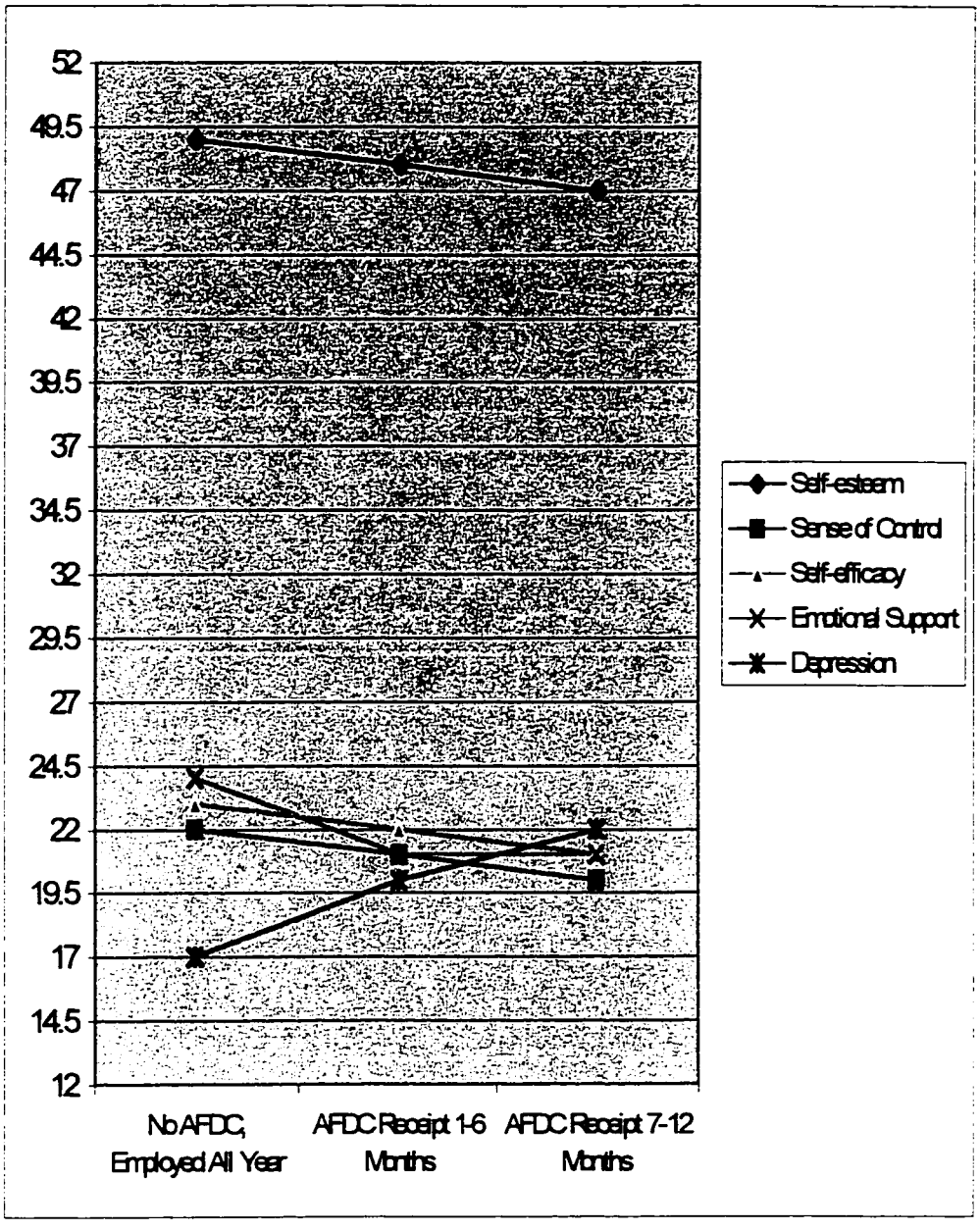

FIGURE 9: Psychosocial Health Characteristics, by AFDC Receipt and Employment Status, Family Income Study Data, Year 1 (n = 1848 women)

Table 37 further delineates the relationship between psychosocial health scores and other demographic variables, such as income, education, number of children, number of months of AFDC receipt, number of months employed, and number of hours in a job training or education program. In general, depression was most strongly associated with select demographic variables than other psychosocial measures. Depression was found to be negatively correlated with income (r = -.2503), education (r = -.1975), and the number of hours employed (r = -.1445) (all: p =< .01), and positively correlated with number of children (r = .1146) and number of months AFDC received (r = .2577) (both p =< .01). Thus, employment, having a higher education, and a higher income were associated with less depression, while more children and AFDC receipt were associated with higher depression scores.

Findings to Research Questions

One of the primary purposes of this dissertation was to answer the following research questions:

1. What is the effect of going from welfare to paid employment on the psychosocial health of women? and,

2. What was the effect of implementing the Family Support Act in Washington state on education or job training program utilization by women?

The first question addresses a fundamental concern of nursing from an ecological health perspective: how one's life circumstances and environment influence health. As described in Chapter 1, nursing as a discipline has consistently overlooked how public policies other than those specifically designated as "health policy" affect health. This research endeavor is one attempt to alter this trajectory, as it specifically implicates policy traditionally considered well outside of the nursing domain as a likely determinant of health status.

The second research question evolved out of the societal expectations that women have the primary, custodial responsibility for children, and the more recent equal expectation that single, poor mothers also have the additional responsibility of financially supporting their families. With economic "independence" or "self-sufficiency" the goal of more recent welfare policies, determining whether supports provided by recent policies (such as extended child care and health insurance provisions, and mandating states increase the availability of job training programs) were effective in terms of increased utilization in education or job training programs was yet another aim of this research. The findings of both questions are presented in this section, and discussed in more detail below.

Findings: Research Question One

What is the effect of going from welfare to paid employment on the psychosocial health of women?

To answer this question, a fundamental consideration was isolating the effect of the change in status (going from the experience of welfare use to the experience of working) from other potentially confounding variables, and being able to measure whatever differences exist between comparable groups. Because the FIS was not designed as an experimental study, answering this question required statistically controlling for extraneous factors most apt to contribute to differences in psychosocial health other than a change in status from welfare to working as effectively as possible. To carry this out, the criteria for selecting a subsample of women and the use of propensity score matching as a statistical tool will be further described.

Selection of the Subsample for Research Question One

Complete cases of women who received at least six months of AFDC in Year 1 and were then employed at least 10 months during Year 2 were included in this analysis (n = 109). Information from Years 1 and 2 were used, as these years had the least missing data. Although multiple imputation was used as a method of replacing missing data to answer other questions in

this study, it was neither statistically sound nor pragmatic to combine both multiple imputation and propensity score matching methods in order to include all years of the FIS. This means that although theoretically and ideally women who moved from AFDC receipt to paid employment in Years 3 and 4, or Years 4 and 5 would have increased the number of women in the subsample and taken most advantage of the longitudinal quality of the data, it was not feasible or certain that unbiased results would be obtained when combining both methods. Of note, there is no literature that explains either how to combine multiple imputation and propensity score matching or the consequences of doing so.

Propensity Score Matching Procedures

The difference between standard matching procedures and the use of propensity scores for matching is described in Chapter 3. Essentially, rather than matching on one or two characteristics thought to be most important to control for (at the expense of ignoring several other characteristics), propensity score matching uses a variety of variables when, weighted equally, match individuals on several attributes (Drake & Fisher, 1995; Stone, et al., 1995). For this analysis, the following variables were used in determining a propensity score: age, income, race, education, whether in school or not, self-esteem scores, depression scores, number of months Medicaid received, perceived emotional support, and the age of the youngest child (in no particular order).

Table 39 provides an example of how pairs of matched individuals compare on a the above variables. A "w." indicates the respondent went from welfare in Year 1 to employment in Year 2, while a "nw." indicates the respondent received welfare in both Year 1 and 2, and was not employed. Note that on many of the variables, respondent pairs are not exactly match -- or may even seem to be quite different, such as the vast difference in age found in Pair 4 (21.9 years old versus 66.6 years old). As Drake and Fisher (1995) explain, for propensity score matching to yield unbiased results, the approach "does not require that units being compared have the same

values in the covariates, only that those variables thought to be related to exposure, given the propensity score, have the same distribution in both exposure groups" (p.185). Figure 10 illustrates the distribution of both groups being compared following the propensity score matching procedure, with "workers" being participants who went from AFDC in Year 1 to employment in Year 2, and "nonworkers" representing participants who remained on AFDC in both Year 1 and 2.

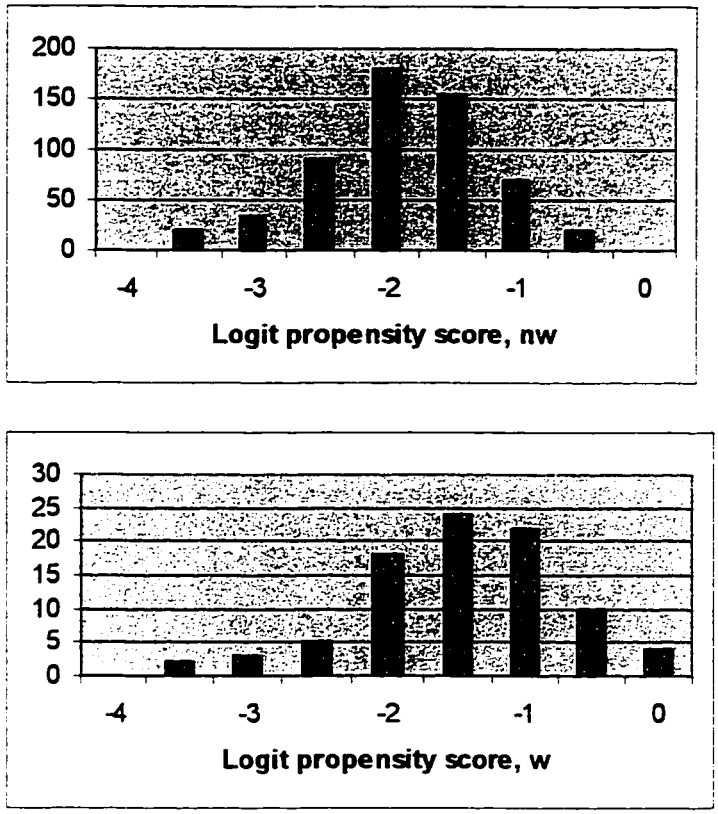

FIGURE 10: Distribution of "Workers" versus "Non-Workers" Post Propensity Score Matching

TABLE 39: Example of Propensity Score Matching Characteristics on Four Respondent Pairs, by Employment Status: Family Income Study (FIS) Data, Years 1 and 2

Variable, by Employment Status*	Pair 1	Pair 2	Pair 3	Pair 4
w.age	30.2	41.7	30.1	21.9
nw.age	21.7	40.5	22.6	66.6
w.race	2	2	1	2
nw.race	2	2	2	2
w.income	8.72	8.70	8.92	9.05
nw.income	8.79	8.79	7.96	10.12
w.education	11	11	12	12
nw.education	11	12	11	10
w.esteem	3.46	4.80	3.00	4.47
nw.esteem	3.74	5.00	4.69	3.61
w.depression	3.47	2.39	3.04	3.17
nw.depression	3.18	2.63	3.63	2.83
w.sense of control	19	22	20	19
nw.sense of control	20	19	14	24
w.self-efficacy	22	18	25	17
nw.self-efficacy	23	18	18	22
w.months Medicaid	2	2	2	2
nw.months Medicaid	2	2	2	2
w.emotional support	11	11	27	14
nw.emotional support	23	21	13	28
w.age youngest child	6.5	16.8	6.2	1.10
nw.age youngest child	2.7	17.6	1.4	6.60
w.in school or not	0	0	0	0
nw.in school or not	0	0	0	0

* indicates log values used for matching procedure to normalize distribution.

Differences in Psychosocial Health of Women Moving From Welfare to Employment

Because the primary outcome of interest required comparing the means of two, pair-matched, dependent groups of people, paired t-tests were conducted to assess the mean difference between the pairs of values. Results are shown in Table 40, which illustrate there were no significant differences in depression (p = .67), self-esteem (p = .56), self-efficacy (p = .55), or perceived emotional support scores (p = .51) between women who continued to receive AFDC or those who left welfare for employment in Year 2. Thus, there was no relationship found between psychosocial health and a change in status from receiving AFDC to employment.

TABLE 40: Differences in Psychosocial Health in Women Moving from AFDC* Receipt to Paid Employment: Paired t-test Results, Family Income Study (FIS) Data, Years 1 and 2

	Depression	Self-Esteem	Self-Efficacy	Perceived Emotional Support
Mean Difference	-.0204	-.0243	.0845	.0137
Standard Error	.0470	.1590	.6580	.7910
z-score	-.4335	-.1528	.1284	.0173
p-value	.6677	.5607	.5511	.5069

*AFDC=the former Aid to Families with Dependent Children program.

Findings: Research Question Two

What was the effect of implementing the Family Support Act in Washington State on education or job training program utilization?

In 1990, Washington State implemented the employment and training component of the Family Support Act (FSA) of 1988 (the Job Opportunities and Basic Skills Training program) (Long, Nightingale, & Wissoker, 1994). The timing of data collection for the FIS (1988-1992) and the implementation of the FSA in 1990 created the fortuitous opportunity to examine the effectiveness of this particular policy with respect to whether differences in educational involvement occurred before and after its implementation.

Although as a policy the FSA was abidingly deficient in establishing the changes necessary to facilitate long-term self-sufficiency for poor single-mothers in economic and practical terms, it did create some opportunities for women to increase their employment skills and experience. The fundamental provisions of the FSA that allowed for this were: 1) extension of child care subsidies while involved in job training or educational programs and during the first year of leaving AFDC for paid employment, 2) compulsory extension Medicaid coverage for participants and their children for up to one year after leaving AFDC for paid employment, and 3) mandating that states increase the availability of job training and educational programs for AFDC recipients (as well as mandating that an increasing percentage of those receiving AFDC were enrolled in

such programs up to 1995). Because the policy may not have been fully implemented by the time Year 3 FIS interviews were conducted, only participation rates in Years 1, 2, 4, and 5 will be compared in the analysis.

Correcting for Missing Data Using Multiple Imputation

The central obstacle to answering this question using the FIS data was the high degree of nonresponse over time (see Chapter 3 for detailed discussion). Missing data in the FIS had notably increased by Year 3 (participants decreased from n =1848 in Year 1 to n =1172 in Year 3 -- or there was 37% missing data by the third year). Using a complete-case analysis approach was inadequate to answer this question and would have clearly led to biased results, as the participants most likely to have missing data in Year 3 and beyond were also those who were most likely to benefit from (or be targeted or mandated to participate in, depending on the state and situation) efforts aimed at increasing education and job training. To correct for this problem, missing data beyond Year 1 was replaced using a multiple imputation procedure (see Chapter 3 for detailed discussion). Figure 11 provides a sharp example of how using complete cases as opposed to multiple imputation for analyses could effect the results of this question.

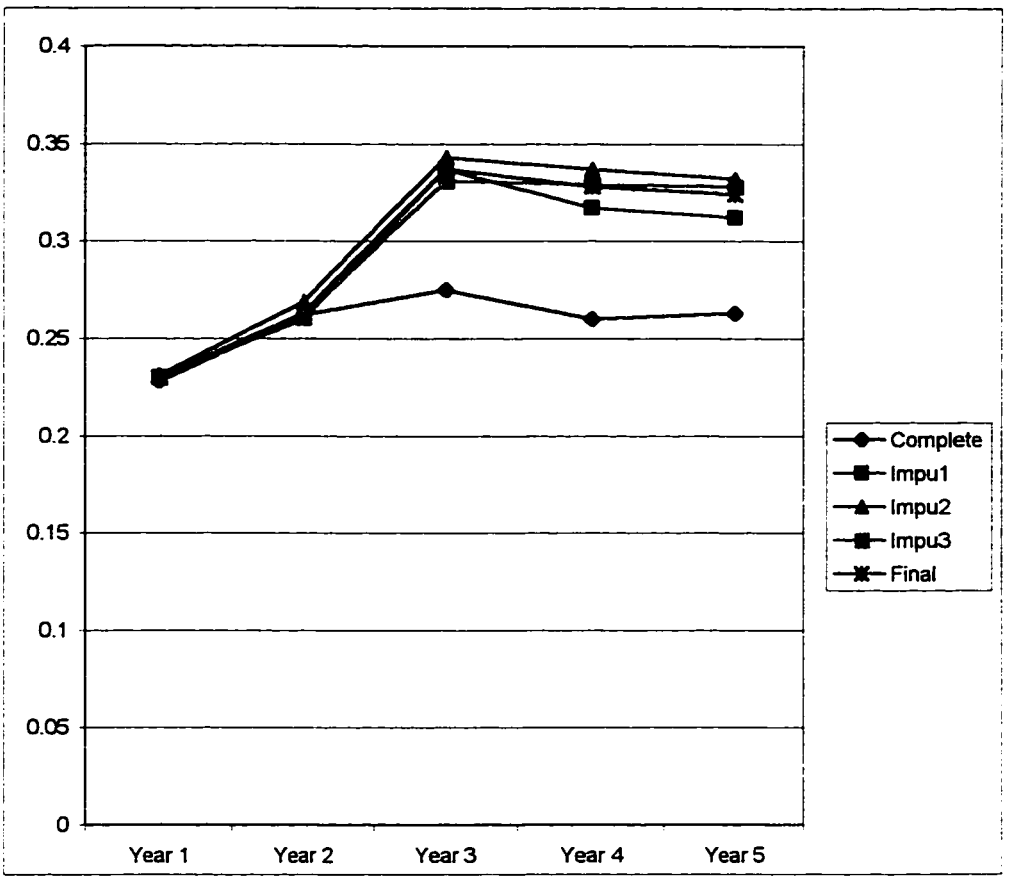

FIGURE 11: Percent Sample in School or Job Training, Comparing Complete Cases with Multiply-Imputed Data

There is a dramatic difference between the percentage of women involved in education or job training programs depending on whether you use complete cases (ignoring patterns of missingness) or replace data with multiple imputation (Figure 11). The difference is most notable at Year 3, which corresponds to the year a significant number of participants left the study. Three repetitions of multiple imputation were performed, which provided three sets of complete data (with all original missing data substituted) for all five years of the study. The line indicating "total"

represents the average values for all of the imputed data sets. In the logistic regression results that follow, the p-values were determined following the imputation adjustment, and correspond to the "final" values in Figure 11.

Effectiveness of the FSA in Increasing Participation in Job Training and Education Programs: Logistic Regression Results for Research Question Two

Using the multiply-imputed data, a logit model was created to answer this question, where, conceptually, one variable is taken as dependent upon variation induced by the others (Knoke & Burke, 1980). Logistic regression models are the categorical variable analog to linear regression models for continuous dependent variables. Descriptions of the variables included in the model are:

Yt = a categorical variable indicating whether the participant was in an education or job training program.

Ytm = a categorical variable indicating whether the participant was in an education or job training program the previous year.

Zt = a categorical variable that indicates whether the year observed was before (Years 1, 2, or 3) or after (Years 4 and 5) the policy change.

Income = income in the previous year.

Age, education, and race = variables from Year 1

The regression model based on these variables is as follows:

logit(P(Yt=1|Ytm,Zt,income,age,education,race))

= b0+b1*ytm + b2*zt + b3*ytm*zt + education+race+income+age

Initial regression results for this full model are detailed in Table 41. As indicated, the strongest predictor of going to school one year is whether or not participants were in school the

previous year (i.e., those who were in school Year 1 were far more likely to be in school Year 2, those in school Year 2 were far more likely to be in school Year 3, and so on) (t =9.38, p =.001). The following variables were found not to effect the outcome (i.e., were insignificant), and were therefore dropped from the model: total number of children, marital status, and age of the youngest child. Although the effect of race was not found significant, it was more likely that white women attended school than non-white women (b =.11193656). Similarly, income was not found to be significant, though participants with larger incomes who did not go to school in one year were more likely to attend school the following year (b =.13997021). Therefore, both race and income were maintained in the model along with variables found to be significant.

Because going to school in one year was the strongest predictor of going to school in the following year, this required being controlled for in order to better determine the effect of the policy change (i.e., if people were in school after the policy change, we want to know it is not simply because they were in school the year the policy change was implemented). Thus, ytm was set at 0, to eliminate this as a contributing factor in the results. With these changes, the final model was as follows:

logit(P(Yt=1|Ytm=0,Zt,income,age,education,race))

= b0+ b2*zt + education+race+income+age

TABLE 41: Effectiveness of the FSA in Increasing Participation in Job Training and Education Programs: Logistic Regression Results for Research Question Two
Family Income Study, (n = 1848 women)

Coefficients:	Value	Standard Error	t value	p value
(Intercept)	-4.35634187	0.875187306	-4.9776109	.001
Ytm	9.38630017	1.270465860	7.3880774	.001
Zt	0.74199257	0.126834803	5.8500707	.001
Income	0.13997021	0.094338966	1.4836946	NS
Agey1	-0.01915997	0.005059619	-3.7868400	.001
Educatw1	0.07743734	0.021800457	3.5520970	.001
White	0.11193656	0.129320651	0.8655737	NS
Ytm:zt	-1.62896003	0.185486239	-8.7821071	.001
Ytm: income	-0.57193331	0.134651978	-4.2474928	.001

The most significant finding of the results (Table 41) is that there is substantial evidence the FSA increased participation in education and job training after its implementation in Washington state. The log odds for respondents who were not involved in such programs before the policy change increases (0.74) significantly (p =.001) once the policy was in effect (as represented by the coefficient zt). Because the odds ratio (OR) is more familiar to researchers in the health sciences, the log odds was converted to a measure of odds ratio, which was 2.16. As an estimate of the magnitude of an association between an exposure and event, the OR indicates the likelihood of participating in an education or job training program following the policy change as opposed to before it. Thus, respondents in this sample were twice as likely to participate in such programs after the FSA was implemented.

Interestingly, the likelihood of participating in education and job training decreased with age (t = -3.78, p =.001). Moreover, the more education respondents had, the more likely they were to enroll in additional educational or training programs (t = 3.55, p =.001). It may be that once women attained a certain level of education (high school completion or the first year of college), the more likely they were to continue. This is possible, given that "breaks" in years of education were not accounted for in this analysis; thus, a woman who finishes one year of education at a

community college, but needs to take a year off because of a child's illness, may indeed be more likely to re-enroll or continue with her education than a woman who has no additional years of education invested beyond high school. Additional factors that may have influenced this outcome will be further discussed in the following chapter.

Summary

This chapter presented the results of both descriptive characteristics of the sample for this study and of the statistical analyses to the two research questions. In general, the sample for the study consisted of primarily young, white women who were not married, had at least one child, and at least 12 years of education. Women in the sample receiving AFDC had not only more children, but younger children, as well. Although employed women had higher mean incomes than women receiving AFDC, the vast majority of the sample reported incomes below 100% of the federal poverty level. Consistent with these findings, the participants also felt they received very little material support.

With respect to health, no differences were found between the psychosocial health scores of women who left AFDC in one year for employment the next and those who remained on AFDC for two consecutive years. There was a significant increase in participation in job training or education programs following the implementation of the FSA in 1990 in Washington State, which is in part what the policy was designed to do. Further discussion of the relevance of these findings continues in the next chapter.

V. Discussion

Sociopolitical and economic factors in the environment are driving forces in shaping the lives and health of women. Those factors continue to play a significant role in perpetuating the disparity that exists in the distribution of poverty along gender axes. The purpose of this study was to examine the relationships between welfare policy and the psychosocial health of women. Data from a large, longitudinal survey of women receiving welfare and those considered at risk for needing welfare in Washington state, the Family Income Study (FIS), were used to answer the following questions:

1. What is the effect of going from welfare to paid employment on the psychosocial health of women? and,

2. What was the effect of implementing the Family Support Act in Washington state on education or job training program utilization by women?

Results of statistical analyses were presented in the previous chapter. In this chapter, the implications of the findings and the contributions this study has made to understanding the dynamics between welfare policy, women's health, and the life circumstances of women who are poor are reviewed. The findings of the two research questions will be initially discussed, with comparisons of the findings from this study being made to prior research. Inherent limitations of the study will also be examined with respect to each of the questions.

The latter portion of the chapter addresses how science influences social knowledge, specifically implicating the many perils of utilizing science for policy making. With respect to this, examples will be provided of how discursive practices in developing "poverty policy" often result in the disenfranchisement of the very individuals the policies are meant to serve. Finally, the consequences of using social science as a tool for making policy, the implications of this study for nursing research in particular, and recommendations for future nursing research are presented.

Psychosocial Health and Moving from Welfare to Employment

Moving welfare recipients from "dependency" to "self-sufficiency" is the primary goal of welfare policy, not improving or maintaining the health of individuals who make this transition (Gueron, 1987). In fact, the virtual absence of studies examining whether the health of women improves or deteriorates as they move from welfare to paid employment (or cycle back into welfare) speaks clearly to the lack of interest on this subject. Although "health", from various conceptualizations, has appeared as a variable under study in some research of welfare use, it has been consistently limited to determining how an AFDC recipient's "health" influences her ability to work. Moreover, there remains only marginal discursive space for considering how entry into a low-wage labor market may conversely influence a woman's health. The basis for this research question was to address this gap in our understanding by examining whether the experience of making the transition from AFDC receipt to paid employment affected the psychosocial health of women.

Numerous studies have indicated that welfare recipients prefer employment over public assistance, disdain the humiliation associated with receiving welfare, and want to financially support themselves and their families (Edin & Lein, 1997; Gordon, 1990; Schram, 1995). In a study of women affected by changes in AFDC in 1981, Sarri, et. al. (1984) found that of the women no longer employed, 41% had wanted to continue in their current job but were either laid off or provided only a temporary position. Research by Gottschalk and Danziger (1989) similarly found that women working in low-wage jobs were three times more prone to layoffs than others (Gottschalk & Danziger, 1986). In Sarri et. al.'s sample, 66% of women employed full-time and 79% of women employed part-time wanted to work more hours, but were not offered additional hours by their employers, and were unable to find second jobs that coincided with the hours they could secure child care. Interviews with women on AFDC by Edin & Lein (1997) clearly indicate

that women want to leave welfare for employment, but few have been able to achieve that goal because of low-wage labor market conditions.

Given the strong desire to leave welfare, it seems reasonable to suggest, then, that as women are successful in leaving public assistance for paid employment, some aspects of their health, surely, at least, aspects of their psychosocial well-being, may improve. In this study, however, no differences were found in psychosocial health (as measured by self-efficacy, self-esteem, sense of control, or depression) between women who left AFDC for paid employment from Year 1 to Year 2, and those who remained on welfare consecutively during those two years. In addition, because social support has been established as a predictor of health status, a form of social support (emotional support) was examined, as well, with no differences between the previously mentioned groups. Although a lack of measure sensitivity may have influenced this finding, it is most instructive to now turn once again to the sociologic fieldwork of Edin & Lein (1997), and the findings of Sarri, et. al. (1984) as a foundation for understanding how the disjuncture between the desire to leave AFDC and the experience of leaving AFDC explains these results.

Lessons from Women Who Leave Welfare for Employment

When listening to low-income single mothers tell their experiences of exiting AFDC for employment, the majority indicate that they had "high hopes" upon entering the labor market (Edin & Lein, 1997, p.71). They, like many, held faith in a U.S. capitalist economy that assures financial reward for working hard: "they believed that if they could manage to stay at one job long enough or, alternatively, use each job as a stepping stone to a better one, they could make ends meet through work" (p.71). The majority struggled in the low-wage job market for three years before realizing that without additional education, skills, or training, no ladder to climb would ever appear, and were reapplying for AFDC benefits as a possible means of attaining additional skills through the educational supports enacted in the late 1980's (the FSA). Perhaps most descriptive

of the determination of the women in Edin & Lein's study is the following summary from their interviews:

> Despite [the disappointing reality of the low-wage labor market], many single mothers remained committed to the work ethic and tried to leave welfare again and again . . . Most mothers had moved from one job to another, always looking for some slight advantage -- more hours, a better shift, a lower copayment on a health plan, more convenient transportation, less strenuous manual labor, or less monotonous work -- without substantially improving their earnings (p.73).

National data uphold what Edin & Lein (1997) found in their interviews: that material hardship actually increases when leaving AFDC for employment. In 1991 dollars, Michalopoulos and Garfinkel (1989) estimated that workers with demographic characteristics similar to that of AFDC recipients were likely to earn only $5.15 an hour if they left welfare (Michalopoulos & Garfinkel, 1989). Using data from the National Longitudinal Survey of Youth (NLSY) and the Current Population Survey (CPS), Burtless (1994) suggests that since the late 1970s, the job prospects for young women with limited education have worsened. Burtless estimates that a woman earning an average hourly wage in the low-wage labor market ($4.69) in 1990 would have needed to work nearly 3,000 hours a year to obtain enough income to exceed federal poverty standards. Further, Diana Pearce's (1991) analysis of the Panel Study of Income Dynamics (PSID) data found that for 70% of women on welfare in the 1980's, leaving public assistance for low-wage employment left them no better off (Pearce, 1991).

When the grim realities of limited job prospects, worsening material hardship, and heightened uncertainty about receiving stable income for women leaving welfare for employment are considered, one might expect the additional stressors could easily erode any sense of psychosocial well-being women had. Yet, regardless of the increased strain, women in Edin & Lein's (1997) interviews reported feeling a greater sense of self-esteem when employed than when on welfare, despite the fact that surviving financially in the low-wage job market was frequently as or more difficult than meeting their basic needs through public assistance. Although

no specific measures of psychosocial or physical health were obtained during their fieldwork, whether the dual responsibilities of being the primary caregiver of children and maintaining employment enhance or erode health status has produced mixed results elsewhere.

Prior Research on Women's Health and Employment

To date, research examining women, work, and health has primarily adopted one of two theoretical perspectives: the role stress and illness perspective, or the health benefits perspective (Killien, 1997). The role stress perspective emphasizes that maintaining multiple roles and competing demands results in increasing amounts of stress, and leads to compounding health problems (Haw, 1982; McBride, 1990; Sorenson, 1987). In contrast, the health benefits perspective assumes that employment provides access to a number of benefits highly correlated with improved health status (such as income, health care insurance, social support, knowledge building, and increased self-esteem) by providing a source of satisfaction other than one's family (Froberg, Gjerdingen, & Preston, 1986; Hibbard & Pope, 1992; Sorenson, 1987).

In applying existing research perspectives of women's health and employment to the experiences of women moving from welfare to paid employment, neither of these binary theoretical categories is adequate for examining how such a transition affects their health. Universal arguments supporting that work is either beneficial or deleterious to women's health misses the multiple ways that class, race, and other characteristics intersect to create a multiplicity of experiences.[10] More applicable frameworks that take into account the likely interactive effects of working conditions, family roles, economic circumstances, alternate forms of social support, and individual characteristics on influencing health are both necessary and beginning to emerge.

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[10] For an in-depth analysis of the ways race, class, gender, and work intersect, see Arnott & Matthaei (1996). *Race, Gender, and Work: A Multicultural Economic History of Women in the United States.*

All of the above theoretical positions assume that employment in some way affects both the material and emotional support of women. The findings from this study indicate that women who were employed all 12 months out of the year and did not receive AFDC perceived they gain very little material support and only a modest amount of emotional support from any source (see Chapter 4). Women working all 12 months did not perceive they received any significantly greater material or emotional support than women receiving AFDC all year. As other research corroborates, this suggests that women working primarily in the low-wage employment sector faired no better than AFDC recipients in terms of the amount of material or emotional support they received, both groups struggled comparably to meet their most basic financial and human needs (Burtless, 1994; Edin & Lein, 1997; Pearce, 1979; Sarri, et al., 1984). Further, as Tebbets (1982) explains, low-income employed mothers are unable to purchase substitutes for their own labor in the home, which exacerbates the strain of holding dual roles. In this way, "poverty compounds the already significant problems of combining work and family that mothers of all economic levels face" (p.85).

Few, if any, studies regarding the psychosocial health of women making the transition from welfare to employment are directly comparable to the findings of this study. Other studies, however, have associated more specific characteristics of employment and family to psychosocial health. Hall, et al., (1985) found that depressive symptoms were positively related to low-income, unemployed, single-mothers (Hall, Williams, & Greenberg, 1985). Additionally, typical of the low-wage jobs women receiving welfare are able to find, a 1984 survey by the National Association of Working Women found a high correlation between stress-related illnesses (such as heart disease, hypertension, and gastrointestinal disorders) and employment considered to be lacking authority, disinteresting, not challenging, and requiring fast, repetitious work (National Association of Working Women, 1984). As also noted in the Edin & Lein (1997) interviews, McBride (1990)

demonstrated that when employment is perceived as interfering with family responsibilities, women's' stress-related health risks are compounded.

Comparable Studies of AFDC Receipt, Employment, and Mental Health

Studies of women's psychosocial health and experiences of moving from welfare receipt to employment are disparagingly lacking. The most comparable studies to date were conducted by Sarri, et al., (1984) and Belle et al., (1982). There were some similarities between this study and those conducted by Sarri, et. al., and Belle, et. al., in that in both studies the majority were single-mothers in their 30s or 40s, many had children that were preschool age, most had completed high school, and had extensive employment histories in the low-wage labor market. There were, however, differences with respect to race and residence between the Sarri, et. al., sample, Belle, et. al., sample, and this sample. The Sarri, et. al, sample consisted of 37% non-whites, with 90% of the sample being from an urban area. The Belle, et. al., sample consisted of 50% whites and 50% non-whites, and all resided in an urban area.

Although not directly equivalent to the self-esteem scale used in this study, Sarri et al., (1984) sought to determine how reductions in AFDC benefits for women (many of whom worked, when policies were less restrictive about earned income) affected their well-being and mental health using the 10 item Rosenberg Self-Esteem Scale. In the Stress and Families Project (SFP), Belle, et al., (1982) examined how environmental stressors in 43 low-income women affected their mental health, 33 of whom were on welfare. The scales for depression and self-esteem used in the Stress and Families Project include the Center for Epidemiologic Studies Depression (CES-D) Scale and the 10-item Rosenberg Self-Esteem Scale. Additional measures of mental health in the SFP were anxiety, mastery, and stability of self-esteem.

The majority of women in this study had higher self-esteem scores than lower (median = 47 on a 12-60 point scale, with higher scores indicating higher levels of self-esteem). In contrast, the majority of women in the Sarri, et al., (1984) study fell below the 35th percentile on self-esteem.

The Sarri, et al., study did not compare self-esteem scores with respect to making a transition from AFDC to employment; however, it did find a higher number of women reporting physical symptoms such as an upset stomachs, nervousness, headaches, a loss of appetite, and sleeping difficulties also scoring in the lower 35th percentile on the Rosenberg Self-Esteem Scale. In the Belle (1982) study, 47% of respondents had high scores of self-esteem, 35% had medium scores, and 19% had low scores. In comparison to Belle's study, a higher percentage of participants in Year 1 of the FIS had high self-esteem (69%), an approximately equal percentage had medium self-esteem (30.5%), but a much smaller percent had low self-esteem (.5%).

In terms of depression, Stress and Family Project participants scored fairly high on the CES-D, with at least half of the distribution of scores falling within the range found in psychiatric patients who were depressed. The distribution of depression scores reported by Belle were similar to that reported by individuals who had either recently separated from their spouse or experienced the death of a spouse. In Year 1 of the FIS study, however, depression scores tended to be lower, with lower scores indicative of less depression. In this study, 58% of participants scored in the lower one-third on depression, 34% scored in the middle one-third, and only 8% were in the highest one-third using the Pearlin Depression Scale.

As reported by Tebbets (1982), participants in the FSP associated employment with feelings of confidence, greater self-esteem, accomplishment, independence, and dignity. Of those unemployed in the FSP, many wanted to work, but often found the barriers of no health insurance, attaining affordable child care, and needing a better education to secure employment to great to overcome. Similar to the findings by Edin and Lein (1997), women in the FSP were dissatisfied with the quality of jobs held, and desired better employment. Specifically with respect to depression, Tebbets reported a statistically significant relationship between employment status and depression: holding many other life circumstance and stress variables constant, employed women in the FSP sample were less depressed than those unemployed. Findings from the FSP

were consistent with the finding of employment being negatively associated with depression scores ($r = -.1445$, $p < .05$).

Differences in the self-esteem and depression findings between this study and that reported by Belle (1982) are most likely due to the different scales used, albeit this may also to some extent reflect geographical differences (Massachusetts versus Washington state). For example, in the FSP project reported by Belle (1982), the CES-D is designed to identify clinical levels of depression, while in this study, the purpose of the Pearlin Depression Scale is not to identify clinical depression, but conceptualized depression as a global indicator of stress. Although no measure of stress was included in the FIS, it is notable that Belle found the degree of stress based on participants' life conditions was highly correlated with all of the mental health measures (with correlates ranging from .35 to .65, all statistically significant at $p < .05$ or higher).

Limitations of the Findings to Question One

The primary limitation in determining whether making the transition from AFDC receipt to paid employment affected the psychosocial health of women pertained to the measures included in the FIS. In general, there are two major concerns: 1) the restricted number and type of health measures included, and 2) the lack of sensitivity of the instruments to detect change.

The original purpose of the FIS was not to determine how AFDC receipt or employment affected health, but was meant to shed light on the reverse. Thus, the health measures were not meant to be outcome measures. Instead, "health" status questions were included only as possible determinants (or confounders) for determining what drives welfare use. If "health" had been a predetermined outcome variable of the FIS, it is likely that a broader category of health indicators would have been used that were sensitive to change, and known to be valid and reliable. Possible measures would include a scale specifying physical symptoms experienced, the number of physician or provider visits for specific problems, whether routine, recommended screening tests were completed, and so forth. Such measures would have added substantially to

the degree of information that could have been obtained regarding health status. Specific limitations with respect to the validity and reliability of the psychosocial measures are detailed in Chapter 3, but reliability coefficients for the instruments were modest, at best. Furthermore, there is a central, theoretical issue of whether the instruments were measuring states or traits.

The Heise method was used to determine the stability of the psychosocial instruments (including self-worth, depression, self-efficacy, sense of control, and self-esteem) (Heise, 1969). This method provides researchers with a means of empirically separating construct stability from instrument stability, which in turn supplies information regarding the state- or trait-like quality of the measure (Knapp, et al., 1997). The principal distinction between the two is a conceptual one, in that states are considered to vary over time and events, while traits exhibit enduring qualities. Much debate continues in the psychological literature with respect to this difference, however.

Applying Heise's method in this study, all of the psychosocial instruments in the FIS were demonstrated to measure traits as opposed to states (with r ranging from .75 to .88). Conceptually, instruments identifying states would have performed better given the research question (i.e., is there a change in psychosocial health, based on a change in life circumstance). Therefore, finding no differences in psychosocial health between women who left welfare for employment or those who remained on welfare may well be attributed to the insensitivity of the instruments to measure change.

Summary

No differences in psychosocial health scores between participants who left AFDC for employment and those who remained on AFDC were found in this study. Although no studies exist that have examined this distinct relationship, others suggest that the struggles to make ends meet in the low-wage labor market are not acutely different from that experienced on welfare, and that stressors may even be compounded when making this transition. The instruments used to measure psychosocial health in the FIS were less than ideal, and their degree of insensitivity has

serious implications for the findings. Because of the lack of comparable studies and the limitations of the measures used, a sound interpretation of these findings remains tentative.

Policy Considerations for Increasing Involvement in Education and Job Training Programs

Since the 1970s, changes in welfare policy have been directed toward decreasing AFDC receipt through employment via efforts at increasing education, job training and/or experience in the workforce. In part, the direction of these changes represented a shift in the predominant public belief that recipients of welfare ought to have "reciprocal obligations," where work or the participation in activities directly leading to work are required in return for assistance.[11] Framing reform efforts in this manner also reflects the underlying belief that policies designed to reduce welfare require altering inherent, individual deficiencies of recipients (i.e., the lack of motivation to work or improve themselves) rather than intervening at a systematic level (i.e., targeting deficiencies within the policies themselves) (Schram, 1995). A number of studies examining the effectiveness of such policy changes have been conducted in various states using an individual frame of reference as the basis for interpretation. Similarly, the second question of this study sought to determine whether federal welfare policy changes (in the FSA) implemented in 1990 were effective in increasing participation in education or job training programs in Washington state, although the interpretation of the findings are based pivotally on a systems level.

The findings from this study clearly indicate that the implementation of the FSA legislation in 1990 increased participation in job training and education programs in Washington state. In fact, participation in such programs was more than twice as likely to occur following implementation of the policy (OR =2.16) than before.

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[11] Although appearing simple enough, this is a highly problematic statement in that it completely negates the value of mothering, parenting, or unpaid domestic labor that has been historically taken for granted, invisible, and expected of women. See Chapter 2 for a more detailed discussion, or see Gordon, L. (1990), *Women, the State, and Welfare.* Moreover, the perception that welfare recipients ought to work in return for assistance is not new, and dates back to the enactment of the Elizabethian Poor Laws. See Abramovitz, M (1996), *Regulating the Lives of Women: Social Welfare Policy from Colonial Times to the Present.*

There are essentially two theoretical and practical issues to consider when explaining why this policy change was effective. First, the theoretical position taken to interpret this data does not presume there are pervasive, inherent motivational "deficits" associated with the majority of women who are poor or receiving welfare. Instead, my interpretation of this finding focuses on the effects of the tangible supports extended to women who are already motivated to work and to learn (i.e., child care provisions and the availability of education or training). The second methodological issue to be addressed is the limited amount of data from the FIS that is available to directly resolve how much of the increase in participation was due to voluntary or mandatory aspects of the policy.

This study found that 23% of women in Year 1 of the FIS were involved in some form of education or job training activity. This remained fairly constant for Year 2 (26%), but dramatically increased in Year 3 (34%), and continued at higher rates in Years 4 and 5 (33% and 32%, respectively). Controlling for income and whether participants were involved in school the previous year (most highly correlated with enrollment the following year), women not consecutively enrolled in school each year were more than twice as likely to initially enroll or re-enroll after the FSA was implemented.

Federal Requirements for Participation in Job Training and Education

Following the implementation of the FSA in 1990, participation requirements in job training or education programs (JOBS) for those applying for or receiving AFDC varied locally depending on available resources. If resources (such as child care) were unavailable to participants because of insufficient funding, then recipients were made exempt. States were required, however, to fund whatever amount necessary to meet the minimum participation rates for JOBS set by the Federal government. Minimum participation rates for states overall AFDC caseload were 7% in 1990-91, 11 percent in years 1992-1993, 15% in year 1994, and 20% in year 1995 (U.S. Ways and Means Committee, 1996). There were penalties of reduced Federal funding for

states that did not meet these requirements. Although funding to states increased with the FSA for job training and education, it was provided in a capped amount determined by the AFDC caseload and other factors. If desired, states could exceed the amount spent on job training, education, child care, and Medicaid, but would be reimbursed at approximately 50-60% in matched Federal dollars (U.S. Ways and Means Committee, 1996). Therefore, financial incentives for states to offer these services beyond Federal requirements were lacking.

Comparisons to Prior Welfare-to-Work Policy Studies

To date, the largest representative study of welfare-to-work policy initiatives was conducted by the Manpower Demonstration Research Corporation (MDRC) in the late 1980s. The MDRC meta-analysis summarizes the results from a number of demonstration studies conducted in various states, nine of which implemented mandatory job training and/or work initiatives, and four that were voluntary (Gueron & Pauly, 1991). It is important to note that none of the 13 studies evaluated by MDRC included each and every element included in FSA, so the findings are not directly comparable. The findings from the MDRC study are, however, the most comparable available, and the aspects of the policy that are either similar or dissimilar to those in the FSA will be specified where necessary.

Of the 13 experimental evaluations conducted by the MDRC, most similar to the FSA was the Minority Female Single Parent Demonstration study (MFSPD). The MFSPD consisted of four sites across the U.S., was entirely voluntary in terms of participation, and included education, job skills training, employability training, counseling, child care, and other support services (Gueron & Pauly, 1991). Although participation rates at each of the four sites in the MFSPD study are not available from the MDRC research, at one site, voluntary participation rates reached up to 84%. The participants in the MFSPD study were all African-American or Hispanic women, with the majority (72%) receiving AFDC and having children under six years of age, and only 50% having a high school diploma. While there are clearly important differences with respect to racial

characteristics between the MFSPD (no whites) and the FIS (80% white, 6% African-American), other meaningful characteristics are the same, such as the high degree of AFDC receipt, the number with young children, the number lacking a high school diploma, and the similarities in support services. Equally important, the outcomes of the MFSPD program demonstrated increased GED attainment and increased employment and earnings after 12 months (Gueron & Pauly). The high participation rates and increases in employment or educational attainment suggest that women receiving welfare are eager, able, and motivated to improve their life circumstances and financially support themselves and their children if provided the opportunity and supports necessary to do so.

Other evaluations of voluntary welfare-to-work programs in Massachusetts (which were not included in the MDRC analysis and varying support services) found that approximately 33% of AFDC recipients were participating (Gueron & Pauly, 1991). Additionally, one entirely voluntary program in New Jersey that subsidized on-the-job-training reported 40% participation.

Of the welfare-to-work initiatives evaluated by MDRC that required mandatory participation, the participation rate ranged from 24 to 51% of those eligible for services (Gueron & Pauly, 1991). Of researchers who support mandatory participation, Mead (1990) proposes that any implementation of programs designed to move AFDC recipients into paid employment that do not require mandatory enrollment are doomed to fail. To support this statement, Mead (1992) argues that people who receive welfare are unable to maintain any form of employment due to a "pathological instability," thus requiring mandatory participation and punishment for failure to do so (p.96). Such a perspective ignores the volumes of data demonstrating the cyclical and short-term receipt of AFDC by nearly all recipients (Schram, 1995). The majority of experimental studies indicate, however, differences between participation rates in either mandatory or voluntary welfare-to-work programs are not substantially different, and are similar to the findings of this study.

Before moving to the next section which presents women's views of job training and education programs, an additional point about interpreting the findings of this data must be made. Although the FSA had a number of ideological difficulties, there were some very useful provisions, such as the extension of child care, educational opportunities, and health insurance to women who make the transition from welfare to paid employment. The length and quality of these provisions can be highly contested, and indeed have inherent, practical problems. Equally troublesome, however, is the theoretical implication that "barriers" (such as child care, health insurance, and lack of skills) are all that need to be "fixed" in order to get people off of welfare and into the workforce. In part, this perspective supports an individualistic approach to reform efforts, and will be further discussed below. While these services can undoubtedly be helpful, deficiencies of the low-wage labor market are left unaddressed. In what follows, interviews with women subject to these structural barriers shed light on this issue.

Women's Perceptions of Job Training and Education Programs

More recently, and consistent with the findings of this study, the work of Edin & Lein (1997) documents that women were also participating in job training programs at rather high rates: in Illinois, approximately 66% were involved, 33% in South Carolina, 66% in Massachusetts, and 64% in Texas. The high rates of participation in their sample did not necessarily correspond to satisfaction with training or educational programs related to JOBS, however. Many women in their study had previous experience with JOBS programs in their states, where "participation" required applying for a predetermined number of jobs per months (comprising the Job Search activity component of the JOBS program), and/or attending a short-term course (typically, one week -- the Job Club component of many JOBS programs) that prepared them only in terms of how to search for available jobs and complete job applications based on their current skill level (generally, in fast-food service industries). The women in Edin & Lein's study knew they needed to achieve a higher level of education -- and sought to do this through the JOBS programs -- but

were frequently disappointed that such high-cost programs were not made available to them. As one participant in their study explained:

> "They have training programs and I've called to find out how to get into them. I don't know how good they're going to be. I know that they don't give you enough training to get a really good job, but they give you enough to get a stupid job and then you won't be any better off anyway. I want to go to technical college and get a two-year degree, but they just put you in some six-month computer course. I don't think those jobs will pay enough to make it worth getting off welfare" (p.75).

The type of educational and job training involvement in this study echoes what women describe in interviews conducted by Edin & Lein (1997). In Year 1 of the FIS, only 11.7% of women involved in educational or job training activities were doing so at a community college; 1.4% were attending a four-year college, and 10.7% were enrolled in some form of "other training." Initial examination of these data may suggest that actually a large number of women were working toward at least an associate degree (with approximately 50% of total participants enrolled in a community college), however, many short-term (less than two year) programs are held on community college campuses, and may not be leading to any significant increase in educational attainment at the degree level. Moreover, when evaluating the "success" of such training programs at a national level, the wage rates of trainees in these programs increased very little or not at all (Blank, 1994; Friedlander & Gureon, 1992).

Summary

The findings of this study support that increases in funding for job training and education (and the child care subsidies necessary for women to utilize such services) provided by the FSA were successful in increasing participation after implementation of the policy in Washington State. Given the voluntary participation rates in JOBS programs and that even mandatory participation rates exceeded those set by Federal minimum mandatory requirements (as indicated by national demonstration project data), it is likely the increase in participation found in this study is a reflection of the desire and interest of women to learn and to work when given the opportunity.

Despite the motivation to participate, the training received by the majority of women in the JOBS program was insufficient to substantially improve their financial circumstances or provide them with the skills necessary for achieving long-term, economic self-sufficiency.

Utilizing Social Science for Policy Making: Confronting the Perils

Social scientists involved in policy research encounter enormous discursive constraints. In many ways, these constraints are reinscribed, as the language required in welfare policy research necessarily determines who conducts the studies. Although not all of the constraints that will be discussed here were confronted directly by me during this project, all were present in a latent form: always there, but not immediately identified. Some were subtler than others, but all shaped this research to some extent.

Perhaps one of the most important things learned during this endeavor is the better appreciation I now have for the inherent (and frequently elusive) contradictions in how welfare policy research is conceived, what constitutes the appropriate discourse for conveying what is learned from that research, and what the goals of welfare policies are. This section elaborates further on these conflicts, and provides a necessary framework for a later discussion of what the implications are for nursing research, in particular.

In his book Words of Welfare: The Poverty of Social Science and the Social Science of Poverty, Schram (1995) discerningly illustrated the double bind in which reflective analysts of welfare policy research can find themselves by contributing to solving the problems of poverty, yet being required to do so in ways that are both rhetorically and methodologically inimical. Though many scholarly works may contribute to our understanding of this issue, Schram's perspective was so uniquely pertinent to the dilemmas that confronted me in the present study that it will be referenced throughout this section to better illustrate the perils of doing poverty research.

Legitimizing State-Supported Poverty Research

Central to Schram's (1995) argument was the disjuncture between analysts aspiring to establish welfare policy research as "legitimate" social science and the fact that, most frequently, its origin is the state. In other words, as poverty researchers strive to adopt all of the well-recognized, accepted, and esteemed qualities of "solid" science -- impartiality, objectivity, and autonomy, to achieve political credibility, their research must conform to the prevailing biases of welfare policy discourse. The irony of this, of course, as Longino (1990) and others (Harding, 1991; Keller, 1985) have more broadly pointed out, is that "doing" social science (related to poverty, or otherwise) is a contextually laden process, and therefore cannot be a method for obtaining pure, value-free knowledge.

Scholars such as Longino (1990) convincingly argued all observation is contextually situated, and that approaching a problem from a particular, identified and acknowledged perspective does not preclude making important contributions to a body of knowledge through systematic methods. Harding (1991) even extended this point of view further, suggesting that identifying one's position and beliefs in an area of research is likely to be less biased (or misleading) than operating under the assumption that one is capable of taking an Archimedean perspective: an impartial, disinterested, value-neutral, "view-from-nowhere" to observe phenomenon. Consequently, as welfare policy research originates from the state, with it come inscribed expectations about societal values. These expectations are inherently biased, and are premised on perspectives that originated with the founding of some of this country's most basic principles.

Economist Biases, Liberal Individualism and the Study of Welfare Policy

Of the biases in welfare poverty research, Schram (1995) pointed to two that are especially relevant here: the shift to a nearly universal econocentric language, and framing welfare as a problem requiring behavioral modification of its recipients. Both of these phenomena are

intimately related to the norms and institutions of the United States with respect to liberal individualism and a capitalist economy.

As Schram described, the centrality of the market in this society generates defining the broad concepts of value or worth in overridingly economic terms. These definitions of worth extend into self-worth, where there is an increasing burden to prove one's value by adhering to prescribed behaviors deemed not only autonomous and rational, but required to show one's ability to be economically self-sufficient and productive. The current political landscape, then, is "centrally concerned with evaluating which selves qualify as valuable members of the economic order and what the state should do in response" (Schram, 1995, p.5). Fundamentally, this concern is now and has always been the focus of debate regarding whether there ought to be any governmental regulation of or even response to instability in the economic market -- essentially, whether a welfare state is necessary (Block, et al., 1987). Furthermore, the value of having a welfare state hangs nearly exclusively in economic terms in one form or another, but primarily in ideological debate, regarding how providing financial assistance to individuals decreases work effort -- or the more liberal version of how assisting people to become self-sufficient, "productive" members of society ultimately facilitates the economic well-being of the whole (society).

Since the U.S. has developed its unique version of a welfare state, the question of how to systemize welfare programs has become a captivating issue for politics. Under the conditions of needing to regulate welfare programs, the state becomes engrossed in managing the social exchanges of individuals to keep the broader social order stable, being referred to as "the problem of governmentality" (Schram, 1995, p.5). One of the primary methods of handling this "problem" has been to increasingly implicate science (in this case, social science -- and, in particular, economics) in the role of policy-making. As both an economist and prior advisor to the U.S. Congress, Robert Haveman (1987) noted, "from the outset the War on Poverty was conceived of as an economic war; the designs, the debates, and the evaluations were all

conducted in economic terms. Economics was the central discipline in both the action and the research components of the war . . ." (p. 51-52). Therefore, because the state recognizes providing welfare as either an economic hazard or an economic benefit, the result is the same with respect to research: framing any advancement of knowledge about the U.S. welfare system in overwhelmingly economic terms. Using econometric models as a principal methodology for studying poverty, however, serves to augment the abstract and reductionist qualities of such research, further removing it from the realm of the practical, daily, particularized constraints those who are poor routinely confront. Despite this, as policy decisions have come to increasingly rely on scientific data to support any one ideological framework, the study of poverty has also become dominated by a group of social scientists who are willing to study controversial subjects in a manner consistent with the economic agenda of the government (Schram, 1995).

Katz (1989) articulated the consequences of adopting economics as the universal language for conducting studies of poverty well, stating "although the economists who dominated poverty research disagreed on answers, they asked the same questions . . . [and failed to] examine their assumptions about the role of market incentives on human behavior" (p.121). The question, of course, that has been reiterated again and again in welfare reform is: how can incentives be applied (or, more aptly, disincentives) to impel individuals to move off welfare and into the workforce (regardless of how much better or worse off they would be by doing this)?

Economistic-Therapeutic-Managerial Discourse in Welfare Policy Research

The second relevant point Schram (1995) made is the prevailing use of what he referred to as an "economistic-therapeutic-managerial" discourse (or ETM) in welfare policy research (p.4). Incorporating an ETM discourse in studies frames the problems of welfare in individualistic terms, and results in targeting the behavior of individuals as the site of intervention for the state. Other scholars have also criticized the individualistic approach to welfare reform interventions. As Naples (1997) pointed out, constructing the welfare recipient as a bureaucratic target creates an

object for intervention that bears little resemblance to the women whose lives welfare policy is designed to regulate. When constructing the problems of welfare policy as solely within individuals, the innate deficiencies of a postindustrial capitalist economy remain invisible, uncontested, untouched. Thus, research conducted using an ETM discourse that follows the predominant perspective of the state implicates poor people's behavior -- particularly with respect to the loathed characteristic of "dependency" -- as the primary problem, and contributes to maintaining the silence that surrounds the inability of a postindustrial economic system to adequately support all members of society.

The Paradox of Dependency in ETM Discourse

The negative connotations associated with "dependency" have been a mainstay in the ongoing debate over welfare reform. The previously obscure meanings of dependency and the more recent association of dependency as being corrupt have invoked a paradox for women and their association to being "dependent." The views of feminist scholars Fraser and Gordon (1994) illuminated the paradox as they traced the genealogy of dependency. They argued dependency is an ideological term that evokes "assumptions about human nature, gender roles, the causes of poverty, the nature of citizenship, the sources of entitlement, and what counts as work and as a contribution to society" (p.311). The historical review of the meanings of dependency provided by Fraser and Gordon suggests that although dependency did mean inferiority, legal coverture, and subjection, it was considered a normal position in the social structure as opposed to a deviant, variant form of personal behavior. With the rise of industrial capitalism, there was a semantic shift in dependency being referred to as less of a social relation and more an individual character trait. As the need to consecrate independence (or individualism) heightened, so too did anxieties about its antithesis: dependency. Moreover, as industrial capitalism became the norm, wage labor was reinterpreted, and became associated with economic independence, divesting it of its affiliation with dependence.

Despite the shift in meanings of dependency with respect to wage labor, women continued to be considered in an inferior sense dependents of their husbands, but were not deemed morally inept because of this (Fraser & Gordon, 1994). Women as dependents became perverse only when they were no longer in the shadow of their husbands and instead dependent on the state for financial support. Although being labeled as "dependent" now carries negative connotations for both men and women, the position that women have held in society places them in a paradoxical relationship with dependency. For women who need welfare to survive, this paradox is exaggerated even further, as their relationship to the state becomes an overtly economic one.[12]

The work of Fraser and Gordon (1994) is especially sanguine with respect to the image of women who are "welfare dependent" as lazy, immoral, sexually careless, unfit mothers who are undeserving of assistance. Their analysis clarifies how the use of ETM discourse in policy research is intimately related to inscribed meanings of dependency. Moreover, it sheds light on how ETM discourse targets individuals as requiring intervention in order to eliminate dependency, further characterizing people labeled as "welfare dependent" as pathologically weak and disobedient.

The Influence of Economic-Therapeutic-Management Discourse in this Research

Turning to how an ETM discourse affects this research in particular, there were a number of instances where I felt there was no language I could use that would not locate the participants of this study (or, all women who have received welfare) as "other." Descriptors such as "welfare recipients," "women receiving AFDC," "AFDC recipients," "women on welfare," "women receiving welfare" (and a host of others) have been encrypted to marginalize or "other-ize." Characterizing women as dependent on welfare seemed particularly hazardous because of the prevailing

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[12] For an alternate perspective regarding women's relationship to the state, see the writing of Frances Fox Piven, *Ideology and the State: Women, Power, and the Welfare State* in Gordon, L. (Ed.) (1990), *Women, the State, and Welfare*. Piven suggests the new relationships women have formed with the state are a potential source of power, and expand the opportunities for women to influence decisions made by the state.

association of dependency with corruption and powerlessness; yet, just as some women depend on the state for economic survival (be it under temporary or more permanent conditions), so too do we all "depend" on someone or something. The wage laborer depends on the company he or she works for economic support, the stockholder depends on the market to sustain itself enough to provide profits, and so on. To a large degree, as members of society, we depend on a great number of things, both inside and outside the workings of the market. In this context, being dependent is a fact of life rather than a repulsive character trait. Describing women as dependent on welfare, however, has the potential to either ostracize them or emphasize the dependence of all human beings, and depends on both the context in which it is written and the perspective from which it is read. The usefulness of substituting the word dependency with another will be further discussed in this section.

Additional common phrases such as "self-sufficiency," "women working," going from "work to welfare" in welfare policy have a tendency to reinscribe the notion that the work of reproduction and parenting (traditionally women's domestic roles) are value-less, require no specialized skills, and in no way contribute to the good of society. Nonetheless, using these phrases was at times necessary when describing existing research in welfare policy. At other times, alternative phrases such as "employed women" or "moving into the paid labor market" were used that did not at least emphasize the dominant notions of work at home not being "real work." Inherently, though, the usefulness of this strategy is limited, because, more generally, at times the discourse still conveyed an ETM approach: that one's "value" is determined by being employed versus unemployed, that one needs to be "self-sufficient" economically to avoid "dependency," among other examples. Being required to both position this study within and compare it to an existing body of research indeed constrained my ability to challenge or disengage the normative language of welfare policy.

The Use of Euphemisms for Contesting the Social Order

Many attempts at categorizing groups of people that neither marginalizes nor patronizes them have taken place in both the social sciences and in the political arena. A number of these attempts, however, have been in the form of isolated renaming practices. Schram (1995) referred to this as using "antiseptic language," and described the futility in using this as a method for creating political change (p.21). Too often, the process of renaming displaces the more necessary and useful process of political interrogation. Unless the structures that serve as the interpretive context for terms are deconstructed, any new terms used that have the intention of being "cleaner," less controversial, or less marginalizing are inclined to become nothing more than euphemisms, and adopt the meanings of the words they are meant to replace. As Schram argued, although "sanitizing language" may be paved with good intentions, it is insufficient for avoiding the "dehumanizing dimension of therapeutic discourse" (p.21). Therefore, whether one uses original terms or euphemisms in the context of welfare policy research, the individual deficiency narratives of ETM discourse are likely to remain intact.

Discursive Maneuvering in the Debate over Welfare: Examples from U.S. Congressional Hearings

Perhaps the best means of conveying the importance of discursive practices in policy-making is to provide examples from the very space in which welfare policy was created. In a recent analysis of the discourse of welfare policy, Nancy Naples (1997) presented some noteworthy statements made during the U.S. Congressional hearings of welfare reform in 1987 and 1988. Although the examples presented here are not specific to studies of welfare policy, they provide a foundation for understanding how studies must be constructed or the findings from research must be presented in a particular context.

Much of the language of welfare reform during the 1987-1988 U.S. Congressional hearings focused on the "new consensus" forged between Republicans and Democrats. Promoting the

term "new consensus" is an instance of how language can be given the illusion of being sterile: that is, stripped of its negative connotations, this term appeared to be positive, progressive, and represent new ideas with respect to governing the programs of a welfare state. A more critical social analysis, however, revealed that a "new consensus" was nothing more than a new euphemism, which reinforced the deeply rooted doctrines of liberal individualism, the social contract, and capitalism. Consistent with the historical development of much political theory, Naples (1997) also noted that from the beginning of the hearings, the new consensus was proclaimed a "natural occurrence," thus elevating it to a level above politics and its social construction. What the new consensus represented were beliefs shared by both Democrats and Republicans about the meanings of dependency, wage labor, what constitutes work, women's responsibilities, normative notions of the family, and deservingness.

The new consensus also embraced ideals of citizenship. At one point during the hearings, Senator Daniel Patrick Moynihan (D-N.Y) referred to citizenship as entirely unproblematic, stating "We are talking about citizenship here; and if we can make that our standard, we can't go all that wrong" (U.S. Senate, 1987b, p.110). This was supported by others providing testimony, such as Michael Novak of the American Enterprise Institute, when he claimed "The problem then is in our society, it seemed to us, that there is a growing number of fellow citizens who are not coping very well for themselves or for those who are dependent on them. We found this particularly shocking in the country -- in a free country such as ours -- because a free country depends on citizens of independence" (U.S. Senate, 1987b, p.79). Essentially, as Naples (1997) indicated, "The new consensus constructed those living in poverty as "less than full citizens" . . . by virtue of their economic insecurity" (p.927).

What may be for many analysts an anecdotal observation in the long tale of welfare reform debate was to Naples (1997) one of the most telling features of the discursive maneuvering that occurred during the testimony -- who was invited to or prohibited from speaking. With nearly no

exceptions, welfare recipients and poor women were represented by a variety of organizational delegates who spoke for them. Out of the 246 witnesses presenting at the hearings, only one had been a recipient of welfare (Naples, 1997).[13] Although a number of the organizational delegates quoted welfare recipients in their presentations, the virtual absence of voices from the people who would be directly affected is instructive, particularly with respect to the relation of power imbalances and the allotment of discursive space.

Naples (1997) further pointed out that despite the restricted discursive space in the hearings, there was testimony that directly challenged the prevailing ideologies shaping welfare policy. This was especially true where racism, sexism, and capitalism intersect. The testimony of Margaret Prescod, for example, exposed the contradictions of the dominant racial, sexual, and economic subtext in the hearings, pointing to the history of Black women's work and family expectations. She stated "that housework [as] a job is not new . . . Black women have been paid for generations for doing housework in white people's houses. When we did that work for no pay, it was called slavery" (U.S. Senate, 1988, p.66).

Of the social scientists that did testify during the hearings, David Ellwood's (1988) research finding that "the rise in welfare dependency in the last four years has been more associated with unemployment than with the changing family structure" was cited by members of Congress (U.S. Senate, 1987a, p.186). Although this at least acknowledged the relationship between the economy and the need for welfare, it simultaneously implicated dependency as the predominant problem. The well-recognized poverty policy analyst Mary Jo Bane represented the New York State Governor's Task Force on Poverty and Welfare at the hearings. During her testimony, Bane attempted to divert the blame for the problems of welfare away from an individual perspective by emphasizing successful reform requires "a genuinely mutual effort

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[13] Naples (1997) makes clear, however, she is not suggesting that simply increasing the representation of welfare recipients in hearings about welfare policy would displace the predominance of an economic-therapeutic-management discourse.

among all of us -- government, business, and private citizens -- that recognizes our mutual obligations" (U.S. Senate, 1987a, p.94). In doing so, however, she reinforces the deceptive presumption that the social contract is a contract between equal parties (Naples, 1997).

Departing from the previous examples of researchers interpreting their own work, publicly available data was used by others during the hearings. At one point David Ellwood's research was cited (available in a Government Accounting Office publication), where demographic data was used to distinguish long-term (black) versus short-term (white) welfare recipients by race. Characterizing Black women as "the" long-term recipients "displaced white women from, and conversely implicated Black women further, in the culture of poverty framework" (Naples, 1997, p.934). Thus, there is an additional hazard of conducting welfare policy research: once data are presented or published they can be extracted from their originally-intended interpretive context to either wittingly or unwittingly support a very different agenda.

Summary

As this section has illustrated, there are a number of pitfalls with respect to utilizing social science for policy making. In particular, the discursive constraints placed on researchers make avoiding marginalizing practices difficult. Strategies for inverting the use of ETM discourse in welfare policy research, however, are limited to the extent that liberal individualistic thinking, being the dominant mode of thought in this country, clouds the interconnectedness and dependency of all people. The profound implications this has for both nursing research now and the direction it will take in the future are discussed in the next section.

Implications for Nursing

There are a number of considerations for nursing that can be drawn from this research: some are theoretical while others are methodological. With respect to the literature reviewed on women's social positions and how they relate to this study, many women who attempt to leave welfare for paid employment will encounter obstacles far larger than themselves. Many will

remain in poverty with inadequate child care, no health insurance, and no way of receiving income support should their fate in the private labor market make it necessary. Increasing participation in job training and educational programs is one possible means for improving the economic circumstances of women, but alone does not address other barriers in a labor market reluctant to make the provisions necessary to accommodate women (particularly with respect to child care needs). What, then, can we learn about how such circumstances -- dictated at the macrolevel of environment -- influence their lives and health? Nursing can, at a minimum, reconceptualize what it considers the environment in broader terms.

As many examples from this research show, for nursing to continue focusing on the individual as the object of intervention and/or solely whether women have access to health care services -- although necessary, they remain insufficient approaches for substantially enhancing opportunities for improved health and well-being. Assuredly, in the words of Milio (1981), "Governments, especially at the Federal level, and corporations, especially the largest, and their interactions, set the range of alternatives available to people -- how many, how varied, how costly or convenient -- from which individuals make the choices that constitute their lifestyle, and, in turn, their profile of health and illness" (p.76).

In the theoretical domain, there are disturbing parallels of the predominance of ETM discourse in welfare policy and the language found in nursing theory and nursing research. In the review of the literature, I present a detailed discussion of how both nursing theory and nursing research interventions have been defined in overwhelmingly individualistic terms. With the exception of Milio (1981) and the work of nurse scholars such as Chooporian (1986), Kleffel (1991), and Butterfield (1990), little consideration has been given regarding how the social, economic, and political positions of people affect their health. Approaching health from an individual level frequently locates the problems of health strictly within individuals, with striking similarities to the economic-therapeutic-management (ETM) discourse so prevalent in welfare

policy research. The absence of nursing scholarship that implicates the larger social, political, and economic order only serves to perpetuate ideals of liberal individualism and a postindustrial, capitalist economy, which reinforces practices of marginalization. As nurses, we belong to a discipline that claims to care. As nurses, we repeatedly witness the consequences of social and economic marginalization in both health and human terms. We are then, I believe, obligated to avoid such dehumanizing practices whenever possible.

An important lesson can be learned from this research in terms of utilizing large, existing data sets in which studies were conducted primarily for other purposes, as well. The theoretical implications for using existing data in some aspects allows the researcher to subvert the original intentions of the study and instead use the data to answer questions that are posed from a different perspective. For instance, the FIS was not concerned with determining how women's health might be affected by welfare policy change. Concern for health in the FIS was framed in terms of how health might preclude women from leaving welfare and entering the paid labor market. This study asked a very different question with respect to the relationship between policies of the welfare state and health: it attempted to interrogate the means in which experiencing welfare policy (i.e., being urged to leave welfare for employment) may have ramifications for health. It also asked questions of the data regarding whether policies that were developed to provide the practical supports necessary for women to increase their involvement in education or training were effective. Thus, looking to how context affects health was an attempt to elude the deficiencies of an economic-therapeutic-management approach to the subject matter.

The methodological constraints with respect to the limitations of the psychosocial health measures restricted what could be interpreted from the findings. Although no differences in psychosocial health were found between women who left welfare for paid employment and those who remained on welfare, the instruments used to measure psychosocial health were not

optimally designed for answering the posed question. This is one of the more limitations of conducting secondary analysis with existing data.

On the other hand, the advantage of conducting a secondary analysis on the FIS data was that it allowed for a longitudinal view of welfare policy that would not have been possible otherwise (given resource constraints and time limitations). In addition to the longitudinal nature of the study, with the large number of participants, statistical procedures could be conducted on this data set that allowed more specific questions to be asked. Moreover, for nurse scientists to become more involved in policy research, increasing familiarity with working with large data sets will be required within the discipline.

Thus, this research has introduced some unique theoretical and methodological perspectives for the discipline of nursing to consider. Both have implications for how the discipline develops theories of nursing and conducts its scientific inquiries. Specific recommendations for nursing research, particularly within the policy arena, will be discussed in the following section.

Recommendations for Future Research

Just as there are theoretical and methodological implications of this research for the discipline of nursing, so too are there theoretical and methodological recommendations for future nursing research. Although the recommendations will be discussed separately as theoretical or methodological, they are at many times interrelated.

Clearly, theoretical perspectives that implicate the social, economic, and political environment as determinants of health are in order. This has, however, occurred with increasing frequency within the discipline. In her research on how nurses conceptualize interventions at the community level, Drevdahl (1995) argued, "it is imperative that . . . nurses stop simply recounting the injustices present in their communities and start employing interventions that breach usual social structures" (p.22). Similarly, another nurse scholar (Montgomery, 1994) has identified how

economic and social institutions have created a population of homeless people, as opposed to individual deficiencies causing the rampant problem of homelessness.

Within the context of welfare policy (or other policy) research, applying an ecological health approach requires thoughtful regard for the discursive constraints inclined to be placed on either the development of the study and/or its findings and interpretation. Avoiding an economic-therapeutic-management (ETM) discourse in policy research is one recommendation, as this would jeopardize the utility of an ecological health framework. As nurse scientists move into the policy arena, we also need to anticipate the manner in which the findings of our studies could be used to the detriment of the very people we are trying to help. Surely, nurse researchers as neophytes in the arena of policy analysis can easily get caught in the undercurrent of poverty politics.

Finally, on the personal philosophic level, nurses need to examine how they contribute to both creating and maintaining the social, economic, and political systems responsible for the oppression of others and their relationship to the inequities we face daily.

The methodological recommendations for nursing research closely follow the theoretical directions advocated. First, and what may seem contradictory, avoiding an ETM discourse in nursing research does not necessarily preclude gathering economic data or, to a lesser extent, using economic terms. As is often the case, to interrogate structures of power, marginalized groups need to be fluent in the language of the oppressor. To what purpose they put the language is what is the pivotal issue. Therefore, it is necessary for nurses who want to engage in policy analysis to become versed in economic "speak." Other nurse scholars agreed knowledge in areas other than nursing are important for the discipline, stating "the science of nursing does not comprise all the knowledge that nurses need in order to practice . . . but rather, it comprises only that knowledge that is particular to nursing" (Bottorff, 1991, p.28).

A second recommendation is for nurse scientists involved in policy to become more familiar with secondary analysis as a research method. This method has not been used in nursing as often as expected (Jacobson, et al., 1993), but can be a sound, practical means for answering nursing research questions in the right context (Gleit & Graham, 1988; Herron, 1989). This is particularly true given the increasing scarcity of available research funds.

Finally, with respect to the limitations of secondary analysis, a nursing perspective with regard to how social policies affect health is in order. A pointed example in this study is the selection of the insensitive instruments used to measure psychosocial health.[14] Would nurse scientists have been involved in designing the FIS, the conceptualization and measurement of health would likely have been very different. In particular, measures evaluating global perceived health, physical symptoms experienced, functional status, life and work satisfaction, perceived social support, and the utilization of health care resources, among others, would have situated this longitudinal, large-scale study well to answer some pressing questions about women's health and welfare policy.

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[14] This, of course, requires being invited to sit at the table, and invokes the problems associated with the carving out of discursive space discussed in the previous section. It is also, however, another reason that nurse investigators in the policy arena become versed in the theory and methods of economics. Increasing the visibility of nurse researchers in the policy arena, increasing our proficiency with respect to secondary analysis, and making incremental contributions to policy research will all serve to improve the odds of being requested to assist with designing policy studies.

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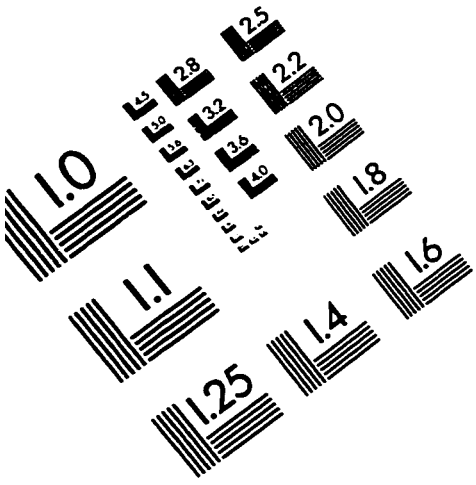
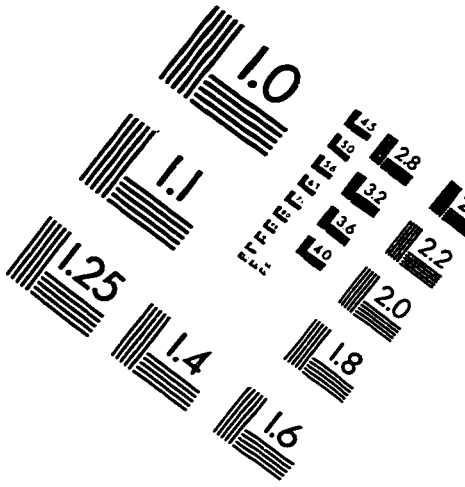
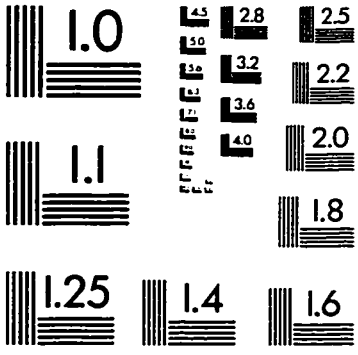
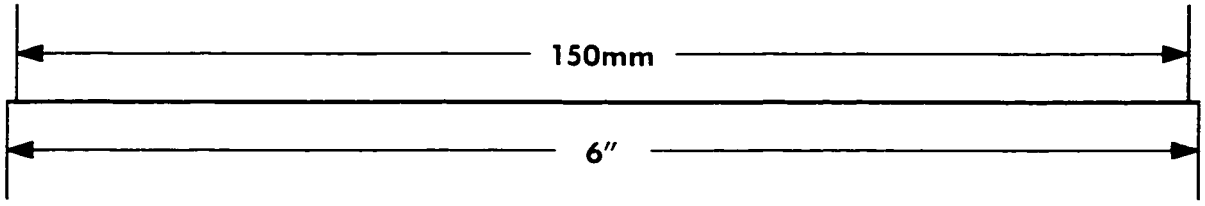
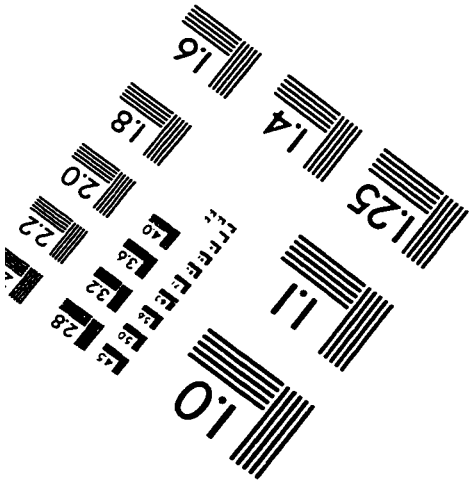
IMAGE EVALUATION TEST TARGET (QA-3)

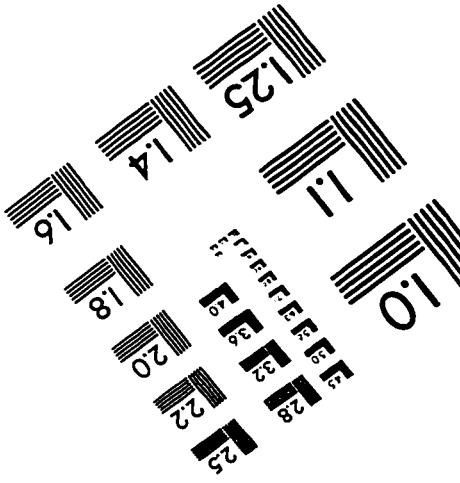












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