Women's experiences of demands and rewards in work and family life and the impact of differential orientations on mental health

Young-Rae Oum

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Women's experiences of demands and rewards in work and family life and the impact of differential orientations on mental health

Oum, Young-Rae, Ph.D.

Iowa State University, 1994
Women's experiences of demands and rewards in work and family life and the impact of differential orientations on mental health

by

Young-Rae Oum

A Dissertation Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the degree of
DOCTOR OF PHILOSOPHY

Department: Human Development and Family Studies
Major: Human Development and Family Studies

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For the Graduate College

Iowa State University
Ames, Iowa
1994
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CHAPTER I. INTRODUCTION

The purpose of this study is to investigate women's experiences in two different ways. First, women's experiences in demands and rewards in work and family life are examined in comparison with men's, and second, differential experiences among women are explored by examining the impact of women's orientations, membership of cohorts, social norms, and family of origin on mental health. This purpose is accomplished through analysis of the three-generational family data from the Longitudinal Study of Generations and Mental Health, led by Vern L. Bengtson and Marjorie Gatz, which were processed and made available by the Henry A. Murray Research Center, Radcliffe College, Cambridge, MA (Bengtson, 1986; Bengtson et al., 1985; Murray Research Center, 1989). This particular data set was selected for this study because the data include comprehensive information on women's and men's work and family experience and mental health across a wide range of adult ages at two different measurement points.

Importance of the Study

The issue of gender differences has been the most central one to American women's movement (Rhode, 1990). The persistence and intensity of the interest in gender differences derives from the urgent concern with gender justice rather than a simple curiosity (Jaggar, 1990). A feminist understanding provides an awareness of how the history of women's subordination has shaped, and continues to shape, both existing gender
differences and people's perception and evaluation of those differences (Jaggar, 1990). Yet, commitments to gender as a theoretical unit of analyses and to gender justice as a social and political goal have been increasingly criticized (Rhode, 1990): these commitments overgeneralize the entire female world, and at the same time, ignore other oppressed groups such as racial minorities. In other words, the effort to understand women only in comparison with men diverts the attention from interindividual differences among women and women's relationships with each other. Also, any framework that challenges gender injustice should condemn similarly other forms of social injustice to be ethically consistent and politically adequate, because gender injustice does intersect with other forms of oppression (Jaggar, 1990; Rhode, 1990). The purpose of this study, examining patterns of gender differences and women's different orientations, is derived from the awareness that gender is a very important and valid theoretical category to represent interindividual differences, yet understanding also can be found by examining diversity among women in the life-course in its own light.

Numerous studies have been published regarding gender differences in psychological adaptations and in life experiences in various social contexts including school, work, and family (e.g., Kendrigan, 1991; Walby, 1986). Some of the studies have focused on gender differences within the family in terms of marital experiences, attitudes, role expectations and enactment (e.g., Bernard, 1982; Thompson & Walker, 1989). Few studies have explored gender differences from the perspective of differential choices of personal investments of time and energy, however, nor have the choices characterized by the differential nature of rewards been examined. One purpose of this
study is to examine the patterns of gender differences in the rewards and demands from family relationships and work. The demands are defined as the areas of life that require the physical and psychological input of personal time and energy. They are measured by caretaking, help and support burdens, relationship maintenance, and paid and domestic work the respondents are carrying out. The rewards are defined by exchange theorists (Nye, 1979; Sabatelli & Shehan, 1993) as "pleasures, satisfactions, and gratifications the person enjoys" that derive from social approval, autonomy, money, security, or equality. In this study, the rewards are measured by emotional closeness to family members, marital satisfaction, and work satisfaction.

The question is not whether there are gender differences in specific role enactment but whether men and women show different patterns in pursuing psychological well-being by investing in differential areas and receiving rewards in different forms. The question of gender differences of demands and rewards is important because, if men and women are equally capable of making rational choices, yet are making different choices in terms of investment of their resources of time and energy, there should be a systematic difference in rewards. Men and women may have different causes for happiness and mental health also, as implied in the studies of gender differences in the relationship between marital status and mental health (Bernard, 1982; Fowers, 1991), which also is explored in this study.

The second major purpose of this study is to explore different types of women's orientations and the implications of those orientations for women's mental health. In this study, women's orientations include a relationship
orientation and an achievement orientation, which are the two dominant categories in the literature (e.g., Faver, 1982; Greenglass & Devins, 1982; Oliver, 1975; Stewart & Salt, 1981). Not much is known about the timing, duration, or sequencing of life events. Even less is known about women's life-courses. In fact, only relatively recently have researchers realized the need to study women's life-course in its own perspective, rather than as a deviant form of men's life-course (Bernard, 1981; Chodorow, 1978; Gilligan, 1982).

Individual differences are a very important theme both in the life-span framework and in feminist theories. Differential orientations among women have great implications not only for theory development but also for a wide range of public policies that influence women's lives. The implication of individual differences among women is that a theory of women's development cannot be generalized to the entire population of women, and that education and public policy should meet the different needs of women with various orientations. This study explores individual differences among women by delineating differential impacts of orientations, cohorts, and experiences in the family of origin, especially in relation to the consequence of mental health.

Organization of the Dissertation

This dissertation consists of six separate chapters, a list references, and appendices. The next chapter contains a review of three major theoretical frameworks relevant to this study. Previous studies are discussed in the
third chapter. Following is the methods chapter where the source of the data, the design of this study, hypotheses, variables, and statistical procedures are introduced. In the last two chapters, findings from this study are reported and discussed. All questionnaires and measurement scale items used in this study are included in the appendices.
CHAPTER II. THEORETICAL REVIEW

This study investigates the nature of women's experiences of demands and rewards in family and work in comparison with men's. Further, women's differential life-courses are explored by examining the impacts of their orientations toward work and family relationships, their different cohort memberships, and experiences in the family of origin.

The questions addressed in this study have been inspired and guided by three different theoretical frameworks: the exchange framework, the life-span paradigm, and feminist theories. Each of the three can be viewed as a perspective, a paradigm, or a framework, rather than a singular theory. Subtheories within each framework share some common theoretical content, whereas they diverge on some assumptions and propositions. For the first two frameworks, the review focuses on commonality; the feminist theories segment reviews three major theories separately.

The three frameworks inform and complement each other in this study. Exchange theory is used as both the explicit and implicit reference in measuring rewards and costs, and investments and outcomes, under the assumption that people make choices over their life-span based on their own subjective cost/benefit analyses. The life-span paradigm is employed to suggest differential life-courses, under the assumption that human behavior is influenced by the interactive forces of psychological, social, and historical factors. Generational (cohort) and social-timing effects are traced in the explanation of interindividual differences. Feminist theories provide a major perspective for this study. Feminist theories acknowledge that both
the family and the larger society are regulated by gender norms that consistently disadvantage women. Also, different theses from different persuasions of feminist theories raise important questions about women's life-course, especially the controversial nature of the impact of mothering and the relationship-orientation (connectedness) on women's mental health, which are investigated in this study. In the next three sections of this chapter, each of the three theoretical frameworks is reviewed and how each framework contributes to this study is discussed.

The Exchange Framework

The exchange framework is reviewed in this section, followed by an assessment of the debate regarding some controversial issues about this framework. Also, the way this study applies exchange framework is introduced.

The Framework

The exchange framework provides a very useful perspective in explaining how relationships are established and developed, how dynamic exchanges within a relationship occur over time, and how people make choices about alternative life chances, events, and paths. There are several different theoretical origins and backgrounds within the exchange framework; however, it is possible to delineate the common theoretical basis that has been applied to family relationships since the late 1960's.
The exchange framework generally assumes: 1) that humans always attempt to make some profit in their social transaction with others, and that they seek rewards and avoid punishments; 2) that they engage in calculations of costs and benefits in social transactions even though they are not perfectly rational; 3) that they do not have perfect information of all available alternatives, but that they are usually aware of at least some alternatives, which provide the basis for assessing costs and benefits; and 4) that the importance that humans attach to the behavior of others in the relationship varies from person to person, and can vary over the life-course (Sabatelli & Shehan, 1993; Turner, 1991).

In applying exchange concepts to family relationships, the implicit assumption of selfishness as an essential human motive has been challenged with the argument that family dynamics are not typically the process of selfish profit pursuit. Becker (1981, 1991) points out that Adam Smith himself recognized that altruism is important within a family. He argues that altruism dominates family behavior perhaps to the extent that selfishness dominates market transactions. Because families are responsible for a sizable portion of the economy, altruism is much more important than commonly understood even in the market economy.

England (1989) pursues this matter further, maintaining that the assumptions of selfishness and rationality reflect a "separative self" that has been assumed and glorified, and seen as masculine rather than feminine in Western thought. That is, conceptualizing self as autonomous and independent from others is typically masculine. Women empirically have been found to be more emotionally connected to others, and more empathic
and altruistic than men, as a result of social construction. She argues that females are more altruistic and more connected than their male counterparts within the family; thus, the dynamics within the family cannot be understood correctly when the classic exchange assumptions are generalized.

There are some problems in England's (1989) logic, however. First, she is not consistent in terms of her "feminist" argument: she maintains that she rejects the reason/emotion dichotomy, yet keeps falling into the selfish, isolated, rational men vs. altruistic, connected, caring women dichotomy. It is also not clear how emphasizing the self's relatedness to others can be an intrinsically feminist idea. Further, she argues that, in contrast to classic economic theory, tastes can change, especially for women, because they are "connected," or even because they are "altruistic." However, being connected does not necessarily ensure that someone will be empathic and easily influenced by others. One form of counter evidence may be co-dependency, in which two persons are very closely related but not necessarily in an altruistic or any other desirable way.

Radical-cultural feminists' belief that women potentially are no less capable than men in rationality or rational choices is shared in this study, but not their reasoning that women are morally superior to and less selfish than men nor that they are more altruistic as a result of being connected to others as England (1989) suggests. Indeed, women seem to be more caring and more connected (Chodorow, 1978; Gilligan, 1982), which may or may not be a result of socialization, mother-child relationships, or biological sex-differences. The exchange framework can be applied, nevertheless, without having to solve all these problems, when utility, cost, benefit, and rational
choice are defined as purely subjective concepts. The narrowly-operationalized definitions, such as utility or benefit, as monetary income, and rational choice as the choices that generate maximum material rewards should be modified because the importance of these criteria varies among individuals.

Homans meets the criticism of human rationality in a similar way: He suggests that people make calculations by weighing costs, rewards, and the probabilities of receiving rewards or avoiding punishments. But people do so in terms of values, that is, in terms of what bestows gratifications to them (Turner, 1991).

Becker (1981) differentiated psychic income from monetary income. It is impossible to predict how much monetary and psychic income a certain individual would pursue, especially when the two are canceling each other, because people not only have varying tastes, beliefs, and cultural backgrounds, but also respond differently in different situations. When it is assumed that an individual's benefit (or utility) results from a certain unique combination of subjective psychic and monetary profit, and this inner process is different for each individual and each situation, the exchange proposition can be generalized to suggest that humans engage in cost and benefit calculations in an attempt to maximize their satisfaction.

In this context, the altruism vs. selfishness controversy can be dealt with differently, also. Altruism may cost the concerned party in some measures, but it must bring the party some form of rewards, at least psychologically. For example, people would not stay altruistic if it is purely a punitive, painful, and costly experience without any rewards or expected
future rewards in any dimension, psychological, spiritual, social, or monetary. Thus, altruism involves at least some form of selfishness (that is, pursuit of rewards), and selfishness may not necessarily preclude altruism.

**Application of the Framework**

In this study, the process of cost/benefit analysis that happens inside of an individual's mind is regarded as basically unpredictable (ungeneralizable). It is assumed that each individual makes her or his own best choices, that is, choices that are the most rational in the context of the specific situation, and the individual's cultural and personal backgrounds. Thus, it is not necessary to assume that a certain group of people (such as women) are less capable, or less rational, nor that they do not fit the exchange model.

Applying this principle to women's life-course, it can be said that women follow individual life paths that are characterized by the differential timings of life events such as marriage, employment, and child bearing, and by a different style of long-term investment, for example, remaining as a full-time home manager vs. having a professional career outside the home. Further, these differential paths reflect each woman's different "rational" choice in various situations and alternatives. Shehan's study (1984) of women's employment and psychological well-being reinforces this view. She found that the relationship between married women's employment status and mental health, which had been controversial in former studies, disappeared when mediating factors such as help with child care and housework, work satisfaction, and involvement in other social networks
were introduced. These findings suggest that the subjectively-viewed rewards and costs of full-time housework and employment are related to women's psychological well-being. Thus, choosing a certain alternative (e.g., staying home full-time) does not reflect irrationality, altruism, or disengagement in cost/benefit analysis; rather each woman makes different choices that result from subjective cost/benefit analyses.

Gender differences in the patterns of life-course are expected because women and men will encounter different sets of alternatives, comparison levels, and cost/benefit determinants that the cultural and social construction provides. For example, Flaherty (1982) points out that, for boys in late adolescence, the choice in future plans is usually between alternative careers or life-styles, whereas girls of the same age often view career goals as conflicting with wishes for marriage and children. More recent studies (Berk, 1985; Duxbury & Higgins, 1991; Hochschild, 1989; Menaghan, 1989; Wiley & Eskilson, 1988) consistently show that women and men confront different role demands, social expectations, and burdens of role enactment in work and family.

Life-Span Paradigm

In this segment, the essential content of the life-span paradigm is reviewed. Then, the way this study employs the paradigm is introduced.
The Paradigm

The life-span paradigm is not a singular integrated theory; rather, it is a perspective that encompasses a variety of theoretical origins, life-span in psychology and life-course in sociology being the two most prominent ones (Bengtson & Allen, 1993). The term, "life-span," has been used among psychologists in theorizing ontogenetic change in individuals, while "life-course" has been used mostly by sociologists in analyzing how society gives social and personal meaning to the passage of biological time (Bengtson & Allen, 1993; Rossi, 1980).

A major focus of life-span developmental studies is individual development and psychological qualities, which usually call for direct measurement of living subjects rather than utilizing historical or demographic documents and records (Rossi, 1980). Human development is viewed as a lifelong process where ontogenetic and evolutionary principles are expressed, under the influences of biological, environmental, and interactive (of the former two) determinants (Baltes, Reese, & Lipsitt, 1980).

German psychologists who established the life-span paradigm (Rudinger & Thomae, 1990; Schmitz-Scherzer & Thomae, 1983; Thomae, 1979) tend to stress cognitive aspects. They acknowledge that an individual's own perception about his or her life, rather than objective qualities of situations, determines human behavior. Further, they presume that perception and cognitive representation of a situation are affected by the person's dominant concerns and expectations (Rudinger & Thomae, 1990).
Thus, subjective reports on cognitive and emotional measures are considered critical.

On the other hand, important interests of life-course research are delineating the social patterns in, and analyzing the social construction of the meanings of, "the timing, duration, spacing, and order of life events, which can be found or reconstituted from demographic or historical data such as census, parish and municipal records" (Rossi, 1980). Individuals are both products and producers of their history, and this dialectical process can be "most effectively studied from a life-course perspective that brings historical insights to institutional arrangements, personality, and their relations: social structures and personalities are embedded in historical contexts and sequences" (Elder, 1981). History is not only a long-term process that creates social contexts (e.g., industrialization) but also a series of economic, political, and social events that directly influence the individuals who experience the events (Neugarten & Datan, 1973).

In spite of the differential backgrounds of theoretical development, there are common elements, assumptions, and themes shared by the theories within the life-span paradigm. Bengtson and Allen (1993) summarize the five basic themes of the paradigm as the importance of: 1) multiple temporal contexts that are ontogenetic time (events in an individual's biographical scheme), generational time (events of family transitions), and historical time (events in larger social context); 2) multiple social structural contexts of development, that is, the belief that the context of social ecology, which provides socially constructed meaning, is essential for understanding human life and development, and at the same time individuals actively interact with
social contexts and structures; 3) diachronic process and change, viewing development as a dynamic and dialectic process where both intraindividual continuity and change are found; 4) heterogeneity, that is, emphasis on interindividual differences that seem to increase with aging and social change; and 5) multidisciplinary assessment, emphasizing the utility of plural perspectives from biology, psychology, sociology, history, economics, and demography.

Gender differences are discussed in some life-span literature. Hagestad and Neugarten (1985) reviewed several studies and concluded that women and men have different "punctuation points" and transitions of stages across the life span. For example, women are consistently perceived to enter middle age and old age earlier than men (both women and men perceive that women have earlier onset ages of both stages), which may reflect a double standard of aging in American culture (Drevenstedt, 1976; Hagestad & Neugarten, 1985; Kogan, 1979). Neugarten, Moore, and Lowe (1965) reported that young women perceived greater constraints regarding age-appropriate behavior than did young men. Gender differences are also found in factors that influence the timing of the transition to adulthood. For both women and men the timing of marriage and educational attainment are related, yet the relationship is stronger for women (Marini, 1978), meaning that educational attainment has a stronger impact on the timing of marriage for women than for men. On the other hand, age at first marriage has no significant effect on men's educational attainment but has a strong effect on women's educational attainment (Marini, 1978). For those who have specifically studied women's life-course and labor force participation, the
interplay of family situation and work has had great importance (Rossi, 1980; Stewart & Healy, 1989). But when examined more closely, there are cohort differences in the relation of family needs and labor force participation, and intracohort differences in values and attitudes toward women's roles (Stewart & Healy, 1989).

**Application of the Paradigm**

An important purpose of this study is to delineate several distinctive patterns in the life-course of different generational cohorts. Gender differences are examined in terms of people's choices and life events. Also, differential patterns in women's choices in family and career are explored. The life-span paradigm emphasizes the heterogeneity of structures and processes associated with development (Bengtson & Allen, 1993; Rudinger & Thomae, 1990; Thomae, 1979). In this sense, plural patterns will reflect the reality of human development better than will a singular type of life-course. This study explores different patterns of women's life-course that reflect women's heterogeneous experiences of family and work events and choices, occurring at different developmental ages.

Defining multiple categories of life paths means employing a typology, which carries a unique attraction and danger at the same time. A typology can provide a clear picture of a distribution of human character, although there is the potential for forcing individuals into a limited number of categories, generating an artifact as a result, by including relatively heterogeneous people within one category or dividing a relatively
homogeneous group into several different types. It is rather a plausible assumption, however, that a typology with several categories is a more effective tool to describe women's development than either a single type or extremely numerous types that do not contribute to parsimony at all.

In the Longitudinal Study on Generations and Mental Health (Bengtson et al, 1985; Bengtson, 1986; Murray Research Center, 1989), three generations of family members were assessed twice over a fourteen-year interval. According to the life-span paradigm, the data reflect several different temporal and social contexts. Respondents represent different generational and birth cohorts; therefore, they have experienced different social and historical events (for example, the Great Depression, World War II, the Korean and Vietnam Wars, the women's movement, computerization, etc.) and some common events at different developmental stages. They also were exposed to different cultural, technological, and ecological environments at different ages. Methodologically, it is not easy to sort out the impacts of each temporal and social context, yet the life-span paradigm can provide a conceptual tool to examine the complexity of interindividual differences and intraindividual changes and continuity.

Feminist Theories

This section reviews feminist theories in relation to the themes of gender differences in the life-course and differential patterns of women's life-course, the foci of this study. Some questions of this study were
originally inspired by feminist perspectives, especially differences among theories within the feminist framework.

It is very important to note that the feminist perspective does not consist of one theory, but rather is a collection of several different theories, each of which originated and developed from a distinctive philosophical thought and political background. Because each theory provides a different and competing set of descriptions, explanations, and prescriptions about women's oppression, developed from different assumptions and in unique theoretical context, it is necessary to understand the theoretical background of certain proclaimed feminist ideas in family studies. Often, a "feminist" critique has been given without making it clear which feminist theory the criticism is based on. In addition, utilizing some portions of several different theories at the same time can lead to confusion and self-contradiction (for example, see Ault-Riche, 1986; Ferree, 1990; Goldner, 1988; Hare-Mustin, 1984, 1987). Thus, this section will review briefly how each feminist theory views the family and women's life-course. The three most prominent traditions in feminist thought, liberal feminism, Marxist/socialist feminism, and radical feminism, are discussed in this section.

**Liberal Feminism and the Problem of Gender Differences**

**The Theory**

Liberal feminism has the longest history among feminist theories, having evolved from liberalism, a school of political thought that is 300 years old. The most important feature of liberalism is the ontological
assumption that human beings are unique because of their capacity of rationality. Because rationality (or "reason") is defined either by the ability to comprehend the rational principles of morality or by the ability to calculate the best means to achieve the desired end, the values of individual human autonomy and self-fulfillment are stressed. Thus, according to this theory, a just society allows individuals the right to exercise their autonomy and to fulfill themselves (Jaggar, 1983; Tong, 1989). Indeed, the values of liberty and equality are the two most honored democratic principles in the American political tradition (McClosky & Zaller, 1984). Liberal feminism evolved from the nineteenth century's libertarian model, which stressed the importance of protection of civil liberties, to the twentieth century's welfare or egalitarian model that emphasizes economic justice (Tong, 1989). The goal of liberal feminism, however, treating women and men the same, became a controversial issue because gender justice is complicated with the issues of gender differences, socialization, and social norms. For example, denying gender differences altogether and pressing gender-neutral laws and politics were found not to be effective in bringing about gender justice (Tong, 1989). Likewise, restricting equality to the idea of equal opportunity is problematic because inequalities in outcomes are permitted, or even encouraged, by the competitive ethic. Granting "formal" equality of opportunity without recognizing differences in individual talents and obvious inequalities in wealth and inheritance would not bring just outcomes (McClosky & Zaller, 1984).

Therefore, the question of whether it is possible to treat men and women differently yet equally has been raised (Ambert, 1976; Tong, 1989).
There seems to be confusion in this discussion between gender difference (innate, "natural," or essential) and gender structure (social). Biological sex differences that necessitate, or were at least used in arguing for, gender injustice may or may not exist, and studies of gender differences always mention that differences are average differences, not the difference between each and every woman and man. Moreover, as Bernard (1976) argues, because children cannot survive outside a cultural matrix, by the time they are examined to study gender differences, they have already begun to be shaped according to our cultural gender norms (for an empirical example, see Zukerman & Sayre, 1982). Thus, even if some gender differences are found empirically, those can never be used as evidence of "essential" gender differences. Yet, the fact that the gender structure in which women belong to the oppressed class exists (or, more moderately, that there is a social structure that consistently disadvantages women as a group) is anything but news.

Bernard (1976) has pointed out that there are three stances of feminism. One ignores the gender differences, another emphasizes such differences, and the other is agnostic. Hare-Mustin (1987) argues that, in family therapy theories, there are two kinds of gender-related errors. One is alpha prejudice that exaggerates gender differences, and the other is beta prejudice of the systemic approach that totally ignores gender differences. Both of the authors put two independent concepts, gender differences and gender structure, on a single dimension.

Indeed, the problem of "treating women differently from, yet equally to men" seems to have originated from the philosophical (ontological) basis
of liberal feminism, which is solipsism. This belief that the rational, autonomous person (woman) is essentially isolated, with needs and interests separated from and even in opposition to, those of other individuals (Ring, 1991; Tong, 1989) leads to the view of community as a contractarian agreement and the goal of sexual equality as individual rights. That is, the fact that human beings are already in the human community is ignored by liberal feminists. Thus, according to them, women can only liberate themselves individually by rejecting the traditional roles unilaterally. This prescription is blind to forces of social and psychological structures that are already in place.

Application of the Theory

This study is based on the important thesis of the life-span paradigm that human behaviors are determined both by social, historical events (cohort, generational, and historical effects) as well as individual biological and psychological characteristics. Hence, the solipsistic idea of liberal feminism is rejected, and gender differences are studied from the viewpoint that the society is structured by gender norms and that the differences that have been found empirically are rather consequential outcomes. As in most of the liberal feminist literature, this study does not assume the existence of any intrinsic or essential gender differences that create different life-courses for women and men. Rather, the goal is to examine how socially constructed norms influence the life paths of women via certain events and the timing of these events, certain choices in the life-course, and the outcome of the choices.
Marxist/Socialist Feminism and Women's Work

The Theory

Marxist and socialist feminism have many common ideas, but they diverge at one point: whereas socialist feminism emphasizes gender and class equally as causes of women's oppression, Marxist feminism believes in social class as the one ultimate account of every form of oppression (Tong, 1989). It is generally agreed among Marxist/socialist feminists, however, that modernization reduced women to worse social positions by confining women in unpaid, and thus devalued, housework solely, or only in jobs parallel to housework and the double burden of doing both housework and paid work outside the home (Harrison, 1985; Zaretsky, 1976).

A major contribution of Marxist/socialist feminism is its attention to work-related issues of women. Because Marxist feminists believe that the institution of the family is closely knit into capitalistic ideas, equality is to be attained only by an economic revolution. Thus some early Marxist/socialist feminists supported socialization of domestic work and some supported the state paying wages for housework (Chafets, 1988; Delphy, 1984; Segal, 1987; Tong, 1989). Current socialist feminism focuses on developing an integrated model to explain how the two conceptually separate systems of capitalism and patriarchy are closely knit into one universal construct. For example, Jaggar (1983) presented a unified theory by expanding the traditional Marxist concept of alienation. According to Jaggar, alienation of women from their physical bodies, their sexuality, and their reproductive and productive functioning is a phenomenon peculiar to the capitalist form
of male dominance (Jaggar, 1983; Tong, 1989). Also, Young (1990) points out that the gender division of labor is essential to capitalism, in which women as a large reserve of unemployed workers are necessary to keep wages low and to meet unanticipated demands for supplying services and goods. In her view, women provide the "secondary" work force material, whereas men are the primary work force material, in capitalist societies.

Marxist/socialist feminists advocate revolutionary social reform and abolishing the patriarchal ideology as well as the capitalist system, but they do not provide any universal prescription in terms of women's labor force participation or reproduction in current society. In the current capitalist system, having a paid job outside the home does not necessarily liberate women, because they face discrimination at work and they will bear a double burden by doing most of the domestic work as well. On the other hand, women who are full-time homemakers are depowered in the family because their production in the family is not recognized, appreciated, or paid.

Application of the Theory

Marxist/socialist feminism provides rather complex insights for this study into the situation of women both within and outside of the family, in terms of their work, reproduction, and their labor force participation. For example, the cost and benefit of participating in the labor force for women as a group should be different from men because women have more restrictions from employers as well as more constraints from family situations than men. They are discriminated against at work in wages and advances, and they are more burdened by domestic production, procreation, and childrearing. This situation again will influence women's choices over
work and family, and the timing of certain events (e.g., marriage, reproduction, employment, and retirement).

Radical Feminism and Mothering

The Theory

Radical feminism is defined by the position that proclaims women as the first (historically) oppressed group, and women's oppression as the most widespread and the hardest to remove. In other words, gender/sex is the infrastructure of all societies (Tong, 1989). Radical feminists show how gender structures the entire domain of life: men and women live different lives, by dressing differently, eating differently, and engaging in different daily routines at work, in family, and everywhere else (Jaggar, 1983). Radical feminists believe that the origin of oppression is male control over female biology, especially sexuality and reproduction. They discuss the very fundamental concepts of femininity and masculinity as patriarchal imposition, and have given a great deal of attention to the ways in which men attempt to control women's bodies, and the ways in which men construct female sexuality to serve not women's but men's needs, wants, and interests. Thus, the most conspicuous contribution of radical feminism is having brought sexuality, childbearing, and childrearing practices into the political arena (Tong, 1989).

There are several different directions in which theories of radical feminism have grown, and are still growing. One approach celebrates feminine characteristics and female biology, especially mothering, as a
unique source of goodness, whereas others want to leave the traditional biological role of reproduction and mothering by using highly developed contemporary technology. Some radical feminists are devoted to eliminating pornography, arguing that it is a symptom and symbol of male-controlled female sexuality, and others support lesbian separatism (Firestone, 1970; French, 1985; Gilligan, 1982; MacKinnon, 1989; Millett, 1970; Tong, 1989).

A post-modern criticism of radical feminism is that radical feminists who exalt the superiority of "feminine" characteristics such as caring, nurturing, relatedness, and community orientation, as opposed to male values such as domination, rationality, power, autonomy, and abstraction, will eventually fail to grant privilege to feminine values, because their argument leaves the dichotomy (male vs. female) that traditionally defines female inferiority intact (Heckman, 1990). Socialist feminists argue against the notion of women's biology as a source of goodness, because this position reflects biological determinism, a belief that human nature is solely determined by fixed, unchanging, and given biology (Jaggar, 1983).

**Application of the Theory**

In spite of the diversity and flaws of the radical feminist theories, it is generally accepted that radical feminists were the first people who exalted femininity, womanhood, and female biology as being essentially good, benign, positive, and empowering (Tong, 1989). The controversy regarding radical feminist theories raises a question regarding women's life-course: Are the mothering/reproduction capacity and the relationship-orientedness of women a blessing, an obstruction, or a result of the oppressive social construction (including gender role socialization)?
This study takes a position that avoids the biological determinism of radical feminism, yet acknowledges that, for at least some women, relationships, especially motherhood, can be a source of strength and personal happiness (Kranichfeld, 1987), even in the societies where women are not completely free to choose when and how to be mothers. The life-span paradigm calls attention to interindividual differences in the interactions of social/historical influences and individual characteristics. One purpose of this study is to explore what differentiates women's life-courses, especially in terms of relationship orientation and mothering. In other words, if women can be differentiated by their orientations (for example, if there are some women who are more oriented to connectedness and more empowered by mothering whereas there are other women who pursue careers outside family to fulfill their needs for achievement), the characteristics that differentiate these distinctive groups of women, the kinds of risks and rewards they experience, and whether there are cohort differences can be explored.
CHAPTER III. PREVIOUS STUDIES

Gender differences in role demands and rewards and women's life-course issues, the two major sets of questions of this study, are reviewed in this chapter. First, the studies on gender differences in family and work experiences and in attitudes on social issues are reviewed. Literature on gender differences in marriage experiences in relation to mental health are then reviewed. Following are discussions of the research on women's differential orientations and women's life-course issues of the timing of events, cohort effect, and family influence. The last section presents the conceptual hypotheses derived from the theories and previous studies.

Gender Differences in Demands, Rewards, and Attitudes

Labor Force Participation and Household Work

The increase in women's labor force participation outside the home in American society in recent decades is nothing short of a revolution. Smith (1979) named the dramatic movement of women into the labor force "the subtle revolution that changed virtually all social and economic arrangements." Between 1890 and 1978, the female labor force participation rate jumped from 18 percent to 50 percent. The labor force participation rate increased for all age groups of women, but the largest recent increase has occurred for the group that has been traditionally least likely to work, mothers of preschool children (Waite, 1976). According to
Otto (1988), 73 percent of women of childbearing age (between 18 and 44 years old) are in the workforce now.

This big change, however, did not bring a comparable revolution in gender division of household labor nor in gender discrimination in market labor (Berheide, 1984). Berk (1985) shows how intact the gender division is, both in household and market labor. Each of member of her sample of 335 couples kept a 24-hour diary on a randomly designated weekday. The analyses indicate that, when the demand of household tasks goes up (e.g., by an increased number of small children), wives will decrease their market participation whereas husbands do not change their commitment to employment. Yet, when the market commitment (working hours) of the household is increased, the effort of husbands and wives in household labor does not change, because husbands' efforts are small from the first and wives' efforts do not change regardless of employment status.

Studies on intergenerational transfer present the consistent finding that women are the kin-keepers and the caregivers of elderly parents (Brody, 1985; Hagestad, 1981). According to a national study, 72 percent of the primary, informal caregivers of the frail elderly are female family members, mostly wives, daughters, or daughters-in-law (Brubaker, 1990; Stone, Cafferata, & Sangl, 1987). Thus, in current American society, wives are still responsible for household labor including child care and elder care even when they are employed outside the home. This pattern of gendered division of labor creates the tension of role overload for employed wives who virtually work a "second shift" at home (Hochschild, 1989).
Hochschild (1989) points out that women are disadvantaged in the career world, not because they lack "role models" nor simply because the institutions and corporations discriminate against women, but because the whole career system runs by rules made to suit the male workers who are supported by a full-time housewife. Most of the career women also take care of families, and the career system simply ignores that fact. Child care seems to be the most salient constraint on women's employment, and the extent of the availability of satisfactory care for children under the age of five is found to be related to mother's employment (Presser & Baldwin, 1980; Stolzenberg & Waite, 1984).

**Work-Family Interface**

The interface of work and family is rather complex. The work-family conflict derives not only from time constraints, but also from the stress produced when one role intrudes upon the other role, and from noncompatible behavior patterns that are functional in one role but dysfunctional in another (Greenhaus, 1989). Some empirical studies have found interactive influences between work and family, such as a positive association between the father's good work relationships and good family relationships (Daniels & Moos, 1989) and a positive relationship between spousal support and work commitment (Voydanoff, 1989). Duxbury and Higgins (1991) found that men's work conflict preceded their family conflict, whereas women's family conflict preceded their work-family
conflict (meaning role overload and interference), thereby showing gender-specific patterns of spillover.

The impact of mother's employment on the family has received much attention, but the findings are not very consistent. A woman's reason for working seems to moderate the consequences. Dissatisfied full-time homemakers have been shown to have the lowest scores in mothering adequacy, whereas satisfied full-time homemakers have the highest scores, and dissatisfied and satisfied employed mothers obtain intermediate scores (Moore, Spain, & Bianchi, 1984). Scarr, Phillips, and McCartney (1990) conclude that maternal employment per se is not a major issue in either marital relationships or child development. Rather, the family circumstances (such as economic reasons) and attitudes of the mother and father make the difference. Reviewing many studies, Hoffman (1989) also agrees that maternal employment is not so strong a variable that it can predict any consistent outcomes on children or marital relationship.

On the other hand, reports about the impact of women's employment on marital adjustment are relatively consistent. High levels of wives' commitment to work adversely affect marital adjustment whereas husbands' commitment to work does not have any significant impact (Ladewig & McGee, 1986). Other studies report that wives' employment has a negative impact on marital stability when there are children under the age of six in the family (Gore & Mangione, 1983), and that wives' employment is related to husbands' low marital adjustment only when there are preschool children and when women have less than a high school education (Staines et al., 1978). Rosenfield (1992) found that, when wives were employed and thus
the husbands' relative income contribution to the households diminished and
the husbands had to share domestic labor more, the husbands' mental health
was low.

Gender differences have been found in work-related values. Women
are more sensitive to social rewards at work, and women value the intrinsic
motivation of working more than men, whereas men value economic
motivations more than women (Lambert, 1991).

The Impact of the Work-Family Interface on Mental Health

There are gender differences in the impact of the work-family
interface on mental health. A study on adolescent employment shows that
boys are more likely to work in the formal sector whereas girls are more
likely to work in the informal sector, and that employment significantly
diminishes older (age 15 to 16) girls' satisfaction with life, a finding that is
not obtained for boys (Yamoor & Mortimer, 1990). Lambert (1991) found
that women's jobs are less rewarding intrinsically but less stressful than
men's jobs, and that there are no gender differences in terms of overall job
satisfaction or job involvement when job conditions are controlled.
Menaghan (1989) points out that mental health cannot be predicted simply by
marital status or the existence of children or employment, but should be
examined in relation to certain combinations of roles in which impact again
varies by gender. According to Menaghan, employment has a positive
impact on mental health for both men and women, but the impact is most
pronounced for married fathers and unmarried mothers. There is also some
evidence that, when a person's role situation departs from the society's norm (for example, a 40-year old unemployed father), the person's mental health is threatened (Menaghan, 1989).

It is a widely-held view that job satisfaction predicts men's mental health but not women's, although gender differences in the relationship between mental health and work have not been found among the individuals in highly educated, full-time dual career couples (Barnett et al., 1993). Thoits (1986) examined the relationship between number of roles and psychological distress, and found that, whereas possession of multiple roles reduces distress in general, women's employment tends to increase distress. Meddin (1986), as well as Gore and Mangione (1983), suggest that, regardless of employment, women are more depressed than men, but this gender gap is significantly reduced among dual career couples. Another study from a Northern European sample supports this result (Haavio-Mannila, 1986): gender differences in morbidity are smaller in families where there are dual earners. The same study shows, however, that career women are under greater stress balancing work and family, and thus exhibit greater anxiety. Also, Stewart and Salt (1981) suggest that work stresses are strongly associated with illness, but not depression, among work-oriented women.

There also is some evidence that men's and women's mental health is affected by different combinations of stress sources. Greenglass (1991) found that work sources are the primary precursors of men's burnout, whereas role conflict, marital satisfaction, and work satisfaction predict women's burnout.
In summary, the pattern of gender differences in the impact of employment is not clear, yet it seems that women have a greater burden of balancing work and family than men. Women's work outside the home is economically essential in today's society, but the cultural norm still views female employment as optional and secondary and working mothers as violating their basic familial and marital commitment (Etaugh & Riley, 1983; Ognibene, 1983; Thompson & Walker, 1989). It is suggested that employment per se has a positive influence on women as well as on men (Meddin, 1986), yet on the other hand, women's double burden at home and at work tends to increase distress and tension (Gore & Mangione, 1983; Gray, 1983; Piechowski, 1992). In general, work satisfaction is related to mental health more closely for men than for women, although the relationship is less salient among individuals who are part of nontraditional dual-career couples.

**Gender Differences in Attitudes**

Women tend to be less conservative than men in terms of political attitudes, a fact that has been reflected in voting patterns (Rinehart & Perkins, 1989). Also, women consistently seem to endorse egalitarian and feminist ideas more than do men and are more likely to consider themselves as "feminists" (Fowers, 1991; Romer, 1990). Some gender differences are found in attitudes toward family, connectedness, and work. A study by Chusmir and Parker (1991) shows that women rate family relationships, personal fulfillment, and security as important success measures in life,
whereas men rate status and wealth as important. Covin and Brush (1991) found that women express a stronger need than men for employer and government support in helping employees cope with child-related issues; that women support traditionally-defined sex roles less than men; and that women are less biased about the working woman and thus are less likely than men to report that employed women are disturbed by nonwork issues. Reviewing many studies, Gilligan (1982) shows how girls and women consistently pursue harmony with, and attachment to, other people, compared to boys and men, whose identity is defined through autonomy and competition.

Because women invest more of their time and energy in household work and maintenance of family relationships, it can be predicted that women value the relationships more than men do, whereas men value their career and work more than women do. The results from a study by Hanson et al. (1984) support part of the prediction: nonemployed childless women describe their homemaking role as interesting and important, whereas employed childless women show high job satisfaction. Similarly, among single women and childless women, Barnett, Marshall, and Singer (1992) found that levels of psychological distress were inversely related to the job-role quality, but for married women and women with children there was no such relationship.

Gender Differences in Experience of Marriage and Mental Health

Bernard (1982) argued eloquently that husband and wife in the same marriage do not experience the marriage in the same way. They not only
report the quality of the family relationships differently, but reply differently to rather concrete questions such as frequency of social interaction, household tasks, sexual relations, and decision making. She also presented unequivocal demographic, psychological, and sociological research findings that suggest that married men enjoy greater well-being than unmarried men, and that men need marriage more than women. Indeed, the gender differences in the relationship between marital status and mental health are rather well-established. In most Western countries, mental health is best among married men, second-best among single women and men, and worst among married women (Fowers, 1991; Haavio-Mannila, 1986). Ensel (1982) suggests that age plays a role in the relationship between marital status and mental health among women. In Ensel's (1982) study, unmarried younger women (especially before the age of 25) were happier than their married counterparts, but married older women (after the age of 50) were happier than unmarried women. The problem with this particular study is that the subjects were drawn by cross-sectional sampling; thus the age difference does not reflect a developmental course. It is possible that the older group has a higher quality of marriage, and that the unmarried group included individuals who formerly were married and who had a poor-quality marriage.

Gender differences also have been found in predictors of marital satisfaction. Role discrepancy (the difference between role expectations and role enactment), perceived emotional maturity of the spouse, spouse's sex-role orientation, and quality of resources received from the spouse seem to predict women’s marital satisfaction, but not men's (Terry & Scott, 1987).
In an Australian study, Terry and Scott (1987) compared couples who follow traditional roles with couples with dual careers. Gender differences in correlates of marital satisfaction were found only among traditional couples. For traditional couples, job satisfaction was correlated positively with marital satisfaction of men, whereas role discrepancy was negatively correlated with women's marital satisfaction.

Powers (1991) suggests that women's marital satisfaction is more strongly related to egalitarian roles than is their husbands' marital satisfaction. A qualitative study by Acitelli (1992) shows that women are more interested and more thoughtful about marriage than are their husbands. Also, women's marital satisfaction is positively related to the amount of husbands' relationship talk (the length of time a respondent talked about his or her own marriage during a nonstructured experimental session), whereas husbands' marital satisfaction is not related to either spouse's relationship talk. To summarize, these results suggest that women's marital satisfaction is determined by their spouses' role enactment, commitment, or personality characteristics, and this relationship is not found for men's marital satisfaction.

Women's Orientations and Mental Health

Virtually all studies that have investigated women's orientations have employed a dichotomy, contrasting either family vs. career orientation, or relationship vs. achievement orientation, both implicitly and explicitly (Barber & Monaghan, 1988; Davies & Welch, 1986; Elder & MacInnis,
The dichotomy may have originated from the idea that women with different orientations can be differentiated in their attitudes and behavior, and that these two categories are, at least to some degree, mutuality exclusive. That is, women who are more oriented to relationships (marriage or family) are less oriented to achievement (career, education, or non-traditional occupations), and vice versa.

There is some support for this idea. Women who have made nontraditional career choices exhibit a distinct personality and attitude pattern that can be described as "masculine" and profeminist (Chusmir, 1983). A longitudinal study (Spenner & Rosenfeld, 1990) shows that being married and having children are inhibitors of women's "work identity," which is defined as women's self-perceived full-time employment for either income reasons or career reasons. Although women consistently are more depressed than men, women who have a professional full-time job are more similar to their spouses in level of psychological distress than are their homemaker counterparts (Haavio-Mannila, 1986; Meddin, 1986). In a study by Oliver (1975), thirty-seven college women were found as "career-oriented" and another thirty-seven women were found to be "homemaking-oriented" out of 149 respondents. Career orientation was defined by having plans for an uninterrupted career, and having a higher score on an achievement scale than on an affiliation scale in an adjective checklist. Homemaking orientation was defined by indicating plans for an interrupted
or terminated career, and having a higher score on an affiliation scale than on an achievement scale.

Interestingly, a more recent study of college women reports that 100% of the 250 respondents had plans for a career (Baber & Monaghan, 1988). The reality is that the majority of college women plan to have a career, although their priority is family (Greenglass & Devins, 1982; Hammersla & Frease-McMahan, 1990). There is an indication that a feminist attitude (related to women's achievement orientation) is related negatively to the desire for motherhood (Davies & Welch, 1986; Gerson, 1980), and the identification with work and family roles trades one off against the other for women (Bielby & Bielby, 1989). Nevertheless, most young women want to have both family and career (Barber & Monaghan, 1988), with the priority being the family. Thus, women's orientations toward achievement and relationships should be viewed as degrees along continuous dimensions, rather than two mutually exclusive categories defined by women's goals for having a career or a marriage and/or family.

Literature on women's differential life-courses is scarce. Jean Shinoda Bolen, a Jungian psychoanalyst, proposes a typology of women's personalities and life-course based on the archetypes of seven goddesses: Artemis, the competitor and sister, Athena, the strategist and father's daughter, Hestia, the wise woman and maiden aunt, Hera, the commitment maker and wife, Demeter, the nurturer and mother, Persephone, the receptive woman and mother's daughter, and Aphrodite, the creative woman and lover (Bolen, 1985). Although Bolen (1985) does not provide any statistics, her clinical observations support the validity of the typology. She
suggests that a woman rarely fits completely and exclusively into one of the archetypes; rather, a women potentially has all archetypes with a particular one or a combination of some being salient in her orientation. Further, she suggests that certain archetypal patterns (roles of women) are favored more than others in a particular cultural or institutional context. For example, the recent women's movement brought a change in the social context so that the achievement-oriented archetypes of Artemis or Athena are favored more than 20 years ago, whereas relationship-oriented archetypes of Hera and Demeter find less support. Likewise, Hestia-like women with a spiritual focus thrive in religious institutions whereas Athena-like women with logical minds excel in higher education. This argument indirectly supports the goodness-of-fit hypothesis of this study, that the fit between social norms and women's roles predicts women's mental health.

A qualitative study by Gerson (1986) delineates women's different experiences with men by comparing domestic women with nondomestic women. The domestically oriented women tend to have established a long-term and committed heterosexual partnership, and have sacrificed their initial work ambitions in favor of securing good relationships with male partners. Even those women who are employed are committed to the male career, and their own career takes second priority. The domestically-oriented women have the traditional package of rewards (good relationships and economic stability) and constraints (gender discrimination at work and pressures to bear and rear children) that have promoted dependency on men. In contrast, nondomestic women tend to have experienced dissatisfying and unstable heterosexual relationships, and their male partners' economic
contribution often failed to meet their needs. These nondomestic women often lack traditional male support, and instead find new and independent sources of support at work. Gerson (1986) suggests that women do make different life choices and reach different conclusions about the value of heterosexual commitment. Moreover, she maintains that many domestic women had originally been achievement-oriented, and many nondomestic women had originally been domestic, but that women's experiences with men eventually changed their orientations. This observation contradicts other longitudinal studies that show relative consistency in women's attitudes, behavior, and orientation over time (e.g., Spenner & Rosenfeld, 1990).

Also, Gerson's (1986) assumption that life choices determine values (orientation) rather than the other way around is one-sided. The relationship may be interactive, so that orientation determines the choices and the choices eventually influence orientation.

According to exchange theory, reviewed in Chapter II, women make choices that they view as giving the maximum subjective reward in a certain situation. Thus it can be said that women choose a certain life path by making a combination of decisions regarding their work and family, which in turn provides the maximum rewards. On the other hand, both the life-span literature and studies on women's orientation suggest that there is more than one type of women's orientation. Therefore, there should be more than one "good choice" that provides maximum subjective rewards for women. All kinds of life paths are equally wise, other things being equal. In other words, women's mental health cannot be predicted simply by either marital
status or employment status, but by the goodness-of-fit between their orientation and the events that they have actually experienced.

Several studies support this hypothesis: Taylor and Spencer (1989) report that there are no differences in marital or job satisfaction among women of different orientations. Similarly, Henry (1991) found that there is no relationship between older women’s level of life satisfaction and their past history of employment and homemaking. Pietromonaco, Manis, and Markus (1987) further indicate that career-oriented women are happier when they are employed full-time than when employed part-time or not employed at all. For women who are not career-oriented, employment does not have a positive impact on psychological well being.

The idea of goodness-of-fit as the predictor of mental health is an important point to reconcile the different feminist theories reviewed in Chapter II. Some radical feminists have exulted motherhood and connectedness as women's unique source of goodness and power, whereas liberal feminists have struggled to ensure women more equal opportunities for education and employment. The goodness-of-fit model suggests that the effectiveness of these prescriptions depends on the individual woman's orientation.

Women's Life-course Issues:

Timing of Events, Mental Health, Cohort Effects, and Family Influence

The life-span literature (e.g., Hagestad, 1990; Neugarten, Moore, & Lowe, 1965) suggests that there is a social force that keeps individuals'
behavior within certain patterns. When an individual deviates from the social norms, she or he is likely to receive some form of social sanction. Social norms are defined as rules or standards, both formal and informal, for the conduct and life conditions of members of a particular society (Mattessich & Hill, 1987; Morris & Winter, 1978; Williams, 1970). A timing norm, such as an acceptable age range to become a first-time parent, and a sequencing norm, such as marriage comes before children, are examples of the social norms (Hagestad & Neugarten, 1985; Rodgers & White, 1993). In a Canadian study (Fallo-Mitchell & Ryff, 1982), a sample of 80 middle-aged women (mean age 44.3) and 80 old women (mean age 66.1) indicated that the ideal ages for bearing the first child were 25.5 (middle-aged women group) and 26.3 (old women group). Both ideal ages were 2.2 years later than the actual age at which the event was experienced.

Another Canadian study (Gee, 1990) shows a cohort-differential preference of women's timing of the events. The older cohort of women (born between 1905 and 1924) preferred younger ages of marriage, 23.9, and for bearing the first child, 25.2. The middle cohort (born between 1925 and 1939) responded that the ideal ages of marriage and bearing the first child were 24.5 and 25.8, respectively. For the younger cohort (born between 1940 and 1949), the ages were 25.2 and 26.7, respectively. U.S. census data indicate that, among women born in the 1950's, the median age of first marriage is 21.2, and median age at birth of the first child is 22.7 (Glick, 1977). In 1988, the median age of U.S. women's first marriage increased to 23.6 (Glick, 1989). The most conspicuous trends in the 20th century are continuing postponement of marriage, smaller number of
children, and longer life expectancy (Glick, 1977, 1989), and these trends will be reflected as cohort differences in the experience of life events. As shown in Canadian examples, the average ages at which events are experienced do not exactly reflect the social norm (the "ideal") about the timing of the events.

Another example of a social norm is the relative importance (priority) of women's roles. Among employed women, those who reported placing career over family scored significantly higher on the anxiety, depression, and hostility scales, whereas those who reported that their families had priority over career showed low scores on those scales (Light, 1984). The results were interpreted as supporting the contention that women who step outside the social norm by placing careers before the family will experience emotional distress. Etaugh and Riley (1983) conducted a study in which the respondents were asked to rate job applications that varied by gender, marital status, and sex-typical jobs (nursing for women and accounting for men). Single women in the sex-typical job were favored the most and single men and women in sex-atypical jobs were least favored. In summary, current social norms prescribe women in sex-typical jobs only, and married women are supposed to place their priority on family rather than career.

Morris and Winter (1978) show how human behavior is governed by social norms, in the process illustrated in their "deficit model." Social norms include the full range of rules that govern the way people live or behave. A deficit occurs when a certain life condition or a set of conditions has been perceived subjectively as undesirable by the criteria of social norms. The deficit causes social and psychological stress for humans, which
in turn provokes different patterns of reactions, such as adaptation, adjustment, and pathology (Morris & Winter, 1978). The deficit model (Morris & Winter, 1978) can be employed to predict an individual's mental health in relation to social norms: when the individual's current state (e.g., a combination of roles, age at marriage and age at childbirth) fits with the norm of the society, the individual's mental health will be good, whereas the individual's mental health will be threatened if a deficit occurs. A partial adaptation of the deficit model, which is called the "goodness-of-fit model" in this study, is illustrated in the next section.

One theme of the life-span perspective on human development is the heterogeneity among individuals in structures and processes associated with development. This interindividual diversity is supposed to increase over time with aging and demographic and social change (Bengtson & Allen, 1993). The statement is still rather hypothetical, because empirical evidence on individual differences over the life span is scarce. There are some studies that have focused on changes in psychological or familial characteristics over the life span (e.g., Medley, 1980; Tamir & Antonucci, 1981), yet none of these studies specifically examined interindividual differences. A few studies (Bornstein & Smircina, 1982; Morse, 1993) reviewed published journal articles to examine whether there is the tendency of increasing interindividual variability in cognitive functions such as intelligence, memory, and reaction time. Bornstein and Smircina (1982) concluded that there was little support for the hypothesis, and no more variability among the elderly could be found than in any other age group of adults.
On the other hand, Morse (1993) found that the older groups are indeed more variable than are the younger groups for reaction time, memory, and fluid intelligence, although the same was not true for crystalized intelligence. Both of the review studies focused only on cognitive functioning; the same hypothesis is applicable for other aspects such as life satisfaction, mental health, and attitudes. Theoretically, it could be predicted that greater interindividual differences will be found among older women than younger women in terms of family relationships, mental health, and attitudes.

Some studies have examined family influences on women's orientations and life styles. Elder and MacInnis (1983) found that achievement-oriented girls who expressed some career interest were most likely to have well-educated and employed mothers. However, these girls had a more tension-laden and conflictful relationship with their mothers than did their less ambitious counterparts. Another study by Sachs, Chrisler, and Devlin (1992) indicates that the majority of women managers reported that they had close relationships with their parents, had mothers who were employed outside the home, and had male role models. Oliver (1975) found that career-oriented college women identified with their fathers whereas homemaking-oriented college women identified with their mothers. Similarly, Gerson (1980) found that a positive early childhood relationship with their mother was related to college women's desire to have children. Falkowski and Falk (1983) also found that high school girls who expected to be homemakers tended to have fathers with low occupational status and nonemployed mothers. Baruch (1974) suggested that daughters identified
with mothers more when mothers were employed, and with fathers more when mothers were not employed.

On the other hand, Acock, Barker, and Bengtson (1982) who utilized the same data set as this study but with different sample of the data (647 father-mother-youth triads from generations 1 and 2, at Wave 1) found that maternal influence on the adolescent was rather diminished when the mother was employed, especially when the mother was working in a low-status position. Hochschild (1989) observed that young women's views on marriage are influenced the most by their own mother's employment and exposure to parental divorce. Young women who have mothers working outside the home have an ideal of a dual career family, but at the same time, they are cautious about the ideal because they have witnessed their mothers' strained marriage and double burden of doing both housework and paid work. Some young women become traditional in the marital relationship when they have been exposed to parental divorce because they know how fragile the marital bond becomes when a woman pushes to be equal to her husband (Hochschild, 1989).

In summary, the mother's having a career orientation and being employed, and father's high occupational status seem to have a positive influence on a daughter's career orientation. Parental divorce may have an opposite influence: women who are exposed to parental divorce are more traditional and more oriented to family than to work.
Conceptual Hypotheses and Models

Two major sets of hypotheses have been derived from the theories and previous studies reviewed in Chapter II and in the previous sections. The first set focuses on gender differences in demands and rewards over the life-course, issues based heavily on the exchange framework. The second set, based on the life-span framework and feminist theories, includes women's life-course issues, especially different life paths in relation to mental health.

**Gender Differences**

1. Men and women have different demands and rewards in family and work roles.
2. Men and women have different causes for mental health.
3. Men and women invest in different aspects in their lives.

**Women's Life-course**

4. Women's mental health is predicted by the goodness-of-fit between personal orientation or social norms and life events (Figure 1).
5. Different orientations have different risks: job loss, retirement, divorce, or widowhood have different impacts on women of different orientations.
6. More individual differences in personal characteristics including mental health, marital satisfaction, and attitudes, will emerge with aging (Figure 2).
Figure 1. Goodness-of-fit models

Figure 2. Hypothetical patterns\(^1\) of interindividual variance.

\(^1\) Three hypothetical patterns, a linear increase, an increase in a function of natural log, and an exponential increase, are illustrated.
7. There are cohort and generational differences on timing of events, values, and attitudes.

8. Women's attitudes are influenced by family members, especially by their own mothers.
CHAPTER IV. METHODS

This chapter consists of the four sections: source of the data, description of variables, empirical hypotheses, and statistical analyses. The data section explains sampling, data gathering procedures, and the design of the original data set. The description of variables section provides the conceptual content and the empirical measurement of each variable that is used in this study. The empirical hypotheses section presents the concrete propositions that are tested statistically in this study. The statistical procedures that are employed to test the hypotheses are described in the final section.

Source of the Data

This study utilizes data from the Longitudinal Study of Generations and Mental Health, an ongoing project led by Vern L. Bengtson and Marjorie Gatz from the Gerontology Research Institute at University of Southern California, Los Angeles, California (Bengtson, 1986; Bengtson et al., 1985; Murray Research Center, 1989). To date, there have been four waves of data collection, conducted in 1971-1972, 1985-1986, 1988-1990, and 1991, respectively. This study uses data from the first and second waves, which were processed and made available to the public by the Henry A. Murray Research Center at Radcliffe College, Cambridge, Massachusetts. The data were collected and analyzed by the original researchers mainly to investigate intergenerational relationships: to construct and test theory in
intergenerational solidarity (Bengtson & Roberts, 1991; Roberts & Bengtson, 1990), and test the effect of affectional solidarity on parents' mortality (Silverstein & Bengtson, 1991), to study the strength of parental influence on children in terms of attitude transmission (Glass & Bengtson, 1986) and value socialization (Bengtson, 1975), to compare marital satisfaction in three generations (Gilford & Bengtson, 1979), and to examine different generations in relation to cohort, lineage, and historical period effects (Bengtson, 1989).

The original project was designed as a cross-sectional study of three-generational families. The data were collected from 2,044 respondents from 345 three- or four-generation families in 1970-1971. The participants were recruited through the grandfathers (Generation 1) who were members of a large metropolitan health maintenance organization servicing several labor unions and other people in southern California. Out of the original pool of 58,328 men over age of 55 with at least one dependent family member, twelve percent (N=7,112) were systematically sampled and screened again, which resulted in 515 men with multigenerational families and a willingness to participate.

The 515 grandfathers selected, and every other eligible family member including spouses, all grandchildren between the ages of 16 and 26, and the parents of the grandchildren, were mailed a structured questionnaire, beginning in November, 1971. By May, 1972, a total of 2,044 usable questionnaires from 345 families had been returned, for a response rate of 64% (Murray Research Center, 1989).
When the cross-sectional study was completed, the names and addresses of the participants presumably were destroyed. However, the identifying information was found in an abandoned file cabinet in 1981. The investigators decided to utilize this information and expand the research into a longitudinal study. In 1985, the second wave of data collection began. At this time, the investigators sent questionnaires to the list of all eligible individuals selected in 1971, rather than limiting the sample to the 2,044 people who responded to the questionnaire in the first wave. In addition to attempting to recover all the participants from Wave 1 by using several public records and directories, other family members identified by a respondent (such as new spouses of family members) were also contacted. Some members were added as replacements of deceased sample members from Wave 1 (Murray Research Center, 1989).

This study will use data from Wave 1 and Wave 2. To be consistent in terms of the size and nature of the sample across the analyses, the sample for this study will be limited to the participants from whom data were gathered in both Wave 1 and Wave 2 (N=1,159).

In the sample for this study, there are 194 people in the grandparent generation (for convenience, it will be called "Generation 1" from now on), 481 people in the parent generation ("Generation 2"), and 484 people in the grandchild generation ("Generation 3"). The number of participants for each gender and generation category is shown in Table 1.

The sample consists of predominantly Caucasian middle-class families residing in southern California. At Wave 2, the mean ages of each
Table 1. Number of participants by gender and generation.

<table>
<thead>
<tr>
<th></th>
<th>Generation 1</th>
<th>Generation 2</th>
<th>Generation 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>113</td>
<td>273</td>
<td>292</td>
<td>678</td>
</tr>
<tr>
<td>Male</td>
<td>81</td>
<td>208</td>
<td>192</td>
<td>481</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>481</td>
<td>484</td>
<td>1,159</td>
</tr>
</tbody>
</table>

generation were 78.12, 57.78, and 33.36 for generations 1, 2, and 3, respectively. (The age at Wave 1 is 14 years less than the age at Wave 2.) The age ranges from 58 to 99 for generation 1, from 45 to 81 for generation 2, and from 28 to 43 for generation 3. The marital status of the participants is shown in the Table 2. It should be noted that the original sample was drawn from male members of a health maintenance organization who had a three-generation family; later, the family members of the men selected were contacted. As a result, never-married singles and childless people in generation 1 and childless people in generation 2 were never represented in the sampling.

Description of Variables

The following is a description of the variables that are used in the hypotheses. The conceptual content and measurement of the variables are also discussed.
Table 2. Marital status of participants by generation at Wave 2.

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Generation 1</th>
<th>Generation 2</th>
<th>Generation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Married</td>
<td>119</td>
<td>61.3</td>
<td>419</td>
</tr>
<tr>
<td>Divorced</td>
<td>4</td>
<td>2.1</td>
<td>33</td>
</tr>
<tr>
<td>Separated</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Widowed</td>
<td>70</td>
<td>36.1</td>
<td>19</td>
</tr>
<tr>
<td>Living together</td>
<td>1</td>
<td>.5</td>
<td>4</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Single</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>100.0</td>
<td>481</td>
</tr>
</tbody>
</table>

Demands in life include caretaking/help and support burdens with both children and aging parents, physical proximity to parents, relationship with parents, relationship with children, employment status and commitment to paid work and household work, and dependency from other family members. Those are measured by burdens of help and support scale (Appendix 1; from Wave 2, Chronbach's alpha=.71), physical mileage to the residence of parents and grandparents (available for generations 2 and 3, in Wave 1 only), physical mileage to the residence of children (available for generations 1 and 2, in Wave 1 only), frequency of interaction with parents and with children (Wave 2), and hours spent on household work and paid work, and questions about dependency of other family members (Wave 2).
The mileage to the residence of child, parents, and grandparents were the actual number of miles the respondents lived from the respective individual, which ranges between zero (in the same residence) to several thousand miles (in another country). The distribution of mileages shows a mountain shape with a tapering tail at the higher end and a rather concentrated lower end. The distribution of all six measures of mileages (to child 1, child 2, parents, and grandparents) were not found to be normal (Kolmogorov-Smirnov goodness-of-fit tests). As an exploration, a log-transformation was conducted for all six mileage variables, but it did not improve the normality of the distribution (Kolmogorov-Smirnov goodness-of-fit tests). Therefore, the raw data of the mileage variables rather than transformed data were used to test the hypothesis. The sampling distributions for mileage variables are still assumed to be normal because the sample size is relatively large (by the central limit theorem; see Howell, 1987).

The hours spent on household work are measured from four questions, each of which asked the respondent to specify the amount of time spent on household chores and child care on a typical day when the respondent does not work outside the home, and on a typical day when the respondent works outside the home. Because there is no information about how many days in a week a respondent works outside the home, the total hours spent per week on household chores and child care were estimated by 1) multiplying the household work hours of paid working days by 5, and the household work hours of nonworking days by 2, and adding the two numbers for all respondents who are employed or 2) multiplying the
household work hours for nonworking days by 7 for the full-time homemakers. On the other hand, the hours spent at the paid job per week were provided directly by respondents. The total work (at home plus outside the home) hours per week are either 1) calculated by adding the estimated total household work hours per week to reported total work hours at the paid job per week for all employed respondents or 2) the same as the total household work hours per week for homemakers.

The questions on dependency asked who depends on the respondent for the five areas of needs: 1) household chores and transportation, 2) information and advice, 3) emotional support, 4) financial assistance, and 5) important life decisions and family matters. Dependency of others on a respondent was calculated by summing up the number of needs of all people who depend on her or him. For example, if a respondent had a mother who depends on her for transportation and finance (2 needs), and a sister who depends on her for advice (1 need), her total dependency score will be 3.

Table 3 shows a summary of the means of the demand variables and relevant scales.

Rewards in life include emotional closeness to family members, marital satisfaction, and work satisfaction (all from Wave 2). Those are measured by questions on quality of relationships with children and parents, a marital quality scale, and questions about work satisfaction (representing how satisfied the respondent is with the current job; see Appendix 4). The relationships with parents and some work-related questions were asked of generations 2 and 3 only. Questions about the quality of the relationship were asked for each parent (mother, father, stepmother, and stepfather), and
Table 3. Summary of demand variables and scales.

<table>
<thead>
<tr>
<th>Scales/Variables</th>
<th>Valid N</th>
<th>Mean</th>
<th>S. D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burden of help and support</td>
<td>1139</td>
<td>3.10</td>
<td>2.79</td>
</tr>
<tr>
<td>Dependency on respondent</td>
<td>1120</td>
<td>9.91</td>
<td>5.49</td>
</tr>
<tr>
<td>Mileage to mother</td>
<td>825</td>
<td>324.52</td>
<td>810.74</td>
</tr>
<tr>
<td>Mileage to father</td>
<td>761</td>
<td>300.08</td>
<td>737.22</td>
</tr>
<tr>
<td>Mileage to grandmother</td>
<td>426</td>
<td>626.59</td>
<td>1025.06</td>
</tr>
<tr>
<td>Mileage to grandfather</td>
<td>440</td>
<td>611.53</td>
<td>1016.61</td>
</tr>
<tr>
<td>Mileage to study child 1(^1)</td>
<td>652</td>
<td>300.30</td>
<td>786.31</td>
</tr>
<tr>
<td>Mileage to study child 2(^1)</td>
<td>141</td>
<td>216.47</td>
<td>635.69</td>
</tr>
<tr>
<td>Avg. hours of hhold work(^2)</td>
<td>389</td>
<td>2.87</td>
<td>3.11</td>
</tr>
<tr>
<td>Avg. hours of hhold work(^3)</td>
<td>444</td>
<td>5.44</td>
<td>3.82</td>
</tr>
<tr>
<td>Avg. hours of child care(^4)</td>
<td>259</td>
<td>2.90</td>
<td>3.00</td>
</tr>
<tr>
<td>Avg. hours of child care(^5)</td>
<td>323</td>
<td>6.98</td>
<td>5.15</td>
</tr>
<tr>
<td>Avg. hours of paid work(^6)</td>
<td>783</td>
<td>41.50</td>
<td>16.97</td>
</tr>
</tbody>
</table>

1 Randomly designated by original investigators.
2 Average hours of household work, paid working days.
3 Average hours of household work, not working days.
4 Average hours of child care, paid working days.
5 Average hours of child care, not working days.
6 Average hours of paid work: average paid work hours per week.
each relationship was analyzed individually, rather than summed together. Refer to Appendices 2 and 3 for the text of the questions about the quality of relationship and the marital quality scale. Table 4 provides a summary of means, standard deviations, and results of reliability tests for the reward scales.

Stress in balancing work and family is measured by questions about strain from, and satisfaction with, the work arrangement. Three questions were asked of generations 2 and 3 regarding the stress level from paid work, and two questions were asked of generations 2 and 3 regarding satisfaction with paid work. Five questions were asked of generation 3 regarding the

Table 4. Summary of reward scales.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Valid N</th>
<th>Mean</th>
<th>S. D.</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship with mother</td>
<td>685</td>
<td>25.19</td>
<td>6.22</td>
<td>.92</td>
</tr>
<tr>
<td>Relationship with stepmother</td>
<td>34</td>
<td>22.24</td>
<td>7.10</td>
<td>.94</td>
</tr>
<tr>
<td>Relationship with father</td>
<td>538</td>
<td>24.11</td>
<td>6.14</td>
<td>.91</td>
</tr>
<tr>
<td>Relationship with stepfather</td>
<td>33</td>
<td>20.30</td>
<td>8.30</td>
<td>.95</td>
</tr>
<tr>
<td>Relationship with study child¹</td>
<td>656</td>
<td>26.74</td>
<td>5.98</td>
<td>.93</td>
</tr>
<tr>
<td>Marital quality</td>
<td>884</td>
<td>38.96</td>
<td>7.17</td>
<td>.88</td>
</tr>
<tr>
<td>Satisfaction, Household²</td>
<td>205</td>
<td>17.69</td>
<td>2.68</td>
<td>.63</td>
</tr>
<tr>
<td>Satisfaction, Paid work³</td>
<td>419</td>
<td>7.28</td>
<td>1.60</td>
<td>.60</td>
</tr>
</tbody>
</table>

¹ Randomly designated study child.
² Generation 3 only
³ Generation 2 and 3 only
stress from, and satisfaction with, household work and child care arrangement, and two of the five questions were asked of generation 2. Separate scores were calculated regarding: 1) stress from the paid work, a summed score of three questions (mean=8.41, standard deviation=2.53, N=443), 2) general work satisfaction, a summed score of the two work satisfaction questions (mean=7.28, standard deviation=1.60, N=419), and 3) satisfaction with household work, a summed score of five or two questions (two stress questions were recoded reverse; five questions scale for generation 3, mean=17.69, standard deviation=2.68, N=205; two questions scale for generations 2 and 3, mean=6.91, standard deviation=1.32, N=323). Refer to Appendix 4 for these work-related questions.

Mental health, which is used in several different hypotheses, is measured by: 1) the Bradburn Emotional Balance Scale (Bradburn, 1969; available in both waves), 2) the Center for Epidemiological Studies Depression (CES-D) Scale (Orme, Reis & Herz, 1986; Radloff, 1977), and 3) the Comfort/Discomfort scale of Brief Symptom Inventory (Derogatis & Spencer, 1982). The CES-D scale and BSI scale were used in Wave 2 only. The Bradburn scale has a dimension of negative affect and a dimension of positive affect, which are not correlated with each other (Bradburn, 1969). In this study, these two dimensions are used independently, rather than summed together. Refer to Appendices 5 to 7 for the content of each scale. Table 5 provides a summary of the means, standard deviations, and the reliability indicators (Cronbach's alpha) of the mental health scales.
Table 5. Summary of mental health scales.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Valid N</th>
<th>Mean</th>
<th>S. D.</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradburn, positive, Wave 1</td>
<td>1129</td>
<td>3.82</td>
<td>1.26</td>
<td>.64</td>
</tr>
<tr>
<td>Bradburn, negative, Wave 1</td>
<td>1136</td>
<td>2.22</td>
<td>1.68</td>
<td>.72</td>
</tr>
<tr>
<td>Bradburn, positive, Wave 2</td>
<td>1099</td>
<td>3.72</td>
<td>1.40</td>
<td>.71</td>
</tr>
<tr>
<td>Bradburn, negative, Wave 2</td>
<td>1111</td>
<td>1.53</td>
<td>1.51</td>
<td>.67</td>
</tr>
<tr>
<td>CES-D scale</td>
<td>1083</td>
<td>69.95</td>
<td>8.82</td>
<td>.88</td>
</tr>
<tr>
<td>BSI, comfort/discomfort scale</td>
<td>1121</td>
<td>13.22</td>
<td>4.22</td>
<td>.80</td>
</tr>
</tbody>
</table>

Orientation is measured in two different ways. At Wave 1, an open-ended question asked the respondents to list up to ten goals in their lives ("the good things that could happen"). The answers were coded by the original investigators into 58 different categories according to the content. For this study, thirteen categories from the original classification were included in relationship-oriented goals (e.g., having a good relationship with husband, child, or parents) and twelve other categories were designated as achievement-oriented goals (e.g., getting more education or an advancement for herself). One point was given for each relationship-oriented and each achievement-oriented goal identified by the respondent. The total score of goals (that is, the total number of goals the respondent listed) for each orientation represents the orientation score. If the respondent was referring to a person other than himself or herself, it was not included in the total score (for example, "my daughter's success in school" was not added to
achievement orientation). The mean of achievement orientation was 1.95 (standard deviation=1.62, median=2, N=1159) and the mean of relationship orientation was 1.32 (standard deviation=1.30, median=1, N=1159). Refer to Appendix 11 for the list of goals and the content of each orientation.

The second classification used value questions asked in Wave 2. The respondents were asked to rank two sets of nine items of values in the order of importance (1=most important, 9=least important). From each set, one achievement orientation item ("sense of accomplishment" from the first set and "career advancement/achieving success in your job or profession" from the second set) and one relationship orientation item ("family life" from the first set and "loyalty to your own--family or love ones, church, or group" from the second set) was chosen, and the two items of each orientation were added together to represent each individual's orientation scores. The responses were reverse-coded so that the higher the score, the higher the priority of the orientation in the person's life. The mean of the achievement orientation score was 10.78 (standard deviation=3.46, N=1127) and the mean of the relationship orientation score was 15.13 (standard deviation=3.38, N=1133).

Employment history was obtained from the question that asked the respondent's employment status. Information was available at Wave 1 if the respondent was employed or not employed (including unemployed, disabled, retired, and attending school) or a homemaker, and if the respondent was employed (including part-time and full-time employment, self-employment, and being temporarily out of work), unemployed (looking for work), retired, disabled, or a homemaker in Wave 2. Because women tend to
respond that they are "homemakers" when they are retired or unemployed there is a gender bias in this classification. At wave 2, the respondents were asked to check as many categories of employment and homemaker status as applied to them, and the data show that all women who are not currently employed, and even some women who are employed identified themselves homemakers whereas only 15 male respondents identified themselves as homemakers (N of employed women=369; homemakers=316; total women=678). Being 'employed' at Wave 2 includes temporary unemployment and part-time employment, and thus, some women who indicated that they are employed because they are temporarily out of work (with plans to go back to work soon) or employed only several hours per week may still consider themselves as homemakers. Those respondents who reported being employed and being a homemaker at the same time at Wave 2 were categorized as homemakers because of the inclusive nature of the definition of being 'employed' at Wave 2.

**Attitudes about family** is measured by the Traditional Family Ideology Scale that was used in Wave 1 (mean=30.63, standard deviation=7.81, N=935, Cronbach's alpha=.83). Refer to Appendix 8 for the content of the scale.

**Attitudes on social and political issues** is measured by questions about the respondent's opinion on various social and political issues. Refer to Appendix 10 for the content of these questions. These questions were asked in both waves, but in different scales. To be consistent, only the 11 repeated questions were used in this scale (at Wave 1, mean=29.62, standard
deviation=6.79, N=880, Cronbach's alpha=.82; at Wave 2, mean=29.53, std=6.74, N=1058, Cronbach's alpha=.84).

Women's orientations are measured in three different ways: Two measures of the "orientation" explained above, goals and value priority, as well as an additional measure of women's values, are used. For goals and value priority, the sample is divided into two groups by a median split: the more relationship-oriented group vs. the less relationship-oriented group, and the more achievement-oriented group vs. the less achievement-oriented group. These two different classification methods are used independently rather than in an additive fashion for the reason discussed above: these two orientations are conceptually independent.

The attitudes toward women's roles scale (Appendix 9; mean=16.61, standard deviation= 4.43, N=958, Cronbach's alpha= .74) is used as an additional measure of women's orientation. This scale was created from the questions regarding women's roles from the Traditional Family Ideology Scale (Appendix 8) and Opinions on Social/Political Issues (Appendix 10). The women are split at the median (women's median=16) on the attitudes toward women's roles scale; the more traditional group is relationship-oriented, whereas the less traditional group is achievement-oriented. However, it must be noted that by the content of the questionnaire, the relationship orientation is limited to rather conservative attitudes. In reality, it is possible that relationship-oriented women, that is, women whose priorities are relationships rather than achievement, are also nonconservative.
Social norms for timing of ages at first marriage and bearing the first child are inferred from a Canadian study (Fallo-Mitchell & Ryff, 1982), which reported 2.2 years of gap between actual and ideal timing. For this study, the ideal ages (social norms) were computed by adding 2.2 years to the actual average age of the sample for each cohort. The calculated ideal ages for first marriage are 22.9 for women of generation 1, 22.3 for generation 2, and 24.1 for generation 3. The ideal ages for bearing the first child are 24.4 for women of generation 1, 24.3 for generation 2, and 25.6 for generation 3. In the computation of the norms, cases with unrealistic ages of marriage and childbearing (under thirteen) were excluded.

Goodness-of-fit means lack of normative or psychological deficit. A normative deficit is a deviation from the norm in either direction, positive or negative, both of which are undesirable (Morris & Winter, 1978). A deficit in the timing of events can happen in either direction. In this study, the age range between two years earlier and two years later than the norm is considered to be on-time, and the rest of the age range is considered to be off-time. A deficit in women's roles does not have any direction. The goodness-of-fit between the norm of women's roles and the actual status has only two values, fit or unfit. In this study, being a full-time homemaker is considered to fit the norm for women of generation 1 and 2, whereas there is no clear norm regarding women's roles for generation 3. A psychological deficit is a deviation from the personal orientation. For achievement oriented women, getting married and bearing children later than the average of their own generation, having less than the median number of children, and being employed are considered to fit their personal orientation. On the
other hand, for relationship-oriented women, getting married and bearing children earlier than the average of their own generation, having more than the median number of children, and being a full-time homemaker are considered to fit to their personal orientation.

The life events that this study focuses on are marriage, bearing children, and employment. The timing of first marriage and of bearing the first child are the special focus of interest. Calculation of age at the birth of the first child is problematic at Wave 1 because there is no information about whether the first child was a natural (biological) child. Therefore step-children and adopted children were not differentiated from a natural child. It is also problematic in Wave 2 data because there were massive numbers of missing or incorrect data values on the question about the step status of the first child (1004 out of 1159 respondent said the first child was a step child, and all the rest of the respondents had no answer to the question). Thus, the step/adoptive status of the first child was ignored, and all first children were treated as natural children. The logically impossible cases of age under 13 for bearing the first child were excluded.

Impact of life events in general is measured by the mental health scales mentioned above. Impact of retirement is measured by the retirement experience scale (Appendix 12; mean=10.18, standard deviation=3.77, N=289, Cronbach's alpha=.73).

Generation in this study means a position in the family, that is, being a grandparent, parent, or grandchild, as defined by the original investigators of the Longitudinal Studies of Generations and Mental Health project. The age range within a generation is quite wide, and there is an overlap between
generation 1 and 2 in terms of age range (some participants of generation 2 are older than some of generation 1). Therefore, an alternative grouping was employed in testing hypothesis 4.2 and 7.1, so that the three generations represent different birth cohorts.

The alternative grouping of generation classifies 12 persons of generation 2 who are between 69 and 81 years old at Wave 2 into generation 1, and 7 persons of generation 1 between 58 and 68 years old into generation 2. This alternative grouping results in nonoverlapping age-ranges, that is, ages between 69 and 99 for generation 1 (N=199) and between 45 and 68 for generation 2 (N=476). In testing hypothesis 4.2, differential social norms are employed for different generations, and for hypothesis 7.1, cohort and generation effect reflect the birth cohort differences rather than the impact of generational position in the family.

Exposure to parental divorce: There are two potential ways to ascertain whether a respondent had been exposed to a divorce of natural parents. One is to examine the marital history of parents from the parents' own responses. The problem with this method is that it is hard to know which marriage the respondent is from, and, as mentioned earlier, the information of the child's step status is often incorrect. The other is to utilize the child's response about parents' marital history. At Wave 1, the respondents of generations 2 and 3 (total N=965) were asked if their parents were still living and together, and, if not, whether either of them had been remarried. From this question, those who were exposed to parental divorce can be identified only when both parents were alive. If one of the parents
was deceased, it is impossible to know if they had ever been divorced while both of them were living.

At Wave 2, questions were asked about whether both of the parents are living, and, if one of them died, the year of the death. In addition, each parent's current marital status was asked. However, if one parent survived the other, it is still unknown whether this person had been divorced while the other was living. Thus, if one of the parents was remarried, divorced, separated, widowed, or living together with someone and the other one was deceased, the timing of the events was compared. If the remarriage or the beginning of the current marital status happened before the death of the other parent, it is logical to assume that the parents had been divorced. On the other hand, if the current marital status happened after the death, it cannot be determined whether the marriage ended with divorce or widowhood, because it is possible that one of the parents died after divorce and the other remarried after the death of the parent. In that case, the respondent could have been exposed to parental divorce, but could not be identified as one way or another. There were 149 respondents in this ambiguous category. In addition, there were 162 respondents who did not answer the question about parents' current marital status or the year when the death occurred or when the current marital status began. Thus, a total of 311 respondents fell into the unknown category, and they were excluded from the analyses. In summary, the respondents were identified as having been exposed to parental divorce if: 1) one (or both) of the parents was reported to have been divorced at Wave 1, or 2) one (or both) of the parents was reported to have been divorced at Wave 2, or 3) one of the parents was
remarried, separated, divorced, widowed, or living together with someone and the other parent was still living at Wave 2, or 4) one of the parents was alive and the other parent was deceased, and the beginning of the current marital status of the surviving parent preceded the death. There was a total of 167 respondents who were identified as having been exposed to parental divorce out of 654 valid cases.

Empirical Hypotheses

Gender Differences

1.1 Women have more burdens of providing help and support than men. Women report that they are burdened more than men on the caregiving burden question, and women have a higher mean score on the help and support burden scale.

1.2 Women live closer than men to their children, parents, and grandparents.

1.3 Women interact with their children and parents in person, on the phone, or through the mail more frequently than men.

1.4 Women work more hours than men on household chores and child care. Men work more hours than women for a paid job outside the home. When household chores and paid work are all added together, women work more hours than men.
1.5 Women have more people who depend on them for household chores and transportation, information and advice, emotional support, financial assistance, and important life decisions than do men.

1.6 Women report a higher quality of relationships with children and parents than men do. That is, they have a higher mean score on relationship questions.

1.7 Women in general, and especially those who are not employed, report a higher mean level of marital quality than men do.

1.8 Men report a higher mean level of satisfaction with work than women do.

2.1 Married men are healthier mentally than unmarried (including widowed, divorced, separated, and never-married) men, regardless of the marital quality.

2.2 Happily married women and unmarried women are mentally healthier than married women with low marital quality. There is no difference in mental health between happily married women and unmarried women. Overall, unmarried women are mentally healthier than married women.

2.3 Married men are healthier mentally than married women.

2.4 Women have higher scores on work stress questions than men. Also, women have a lower satisfaction level about the household work arrangement.

3.1 Men have higher scores than women in achievement orientation measures. Women have higher scores than men in relationship orientation measures.
3.2 For men, being employed at both Wave 1 and Wave 2 times is positively related to mental health. For women, there is no overall relationship between employment status and mental health.

3.3 Men have more traditional and conservative attitudes than women regarding family norms, women's roles, and social and political issues.

Women's Life-course

4.1 Women who are oriented toward achievement show a higher mental health score if they are employed, had postponed their first marriage to later than the median age, had the first child later than the median, and had fewer children. On the other hand, women who are oriented toward relationships show a higher mental health score if they are not employed, had an earlier age of first marriage, had the first child earlier, and had more children than average.

4.2 Women whose age at first marriage and first birth is closer to the norm show higher mental health scores than do those whose age at first marriage and first birth is farther from the norm. Also, women of generations 1 and 2 are mentally healthier if they stayed home full-time, rather than being employed. For women of generation 3, there is no relationship between employment status and mental health.

5.1 Women who are achievement-oriented show lower mean mental health scores than those who are not, when they are unemployed. Women
who are achievement-oriented show more negative responses to retirement than those who are not.

5.2 When they are divorced or widowed, women who are relationship-oriented show lower mental health scores than do those who are not.

6.1 (descriptive) The variance of the entire group of women increases as they age, in terms of mental health, marital quality, attitudes toward traditional family and women's roles, and opinion about social/political issues.

7.1 Cohort differences are found in the mean age of marriage and child-bearing, attitudes toward traditional family and women, and opinions about social/political issues.

8.1 Women who have been exposed to parental divorce have higher mean marital quality than do women who have not been exposed. They also have more children, and spend more time in household chores and child care than do women who have not been exposed to parental divorce.

8.2 Age at mother's first marriage and age at daughter's first marriage are significantly correlated. Also, mother's age of bearing the first child is significantly correlated with daughter's age at bearing the first child.

8.3 Maternal employment history is related to daughter's achievement orientation and employment status.

Analyses

Gender differences that are measured by a categorical variable such as a single question item on current caregiving status or caregiving burden
were tested by Chi-square analyses. Gender differences for variables measured on a continuous interval (hypothesis 1 and 3), such as the Traditional Family Ideology scale, or mileage between parental residence and respondent's home, were tested by a t-test. It should be noted that the data set used in this study is a family data set. The respondents include married couples, parents, children, siblings, and in-laws. Because men and women in this sample are related to each other, they are influenced by each other; thus, the magnitude of gender differences might have been underestimated in the findings.

For all t-tests conducted in this study, the pooled variance estimate of t-value was used when the F-test led to rejection of the null hypothesis of equal variance, and the separate variance estimate of t-value was used when the F-test indicated unequal variance.

A series of analyses of variance and t-tests were conducted to test the relationship between gender, marital quality, and mental health (hypotheses 2.1, 2.2, and 2.3). The goodness-of-fit models (hypothesis 4.1 and 4.2) were tested by a series of multiple regression analyses. The comparison between women with different orientations according to employment and marital status (hypothesis 5.1 and 5.2) were done by t-tests. The pattern of interindividual divergence (hypothesis 6.1) was delineated at different stages of the life-course by each generation. Interindividual differences were described with coefficients of variability of the exploratory variables—mental health, marital satisfaction, and attitudes on family, women, and social and political issues. The coefficient of variation (CV) is the standard deviation divided by the mean and multiplied by 100. CV is the most
appropriate parameter to indicate relative variability because it is not influenced by the change of group means (Morse, 1993). This particular analysis was descriptive rather than testable, because the data had only two points of time for each cohort, and because the data did not cover the entire life span. The design is cross-sequential for two subscales of the Bradburn Emotional Balance Scale (Appendix 5), Marital Quality Scale (Appendix 3), and Opinions on Social/Political Issues (Appendix 10) because there are two measurement points and three different cohorts. For four measures, the CES-D scale (Appendix 6), the Brief Symptom Inventory, the Comfort/Discomfort Scale (Appendix 7), the Traditional Family Ideology (Appendix 8), and the Attitudes Toward Women's Roles (Appendix 9) there was only one measurement point, and thus, the pattern of the CV is cross-sectional.

The generational differences (hypothesis 7.1) were measured by ANOVA with a set of contrast matrices. This procedure used the alternative grouping of generations so that cohort differences rather than different positions in the family would be reflected. The analysis of the effect of exposure to parental divorce (hypothesis 8.1) used a t-test. A data set with paired mother-daughter records was created to test hypotheses 8.2 and 8.3. The relationship of the ages at mother's and daughter's events (hypothesis 8.2) was measured by a correlation analysis and the relationships between mother's and daughter's employment status and achievement orientation were measured by Chi-square analyses.

Table 6 presents a summary of sample (gender and generation), waves, measures, and test methods used for each hypothesis.
Table 6. Overview of data and test methods.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Sample</th>
<th>Gender&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Wave</th>
<th>Measure&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Other&lt;sup&gt;4&lt;/sup&gt;</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>All</td>
<td>M, F</td>
<td>2</td>
<td>1</td>
<td></td>
<td>Chi-square</td>
</tr>
<tr>
<td>1.2</td>
<td>All</td>
<td>M, F</td>
<td>1</td>
<td></td>
<td></td>
<td>t-test</td>
</tr>
<tr>
<td>1.3</td>
<td>All</td>
<td>M, F</td>
<td>2</td>
<td></td>
<td></td>
<td>Chi-square</td>
</tr>
<tr>
<td>1.4</td>
<td>G2, G3</td>
<td>M, F</td>
<td>2</td>
<td></td>
<td></td>
<td>t-test</td>
</tr>
<tr>
<td>1.5</td>
<td>All</td>
<td>M, F</td>
<td>2</td>
<td></td>
<td></td>
<td>t-test</td>
</tr>
<tr>
<td>1.6</td>
<td>All</td>
<td>M, F</td>
<td>2</td>
<td></td>
<td></td>
<td>t-test</td>
</tr>
<tr>
<td>1.7</td>
<td>All</td>
<td>M, F</td>
<td>1, 2</td>
<td>3</td>
<td></td>
<td>t-test</td>
</tr>
<tr>
<td>1.8</td>
<td>G2, G3</td>
<td>M, F</td>
<td>2</td>
<td>4</td>
<td></td>
<td>t-test</td>
</tr>
<tr>
<td>2.1</td>
<td>All</td>
<td>M</td>
<td>2</td>
<td>3, 5, 6, 7</td>
<td></td>
<td>t-test, ANOVA, Scheffe</td>
</tr>
<tr>
<td>2.2</td>
<td>All</td>
<td>F</td>
<td>2</td>
<td>3, 5, 6, 7</td>
<td></td>
<td>ANOVA, Scheffe</td>
</tr>
<tr>
<td>2.3</td>
<td>All</td>
<td>M, F</td>
<td>2</td>
<td>5, 6, 7</td>
<td>Married persons only</td>
<td>t-test</td>
</tr>
<tr>
<td>2.4</td>
<td>G2, G3</td>
<td>M, F</td>
<td>2</td>
<td>4</td>
<td></td>
<td>t-test</td>
</tr>
<tr>
<td>3.1</td>
<td>All</td>
<td>M, F</td>
<td>1, 2</td>
<td>11</td>
<td>Goals (orientation measure) from Wave 1</td>
<td>t-test</td>
</tr>
<tr>
<td>3.2</td>
<td>All</td>
<td>M, F</td>
<td>1, 2</td>
<td>5, 6, 7</td>
<td></td>
<td>t-test</td>
</tr>
<tr>
<td>3.3</td>
<td>All</td>
<td>M, F</td>
<td>1, 2</td>
<td>8, 9, 10</td>
<td></td>
<td>t-test</td>
</tr>
<tr>
<td>4.1</td>
<td>All</td>
<td>F</td>
<td>1, 2</td>
<td>5, 6, 7, 11</td>
<td></td>
<td>multiple regression</td>
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<tr>
<td>4.2</td>
<td>All</td>
<td>F</td>
<td>2</td>
<td>5, 6, 7</td>
<td></td>
<td>multiple regression, ANOVA</td>
</tr>
</tbody>
</table>
Table 6. (continued)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Sample</th>
<th>Gender</th>
<th>Wave</th>
<th>Measure</th>
<th>Other</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>All</td>
<td>F</td>
<td>1, 2</td>
<td>5, 6, 7, 12</td>
<td>Goals from Wave 1</td>
<td>t-test</td>
</tr>
<tr>
<td>5.2</td>
<td>All</td>
<td>F</td>
<td>1, 2</td>
<td>5, 6, 7, 11</td>
<td>Goals from Wave 1</td>
<td>t-test</td>
</tr>
<tr>
<td>6.1</td>
<td>All</td>
<td>F</td>
<td>1, 2</td>
<td>3, 5, 6, 7, 8, 9, 10</td>
<td>Respondents with data of both waves only</td>
<td></td>
</tr>
<tr>
<td>7.1</td>
<td>All</td>
<td>F</td>
<td>1, 2</td>
<td>8, 9, 10</td>
<td>ANOVA, Scheffe</td>
<td></td>
</tr>
<tr>
<td>8.1</td>
<td>All</td>
<td>F</td>
<td>1, 2</td>
<td>3</td>
<td>Exposure to divorce from both waves</td>
<td>t-test</td>
</tr>
<tr>
<td>8.2</td>
<td>All</td>
<td>F</td>
<td>2</td>
<td>G1-G2, and G2-G3 pairs</td>
<td>Pearson Correlation</td>
<td></td>
</tr>
<tr>
<td>8.3</td>
<td>All</td>
<td>F</td>
<td>1, 2</td>
<td>Goals from Wave 1</td>
<td>Chi-square</td>
<td></td>
</tr>
</tbody>
</table>

1 Generations: G1=Generation 1, G2=Generation 2, G3=Generation 3
2 Gender: M=Male respondents F=Female respondents
3 Measure: Appendix number for scales used in the analysis
4 Other specifications
CHAPTER V. FINDINGS

Results of statistical analyses are presented in this chapter. Each empirical hypothesis is listed, then findings regarding the hypothesis are presented. A summary of overall findings follows at the end of this chapter.

Findings about Gender Differences

1.1 Women have more burdens of providing help and support than men. Women report that they are burdened more than men on the caregiving burden question, and women have a higher mean score on the help and support burden scale.

This hypothesis is partially supported. More women report having provided caregiving assistance to a parent or an elderly relative in the past 12 years than men (35.3% of women, compared to 23.5% of men; Chi-square=18.53, d.f.=1, p<.00002), although there was no significant gender difference in the report of current caregiving (Chi-square=3.70, d.f.=1, p<.054). There is no significant gender difference in the report of being burdened by caregiving (Chi-square=5.23, d.f.=4, p<.26). Also, the t-test on help and support burden (Appendix 1) shows that women do not report being more burdened than men (t-value--pooled variance estimate--=1.47, d.f.=1137, p<.14).
1.2 Women live closer than men to their children, parents, and grandparents.

This hypothesis is partially supported. A series of t-tests by gender on actual mileages between residences of the respondents and 1) their children, 2) their parents, and 3) their grandparents were conducted. Women live closer to their parents than men do (Table 7). The gender difference is not significant in the physical proximity to residences of children or grandparents. There seems to be a pattern in the data, however, because women consistently have lower mean mileage than men for all six categories of residences.

1.3 Women interact with their children and parents in person, on the phone, or through the mail more frequently than men.

This hypothesis is partially supported for the interaction with mother, grandmother, and grandchild. A series of Chi-square analyses were conducted for each of the relationships (with children, grandchildren, parents, and grandparents), and form of interaction (in-person contact, mail contact, and phone contact), on frequency of the interaction (daily, every week, every month, once in several months, and less than a few times a year). Women have more frequent phone and mail contacts with mother. Women also reported writing more often than men to grandchildren and grandmothers (Table 8). The interaction frequencies are not significantly different between women and men in any form of interaction with children.
Table 7. Gender differences in mileage to the residence of each person.  

<table>
<thead>
<tr>
<th>Person(^1)</th>
<th>Women</th>
<th></th>
<th>(t)-value(^2)</th>
<th>Men</th>
<th></th>
<th>(t)-value(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 1</td>
<td>279.1</td>
<td>778.7</td>
<td>373</td>
<td>304.6</td>
<td>797.7</td>
<td>279</td>
</tr>
<tr>
<td>Child 2</td>
<td>193.5</td>
<td>610.3</td>
<td>79</td>
<td>245.7</td>
<td>670.5</td>
<td>62</td>
</tr>
<tr>
<td>Mother</td>
<td>267.9</td>
<td>704.2</td>
<td>494</td>
<td>409.0</td>
<td>942.6</td>
<td>331</td>
</tr>
<tr>
<td>Father</td>
<td>251.8</td>
<td>591.3</td>
<td>470</td>
<td>378.0</td>
<td>921.4</td>
<td>291</td>
</tr>
<tr>
<td>GrandM</td>
<td>572.2</td>
<td>912.6</td>
<td>251</td>
<td>704.7</td>
<td>1165.9</td>
<td>175</td>
</tr>
<tr>
<td>GrandF</td>
<td>562.8</td>
<td>909.0</td>
<td>264</td>
<td>684.6</td>
<td>1158.3</td>
<td>176</td>
</tr>
</tbody>
</table>

* \(p<.05\).

1 Child 1: Randomly designated study child 1.
Child 2: Randomly designated study child 2.
GrandM: Grandmother
GrandF: Grandfather
2 The \(t\)-values for Child 1 and Child 2 are pooled variance estimates and the rest are separate variance estimates.

father, step-mother, step-father, and grandfather. When there is a significant gender difference, women invariably have a higher frequency of interaction than men. However, the results of this hypothesis, especially those with a lower significance level, should be interpreted cautiously: because the same sample was tested repeatedly on multiple occasions (mail, phone, and in-person contacts), the rate of Type I error has been increased. The familywise error rate for three not-independent-comparisons (each at \(alpha=.05\)) approaches .15 (Howell, 1987).
Table 8. Gender differences in frequencies of interaction.

<table>
<thead>
<tr>
<th>Form of Interaction</th>
<th>Chi-square</th>
<th>d.f.</th>
<th>Valid N</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-person contact with mother</td>
<td>3.5</td>
<td>4</td>
<td>701</td>
</tr>
<tr>
<td>Phone contact with mother</td>
<td>29.2***</td>
<td>4</td>
<td>688</td>
</tr>
<tr>
<td>Mail contact with mother</td>
<td>12.5**</td>
<td>3</td>
<td>553</td>
</tr>
<tr>
<td>In-person contact with father</td>
<td>2.8</td>
<td>4</td>
<td>555</td>
</tr>
<tr>
<td>Phone contact with father</td>
<td>7.4</td>
<td>4</td>
<td>538</td>
</tr>
<tr>
<td>Mail contact with father</td>
<td>8.1</td>
<td>4</td>
<td>450</td>
</tr>
<tr>
<td>In-person contact with step-mother</td>
<td>.8</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>Phone contact with step-mother</td>
<td>1.0</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>Mail contact with step-mother</td>
<td>3.3</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>In-person contact with step-father</td>
<td>3.5</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Phone contact with step-father</td>
<td>7.9</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Mail contact with step-father</td>
<td>2.8</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>In-person contact with child¹</td>
<td>1.2</td>
<td>4</td>
<td>628</td>
</tr>
<tr>
<td>Phone contact with child¹</td>
<td>5.8</td>
<td>4</td>
<td>608</td>
</tr>
<tr>
<td>Mail contact with child¹</td>
<td>5.0</td>
<td>4</td>
<td>453</td>
</tr>
<tr>
<td>In-person contact with grandchild²</td>
<td>6.5</td>
<td>4</td>
<td>166</td>
</tr>
<tr>
<td>Phone contact with grandchild²</td>
<td>1.0</td>
<td>4</td>
<td>159</td>
</tr>
<tr>
<td>Mail contact with grandchild²</td>
<td>13.0*</td>
<td>4</td>
<td>136</td>
</tr>
<tr>
<td>In-person contact with grandmother</td>
<td>.9</td>
<td>4</td>
<td>280</td>
</tr>
<tr>
<td>Phone contact with grandmother</td>
<td>4.8</td>
<td>4</td>
<td>277</td>
</tr>
<tr>
<td>Mail contact with grandmother</td>
<td>13.0*</td>
<td>4</td>
<td>253</td>
</tr>
<tr>
<td>In-person contact with grandfather</td>
<td>3.1</td>
<td>4</td>
<td>186</td>
</tr>
</tbody>
</table>
Table 8. (continued)

<table>
<thead>
<tr>
<th>Form of Interaction</th>
<th>Chi-square</th>
<th>d.f.</th>
<th>Valid N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone contact with grandfather</td>
<td>2.4</td>
<td>4</td>
<td>184</td>
</tr>
<tr>
<td>Mail contact with grandfather</td>
<td>13.0*</td>
<td>4</td>
<td>253</td>
</tr>
</tbody>
</table>

*** p<.0001.
** p<.01.
* p<.05.

1. Randomly designated study child.
2. Randomly designated study grandchild.

1.4 Women work more hours than men on household chores and child care. Men work more hours than women for a paid job outside the home. When household chores and paid work are all added together, women work more hours than men.

This hypothesis is supported. Women spend more hours working on both household chores and child care on days when they work outside the home as well as on days when they do not. Men spend more hours for paid work. The total amount of time spent on household work and paid work per week is greater for women than men. Table 9 shows the summary of t-tests.
Table 9. Gender differences in hours spent on household work and paid work.

<table>
<thead>
<tr>
<th>Area of Work</th>
<th>Women</th>
<th></th>
<th>Men</th>
<th></th>
<th>t-value(^7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>N</td>
<td>Mean</td>
<td>S. D.</td>
</tr>
<tr>
<td>Household wk(^1)</td>
<td>6.2</td>
<td>4.1</td>
<td>265</td>
<td>4.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Household wk(^2)</td>
<td>3.5</td>
<td>3.5</td>
<td>210</td>
<td>2.1</td>
<td>2.3</td>
</tr>
<tr>
<td>Child care(^3)</td>
<td>7.0</td>
<td>5.1</td>
<td>198</td>
<td>4.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Child care(^4)</td>
<td>3.8</td>
<td>3.6</td>
<td>137</td>
<td>1.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Paid work(^5)</td>
<td>42.9</td>
<td>20.3</td>
<td>239</td>
<td>46.3</td>
<td>10.8</td>
</tr>
<tr>
<td>Total work(^6)</td>
<td>110.0</td>
<td>51.6</td>
<td>176</td>
<td>99.8</td>
<td>28.6</td>
</tr>
</tbody>
</table>

*** p<.0001.
* p<.05.

1 Household work, unpaid days: Hours spent on household work per day, on days when the person does not work outside home.
2 Household work, paid days: Hours spent on household work per day, on days when the person works outside home.
3 Child care, unpaid days: Hours spent on child care per day, on days when the person does not work outside home.
4 Child care, paid days: Hours spent on child care per day, on days when the person works outside home.
5 Paid work: Hours spent on paid work per week.
6 Total work hours per week
   for employed people=(total household hours unpaid days)*2 + (total household hours paid days)*5 + (total hours on paid work per week)
   for homemakers=(total household hours, unpaid days)*7
7 All are separate variance estimates.
1.5 Women have more people who depend on them for household chores and transportation, information and advice, emotional support, financial assistance, and important life decisions than do men.

This hypothesis is supported. The t-test shows that women have a higher value on the dependency indicator, calculated by adding the numbers of the specified area of dependency (household chores and transportation, information and advice, emotional support, financial assistance, and important life decisions) of all relatives and friends who depend on the respondent. The mean value of the dependency indicator for women is 10.3 (standard deviation=5.6, N=657) and the mean value of the dependency indicator for men was 9.4 (standard deviation=5.3, N=463). The t-value is 2.66 (pooled variance estimate; p<.0001).

1.6 Women report a higher quality of relationships with children and with parents than men do. That is, they have a higher mean score on the relationship questions.

This hypothesis is supported, except for the relationship with step-parents. Women consistently report a better quality of relationship with both children and parents (Appendix 2). Table 10 shows the summary statistics.
Table 10. Gender differences in the quality of relationships with children and parents.

<table>
<thead>
<tr>
<th>Quality of Relationship with</th>
<th>Women</th>
<th>Men</th>
<th>t-value(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>N</td>
</tr>
<tr>
<td>Mother</td>
<td>25.9</td>
<td>6.3</td>
<td>419</td>
</tr>
<tr>
<td>Father</td>
<td>24.6</td>
<td>6.2</td>
<td>336</td>
</tr>
<tr>
<td>Step mother</td>
<td>22.8</td>
<td>7.1</td>
<td>28</td>
</tr>
<tr>
<td>Step father</td>
<td>21.0</td>
<td>8.5</td>
<td>25</td>
</tr>
<tr>
<td>Child(^1)</td>
<td>27.3</td>
<td>6.3</td>
<td>375</td>
</tr>
</tbody>
</table>

*** p<.0001.
**  p<.01.
  *  p<.05.

1 Randomly designated study child.
2 All t-values are pooled variance estimates except for the t-value for the relationship with Child.

1.7 Women in general, and especially those who are not employed, report a higher mean level of marital quality than men do.

This hypothesis is not supported in general. There is no gender difference in reported marital quality (Appendix 3) at either wave. Also, the t-tests between women who are not employed (everyone other than those who indicated being currently employed, including homemakers) and all men do not show any significant differences in marital quality at either wave. The t-test between unemployed women (those who indicated not being
currently employed, excluding homemakers) and all men at Wave 1, however, shows a significant difference. The mean of marital quality for unemployed women at Wave 1 is 42.2 (standard deviation=6.0, N=41) and the mean of marital quality of all men at Wave 1 is 39.9 (standard deviation=5.7, N=259). The t-value is 2.46 (pooled variance estimate; p<.02).

1.8 Men report a higher mean level of satisfaction with work than women do.

This hypothesis is not supported. The t-test shows that there is no gender difference in work satisfaction (Appendix 4; t=.08--separate variance estimate--, d.f.=417, p<.94).

2.1 Married men are healthier mentally (higher on mental health scales) than unmarried (including widowed, divorced, separated, and never-married) men, regardless of the marital quality.

This hypothesis is generally supported. First, four separate t-tests were conducted to compare married men and unmarried men on four different mental health measures: Positive and Negative subscales of the Bradburn Emotional Balance Scale (Appendix 5), the CES-D Scale (Appendix 6), and the Comfort/Discomfort Scale of BSI (Appendix 7). Married men have fewer negative feelings, are less depressed, and have fewer psychopathological symptoms than do unmarried men. There is no
difference between married and unmarried men, however, in terms of positive feelings. Table 11 shows the t-tests results.

To test the hypothesis that married men are mentally healthier than unmarried men regardless of marital quality, a series of analyses of variance with contrast coefficient matrices were conducted. Married men were divided into two groups by a median split on marital quality (median of men's marital quality=40). Thus, the three groups, unmarried men, married men with a lower quality of marriage, and married men with a higher quality of marriage, were compared on four separate mental health measures. The results show that unmarried men have more negative feelings and are more depressed than men with a lower quality of marriage, as well

Table 11. Men's marital status and mental health.

<table>
<thead>
<tr>
<th>Mental Health Measures</th>
<th>Married Men</th>
<th>Unmarried Men</th>
<th>t-value&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>N</td>
</tr>
<tr>
<td>Bradburn, Positive</td>
<td>3.6</td>
<td>1.5</td>
<td>371</td>
</tr>
<tr>
<td>Bradburn, Negative</td>
<td>1.2</td>
<td>1.4</td>
<td>376</td>
</tr>
<tr>
<td>CES-D&lt;sup&gt;1&lt;/sup&gt;</td>
<td>71.8</td>
<td>7.2</td>
<td>366</td>
</tr>
<tr>
<td>BSI&lt;sup&gt;2&lt;/sup&gt;</td>
<td>12.3</td>
<td>3.6</td>
<td>382</td>
</tr>
</tbody>
</table>

*** p<.0001.  
** p<.01.

1 Recoded reverse; the higher the score, the better the mental health (the less depressed), Appendix 6  
2 Comfort/Discomfort Scale, Brief Symptom Inventory, Appendix 7  
3 All t-values are separate variance estimates except for the t-value for the Bradburn, Positive.
as compared to men with a higher quality of marriage. There were no
differences in terms of positive feelings and psychopathological symptoms,
however, between unmarried men and married men with a lower marital
quality. Both of these groups had more psychopathological symptoms than
did married men with a higher marital quality. The results are summarized
in Table 12.

Table 12. Men’s marital status, marital quality, and mental health.

<table>
<thead>
<tr>
<th>Mental Health Measures</th>
<th>Unmarried men</th>
<th>Lower MQ1</th>
<th>Higher MQ2</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>Bradburn, Positive5</td>
<td>3.5</td>
<td>85</td>
<td>3.3</td>
<td>172</td>
</tr>
<tr>
<td>Bradburn, Negative6</td>
<td>2.5</td>
<td>85</td>
<td>1.6</td>
<td>170</td>
</tr>
<tr>
<td>CES-D3, 6</td>
<td>65.4</td>
<td>79</td>
<td>69.4</td>
<td>166</td>
</tr>
<tr>
<td>BSI4, 7</td>
<td>14.2</td>
<td>86</td>
<td>13.0</td>
<td>176</td>
</tr>
</tbody>
</table>

*** p<.0001.
** p<.01.

1 Lower marital quality group
2 Higher marital quality group
3 Recoded reverse; the lower the score, the better the mental health (the less depressed), Appendix 6
4 Comfort/Discomfort Scale, Brief Symptom Inventory, Appendix 7
5 Lower MQ and Higher MQ groups are significantly different from each other at p<.05 (Scheffe test).
6 All three groups are significantly different at p<.05 (Scheffe test).
7 Both unmarried group and lower MQ group are significantly different from higher MQ group at p<.05 (Scheffe test).
2.2 Happily married women and unmarried women are mentally healthier than married women with low marital quality. There is no difference in mental health between happily married women and unmarried women. Overall, unmarried women are happier than married women.

This hypothesis is only partially supported. A series of analyses of variance with contrast coefficient matrices were conducted. Married women were divided into two groups, a low-marital quality group and a high-marital quality group, at the median of the frequency distribution for the marital quality (median of women's marital quality=41). Three groups, unmarried women, married women with a lower quality of marriage, and married women with a higher quality of marriage, were compared on four separate mental health measures. It seems that unmarried women are more similar to married women with a lower quality of marriage than they are to married women with a higher quality of marriage, in terms of mental health. There are no differences in positive feelings, negative feelings, and psychopathological symptoms between unmarried women and women with a lower quality marriage. Both groups have fewer positive feelings, more negative feelings, and more psychopathological symptoms than women with a higher quality of marriage. Unmarried women are more depressed than both women with a lower quality marriage and women with a higher quality marriage. These patterns are differentiated from the same analyses for men (hypothesis 2.1), in that unmarried men have more negative feelings and are more depressed than men with a lower quality of marriage. The results are summarized in Table 13.
Table 13. Women's marital status, marital quality, and mental health.

<table>
<thead>
<tr>
<th>Mental Health Measures</th>
<th>Unmarried women</th>
<th>Lower MQ(^1)</th>
<th>Higher MQ(^2)</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean N</td>
<td>Mean N</td>
<td>Mean N</td>
<td></td>
</tr>
<tr>
<td>Bradburn, Positive(^5)</td>
<td>3.8 194</td>
<td>3.6 224</td>
<td>4.2 214</td>
<td>11.7***</td>
</tr>
<tr>
<td>Bradburn, Negative(^5)</td>
<td>2.0 192</td>
<td>1.9 229</td>
<td>1.0 218</td>
<td>31.9***</td>
</tr>
<tr>
<td>CES-D(^4), (^6)</td>
<td>65.9 191</td>
<td>68.4 217</td>
<td>73.5 219</td>
<td>41.0***</td>
</tr>
<tr>
<td>BSI(^3), (^5)</td>
<td>14.7 197</td>
<td>14.4 226</td>
<td>13.7 217</td>
<td>29.9***</td>
</tr>
</tbody>
</table>

*** p<.0001.

1 Lower marital quality group
2 Higher marital quality group
3 Comfort/Discomfort Scale, Brief Symptom Inventory, Appendix 7
4 Recoded reverse; the higher the score, the better the mental health (the less depressed), Appendix 6
5 Both unmarried and lower MQ groups are significantly different from higher MQ group at p<.05 (Scheffe test).
6 All three groups are significantly different from each other at p<.05 (Scheffe test).

2.3 Married men are healthier mentally than married women.

This hypothesis is partially supported. Four separate t-tests were conducted to compare married men and married women on four mental health measures. Married men have fewer negative feelings and fewer psychopathological symptoms than do married women, but married men and women are not different in depression. On the other hand, married women reported more positive feelings than did married men. Table 14 shows the summary of the relevant t-tests.
Table 14. Differences in mental health between married women and married men.

<table>
<thead>
<tr>
<th>Mental Health Measures</th>
<th>Married Women</th>
<th>Married Men</th>
<th>t-value^3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>N</td>
</tr>
<tr>
<td>Bradburn, Positive</td>
<td>3.9</td>
<td>1.3</td>
<td>448</td>
</tr>
<tr>
<td>Bradburn, Negative</td>
<td>1.4</td>
<td>1.4</td>
<td>457</td>
</tr>
<tr>
<td>CES-D^1</td>
<td>71.0</td>
<td>8.0</td>
<td>445</td>
</tr>
<tr>
<td>BSI^2</td>
<td>13.2</td>
<td>4.0</td>
<td>454</td>
</tr>
</tbody>
</table>

** p<.01.
1 Recoded reverse; the higher the score, the better the mental health (the less depressed), Appendix 6
2 Comfort/Discomfort Scale, Brief Symptom Inventory, Appendix 7
3 The t-values for Bradburn, Positive and BSI are separate variance estimates, and the t-values for Bradburn, Negative and CES-D are pooled variance estimates.

2.4 Women have higher scores on work stress questions than men. Also, women have lower satisfaction level about the household work arrangement.

This hypothesis is supported only for the household work. A t-test shows that men report greater satisfaction than women regarding household work: men respond more than women that the arrangement of time on household work and child care are satisfactory, and men are less likely than women to report that household work is a source of marital tension (Appendix 4). On the other hand, men report greater stress from
paid work. There is no gender difference in satisfaction with paid work. Table 15 shows the summary of t-tests.

3.1 Men have higher scores than women in achievement orientation measures. Women have higher scores than men in relationship orientation measures.

This hypothesis is supported. A set of t-tests shows that women have more relationship-oriented goals than men do, and that men have more achievement-oriented goals than women do. Also, women rate relationship values as more important than men do, and men rate achievement values as more important than women do. Table 16 shows the summary statistics.

Table 15. Gender differences in work stress and satisfaction.

<table>
<thead>
<tr>
<th>Work Stress Measures</th>
<th>Women</th>
<th></th>
<th>Men</th>
<th></th>
<th>t-value¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S. D. N</td>
<td>Mean S. D. N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress, Paid work</td>
<td>8.2 2.6 253</td>
<td>8.7 2.5 190</td>
<td></td>
<td></td>
<td>2.1*</td>
</tr>
<tr>
<td>Satisfaction, Paid work</td>
<td>7.3 1.6 234</td>
<td>7.3 1.6 185</td>
<td></td>
<td></td>
<td>.1</td>
</tr>
<tr>
<td>Satisfaction, Household -Generation 3 only</td>
<td>17.2 2.8 99</td>
<td>18.1 2.5 106</td>
<td></td>
<td></td>
<td>2.3*</td>
</tr>
<tr>
<td>Satisfaction, Household -Generations 2 and 3</td>
<td>6.8 1.4 202</td>
<td>7.1 1.2 121</td>
<td></td>
<td></td>
<td>2.3*</td>
</tr>
</tbody>
</table>

* p<.05.

¹ All t-values are pooled variance estimates.
Table 16. Gender differences in orientation.

| Orientation Measures   | Women       |          |         | Men       |          | t-value
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>N</td>
<td>Mean</td>
<td>S. D.</td>
<td>N</td>
</tr>
<tr>
<td>Goals, Achievement</td>
<td>1.8</td>
<td>1.6</td>
<td>678</td>
<td>2.1</td>
<td>1.7</td>
<td>481</td>
</tr>
<tr>
<td>Goals, Relationship</td>
<td>1.5</td>
<td>1.3</td>
<td>678</td>
<td>1.1</td>
<td>1.2</td>
<td>481</td>
</tr>
<tr>
<td>Values, Achievement</td>
<td>10.3</td>
<td>3.4</td>
<td>662</td>
<td>11.4</td>
<td>3.4</td>
<td>465</td>
</tr>
<tr>
<td>Values, Relationship</td>
<td>15.5</td>
<td>3.2</td>
<td>666</td>
<td>14.6</td>
<td>3.5</td>
<td>467</td>
</tr>
</tbody>
</table>

** p<.01.
*** p<.0001.

1 All t-values are pooled variance estimates except for the t-value for the Goals, Relationship.

3.2 For men, being employed at both Wave 1 and Wave 2 times is positively related to mental health. For women, there is no overall relationship between employment status and mental health.

This hypothesis is supported only for women. T-test results show that there is no relationship between being employed at both waves and any mental health measures for either gender. Employment status at Wave 2 alone (regardless of the employment status at Wave 1) is not related to men's or women's mental health, either. When separate analyses were done for generation 3 only in order to control the effect of age, the results also were insignificant.
3.3 Men have more traditional and conservative attitudes than women regarding family norms, women's roles, and social and political issues.

This hypothesis is partially supported. Men are more traditional than women, regarding family norms (Appendix 8) and attitudes toward women's roles (Appendix 9), according to t-test results. Yet, no differences are found between women and men regarding opinions on social-political issues (Appendix 10). Table 17 provides a summary of the relevant t-tests.

Table 17. Attitudes by gender.

<table>
<thead>
<tr>
<th>Attitude Measures</th>
<th>Women</th>
<th></th>
<th>Men</th>
<th></th>
<th>t-value 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>N</td>
<td>Mean</td>
<td>S. D.</td>
</tr>
<tr>
<td>TFI 1</td>
<td>30.1</td>
<td>7.8</td>
<td>553</td>
<td>31.4</td>
<td>7.8</td>
</tr>
<tr>
<td>Attitudes/Women 2</td>
<td>16.3</td>
<td>4.4</td>
<td>563</td>
<td>17.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Opinion 3, Wave 1</td>
<td>29.6</td>
<td>6.7</td>
<td>513</td>
<td>29.7</td>
<td>6.9</td>
</tr>
<tr>
<td>Opinion 3, Wave 2</td>
<td>29.2</td>
<td>6.7</td>
<td>616</td>
<td>30.0</td>
<td>6.8</td>
</tr>
</tbody>
</table>

** p<.01.

1 Traditional Family Ideology Scale, Appendix 8.
2 Attitudes toward Women's Roles, Appendix 9.
3 Opinion on Social/Political Issues, Appendix 10.
4 All t-values are pooled variance estimates.
Findings about Women's Life-course

4.1 Women who are oriented toward achievement show a higher mental health score if they are employed, had postponed their first marriage to later than the median age, had the first child later than the median age, and had fewer children. On the other hand, women who are oriented toward relationships show a higher mental health score if they are not employed, had an earlier age of first marriage, had the first child earlier, and had more children than average.

This hypothesis is not supported. A series of multiple regression analyses were conducted, with forced entry of dummy-coded achievement and relationship orientation variables, as well as dummy-coded independent variables of employment status, early/later timing of marriage and childbearing, more/fewer than median number of children, and interaction terms for four different mental health measures. None of the regression models was significant, and no interaction terms of the orientation variables and the independent variables were found to be significant. In other words, the orientation of women, the employment status, an early/late timing of marriage and childbearing, and the number of children have no main nor interactive effect on women's mental health.
4.2 Women whose age at first marriage and first birth is closer to the
norm show higher mental health scores than do those whose age at first
marriage and first birth is farther from the norm. Also, women of
generations 1 and 2 are mentally healthier if they stayed home full-time,
rather than being employed outside the home. For women of generation 3,
there is no relationship between employment status and mental health.

This hypothesis is generally not supported. The age range between
two years earlier than the norm and two years later than the norm was
considered to be "on-time," and the rest of the age range on each event was
considered to be "off-time." This on- and off-time ranges were determined
based on the distribution: the on-time range of four years included forty to
sixty percent of the women of each generation. Regression analyses with
dummy-coded variables of on- and off-the-norm status show that there is no
significant impact of being on time normatively regarding marriage and
bearing the first child, on any measure of mental health. Also, for all
generations of women (not solely for women in generation 3), there is no
relationship between employment status and mental health, according to the
regression analyses. As a further exploration, the off-the-timing-norm
group was divided into earlier-than-norm and later-than-norm groups, and a
series of analyses of variance with contrast coefficient matrices were
conducted on four mental health measures. None of the overall F-ratios was
significant; thus, no significant impacts of the timing norms of marriage and
birth of the first child on mental health were found. Table 18 shows a
summary of statistics of three group analyses (early, on-time, later) of the effects of timing of first marriage and childbearing.

5.1 Women who are achievement-oriented show lower mean mental health scores than those who are not, when they are not employed. Women who are achievement-oriented show more negative responses to retirement than those who are not.

This hypothesis is minimally supported. All women other than those who were employed at both waves were selected, and achievement-oriented women were compared with women who are not achievement-oriented. Women who are achievement-oriented (by both the goal measure and the value measure) have more negative feelings than those who are not achievement-oriented, if they were not employed at both waves. These differences are, however, not found on other mental health measures. No significant difference is found in t-tests on responses to retirement (Appendix 12) between women who are achievement-oriented and women who are not. A summary of statistics is shown in Table 19.
Table 18. Effects of marital and childbearing timing norms on women's mental health.

<table>
<thead>
<tr>
<th>First Marriage</th>
<th>Early</th>
<th>On time</th>
<th>Later</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health</td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>Bradburn, Positive</td>
<td>3.8</td>
<td>278</td>
<td>3.8</td>
<td>209</td>
</tr>
<tr>
<td>Bradburn, Negative</td>
<td>1.6</td>
<td>283</td>
<td>1.5</td>
<td>212</td>
</tr>
<tr>
<td>CES-D&lt;sup&gt;1&lt;/sup&gt;</td>
<td>69.2</td>
<td>275</td>
<td>70.8</td>
<td>207</td>
</tr>
<tr>
<td>BSI&lt;sup&gt;2&lt;/sup&gt;</td>
<td>13.9</td>
<td>282</td>
<td>13.1</td>
<td>207</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child Bearing</th>
<th>Early</th>
<th>On time</th>
<th>Later</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health</td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>Bradburn, Positive</td>
<td>3.8</td>
<td>277</td>
<td>3.8</td>
<td>230</td>
</tr>
<tr>
<td>Bradburn, Negative</td>
<td>1.6</td>
<td>277</td>
<td>1.4</td>
<td>237</td>
</tr>
<tr>
<td>CES-D&lt;sup&gt;1&lt;/sup&gt;</td>
<td>68.9</td>
<td>271</td>
<td>70.3</td>
<td>235</td>
</tr>
<tr>
<td>BSI&lt;sup&gt;2&lt;/sup&gt;</td>
<td>13.9</td>
<td>275</td>
<td>13.1</td>
<td>238</td>
</tr>
</tbody>
</table>

1 Recoded reverse; the higher the score, the better the mental health (the less depressed), Appendix 6
2 Comfort/Discomfort Scale, Brief Symptom Inventory, Appendix 7

5.2 When they are divorced or widowed, women who are relationship-oriented show lower mental health scores than do those who are not.

This hypothesis is not supported. No difference was found on any mental health measure between relationship-oriented women who are divorced or widowed and relationship-oriented women who are not divorced or widowed.
Table 19. Effects of being not employed for achievement-oriented women and not achievement-oriented women.

<table>
<thead>
<tr>
<th>Mental Health Measures</th>
<th>Achievement by Goals</th>
<th>Achievement-Oriented Women</th>
<th>Mean</th>
<th>S. D.</th>
<th>N</th>
<th>Not-Achievement-Oriented Women</th>
<th>Mean</th>
<th>S. D.</th>
<th>N</th>
<th>t-value&lt;sup&gt;4&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradburn, Positive</td>
<td>3.8</td>
<td>1.3</td>
<td>242</td>
<td></td>
<td></td>
<td>3.8</td>
<td>1.3</td>
<td>253</td>
<td></td>
<td>.1</td>
</tr>
<tr>
<td>Bradburn, Negative</td>
<td>1.7</td>
<td>1.6</td>
<td>247</td>
<td></td>
<td></td>
<td>1.3</td>
<td>1.4</td>
<td>255</td>
<td></td>
<td>3.1**</td>
</tr>
<tr>
<td>CES-D&lt;sup&gt;1&lt;/sup&gt;</td>
<td>69.6</td>
<td>8.9</td>
<td>238</td>
<td></td>
<td></td>
<td>69.5</td>
<td>9.4</td>
<td>249</td>
<td></td>
<td>.2</td>
</tr>
<tr>
<td>BSI&lt;sup&gt;2&lt;/sup&gt;</td>
<td>13.8</td>
<td>4.8</td>
<td>248</td>
<td></td>
<td></td>
<td>13.4</td>
<td>4.1</td>
<td>256</td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>Retirement&lt;sup&gt;3&lt;/sup&gt;</td>
<td>10.8</td>
<td>4.4</td>
<td>52</td>
<td></td>
<td></td>
<td>9.6</td>
<td>3.6</td>
<td>101</td>
<td></td>
<td>1.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Achievement by Values</th>
<th>Achievement-Oriented Women</th>
<th>Mean</th>
<th>S. D.</th>
<th>N</th>
<th>Not-Achievement-Oriented Women</th>
<th>Mean</th>
<th>S. D.</th>
<th>N</th>
<th>t-value&lt;sup&gt;4&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradburn, Positive</td>
<td>3.9</td>
<td>1.3</td>
<td>201</td>
<td></td>
<td>3.8</td>
<td>1.3</td>
<td>284</td>
<td></td>
<td>.8</td>
</tr>
<tr>
<td>Bradburn, Negative</td>
<td>1.8</td>
<td>1.6</td>
<td>206</td>
<td></td>
<td>1.4</td>
<td>1.4</td>
<td>286</td>
<td></td>
<td>3.4**</td>
</tr>
<tr>
<td>CES-D&lt;sup&gt;1&lt;/sup&gt;</td>
<td>68.9</td>
<td>9.6</td>
<td>200</td>
<td></td>
<td>70.0</td>
<td>8.8</td>
<td>276</td>
<td></td>
<td>1.3</td>
</tr>
<tr>
<td>BSI&lt;sup&gt;2&lt;/sup&gt;</td>
<td>13.9</td>
<td>4.5</td>
<td>204</td>
<td></td>
<td>13.4</td>
<td>4.4</td>
<td>289</td>
<td></td>
<td>1.3</td>
</tr>
<tr>
<td>Retirement&lt;sup&gt;3&lt;/sup&gt;</td>
<td>9.5</td>
<td>4.4</td>
<td>39</td>
<td></td>
<td>10.3</td>
<td>3.8</td>
<td>110</td>
<td></td>
<td>1.1</td>
</tr>
</tbody>
</table>

** p<.01.

1 Recoded reverse; the higher the score, the better the mental health (the less depressed), Appendix 6
2 Comfort/Discomfort Scale, Brief Symptom Inventory, Appendix 7.
3 Retirement Experience Scale, Appendix 12.
4 All t-values are pooled variance estimates except for the t-value for the BSI, Achievement by Goals.
6.1 (descriptive) The variance of the entire group of women increases as they age, in terms of mental health, marital quality, attitudes toward traditional family, and women's roles and opinion on social/political issues.

Four of the measures have two measurement points, whereas the remaining four measures have only one measurement point. Therefore, the design of the analysis is partially cross-sequential and partially cross-sectional. For the scales with two measurement points, the analyses were limited to the people who completed identical questionnaires at both waves. Because many women of generation 1 were widowed and many of generation 3 got married between Wave 1 and Wave 2, the valid number of respondents on marital quality for this particular calculation was reduced considerably (N at Wave 1=367, N at Wave 2=498, N at both Waves=284). For the other measures, the sample was reduced by 30 to 50 cases. As a further exploration, the same calculations were conducted for the entire sample without limiting the respondents to those who have both data points on a certain scale, and the patterns of coefficients of variation (CV) were very similar despite different sample sizes. For both cross-sequential and cross-sectional data, it is impossible to sort out the age (developmental) effect from the cohort and historical timing effects. Thus, these data are presented only in a descriptive manner.

At least four different patterns emerged: 1) a constant increase of interindividual variation with aging (Bradburn Emotional Balance Scales), 2) a constant decrease (CES-Depression scale and Attitudes toward Women's Roles), 3) an increase from generation 3 to generation 2, and then a decrease
from generation 2 to generation 1 to an even smaller variation than
generation 3 (Brief Symptom Inventory and Traditional Family Ideology),
and 4) an increase between Wave 1 and Wave 2 for every generation
(Marital Quality).

A consistent increase of coefficient of variation (CV) that has been
predicted in the life-span literature is shown only in positive and negative
affects measured by the Bradburn Emotional Balance Scale. The rest of the
mental health scales are available only at one time point (either Wave 1 or
Wave 2). When the three data points are compared, the interindividual
variation tends to be smaller for the oldest cohort. The CV pattern of
marital quality is quite unique in that it shows the historical timing effect.
As mentioned before, the sample size was rather small for this particular
scale, nonetheless, the CV pattern for the nonlimited sample (without
limiting it to those who answered the Marital Quality Scale at both waves)
was almost identical. Three attitude scales, Attitude toward Women's Roles,
Traditional Family Ideology, and Opinions on Social/Poltical Issues do not
show the same pattern, but the CV is always the smallest for oldest
generation. Table 20 and Figure 3 present the CV data and the graphic
patterns.
Table 20. Coefficients of variation.

<table>
<thead>
<tr>
<th></th>
<th>Generation 3</th>
<th></th>
<th>Generation 2</th>
<th></th>
<th>Generation 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wave 1</td>
<td>Wave 2</td>
<td>Wave 1</td>
<td>Wave 2</td>
<td>Wave 1</td>
<td>Wave 2</td>
</tr>
<tr>
<td>Bradburn, Positive (N)</td>
<td>29.3</td>
<td>(286)</td>
<td>33.8</td>
<td>(253)</td>
<td>39.3</td>
<td>(88)</td>
</tr>
<tr>
<td>Bradburn, Negative (N)</td>
<td>45.4</td>
<td>(285)</td>
<td>86.0</td>
<td>(262)</td>
<td>126.1</td>
<td>(89)</td>
</tr>
<tr>
<td>CES-D¹ (N)</td>
<td>13.9</td>
<td>(283)</td>
<td>12.8</td>
<td>(264)</td>
<td>12.1</td>
<td>(91)</td>
</tr>
<tr>
<td>BSI² (N)</td>
<td>32.1</td>
<td>(283)</td>
<td>32.6</td>
<td>(269)</td>
<td>29.7</td>
<td>(101)</td>
</tr>
<tr>
<td>Marital quality (N)</td>
<td>14.4</td>
<td>(53)</td>
<td>15.6</td>
<td>(185)</td>
<td>15.1</td>
<td>(46)</td>
</tr>
<tr>
<td>TFI³ (N)</td>
<td>24.9</td>
<td>(239)</td>
<td>25.0</td>
<td>(225)</td>
<td>23.7</td>
<td>(89)</td>
</tr>
<tr>
<td>Attitudes/Women⁴ (N)</td>
<td>28.2</td>
<td>(242)</td>
<td>26.3</td>
<td>(230)</td>
<td>23.9</td>
<td>(91)</td>
</tr>
<tr>
<td>Opinion⁵ (N)</td>
<td>23.0</td>
<td>(199)</td>
<td>20.8</td>
<td>(194)</td>
<td>18.6</td>
<td>(84)</td>
</tr>
</tbody>
</table>

¹ Recoded reverse; the higher the score, the better the mental health, Appendix 6.
² Comfort/Discomfort Scale, Brief Symptom Inventory, Appendix 7.
³ Traditional Family Ideology Scale, Appendix 8.
⁴ Attitudes toward Women's Roles, Appendix 9.
⁵ Opinion on Social/Political Issues, Appendix 10.
Figure 3. Patterns of intrahistorical variance.
Figure 3. (continued)  

CV: Attitudes toward Women's Roles

CV: Marital Quality

CV: Opinion on Social/Political Issues

CV: Traditional Family Ideology

G1=generation 1; G2=generation 2; G3=Generation 3

W1=Wave 1; W2=Wave 2
7.1 Cohort differences are found in the mean age of marriage and childbearing, attitudes toward traditional family and women, and opinions about social/political issues.

This hypothesis is generally supported. A set of analyses of variance with contrast coefficient matrices confirms that different generations of women are distinguished from one another, not only in timing of life events, but also in attitudes. The timing of events is significantly different between generation 2 and 3 only; thus, a linear trend of increase or decrease is not found. Older generations are more conservative and traditional than younger generations in family ideology and in opinions about social and political issues. Table 21 shows a summary of generational differences.

8.1 Women who have been exposed to parental divorce have higher mean marital quality than do women who have not been exposed. They also have more children, and spend more time in household chores and child care than do women who have not been exposed to parental divorce.

This hypothesis is not supported. The results of t-tests show that there is no significant difference between women who have been exposed to parental divorce and women who have not been exposed to parental divorce on marital quality, the amount of time spent on household work, or the number of children.
Table 21. Cohort differences in timings of life events and attitudes.

<table>
<thead>
<tr>
<th>Measures/Variables</th>
<th>Generation 1</th>
<th>2</th>
<th>3</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, First marriage⁴</td>
<td>20.7</td>
<td>70</td>
<td>20.1</td>
<td>244</td>
</tr>
<tr>
<td>Age, Childbearing⁴</td>
<td>22.2</td>
<td>109</td>
<td>22.1</td>
<td>266</td>
</tr>
<tr>
<td>TFI¹, ⁵</td>
<td>35.2</td>
<td>89</td>
<td>29.4</td>
<td>225</td>
</tr>
<tr>
<td>Attitudes/Women², ⁶</td>
<td>17.7</td>
<td>91</td>
<td>16.0</td>
<td>230</td>
</tr>
<tr>
<td>Opinion, Wave 1³, ⁵</td>
<td>33.0</td>
<td>90</td>
<td>30.6</td>
<td>209</td>
</tr>
<tr>
<td>Opinion, Wave 2³, ⁵</td>
<td>33.5</td>
<td>100</td>
<td>29.7</td>
<td>247</td>
</tr>
</tbody>
</table>

*** p<.0001.  
** p<.01.

1 Traditional Family Ideology Scale (Appendix 8).  
2 Attitudes toward women's roles (Appendix 9).  
3 Opinion on social/political issues (Appendix 10).  
4 Significant difference is found only between generation 2 and 3 at p<.05 (Scheffe test).  
5 All three generations are significantly different at p<0.5 (Scheffe test).  
6 Significant difference is found only between generation 1 and 3 at p<.05 (Scheffe test).

8.2 Age at mother's first marriage and age at daughter's first marriage are significantly correlated. Also, mother's age of bearing the first child is significantly correlated with daughter's age at bearing the first child.

This hypothesis is partially supported. A subset of the data that matched a daughter with her mother was created to test the hypothesis. Although the magnitude of the correlation coefficient is not very impressive, the correlation between generation 2 mother's age of marriage and
generation 3 daughter's age of marriage is significant \((r=.20, p<.05)\). This correlation is not significant for generation 1 and 2 pairs. The correlation between the daughter's age at first childbearing and the mother's age at first childbearing was not significant for either of the generation pairs (generation 1 mother and generation 2 daughter, and generation 2 mother and generation 3 daughter).

8.3 Maternal employment history is related to daughter's achievement orientation and employment status.

This hypothesis is not supported. A subset of the data that matched a daughter with her mother was created to test the hypothesis. The pairs of generation 1 and 2 women and generation 2 and 3 women were analyzed separately. A Chi-square analysis shows that mother's employment history was not related with the daughter's employment history for either pair of generations. Likewise, mother's staying home full-time was not correlated with daughter's staying home full-time for either pair of generations. Mother's employment history did not predict daughter's achievement orientation for either pair of generations.

Summary of Findings

This study examined women's experience in demands and rewards in family and work life in comparison to men's experience, and the impact of the interaction between women's differential orientations and life events on
mental health. Overall, the contrast between women's and men's experience is more conspicuous and consistent than is the contrast between women with different orientations. Cohort differences are found among women, however, in terms of the timing of events and attitudes.

As predicted in the hypotheses, women do seem to invest more of their time and energy than men into various relationship-maintenance activities. They offer help and care to relatives and friends more than do men; they live closer to their parents than men do and have contact with their mothers, grandmothers, and grandchildren more often than men do. Women spend more hours doing household chores and taking care of children. Nonetheless, women do not report feelings that they are burdened helping and supporting others more than men. There is an indication, however, that women are more stressed about the arrangement of household work, and are more vulnerable to marital tension derived from the arrangement of household work. On the other hand, women have a higher quality of relationships than men with their parents and their children.

Women experience marriage differently than men, also. Married men are happier than married women. Married men enjoy better mental health (fewer negative feelings and less depression) than unmarried men, even when the quality of marriage is relatively low. Women with a higher quality of marriage are mentally healthier than both unmarried women and women with a lower quality marriage, and the latter two groups do not show any differences, except in depression (CES-D). Both unmarried men and unmarried women are more depressed than their married counterparts.
These gender differences in demands and rewards are explained partly by differences in values and goals. Women are more oriented toward relationships than men and men are more oriented toward achievement than women. Nevertheless, no gender difference is found in the relationship between employment history and mental health: employment history is not related to mental health for either gender.

Women's mental health is not explained by their orientations, their life events and situations such as employment, timing of marriage and childbearing, and number of children, or the interaction of orientation and life events. Women's mental health is not predicted directly by on- or off-normative timing of life events, either. No group difference was found on mental health when the off-normative timing group was divided further into earlier- vs. later-than the normative time.

There is no evidence that women with differential orientations have different risks. Unemployment, retirement, or divorce and separation do not seem to affect women in a different fashion according to their orientations.

More than one pattern of interindividual divergence with aging is found in terms of mental health and attitudes. The coefficient of variation on positive and negative feelings does seem to increase with aging as predicted in the life-span literature. The coefficient of variation on marital quality increases at Wave 2, for all three generations, reflecting the effect of historical timing. Other mental health and attitude measures are available for only one time point, and when the three data points are compared, there
is no evidence of greater variability among older cohorts. If anything, variability seems to be smaller for the oldest cohort.

Cohort differences are found consistently in the timing of life events and attitudes. Older generations are consistently more conservative than younger generations. There are no significant differences in timing of the first marriage and first childbearing between generations 1 and 2, nor between generations 1 and 3, but generation 3 married and had children significantly later than generation 2.

Maternal influence on women's life-course is found to be minimal. There is no difference between women who have been exposed to parental divorce and those who have not been, in terms of marital satisfaction, the amount of time spent at home, or the number of children. The ages at first marriage are correlated for generation 2 mothers and generation 3 daughters, but this relationship was not significant for generation 1 mothers and generation 2 daughters. The age of bearing the first child is not correlated in either set of mothers and daughters. Also, mother's employment is not found to influence the daughter's employment or achievement orientation significantly.
CHAPTER VI. SUMMARY AND CONCLUSIONS

Implications of findings of this study are discussed in relation to previous studies in this chapter. Suggestions for future studies are also provided.

General Conclusions and Discussion of Findings

The purpose of this study was to investigate women's experience in two ways. Gender differences in demands and rewards in work and family life were examined, and issues of differential life-course among women were explored. Initially, it was hypothesized that gender is a valid and meaningful category to represent interindividual differences in work and family life; thus, the contrast of women's experience with men's experience was expected to be significant. Further, women's differential life-courses were expected to be manifested in the interaction between women's orientations and life events, and the impact of this interaction on women's mental health. The influences of social norms regarding women's life-course on individual women's mental health, diverging interindividual differences with aging, generational differences among women, and maternal influence were also investigated.

The hypotheses that women invest in relationships more than men were generally supported. Women offer care and help to relatives and friends more than men do, women live closer to their parents than men do, and spend more time than men on household work. Women also engage
more than men in relationship maintenance. On one hand, women seem to be stressed more than men regarding household work and child care. Nonetheless, women do not report being burdened more than men from giving help and care to others, and women indeed enjoy a better quality of relationship with their parents and their children than men do. That is, there are systematic costs for women that are bigger than men's, but there are also systematic rewards for women that exceed those of men. However, women do not report higher marital quality than men, which may mean that the rewards come mostly from intergenerational relationships rather than horizontal (marital) bonds, as Kranichfeld (1987) pointed out.

Men work more hours than women at a paid job, but when household work and paid work are added together, women work longer hours than men. The estimation is a proxy, though, because the total amount of working hours per week was calculated from the amount of time spent on a paid working day multiplied by 5, plus the typical amount of time spent on a nonworking day multiplied by 2. The respondent may be working for a paid job more than or less than five days per week, but the information about how many days per week the respondent works outside the home was not available. It is plausible to conclude that employed women work more hours altogether than men, because it is known that men share only a small portion of household work even when the demand for household labor is great (Berk, 1985; Hochschild, 1989).

Contrary to the hypotheses, men do not report higher satisfaction than women on paid job, and men's employment history does not have any impact on their mental health. In fact, findings from previous studies (Barnett et
al., 1993; Lambert, 1991; Menaghan, 1989) are not very consistent about gender differences in the relationship between employment status/history and mental health, and some authors suggest that the relationship between mental health and work and family roles is complex and mediated by a number of variables such as personal orientation, quality of work, and interface characteristics of family and work (e.g., Lambert, 1991; Menaghan, 1989).

Gender differences in attitudes and values also are found. Men are more traditional and conservative in family norms and attitudes toward women, but men are not more conservative in terms of social and political issues. From the exchange framework, it is a plausible explanation that men invest in the status quo of family norms and gender roles because these benefit them. Social and political issues are not particularly related to gender interests, although the opinion questionnaire used in this study includes a few questions regarding gender roles. As expected, men are more achievement-oriented than women and women are more relationship-oriented than men. There are competing theories (especially, socialization vs. biological determinism) about the origins of gender differences in the orientation, but it is not possible to test these theories with the current data. Even the radical feminists who exult the goodness of women's "natural" tendency to take care of other people rather than compete with other people do not exclude the role of socialization (Gilligan, 1982). Bernard (1976) suggests that to measure the pure impact of socialization and sort out biological or genetic influence in living human subjects is impossible because humans always exist in a cultural context. The more important question is the impact of the gender differences in the orientations (or goals and values,
in this study) over the life-course. This question can be answered by studying women's life-course longitudinally, either in comparison with men or by differentiating women with different orientations.

As predicted, marriage contributes to men's mental health more than to women's: married men are happier than married women. When the quality of marriage is considered, men with a lower quality of marriage still are better off (have fewer negative feelings and are less depressed) than are unmarried men. The hypothesis that unmarried women are mentally as healthy as happily married women was not supported. In terms of mental health, unmarried women are more similar to women with a lower quality of marriage than to women with a higher quality of marriage. The finding that unmarried women are more depressed than any group of married women may suggest the impact of social norms. Being married rather than being unmarried is certainly a norm of this society. It is a curious result, however, considering that unmarried women do not have more psychopathological symptoms or negative feelings than do women with a lower quality of marriage. It seems that the impact of being deviant from social norms is selective for certain aspects of mental health. Another explanation about this unexpected result is the inclusive category of unmarried women in this study. Most of the previous studies (e.g. Fowers, 1991; Haavio-Mannila, 1986) compared single women with married women. In this study, widowed, divorced, and separated women, as well as never-married single women, were included in the category of unmarried women. It is possible that widowed or divorced women show a different pattern than do never-married single women. A study by Ensel (1982) supports this
possibility: young women under 25 were happier if they were not married, whereas women over 50 were happier if they were married. The older group of unmarried women may have more widowed and divorced women than did the younger group.

No direct or interactive impacts of women's orientation on mental health were found. The goodness-of-fit hypothesis suggested that neither women's orientation per se, nor women's current employment/homemaker status, timing of life-events, or number of children would predict women's mental health, but the goodness-of-fit between women's orientation and life events should predict women's mental health. This hypothesis is not supported. One potential reason is the measurement problem of women's orientation. All three measures of women's orientation in this study—goals, values, and attitudes toward women's roles—were indirect measures of orientation. Indeed, women's orientation is a loosely defined term in the existing literature. The conceptual refinement of women's orientation and the development of a reliable measure are required to pursue the question further.

Another obvious possibility is that goodness-of-fit has no impact on women's mental health. For example, even for the women who are achievement-oriented, neither employment, nor postponement of marriage and childbearing nor having fewer children guarantees a benefit for mental health. Likewise, even for the women who are relationship-oriented, staying home full-time, getting married earlier, having children earlier, or having more children does not cancel other influences on mental health. Considering that most feminist theories do not endorse a certain life-style of
women (such as being employed) as a universal solution, this explanation is somewhat plausible. In other words, the current institutions of work and family are no-win situations for women regardless of their orientation. The null results of this study regarding women's orientations and mental health may provide counter evidence against radical feminists' assumption that relationships and women's inclination toward connectedness are the source of women's happiness and strength (Gilligan, 1982; Kranichfeld, 1987; Tong, 1989), because there is no relationship between women's mental health and relationship-orientation (goals and values), staying home full-time, number of children, or early marriage and childbearing. Similarly, women are not healthier mentally than men despite the fact that women enjoy a better quality of relationship with their parents and children than men do.

The exchange framework provides yet another explanation. Among the available alternatives, humans make choices that involve the most benefits and the least costs, according to their own individual values and tastes. Life-events such as employment and marriage and the timing of those events are not entirely controllable, and women are aware of this. Thus, when women make choices either actively or passively, those are probably the best choices for individual women regardless of the goodness-of-fit between the choices and their orientations. Therefore, the results of the choices do not have a significant impact on women's mental health.

The impact of goodness-of-fit with social norms on individual women's mental health is not found to be significant in this study. Neither on- and off-normative timing, nor on-, earlier-than-, and later-than-normative timing effects were found. However, a more accurate
measurement of social norms (for example, an actual survey of the ideal timings or ideal roles of women designed to represent certain cohorts, classes, and cultures) may make a difference. The impacts of the direction or magnitude of the deviance from social norms need to be studied further with a larger, more random (heterogeneous) group of women. Because this study utilized a family data set, it is possible that the impact may have been underrepresented. As Hagestad (1990) pointed out, defining "norms" or "being normative" involves some conceptual difficulties, because first, it is hard to determine how far away from the statistical norm is irregular, and second, the statistical norm is not in exact correspondence with cultural norm. In this study, being on- and off- the timing norm was defined by distribution. The ranges between two years earlier-than- and two years later-than-the cultural norms (which, again, were estimated from the statistical means) were arbitrarily defined as on the timing norm because this range included about 40% to 60% of women of each generation.

Another problem of the design of this particular analysis is that the timing norm was confounded with developmental age. For example, a certain status on the timing norm variable (such as earlier age of marriage than the social norm) also indicates a certain developmental age at the event. One way to reduce the confounding effect may be to measure the individual perception of the social norm of each respondent as well as the actual experience of the events, and then analyze the impact of psychological goodness-of-fit (the fit between individually perceived social norm and actual experience), rather than a social goodness-of-fit (the fit between the norm of the group to which the respondent belongs and individual
experience). The psychological goodness-of-fit is also an alternative to avoid the conceptual problem (arbitrariness of determining being on- or off-the-norm) discussed above.

The hypothesis on the increased interindividual variance among older women seems to be supported for Bradburn's Emotional Balance Scales only. Cross-sectional data on other mental health and attitude measures show several different patterns. However, the interindividual variance seems to be reduced rather than increased among the oldest cohort of women. The coefficient of variation on marital quality increased for every cohort at Wave 2, implying the historical timing effect. In other words, women in 1985 vary more in their perception of marital quality than in 1971, and this pattern is true for every cohort.

The family influence on women's orientation and life style seems to be insignificant or minimal. Women who have been exposed to parental divorce do not invest in the family life more than women who have not been exposed to parental divorce. Mother's age and the daughter's age at first marriage and childbearing are generally not correlated. Maternal employment history does not predict either daughter's employment history or her orientation. A potential explanation of these null relationships is that it is the daughter's identification with a certain aspect of a certain parent, not a parent's life situation (such as employment/homemaker status) per se. A study by Baruch (1974) indirectly supports this explanation. It was found in Baruch's study that daughters identified with their mothers only when mothers were employed outside home. That is, identification is a selective process and it may not happen automatically only because the identified
figure is a mother. Another explanation is a rather complex impact of maternal employment. Hochschild (1989) points out that young women whose own mothers have worked outside the home are rather ambivalent toward women's employment. On the one hand, mothers of these young women set a new ideal for their daughters. But on the other hand, the daughters have also observed negative impacts of maternal employment such as parental marital tension or mother's "second shift" at home. As socialist feminists have warned, women's employment does not necessarily bring gender equity as long as the current career and family system remain intact.

In conclusion, women's experiences in demands and rewards in life are differentiated clearly from men's. It is not supported from the findings of this study, however, that women's orientation interacts with life events, and that the goodness-of-fit predicts women's mental health.

Limitations of the Study

This study is based on a sample of generally White, economically stable middle and working class three-generational families (Silverstein & Bengtson, 1991). The original investigators found that although three-generational families were rare in the population, the study sample exhibited diversity in social characteristics (Bengtson, 1975). However, findings from this study may not be generalized to the entire population of the United States or a specific subgroup of people because of a unique procedure of sampling of this study. The original sample was rooted in generation 1 males with at least one adult child and one grandchild of adolescence. This
procedure is likely to exclude never-married man and women and unmarried (divorced or widowed) women in generation 1, and childless people in generation 1 and 2. Because this study utilized both Waves 1 and 2, the sample was limited again to the respondents who participated in both waves to be consistent in terms of sample characteristics. This limited sample might also have introduced a bias, because the respondents who were able to be tracked down at Wave 2, which was initially unplanned, and who were willing to participate at both waves might be less geographically mobile and more psychologically motivated than the respondents who dropped out at Wave 1.

As mentioned earlier, using family data in studying gender differences may be problematic. It could be a violation of the assumption of independence of the statistical procedure used in this study (t-test). Some of the respondents are related with one another by marriage or by blood. Because they are related, it is possible that they influence one another. The potential bias is, however, to reduce, not to exaggerate, gender differences in this study. In other words, the tests in this study might have been more conservative than they need to be. Furthermore, men and women are related by many ways (as family members, friends, or co-workers) in real life. When gender differences are discussed, it is only natural to assume the men and the women being married to each other or being related to each other in different ways. Because humans do not exist in the vacuum where no one is influenced by anyone, the assumption of independence should not be interpreted as complete lack of familial influence.
Another limitation of this study was indirect and incoherent measures of women's differential orientations. Because there were no direct psychological data on orientations, values, goals, and attitudes were used as different orientation measures, and the correlations among these measures were very low (Pearson Correlation Coefficients ranged from -.117 to .005 to .218), indicating that these measures were not measuring the same psychological construct.

Suggestions for Future Studies

1. Multiple measures of mental health were used in this study, and the variation in the nature of the relationships with various independent variables, especially marital status, is striking. Mental health is a complex concept, and thus, a multidimensional assessment is encouraged. Further, the differential impact of gender, marital quality, and marital status on different aspects of mental health should be explored more systematically.

2. The gender difference in physical proximity to the residences of parents, grandparents, children, and grandchildren needs to be explored further with a larger and more random sample. In this study, a significant gender difference was found only in the proximity to parents' residence, yet there seems to be a consistent pattern that women live closer to their kin than men. The distributions of the proximity variables (which lack normality) may have played a role in this study, which could be improved by employing a larger sample.
3. The relationship between women's marital status and mental health needs to be explored further. It is interesting that unmarried women are more depressed than women with a lower quality of marriage, but they do not have more negative or positive feelings, nor more psychopathological symptoms. Also, unmarried women may differ among themselves. For example, never-married single women, divorced women, widowed women, and women with other combinations of marital history may differ in mental health.

4. Qualitative longitudinal studies on women's differential life-course are needed. Following up the differential paths of women, how goals, values, and orientations of young women eventually influence their choices in later life, how different kinds of life events interact with women's orientation, and the impacts of the differential life-course on mental health should be examined.

5. The concept of women's orientation needs to be refined, and appropriate measures should be developed. The null findings of this study in regard to the impact of women's orientation suggest that conventional dual categories of women's orientation, that is, relationship vs. achievement, might not be valid.

6. The relationship between being on- and off-timing norms and mental health needs to be explored further. The differential impacts of different directions of off-timing norms should be investigated further. Also, not much is known about the impact of the magnitude of the deviance and normative range of "on-time."
7. The hypothesis of interindividual divergence with aging needs to be explored further. Because the data this study utilized had only two data points, the results cannot be generalized over the entire life span. However, it seems that, at least for some mental health measures, this hypothesis is supported. Whether this hypothesis can be generalized to attitudes should be answered by future studies.

8. Maternal influence on women's orientation and behavior needs to be examined in a more complex context. The relationship between maternal behavior and the process of women's socialization, identification, and the determination of women's orientation may not have a universal direction. Also, it may be women's perception and evaluation about their own mothers' personal experiences of employment or divorce, rather than mother's employment status or exposure to divorce per se, that determines their behavior and orientation.
REFERENCES


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APPENDIX 1. BURDENS OF HELP AND SUPPORT SCALE

How often do you feel that your family and friends want too much from you in the way of help and support?

Response categories:
1 = never (recoded to 0)
2 = rarely (recoded to 1)
3 = sometimes (recoded to 2)
4 = fairly often (recoded to 3)
5 = very often (recoded to 4)
6 = n/a (recoded to 0)

1. your spouse/partner
2. your study child (G1 and G2 only)
3. your other children (G1 and G2 only)
4. your study grandchild (G1 only)
5. your mother (G2 and G3 only)
6. your step-mother (G2 and G3 only)
7. your father (G2 and G3 only)
8. your step-father (G2 and G3 only)
9. your grandmother (G3 only)
10. your grandfather (G3 only)
11. your brothers/sisters
12. your other relatives/in-laws
13. your friends/neighbors

(G1=Generation 1; G2=Generation 2; G3=Generation 3)
APPENDIX 2. QUESTIONS ON THE QUALITY OF THE RELATIONSHIPS

Relationship with parents (asked to generation 2 and 3 only):
The following set of questions was asked about mother, step mother, father, and step father separately.

Response categories:
1 = not at all close (good, similar, well)
2 = not too close (good, similar, well)
3 = somewhat close (good, similar, well)
4 = pretty close (good, similar, well)
5 = very close (good, similar, well)
6 = extremely close (good, similar, well)
7 = N/A, deceased

1. Taking everything into consideration, how close do you feel is the relationship between you and your parent at this point of time?
2. How good is communication between you and your parent? That is, how well can you exchange your ideas or talk about things that really concern you at this point in your lives?
3. In general, how similar are your opinions and values about life to those of your parent at this point in time?
4. How well do you and your parent get along at this point of time?
5. How well do you feel your parent understands you at this point in your life?
6. And finally, how well do you feel you understand your parent?

Relationship with children (asked to generation 1 and 2 only):
To generation 1, the following set of questions was asked about the study child, and to generation 2, it was asked about all study children, up to six of them, separately.

Response categories:
1 = not at all close (good, similar, well)
2 = not too close (good, similar, well)
3 = somewhat close (good, similar, well)
4 = pretty close (good, similar, well)
5 = very close (good, similar, well)
6 = extremely close (good, similar, well)

1. Taking everything into consideration, how close do you feel is the relationship between you and your child at this point of time?
2. How good is communication between you and your child? That is, how well can you exchange your ideas or talk about things that really concern you at this point in your lives?
3. How similar are your opinions and values about life to those of your child at this point in time?
4. Overall, how well do you and your child get along at this point of time?
5. How well do you feel you understand your child?
6. How well do you feel your child understands you?
APPENDIX 3. MARITAL QUALITY SCALE

(Question 1 to 10) Here are things that husbands and wives may do when they are together. When you are with your spouse or partner:

Response categories:
1=hardly ever
2=sometimes
3=fairly often
4=quite frequently
5=almost always

1. You calmly discuss something together.
2. One of you is sarcastic.
3. You work together on something (dishes, yard work, hobbies, child care, etc.)
4. One of you refuses to talk in a normal manner (for example, shouting or not talking)
5. You laugh together
6. You have a stimulating exchange of ideas.
7. You disagree about something important
8. One of you becomes critical or belittling.
9. You have a good time together.
10. One of you is being angry.

(Questions 2, 4, 7, 8, and 10 were recoded reverse.)
APPENDIX 4. WORK-RELATED QUESTIONS

Work stress questions:
Listed below are some questions describing the way people sometimes feel about their jobs. We would like to know how often you feel this way. How much of the time:

Response categories: 1=never  
2=rarely  
3=sometimes  
4=fairly often  
5=very often

1. Do you feel pressured at work? 
2. Do you feel hassled trying to get time off for personal or family matters? 
3. Do you feel that your job requires you to work more hours than you would like to?

Work satisfaction questions:

1. If you are currently working, how satisfied would you say you are with your present job?
   Response categories: 1=not at all satisfying  
2=not too satisfying  
3=somewhat satisfying  
4=very satisfying  
5=extremely satisfying

2. Do you feel that the job you do is respected by others? 
   Response categories: 1=never  
2=rarely  
3=sometimes  
4=fairly often  
5=very often

(Appendix 4 continues on the next page)
Questions about satisfaction on household work:

Response categories: 1=not at all satisfying
(Questions 1, 2, & 3) 2=not too satisfying
3=somewhat satisfying
4=very satisfying
5=extremely satisfying

1. All in all, how satisfying do you find the time you spend on household responsibilities?
2. Taking everything into consideration, how satisfying is the time you spend taking care of the needs of your children and/or grandchildren?
3. If you are currently employed, how satisfied are you with the present arrangement for the care of your child(ren) while you are at work? (Generation 3 only)

Response categories: 1=never
(Questions 4 & 5) 2=rarely
3=sometimes
4=fairly often
5=very often

4. How often is housework a source of tension in your marriage? (Generation 3 only)
5. How often is child care a source of tension for you and your spouse or partner? (Generation 3 only)
APPENDIX 5. BRADBURN EMOTIONAL BALANCE SCALE

The following questions describe how people sometimes feel about their lives. During the past few weeks, did you ever feel:

Response categories: 1=yes
                    2=no (recoded to 0)

1. particularly excited or interested in something?
2. so restless that you couldn't sit long in a chair?
3. proud because someone complimented you on something you had done?
4. very lonely or remote from other people?
5. pleased about having accomplished something?
6. bored?
7. on top of the world?
8. depressed or very unhappy?
9. that things were really going your way?
10. upset because someone criticized you?

(Questions 1, 3, 5, 7, and 9 are included in the Positive Scale and Questions 2, 4, 6, 8, and 10 are included in the Negative Scale.)
APPENDIX 6. CES-D SCALE

Below is a list of the ways you may have felt or behaved recently. For each statement, check the box that best describes how often you have felt this way during the past week. During the past week:

Response categories: 1=rarely or none of the time  
2=some of the time  
3=occasionally  
4=most of the time

1. I was bothered by things that don't usually bother me. 
2. I did not feel like eating; my appetite was poor. 
3. I felt I could not shake the blues even with help from my family or friends. 
4. I felt that I was just as good as other people. 
5. I had trouble keeping my mind on what I was doing. 
6. I felt depressed. 
7. I felt that everything I did was an effort. 
8. I felt hopeful about the future. 
9. I thought my life was a failure. 
10. I felt fearful. 
11. My sleep was restless. 
12. I was happy. 
13. I talked less than usual. 
15. People were unfriendly. 
16. I enjoyed life. 
17. I had crying spells. 
18. I felt sad. 
19. I felt people disliked me. 
20. I could not get going. 

(All questions except 4, 8, 12, and 16 were recoded reverse. The higher the score is, the better the person's mental health is.)
APPENDIX 7. COMFORT/DISCOMFORT SCALE OF BSI

Thinking about the past seven days, how much discomfort have the following problems or complaints caused you?

Response categories: 1=not at all  
2=a little bit  
3=moderately  
4=quite a bit  
5=extremely

1. nervous or shaky  
2. faint or dizzy  
3. trouble getting your breath  
4. easily annoyed or irritated  
5. fearful or afraid  
6. had to check and double check work  
7. hot and cold spells  
8. had you mind go blank  
9. felt tense or keyed up
APPENDIX 8. TRADITIONAL FAMILY IDEOLOGY SCALE

Response categories: 1=strongly disagree  
2=mildly disagree  
3=mildly agree  
4=strongly agree

1. A child should not be allowed to talk back to his parents, or else he will lose respect for them.
2. A man can scarcely maintain respect for his fiancee if they have sexual relations before they are married.
3. Some equality in marriage is a good thing, but by and large the husband ought to have the main say in family matters.
4. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.
5. A woman whose children are messy or rowdy has failed in her duties as a mother.
6. It goes against nature to place women in positions of authority over men.
7. If children are told too much about sex, they are likely to go too far in experimenting with it.
8. A child who is unusual in any way should be encouraged to be more like other children.
9. In choosing a husband, a woman will go well to put ambition at the top of her list of desirable qualities.
10. The most important qualities of a real man are strength of will and determined ambition.
11. A wife does better to vote the way her husband does, because he probably knows more about such things.
12. The family is a sacred institution, divinely ordained.
13. Faithlessness is the worst fault a husband could have.
14. It is a reflection on a husband's manhood if his wife works.
(These higher the scores are, the more traditional the person's attitude is. Questions 3, 5, 6, 11, and 14 were included in the Attitude toward women's roles scale described in the Appendix 9.)
APPENDIX 9. ATTITUDE TOWARD WOMEN'S ROLES SCALE

Response categories: 1=strongly disagree
2=mildly disagree
3=mildly agree
4=strongly agree

1. Women who want to remove the word "obey" from the marriage service don't understand what it means to be a good wife.
2. The most important thing a woman owes her husband is to develop herself as a person in her own right.
3. The "women's liberation" ideas make a lot of sense to me.
4. Women should take an active interest in politics and community problems as well as in their families.
5. Some equality in marriage is a good thing, but by and large the husband ought to have the main say in family matters.
6. A woman whose children are messy or rowdy has failed in her duties as a mother.
7. It goes against nature to place women in positions of authority over men.
8. A wife does better to vote the way her husband does, because he probably knows more about such things.
9. It is a reflection on a husband's manhood if his wife works.

(Question 3 and 4 were recoded reverse.)
APPENDIX 10. OPINION ON SOCIAL/ POLITICAL ISSUES

Wave 1: We would like to know what you think about some current social issues. Please tell us how much you agree or disagree with the following statements.

Response categories:  
1=strongly disagree  
2=somewhat (mildly) disagree  
3=somewhat (mildly) agree  
4=strongly agree

Wave 2: If you participated in the 1972 survey, you might remember that we asked your opinion on some social and family issues that were being discussed in the United States at that time. We'd like now to know how you feel about these same issues at this point in your life.

Response categories:  
4=strongly disagree  
3=somewhat (mildly) disagree  
2=somewhat (mildly) agree  
1=strongly agree

(recoded reverse to be consistent with wave 1)

1. This country would be better off if religion had a greater influence in daily life.
2. Some equality in marriage is a good thing, but by and large the husband ought to have the main say in family matters.
3. Every child should have religious instructions.
4. It goes against nature to place women in positions of authority over men.
5. It is men's duty to work: it is sinful to be idle.
6. God exists in the form in which the Bible describes Him.
7. Most people on welfare are lazy; they just won't do a good day's work and so cannot get hired.
8. The most important task facing our society today is to maintain law and order.
9. The U.S. should be ready to answer any challenge to its power, anywhere in the world.
10. A person should talk over important life decisions (such as marriage, employment, and residence) with family members before taking action.
11. If a person finds that the lifestyle he/she has chosen runs so against his/her family's values that conflict develops, he/she should change.
APPENDIX 11. GOALS

Achievement-oriented goals
1. achievement, general: accomplishment, to be successful, to do something worthwhile; to do things well
2. achievement in particular skill or ability
3. greater knowledge, increase education
4. finish educational preparation
5. success in school
6. independence, freedom: to not have to depend on others, to be financially independent, to be independent from parents
7. wealth
8. financial security
9. salary increase
10. to acquire or own things
11. work type or condition: to find a job; to find a better job or working hours
12. advancement of work achievement

Relationship-oriented goals:
1. popularity in dating or going steady
2. love relationships
3. marital relations: to have a good marriage; to find more time with spouse
4. to become a parent
5. to become a grandparent
6. relations between self and parents or parents-in-law
7. relations between self and child or child-in-law
8. relations between self and siblings
9. relations between self and grandchild or grandparents
10. family relations, general or unspecified
11. friendship
12. succorance or nurturance: to be able to depend on someone; to have someone need me; to help friends in need
13. acceptance: to be accepted as a person; to be liked for what I am
APPENDIX 12. RETIREMENT EXPERIENCE SCALE

Listed below are some statements describing the way people sometimes feel about their retirement experience. We would like to know how often you feel this way. How often has your retirement resulted in:

Response categories: 1=never
(Questions 1 to 4) 2=rarely
3=sometimes
4=fairly often
5=very often

1. having too much time with not enough to do?
2. not having the money to be able to do some of the things you used to do?
3. missing your daily routine?
4. people paying less attention to your opinions?

5. All in all how does your life in retirement compare with what you expected it to be?
Response categories: 1=much better?
2=somewhat better?
3=about the same?
4=somewhat worse?
5=much worse?