

His Marriage and Her Marriage:
Gender Differences in Time Use in China

by

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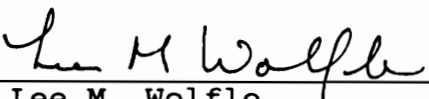
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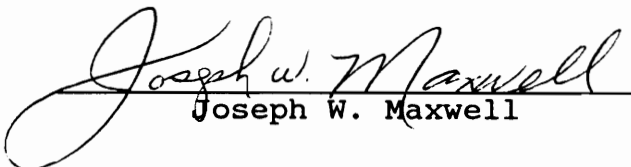
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Family and Child Development

(Abstract)

The purposes of this study were to describe patterns of time use and to identify some of the sources of the gender gap in time expenditures in both urban and rural China. Based on previous theoretical perspectives, a number of individual and family structure characteristics were proposed to form a parsimonious and distinct model. Bivariate analysis, ANOVA, and multiple regression with interaction terms were used to test hypotheses that linked predictive variables with the dependent variables of the inquiry. Empirical work of the study was based on the 1990 survey data from a representative sample of adult Chinese persons living in Hubei Province, People's Republic of China. The descriptive results provided abundant information about gender differences in paid work, housework and leisure activities. On the whole, urban women had an equal amount of paid work as men had, their unpaid housework hours doubled or tripled their men's, and their leisure time was one hour less than men's. The gender gap in time use was larger in rural areas than in urban ones. The ANOVA results confirmed the majority of the aforementioned

findings as significant. The multiple regression results identified the determinants of time use as follows: Once the other variables were held constant, (1) age, education, and income were predictive of paid work time; (2) sex, paid work time, education, and marital status had a significant impact on housework time; and (3) sex, time spent on paid work and housework, age, education, and income affected leisure time. The three models were found to be more applicable to the rural setting than to the urban one. The conclusions raised questions requiring policy development in China, and theoretical improvement and future research in both China and America.

To
my people
and my homeland

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CHAPTER I

INTRODUCTION

Contemporary economic reforms in China were initiated in the late 1970s and gained full swing in 1981. After more than a decade's development, it was widely observed (e.g., Doder, 1989; Hare-Mustin & Hare, 1986; Honig & Hershatter, 1988; Whyte, 1993) that there were two contradictory trends of social change generated out of this nationwide campaign. On the one hand, the country had won a triumph of unprecedented prosperity and wealth. On the other hand, it had witnessed a retrogressive trend in ideological norms and social values.

Throughout the 1980s and up to date, there were several waves of passionate debate on the future of Chinese women (Deng, 1989; Ma, 1989). One of the major issues around which the debate raged concerned women's appropriate place--whether returning home or staying in the work place. As the country's economic reform intensified, political restrictions were relaxed and Chinese employers were granted much more autonomy in hiring and firing workers (Leung, 1988). For the first time in the 30 years' history of socialist China, the employment of young, unmarried women or women with young children became blatantly questioned or unaccepted. Many Western feminist authors (e.g., Robinson, 1985; Stacey, 1983; Wolf, 1985) showed genuine concern that the redefinition of Chinese women's work role might help make rigid the nature of male superiority and female inferiority which was

deeply embedded in the traditional Chinese culture.

In addition to the debate on Chinese women's status in the work force, pressing concerns over housework division of labor were raised. Like many societies elsewhere, household tasks such as food preparation, home maintenance and child care were far from being gender-free in contemporary China. Politically and culturally, housework was perceived as primarily women's responsibility. It was widely observed that Chinese women of all age groups had to contend with a "double day" (Andors, 1983; Croll, 1983; Whyte & Parish, 1984; Wolf, 1985).

Interestingly, many of the conflicts faced by Chinese women in the 80s resembled those of the United States in the 1950s. In both countries, a period of widespread social change was followed by an attempt in society at large to reestablish clear gender roles. However, the historical context of the Chinese in the 1980s was radically different from the American 1950s. Besides the industrial revolution, urbanization and several wars, the women's movements had added further complexities to gender relations in today's China. As Honig and Hershatter (1988) vividly described:

It was as though Queen Victoria, Rosie the Riveter, Helen Gurley Brown, and a host of others had appeared simultaneously on the scene, all proffering advice. Not surprisingly, Chinese women, themselves products of a complex tradition and a cataclysmic recent history, reacted with a mixture of fascination, incomprehension, and wariness that was entirely their own. They initiated some changes and acquiesced in others, but protested vigorously when they felt their interests threatened, as when changes in hiring

practices made it more difficult for them to find certain jobs. Their situation was not a simple replication of the female experience elsewhere (p. 8).

As a result, feminist researchers in the West were looking forward with concern and enthusiasm to the new production of gender studies from China (e.g., Davin, 1987; Stacey, 1983).

Purpose of the Study

The central focus of this study was analysis of gender differences in time use in both rural and urban China. Two major research tasks were proposed. The first one was a description of gender differences in three broad categories of time expenditure: paid work, unpaid housework and leisure activities. Quantitative information about men's and women's time use was presented by focusing on what they did and how much time they spent doing it on a daily behavioral basis.

In order to better assess the gendered nature of time use patterns in contemporary China, the second objective of the study was an in-depth analysis which explored how a number of factors might have influenced various modes of time use. Based on previous American theories on time use, this study proposed four categories of influencing factors: (1) socio-demographic characteristics, (2) family structure, (3) gender-role attitudes, and (4) other time uses. A wide range of sub-groups, varying in marital status, employment status, life-cycle status and socioeconomic status, were compared to see whether Chinese men and women had experienced significantly different daily lives.

The overall examination of time use patterns in the study was intended to enable the author to elucidate in what activity domains and to what extent Chinese men's and women's role performances were convergent or divergent from one another.

Importance of the Study

It was important and meaningful to conduct the present study for three reasons. First, analysis of gender differences in time use might lead us to understand many other social phenomena. For example, time differences spent by men and women reflected gender roles, personal well-being and power relationships within marriage (Baxter, 1992; Bird & Fremont, 1991; Blumstein & Schwartz, 1991; Hill, 1985). Studies of family leisure had implications for family satisfaction, marital interaction and family stability (Orthner & Mancini, 1992).

Specifically, studies of gender differences in time use might help us understand to what extent employed Chinese women had undertaken a "double role" and in what ways gender hierarchy in Chinese society had been perpetuated to bar the route to egalitarianism. Also, the study might be used to infer the power relationships between men and women with its well-documented analysis of role-taking accuracy.

In addition, studies of time use in a large context might demonstrate gender inequalities in the nation's economy (Douthitt, Zick & McCullough, 1990; Gershuny, 1986). In this study, although time use was examined as an outcome of

personal/family structure characteristics and time use in other spheres, all of these processes could be seen as a result of a larger context--the country's economy and the availability or unavailability of economic resources to different sexes. For example, income might influence the time one invested in housework. Explanations of the effects of income as a sheer product of micro-level processes might be incomplete because the root cause of its effects might well lie in the gendered nature of the whole economy. In this sense, the results of this study might pose a series of questions which should be of the utmost concern to all who were interested in developing true equality of opportunities between women and men in China.

Furthermore, because gender inequality as a social phenomenon shared by many societies could take different forms, this research, as a definitive study of Chinese women and family life, could serve as one of the essential steps toward illuminating "others' experiences" and thus provide Western feminist scholarship with a rich comparative context to spur new theories.

Second, investigations of individuals' time expenditures might be preferable to examinations of gender role attitudes because the former were more objective. Berardo, Shehand and Generald (1987) found a persistent discrepancy between actual behavior and prescriptive beliefs about role attitudes. In other words, people who had intellectually accepted progressive gender

role values might not behaviorally carry the new roles in their daily lives. Harvey (1990) argued that research of time use was particularly significant because it looked at the unit of behavior that represented the "basic building block of behavior" and constitutes an "event profile" (p. 304). Because this event profile provided sufficient specification of one's daily activities, it might help minimize the confounding effect of attitudes.

Third and finally, studies of time use might help us clarify some of the widespread confusion and misconception about the extent of gender discrimination in contemporary Chinese society. Wan (1989) found that among the social science scholarship in China, the existing gender inequalities had been discussed only at societal levels and rarely had those topics been explored in the context of marriage or at individual levels, with the exception of a few descriptive or attitudinal studies (e.g., Hare-Mustin & Hare, 1986; Lock, 1989). Under these circumstances, the present study might make a small but timely, significant contribution to fulfilling the need for behavioral studies of gender differences in China.

More importantly, this study was an active response to Whyte's (1993) call for research on changes in the Chinese family "in its own right" (p. 321). As Whyte suggested, the permanence and change of the Chinese family were unique to an extent that studies of them should not blindly borrow concepts and measures

developed in other irrelevant cultural settings. Time as a social science parameter had a distinct advantage in so far as there was little argument about what one was measuring (Robinson, 1977). By using this culturally universal measure, this study might afford American readers a sound, objective introduction to gender behavior in contemporary Chinese society.

Research Questions

Gender differences in the amount and nature of time use were commonly assumed to have existed in China. It was not clear, however, why or under what conditions these differences emerged. Certain individual/structural characteristics and time use in other activity spheres might produce variations in the amount of time that was used for a given activity by men and women. Based on these assumptions and propositions, the following research questions were explored:

1. Were there any significantly different allocations of time to paid work, housework and leisure among contemporary Chinese men and women?
2. Did individual and family structure characteristics of the respondent influence his or her time use? If so, was the effect gender-specific, or in other words, was the effect more apparent for one gender than for the other?
3. What were some of the sources of variation in women's and men's time allocation in each activity? What were some of the sources of any gender gap in time allocation in each activity?

4. To what extent was a gap between women's and men's household labor time a function of their differential investments in paid labor time, and to what extent did a gap remain even after taking into account their paid labor time?

5. To what extent and in what ways did paid work and household labor affect leisure time? Were their effects the same for men and women?

CHAPTER II

LITERATURE

The task of this chapter was threefold. First, American theories on time use and related research were briefly reviewed as a guide for the development of the theoretical framework used in this study. Second, hypotheses for the empirical analysis of the current study were established accordingly. Finally, measurement issues for the dependent variables were discussed to suggest a more valid and reliable measure for the dependent variables in the study.

Theories of Time Use and Some Related Findings

Wan (1989), in summarizing women's studies in China, pointed out that one of the most prominent problems inherent in the study of time use was the lack of sound theories and more advanced research methods. Therefore, the theoretical framework guiding the present study had to be developed on the basis of the American literature.

In the United States, there were no cogent and comprehensive social theories developed so far to simultaneously address time use in paid work, housework and leisure. Godwin (1991) reviewed previous theories and research on the spouse's time allocation to household work. Orthner and Mancini (1980/1992) summarized theoretical contributions to the research on leisure. Shelton's (1992) recent work on gender differences in time use was one of the very few that studied three types of time use all at once.

However, her work was built on an approach that was more empirical rather than theoretical.

In the past few decades, there emerged three major theoretical perspectives on issues of time division in household labor. They were approaches from the disciplines of economics, home economics and family sociology. The following briefly reviewed and compared each of them so that the reader could realize how theoretically significant it was for the present study to employ a relatively more comprehensive model.

Economists' Theoretical Perspectives

Economists assumed that one's participation in both paid work and housework was a rational decision-making process. In other words, the absolute amount of time spent in paid labor and household labor was rationally determined by the family through deliberate negotiations between spouses (Becker, 1981). The key determinant of the family's time allocation was viewed to be one's wage rate or income. The theory hypothesized that the increase of one's wage rates was expected to result in one's declined time in housework, given the underlying assumption that the family would substitute this family member's time in housework for greater time use of other family members or greater use of market goods-intensive housework technologies (Gramm, 1974; Gronau, 1976; Wales & Woodland, 1977). In addition, the economic theory viewed time use as a "simultaneous" decision-making process for the three mutually exclusive daily activities

and acknowledged an interdependent relationship between paid work time, housework time and leisure time (Linder, 1970).

The economic theory was lauded as the "most parsimonious and well-developed" model of time use (Godwin, 1991, p. 258).

Ironically, however, the merit of being parsimonious was also criticized for being narrow and oversimplistic (Godwin, 1991). As Feldman and Hornik (1981) pointed out, "clearly non-economic variables have a strong influence on behavior--affecting perception, preferences and production" (p. 415). In the recent decades, many economists endeavored to expand the model by incorporating other variables. Nonetheless, those efforts had not been systematic enough to yield consistent research results.

Home Economists' Theoretical Perspectives

These perspectives were developed primarily out of practical concerns over the effects of household work on the family's economic well-being (Walker, 1973). The research focus of home economists was placed on specific tasks of household labor such as food preparation, clothing care, child care, etc.

According to home economists' approaches (Hafstrom & Schram, 1983; Nickols & Metzen, 1978), the major determinants of time inputs into housework were hypothesized to be pressures (e.g., the presence of young children), facilitators (e.g., family income, wife's education, husband's market work time and use of hired household help) and constraints (e.g., time spent in paid work and occupational types).

Unlike the simultaneous and interdependent decision-making process proposed by economists, home economists' theory (Hafstrom & Schram, 1983; Nickols & Metzen, 1978) suggested a process model within which one's labor force decisions were seen as exogenous to household time decision-making. In other words, one first decided his/her labor force hours and subsequently decided on household labor time.

Although empirical tests based on the home economics model included a large number of variables, the model accounted for limited variation in explaining women's household labor and an even smaller proportion of variation in men's involvement in housework (Rexroat & Shehan, 1987). The relatively atheoretical approach held by home economists was attributed to their heavy reliance on descriptive work (Godwin, 1991).

Family Sociologists' Theoretical Perspectives

Family sociologists emphasized the relative contributions of husbands and wives to housework, rather than the absolute amount of time each spouse devoted. Scholars working in this area not only differed from economists and home economists, but also were diverse within their own paradigms. The existing literature revealed at least four somewhat different perspectives.

Relative resources perspective. This perspective was the most frequently cited approach by family sociologists. It was initiated by Blood and Wolfe (1960) and furthered by many others (e.g., Bahr, 1974; Miller & Garrison, 1982; Ross, 1987). The

theory suggested that one's household labor time be a function of one's resources relative to the resources of one's spouse. Hypothetically, the spouse with higher socioeconomic resources (e.g., education) was expected to have more power and thus spend less time on household labor (Blau & Ferber, 1986; Reskin & Roos, 1987; Shelton & Fireston, 1988). Hence, the resources perspective was also termed the power perspective.

Comparatively, the resources perspective converged with economic approaches to the extent that both focused almost invariably on the effects of income, although the former expanded the model to incorporate education and occupation. The two perspectives differed, however, in their views of the theoretical mechanism through which economic resources influenced the time spent in housework. Family sociologists assumed that relative income reflected one spouse's power over the other to reduce his/her involvement in household production, whereas economists viewed one's wages as an advantage for the whole household.

Gender-role perspectives. Gender-role or socialization perspectives viewed the time division of labor as being influenced by the normative expectations of "who should do what." Since 1970 changing gender roles had been the subject of systematic research (e.g., Pleck, 1985). In many other studies as well, this variable was found to have substantially increased the explanatory power of the previous frameworks (e.g., Atkinson & Huston, 1984; Barnett & Baruch, 1987; Coverman, 1985; Perry-

Jenkins & Crouter, 1990).

Interestingly, numerous studies revealed that gender role attitudes had opposing effects on men's and women's participation in household labor (e.g., Huber & Spitze, 1983; McHale & Crouter, 1992; Ross, 1987). Men with traditional attitudes were expected to do less housework than men with non-traditional attitudes. By contrast, women with traditional attitudes were expected to do more housework than women with less traditional attitudes.

The demand/response capability hypothesis Coverman (1985) explained that individuals' housework hours was a function of demands on them to fulfill domestic responsibilities. The demand was defined as pressures on family members to modify their work loads and/or change a traditional division of domestic labor. Such demands were often measured by one's employment status.

The increase in women's labor force participation rate led sociologists and family researchers to examine the impact of these shifts on the household. It was found that the trend of dual demands in the labor market had many implications for changes in men's and women's time investments in various tasks (Pleck, 1985; Shelton, 1990). As Robinson (1988) argued, the change in female labor force participation raised questions not only about the assumptions regarding women's roles but also about men's roles in the labor market and household.

The family development approach Many family scholars asserted that changes in family time use evolved over the family

life cycle as couples passed through different developmental stages and confronted different developmental tasks (Schafer & Keith, 1981). The central idea of this approach was that task sharing was more common in the early years of marriage and less frequent during later stages. The major measures of the family life cycle were the ages of the respondent and of the first or last child at home.

To take into account unmarried sample members, the present study added marital status as a variable to the model. By including this variable, it was possible to examine the extent to which division of time was a function of the dynamics of the relationship and the extent to which married men and women differed from or mirrored their unmarried counterparts in various activities. Shelton (1992) found that the existing research was rather weak in this aspect.

The family development approach also addressed how time use in different activity spheres was related. Among the few existing empirical studies in this regard, it was revealed that paid work time negatively determined housework time and housework time negatively influenced leisure time; that their effects were more apparent for women than for men (McAllister, 1990; Shelton, 1992); that men's paid labor time more directly affected their leisure time than women's (Clark, Nye & Gecas, 1978); and that men had more leisure time than women under any circumstances (Coverman & Sheley, 1986; Shaw, 1985). These findings again

confirmed home economists' proposition that daily time use was a developmental process flowing from paid work to housework and then to leisure. The simultaneity of rational decisions viewed by economists seemed to be theoretically problematic.

In short, compared with economic and home economic approaches, family sociologists' approaches were much more diverse with a great number of independent variables proposed. Their models, however, were more fragmented and confusing than those of the other two approaches. Some of family sociologists' approaches were relatively mature in their theoretical development with consistent empirical works yielded. Others, however, were still in rudimentary stages with some propositions remaining untested or findings inconclusive. Apparently, both theoretical and research efforts were needed to synthesize family sociological approaches into a more integrated theory.

Summary

Three different social science disciplines were relevant to the study of time use. Economists focused on the role of one's productivity in market work and household production. Home economists examined the effects of pressures, facilitators and constraints on time primarily spent in household work. Family sociologists addressed issues of equity and/or power between spouses and of labor division. These three theoretical approaches independently examined the effects of variables proposed within each of their own paradigms. Thus it was now

important to reconcile most of these variables into a cohesive theoretical model as proposed in the current research.

The researcher proposed that the amount of time use be influenced by a series of independent variables. These variables were categorized into four domains: (1) individual socio-demographic characteristics, including the respondent's age, education, employment status and income; (2) features of family structure, referring to the respondent's status in marriage and parenthood and the first child's age; (3) the respondent's gender-role attitudes; and (4) the amount of time spent in other activity domains. Although sex was expected to be the most distinctive factor, each of the proposed variables was expected to have a differential impact on men and women as well. The theoretical model was graphically shown in Appendix A.

Insert Figures 1 and 2 about here

Hypothesis Statement of the Current Study

Based on the review and critique of previous theories and empirical works, the hypothesized relationships between each of the dependent variables and the independent variables were as follows:

The Relationship Between Paid Work Time and Independent Variables:

1. Effects of gender-role attitudes. An individual who was

less traditional in gender-role ideologies would spend more time in paid work, ceteris paribus; and this effect was expected to be more apparent for women than for men (based on family sociologists' gender-role hypothesis).

2. Effects of income. Individuals, including men and women, with higher wages would spend more time in labor market activities, ceteris paribus (based on both economists' and home economists' hypotheses).

3. Effects of education. An individual, including men and women, with higher educational levels would spend more time in labor force activities, ceteris paribus (based on family sociologists' resources perspective).

4. Effects of the respondent's age. Ceteris paribus, the relationship between paid work time and one's age was expected to be curvilinear. That is, paid work time was expected to increase with age up to a point and then begin to decrease with increasing age.

5. Effects of marital status. Ceteris paribus, paid work time was expected to vary depending on respondents' marital status. Specifically, married women were expected to spend less time in paid work than unmarried women, whereas married men might spend more time than unmarried men.

6. Effects of the first child's age. Ceteris paribus, women might be more adversely affected than men by the presence of young children at home (based on Chinese as well as family

sociologists' findings). The younger the child, the less time the mother might spend in outside employment.

The Relationship Between Housework Time and Independent

Variables:

1. Effects of gender-role attitudes. Ceteris paribus, women with non-traditional gender-role attitudes might reduce their household labor time more than their traditional counterparts, whereas men with non-traditional gender-role attitudes might increase their household than men with traditional attitudes even though the former would not take over tasks often performed by their spouses (based on family sociologists' empirical findings).

2. Effects of income. Ceteris paribus, an individual's earnings might negatively affect household labor time because of the greater "costs" of household labor time (based on economists' hypothesis) or because of the greater "power" possessed by the individual (Based on family sociologists' hypothesis).

3. Effects of education. Women with more education would be more likely to reduce their time spent in household labor than their less educated counterparts, ceteris paribus, because more education usually better prepared one to participate in the paid labor force and also implied greater economic rewards than those brought out by housework (Blau & Ferber, 1986; Shelton & Firestone, 1988).

4. Effects of employment status. Those who were employed were likely to spend less time in housework, ceteris paribus.

The effect of employment status on housework time was expected to be less evident for women, given the fact that Chinese women, like their American sisters, faced a serious double burden on a daily basis.

5. Effects of the respondent's age. Little research had been done to reveal the relationship between one's age and household labor participation. The effect of the variable was to be revealed by preliminary analyses, and then the direction of the hypothesis would be stated.

6. Effects of marital status. Married men and women would spend more time on housework than unmarried men and women, ceteris paribus (based on home economists' and family sociologists perspectives).

7. Effects of the first child's age. Assuming that children made different demands on their fathers and mothers, and that the demand varied by the child's age, the study expected that women with a younger child would have to do more housework than women with older children and also more than their men counterparts, ceteris paribus.

The Relationship Between Leisure Time and Independent Variables:

Shelton (1992) noted that the research on gender difference in leisure time was very limited, compared with studies on time use in paid work and housework. Her exploratory study indicated that the gap between men and women in leisure time varied by marital status, work status, education, and ages of the

respondent and of the child. Given these findings, the researcher expected the first four relationships as follows:

1. Effects of marital status. Ceteris paribus, married respondents would spend less time on leisure than unmarried respondents and the impact of marital status was hypothesized to be greater for men than for women.

2. Effects of employment status. Ceteris paribus, employed respondents would have less leisure time than those who were not employed; however, the difference between men and women was not expected to be significantly large.

3. Effects of education. Ceteris paribus, better educated men would spend more time on leisure than men with less education, but for women, those with more education would spend less time on leisure than those with less education.

4. Effects of age. Ceteris paribus, the relationship between leisure time and age was expected to be curvilinear, with both men and women having their lowest level of leisure in their middle ages.

5. Effects of income. Ceteris paribus, the higher the income one has, the less leisure time this person might have, given that more income might be correlated with more paid work time, based on the research findings derived from some empirical studies (e.g., Shaw, 1985; Meissner, Humphries, Meis & Scheu, 1975).

6. Effects of gender-role attitude. Ceteris paribus, those

who held a relatively traditional gender-role attitude might spend less time on recreational activities than those who had more progressive attitudes because it was likely that the former were still affiliated with a family ideology that emphasizes "role taking" rather than "role making."

7. Effects of the age of the first child. Ceteris paribus, the younger the child, the less leisure time one might have. The relationship was expected as such in terms of family life cycle effects.

The Relationship Between Paid Work Time, Housework Time and Leisure Time:

The family development approach stressed that the relationship between paid work time, housework time and leisure time was that each determines the next, rather than being interdependent with each other. Based on the very few research findings on the impact of paid work time on housework and of paid work time and housework time on leisure time (e.g., Campbell, 1978; Deem, 1982; Shaw, 1985), the following relationships were expected:

1. Effects of paid work time on housework time. Given the time constraint hypothesis raised by home economists, those who were active in the labor force were expected to spend less time in housework than their non-employed counterparts. However, the magnitude of the effects of paid work time on housework time might be not very evident for Chinese men because the female

labor force activity in China had not substantially challenged the notion that there were separate spheres within which men and women existed and worked. As for women, the increase of paid work time might negatively affect their housework time (Aslanbeigui & Summerfield, 1989; Dalsimer & Nisonoff, 1987).

2. Effects of paid work time on leisure time. Paid work time was expected to have more direct effects on men's leisure time than on women's (Clark et al., 1978). The more time a man spent in employment, the less leisure time he would have. Whereas, because women's main sphere was still home, their paid work time more directly influenced their housework time, rather than their leisure time.

3. Effects of time in paid work and housework on leisure time. According to some research on the impact of shifts in paid and unpaid work time on the distribution of leisure time (Clark et al., 1978; Firestone & Shelton, 1988; Shaw, 1985), increases in women's paid work time, if not accompanied by reductions in household labor time, might be associated with decreases in their leisure time. Men's leisure time might be increased with a decline in their paid work hours (Parker, 1976) and the extent of their unpaid housework time might not affect their leisure time (Shelton, 1992).

Measurement Issues of Time Use as a Variable

American academia was interested in time use research for over a quarter century (Harvey, 1990). Like the theories, the

methods employed by researchers in this area varied substantially. This section briefly reviewed and critiqued issues of measurement in time use research. It was important to overview the differences and highlight the shortfalls in measures of time to show the reader how these issues had illuminated the different disciplinary approaches and how the current research attempted to utilize a relatively more reliable and valid measurement for the dependent variables.

One of the major methodological problems in time use was found to be the wide variation in the measurement of the dependent variable (Godwin, 1991). It was also considered one of the major causes for the inconsistency of empirical results (Altergott, 1990; Burley, 1991; Presland & Antill, 1987). Economists typically measured time in household labor with a single question: "How much time do you usually spend in housework in a week?" Responses were calculated into hours per week or accumulated into annual hours (e.g., Hill & Stafford, 1974; Leuthold, 1981). Godwin (1991) pointed out that the advantage of this measure lay in the simplicity of the universally defined interval unit of measure, minutes or hours. However, Mercer (1985) discovered that recall of one week's activities could cause motivational and recall problems for the interviewee.

Home economists usually questioned the respondent with a detailed list of activities in the form of the time diary (e.g., Walker & Woods, 1976). The advantage of this measure lay in its

capacity of specifying household activities. The time diary method enabled the researcher to precisely reveal "who constituted what." However, from the point of view of the researcher, this method was frequently expensive and time-consuming to administer, collate and analyze.

Family sociologists were likely to use proportional measures or approximate estimates of time use without indicating the absolute amount of time (e.g., Barnett & Baruch, 1987; Maret & Finlay, 1984; Shamir, 1986). That was, they presented respondents with a Likert-scale response format to choose from "by husband entirely; by husband more than wife; by husband and wife equally; by wife more than husband; or by wife entirely." Although this method was relatively easy for the respondent to answer, compared with the time-consuming nature of the time diary, it was criticized for being short of accuracy, especially because it was difficult for the researcher to accurately compare gender differences in various time blocks (Shelton, 1992).

The instrument used in the present study applied the method of the time budget which incorporated the advantages of both economists' and home economists' measures. The data were collected in a face-to-face interview situation, and time use statistics were extracted for the day prior to the interviewer, so the problem of recall was largely eliminated. The "previous day recall" technique was by far the most efficient and accurate method of analyzing time use (Juster & Stafford, 1985; Mercer,

1985). Other methods such as direct observation, individual recording at the random signal of an alarm bell or respondent estimates were found to be far less reliable (Robinson, 1977). In terms of the validity and reliability of this method, Michelson (1990) commented:

The time budget is generally considered a comprehensive and valid way to assemble systematic data on the wide range of everyday behavior...[by] gathering systematic information about the chronological stream of activity during a particular period of time (often the previous day) (p. 356).

In sum, the diversity of measurement led to inconsistencies in research findings and made it difficult for researchers to evaluate the findings across studies. The current study attempted to absorb the advantages and avoid the shortfalls of previous measurements within the reality of the available data. Fortunately, the data to be used in this study employed the time budget method which involved an intensive interview with a list of carefully defined daily tasks and activities. The operational method as such was viewed as a clear, reliable and valid measure for the dependent variable (Godwin, 1991; Shelton, 1992). In terms of sampling and statistical methods, the use of a large representative sample, multivariate models and advanced statistical techniques should enable the present study to make important contributions to research on time use.

Conclusion

This chapter compiled and critiqued previous literature and

explored the theoretical justification and empirical plausibility for the present study. In summary, three recommendations could be summarized to guide our research. First, rather than competing one theory with another, the present study incorporated a multidisciplinary theoretical paradigm. Though such a paradigm had not been frequently used, it should enrich understanding of time allocation processes and patterns. Second, in explaining the relationship between time use and its determinants, attention would be given to the possibilities of alternative mechanisms underlying the relationship. Third, a relatively valid measure for the dependent variable was used to disentangle the complicated and sometimes contradictory theoretical effects in the previous literature.

CHAPTER III

METHOD

This chapter discussed methodological details pertaining to the data, sampling, subjects, measures and means of data analysis.

Survey of Chinese Women's Social Status (SCWSS)

The analysis presented in this study was based on the data collected by Chinese research efforts. In 1990, the National Bureau of Statistics and the All-China Women's Association in the People's Republic of China coordinated to conduct a nation-wide survey on Chinese women's social status. The index of the survey was referred to as the SCWSS (Survey of Chinese Women's Social Status).

The SCWSS used a nationally representative sample covering both urban and rural populations of 24 Chinese provinces. The current study employed samples chosen from Hubei Province (see Appendix A) because the author of the study, as a professional affiliated to the Hubei Social Science Academy, had ready access to the Hubei data. The official permission for using the data was shown in Appendix B. It was recognized that the generalization of the study would not be made beyond the Hubei population. Given the vastness of China's territory, the conclusions made from this study would only be suggestive when they were referred to the whole country.

The time period for the data collection was the calendar

year 1990. Field operations for the SCWSS included at least two rounds of interviewing conducted from September to December, 1990.

The questionnaire items tapped by the SCWSS were 68 questions concerning seven important aspects of women's life in contemporary China: (1) legal rights; (2) demography and health; (3) education; (4) work and employment; (5) social and political participation; (6) marriage and the family; and (7) self-actualization and social awareness. The same information was collected from Chinese men for purposes of comparisons.

Sampling Methods

According to The Survey Methods of the SCWSS (see Appendix C), the sampling methods of the SCWSS involved area sampling, stratification, multistage, probability and random sampling. Systematic area sampling was used as a first step to select areas within a province or a city so that a sampling frame with equal numbers of urban and rural area units could be obtained. In this process, urban areas were stratified according to the city size (those of a population more than 500,000 were defined as large cities and those of less than 500,000 were medium or small cities) and rural areas according to their geographical features (counties of mountains, hills and plains). The number of areas to be sampled in each stratified area was accordingly determined by the size of the latter.

Given that start, a four-stage strategy using probability of

selection was used:

Stage 1. A sample of 30 cities or counties was drawn.

Stage 2. Four neighborhood districts within each selected city and two county towns within each selected county were chosen.

Stage 3. Two residential units were drawn from within each of those neighborhood districts or county towns.

Stage 4. A list of all the households was made for every sampled residential unit and the random sampling method was applied to select 20 households from within one urban residential unit and 10 from within one rural residential unit, respectively.

Finally, one person was selected from each of the sampled households based on the demographic characteristics of the latter. In other words, only those who were 18 years old or above were regarded as eligible respondents for the SCWSS project.

Participation was achieved by door-to-door solicitation at predesignated addresses. All interviews took place in the respondents' homes and were conducted by native Chinese interviewers. All the returned questionnaires were checked by supervisors working for the SCWSS project at various levels. Upon discovering any errors and missing information, particularly those of systematic ones, the investigator was required to correct them immediately.

Assessment of the SCWSS Data

There were at least three advantages to using the SCWSS. First, the choice of multiple sampling methods, particularly the use of probability sampling, permitted one to estimate the precision of sample estimates. However, the author did not take it as one of the tasks for this study because the volume of a dissertation would not allow for such a procedure.

Second, the precision of the stratified random survey gave the largest range of variation as well as the most easily quantified and comparable data. Smaller subsamples categorized by social strata could be drawn without a serious threat to the validity of the inferences.

Third, the SCWSS data contained high quality measures of time use which were derived from direct questioning. Estimates of the dependent variables were based on questions about absolute rather than average time spent on specific activities on the day prior to the one on which the interview was conducted. Independent variables representative of individual and familial characteristics were also adequately provided by the data.

The use of the SCWSS might be limited for three reasons. First, due to the cross-sectional nature of the data, this study was not able to reveal the evolution of gendered time use patterns in historical depth so that a better prediction of a general trend in time use could be attained. For any research on changes, a behavioral approach incorporated into a longitudinal

design would be desirable. However, as Whyte (1993) pointed out, given the extreme complexity of current societal changes in China, it would be very difficult to see in the near future a consistent pattern or trend in any aspect of Chinese family life. In light of this argument, the author thought that it was equally important for the present study to uncover current variations and determinants of gender role performance indicated by time allocation.

Second, like all the survey research, the SCWSS might be somewhat beset with the problems of social desirability response bias. For example, in terms of the measures for time use, respondents might over- or under-estimate their involvement in a given activity. Also, it might be difficult for wives to admit to an interviewer that their husbands did little housework, especially when both husband and wife were present during the interview.

Finally, rural women's time spent in paid work might have been underestimated taken into consideration the time the data were collected. November and December were usually the stagnant season for agricultural planting. During this time, women were usually asked to stay at home and perform other tasks whose work nature might be ambivalently defined.

Respondents

The probability sampling design stratified by geographic areas and locality size yielded a completed provincial sample of

2,000 respondents aged from 18 to 64 years old. After deleting observations afflicted with a substantial amount of missing information, the sample contained 1,865 respondents, with 414 men and 504 women living in urban areas and 449 men and 498 women in rural areas.

Setting

Hubei Province was located in the central part of the People's Republic of China (see Figure 3).

Insert Figure 3 about here

Geographically, the Yangtze River and its numerous tributaries ran through the area which was covered with the beautiful and fertile Jiangnan Plains. Wuhan stood in the middle course of the river. It was the largest metropolitan city in the province and in China as well. The city was an important hub of land and water communications. It was also the base of economy, education and scientific research in China. During the economic reform years, Wuhan became one of the nation's centers earmarked for accelerated economic growth.

Hubei had a typical continental climate with a summer temperature higher than that of the tropics and a cold winter. It was favored by a mild terrain appropriate for growing wheat, double-planting rice, cultivating vegetables, and raising fish. There was intensive agricultural cultivation in Hubei. As one of

the first areas in China to be economically dominated by the private sector, most agricultural areas in Hubei were relatively more prosperous than many other inland Chinese provinces. Hubei women, categorized as southern women, had relatively greater contribution to agriculture than their sisters living in the north (Salaff, 1972).

Compared with many other Chinese provinces, Hubei had a relatively larger population. According to The Annual Statistics Book of Hubei (1985), by the end of 1985, the total population of Hubei was 4,930,970, with 2,540,010 males (51.5% of the total) and 2,390,960 females (48.5% of the total). In 1982, only 1% of the Hubei people reached educational levels of college graduate or above, 12% finished their senior high school education and 29.9% their junior high, 57.1% had elementary school education, and 31.1% were illiterate or semi-illiterate. The illiteracy rate was higher for the females than for the males, higher for the elderly than for the young, and higher for rural residents than for urbanites (The Hubei Census, 1982).

Changes occurred in other demographic structures of Hubei. For example, early marriage (16-18 years old) prevalent in 1949 had gradually disappeared. The average marriage age in 1985 was 25.3 years for men and 22.9 years for women. Marriage was still fairly universal. Among the population aged 20 years and above, 86.9% were married. Of those married people, 88.4% had living spouses and 10.7% were widowed. The divorce rate was only .89%

of the total married population (The Annual Statistics Book of Hubei, 1985).

The Hubei Census published in 1982 also reported that the large household size had given way to relatively smaller households. In 1982, the average household had 4.53 members, compared with 5.67 in 1949. Among the former, 31.9% of the households had one to three members, 52.1% had four to six members and only 16% had more than seven members. Family structure patterns also changed with more and more two-generation families emerging to replace the traditional family of multiple generations.

Measures

The instrument of the SCWSS was modeled after those that were developed by the United Nations for purposes of estimating Asian women's social status (see Appendix C). The following section discussed how the measures were selected for the empirical analysis of the current study.

Measures for the dependent variables. Piotrkowski, Rapoport and Rapoport (1988) specifically defined time use as follows: (1) paid work time was referred to as time spent on instrumental human activity on a cash basis with its aim to provide goods and services for supporting human life; (2) household labor time meant time spent on work activities outside the formal economy without public accounts of wages; and (3) leisure time was time spent on leisure activities, which was defined as recreational

experiences that were engaged in freely with intrinsic gratification provided to participants (Orthner & Mancini, 1992).

The SCWSS instrument classified a respondent's one day activities into 10 time items. These items were listed as follows:

- (1) paid work (including time for work preparation, actual work and overwork);
- (2) transportation from home to work and vice verse;
- (3) shopping;
- (4) food preparation;
- (5) laundry;
- (6) other housework (including house cleaning, sewing and mending, caring for other family members, furniture and housing construction, dumping trash);
- (7) studying (referring to studies with purposes to improve one's own scientific skills and cultural knowledge, including home-study and study in an organized setting);
- (8) watching television;
- (9) other activities with personal autonomy (including reading newspapers and magazines, listening to the radio, watching movies and going to shows and the museum, sightseeing, doing physical exercises, socializing with friends, cosmetic practicing, running errands for relatives and friends);

(10) sleeping.

In order to simplify analysis and comparison, the author aggregated the data into three major time allocation categories, excluding the item for sleeping. These three time blocks were paid work time (PWTIME), including previously stated time items 1 and 2; household work time (HWTIME), ranging from items 3 to 6; and leisure activity time (LSTIME), including items 7, 8 and 9.

In estimating the total amount of paid work time, Shelton (1992) suggested that time spent for travel between home and work be included as part of paid work time. This suggestion had some implications to a China study in the sense that Chinese women usually spent more time in transportation for work than their men counterparts because housing priorities near the work place were frequently allocated to men.

Computationally, the total amount of time spent in each time block was derived by the following:

Total time for paid work = (1) + (2)

Total time for housework = (3) + (4) + (5) + (6)

Total time for leisure = (7) + (8) + (9)

Measures for the independent variables This study used two different kinds of independent variables for different kinds of statistical analysis. Categorical measures were created for the tests of bivariate analysis and ANOVA; and continuous measures, most of which were original measures in the questionnaire, were used for multiple regression analysis. For the variable index

and measures, please refer to Tables 1 and 2 in Appendix A.

Insert Tables 1 and 2 about here

1. Measure for sex (SEX). It was a dummy variable which was recoded with "1" indicating the female and "0" the male (see Coding Sheet for Household Members in Appendix D).

2. Measure for marital status (MARSTAT). It was a dummy variable with "1" indicating those who were married, whether first time marriage or remarriage, and "0" referring to those who were not currently married, regardless of their previous marital status (see Question 35 in Appendix D).

3. Measures for employment status (EMSTAT). It was a dummy variable transformed from a categorical variable. According to The SCWSS Coding Book (see Appendix D), the employed status was defined as those who were engaged in social production with given payment, including those who were currently working and those who were temporarily out of jobs for various reasons, such as medical leave, vacation and technical training. Thus, the values 1 and 2 in the original codings were recoded as "1" (employed) and else as "0" (unemployed). The unemployed includes those who had no jobs, or stayed at home on long-term maternity leave, or were not working for some other reasons (see Question 19 in Appendix D).

4. Measures for the age of the respondent (AGE & AGE GP). The age range of the SCWSS sample was 18 to 64 years (see Coding

Sheet for Household Members in Appendix D). This measure was used for regression analysis. For bivariate examinations and ANOVA tests, AGE was recoded into the following five groups (AGEGP):

Group 1 = 18-25 years old

Group 2 = 26-35 years old

Group 3 = 36-45 years old

Group 4 = 46-55 years old

Group 5 = 56 years old and above.

5. Measures for the educational attainment (SCHOOLYR & EDUGP). The continuous variable of one's education (SCHOOLYR) was defined as the actual number of years that the respondent attended school. The question in the questionnaire asked: "How many years did you attend school?" The response was a column of two digit numbers and it was a continuous scale with the exact number of school years indicated (see Question 1 in Appendix D). The categorical variable (EDUGP) referred to the highest academic diploma or the level of schooling that the respondent had attained up to the time point when the survey was conducted. Altogether, there were five educational levels indicated as follows:

Level 1 = illiterate or semi-illiterate

Level 2 = primary school

Level 3 = junior high

Level 4 = senior high

Level 5 = college

6. Measures for income (ANURINC/ANRRINC & URGINC/ RRGINC).

The measures for income were obtained differently for urban and rural samples in the SCWSS (see questions 15 and 16 in Appendix D). Urban respondents were asked to give information on their monthly income, whereas rural respondents were asked to report their annual income. In order to arrive at a consistent measure indicating annual income, the urban monthly income was multiplied by 12. Thus the measures for the annual urban and rural income were obtained (ANURINC & ANRRINC). For bivariate analyses and ANOVA tests, however, the continuous measures were grouped into two income groups (URGINC & RRGINC):

Group 1 = 0-1,000 Chinese Yuan

Group 2 = 1,001 and above

7. Measures for the age of the first child (KIDSTAGE &

KIDAGE). These measures were both transformed from the question about the year when the respondent's first child was born (see Question 47 in Appendix D). The continuous variable (KIDAGE) only incorporated values "0" to "46" because the oldest respondent in the study was 64 years old. Relatively, the oldest child of the respondent was limited to 46 years old, given assumption that the average fertility age of the old generation in China was 18. The categorical variable for the child's life stage (KIDSTAGE) needed measures that could reflect five stages of the child's family life cycle. The recoded values were:

Stage 1 = newborns to 4 year old child

Stage 2 = 5 to 9 year old child

Stage 3 = 10 to 14 year old child

Stage 4 = child who was 15 or older

Stage 5 = childless

8. Measure for gender-role attitudes (GENDATT). It was computed from four question items selected from a composite that measured the respondent's attitude toward men's and women's appropriate roles and spheres in both society and home. These questions used a five-point Likert scale ranging from 1 (highly agree) to 5 (disagree) (see Question 61 in Appendix D). These four questions and scales were stated as follows:

- (1) Men's sphere is society while women's is family;
- (2) Men are innately stronger than women in capacity;
- (3) A woman should avoid exceeding her husband in social status;
- (4) Husband's success is also wife's success. Therefore, a wife should support her husband with all her efforts.

1	2	3	4	5
Highly agree	Agree	No opinion	Slightly disagree	Disagree

A respondent's total score of gender-role attitude was derived by the following:

$$\text{GENDATT} = \text{Scores in (1) + (2) + (3) + (4)}.$$

Data Analysis

All the empirical analysis was conducted using the SAS package. As the first step, a series of bivariate analyses were conducted to examine a number of pairwise relationships between a dependent variable, a given independent variable and SEX. This test determined whether differences in women's and men's time expenditure were due to differences in socio-demographic and/or family structure between them.

This process was followed by a series of two-way ANOVA tests which examined the significance level for the relationship among the dependent variable, one proposed independent variable and SEX. The purpose of conducting ANOVA was to determine whether there was any significant interaction between the treatment and SEX in order to decide whether the interaction term should be included in the following multiple regression analysis. In cases that the interaction was not significant, the regression equation would not be burdened with it. With this purpose in mind, the tests for simple effects upon discovering a significant interaction were not subsequently conducted because the main interest in the study was not to discover how levels of one factor significantly changed from one level to the other of the second factor.

Prior to the undertaking of multiple regression analyses, the Pearson correlation test was conducted as an attempt to avoid the multicollinearity problem. As the final step of empirical

analysis, multiple regression was seen as a way to better understand Chinese men's and women's time use patterns with its capacity of identifying determinants and the sources of the gender gap in three different time uses. Besides all the independent variables, SEX was perhaps most commonly thought to influence time use, but the source of the gender impact was not always clear. For example, some of the gender differences in housework time were probably due to the differential impact of children on men's and women's housework time, rather than arising directly from sex. Thus, using multiple regression with interaction terms permitted clarification of the mechanisms through which gender operated, and fuller understanding of whether the relationships between dependent variables and independent variables were different for women and men.

Multiple regression also allowed ascertainment of the nature of the predicted relationship between dependent variables and the variable AGE, whether linear or curvilinear. For example, it was very likely that the association between paid work time and age was curvilinear. Inclusion of "age and age-squared" in the MR equation enabled determination of the nature of the relationship and also the estimation of the age at which the relationship between the two variables differed.

As for the research design, empirical analysis were performed separately on urban and rural samples. This decision was based on the fact that Chinese society had followed different

paths of development in urban and rural areas, and Chinese cities differed markedly in terms of their economic and demographic bases and in terms of their employment and time use profiles. Given the sharp contrast in political and social systems between rural and urban China, scholars (Stacey, 1983; Wolf, 1985) suggested that studies of Chinese families should be conducted separately on urban and rural samples, whether using descriptive or analytical approaches.

CHAPTER IV

RESULTS

This chapter displayed empirical results of the study in an organized way. In order to provide a clear explanation for each time allocation, the results were reported in a sequential manner. Basically, there were three steps of analysis for each time use. First, specific within-group comparisons of time use were made in the form of bivariate analysis. This part of the results illuminated whether the patterns of time use varied depending on socio-demographic characteristics of the respondent and/or the nature of family structure. Second, the results of the two-way ANOVA were computed to indicate the significance level for the difference in a given time category by sex and by background factors. Finally, multiple regression was used to assess simultaneously the impact of individual and household characteristics on time use as well as to determine the sources of the gender gap in time use. All the proposed independent variables were included, except those that were found highly correlated. The selection of interaction terms and curvilinear terms was based on the results of preliminary analyses.

Each time category was analyzed sequentially. Completion of analysis on paid work time enabled better analysis of housework time and leisure time because the former was hypothesized to affect the latter. In the same vein, both paid work time and housework time were regarded as determinants of leisure time.

Before going to the analysis, a general description of the SCWSS respondents was presented, based on socio-demographic information in Table 3 in Appendix A.

Insert Table 3 about here

The four SCWSS subsamples were rather homogeneous in their demographic characteristics. Over 80% of the SCWSS respondents were married. There were small variations in the age spectrum as well. Urban respondents' average age was about two to three years higher than rural respondents'. Urban women had the highest average age (39.1 years old) and rural women had the lowest average age (33.4 years old), with urban and rural men standing in between these two figures. In terms of socioeconomic background, however, Chinese women and men had very different profiles. The economic activity rate for urban women was 67% of urban men's and rural women's proportion was 90% of their men's. Although the gap between women's and men's labor force participation rates was 20% among urban respondents and 7% among rural respondents, women's annual income was invariably lower than men's. Urban women earned 83% of urban men's income and rural women earned 87% of rural men's income. Women also had less education than men. Statistics in Table 3 gave an interesting comparison: Urban men's average educational level was senior high, urban women's average reached junior high, rural

men's average approximated primary school graduate, and rural women's average was the fourth- or fifth-grade level.

Table 4 showed the correlation coefficients for all the proposed independent variables. The respondents' age was highly correlated with the first child's age for both urban and rural samples. Paid work time was highly correlated with employment status among urban samples. As a means of avoiding the multicollinearity problem, the variable for the child's age (KIDAGE) was dropped from all the regression equations. By the same token, in predicting housework time and leisure time, the variable for employment status (EMSTAT) was not included in urban equations because it was highly correlated with the independent variable indicative of paid work time.

Insert Table 4 about here

Section I. Gender differences in paid work time

Results of bivariate and two-way ANOVA analyses of paid work time. Tables 6 and 7 depicted the general patterns of paid work time. Table 6 showed that Chinese urban women in the majority of socio-demographic groups worked more than 8 hours on a single, constructed day. The gender difference in paid work time between urban women and men was minimal. In contrast, rural men of every socio-demographic group still worked in the labor force nearly two hours more than their women. Table 5.1 showed significance

levels for the gender and residential gaps in grand means of paid work time. The urban-rural difference in paid work time was significant at the .001 level. The interaction between sex and residence was significant at the same level. Table 7 further clarified how other factors interacted with sex in assessing mean differences in paid work time.

Insert Tables 5.1, 6 and 7 about here

Age. Age was somewhat associated with paid work time such that urban men and rural women worked fewer hours when they were over 56 years old. The variation of paid work time was small for urban women of all age cohorts, and they worked full time in paid employment at every stage of their lives, except in the beginning of their retirement years (50 years old). Urban women of the youngest cohort (18-25 years old) worked longer than men of the same age cohort. This finding suggested that women had entered the labor force earlier than men. The latter's entry time was late because many men were pursuing education at this age. Rural women's average paid work time was three hours less than urban women's. At their 50s, their work time would shrink to 3 hours or so, which was 5 hours less than urban women's. Rural women of all age cohorts worked less than rural men.

Education. In the like manner, the gender gap between women's and men's paid labor time was larger for rural samples

than for urban ones. Urban women with any educational level worked as long as urban men of the same educational level. Rural women worked less than their men, regardless of their educational level. Paid work time was also somewhat varied by education for rural samples, but not for urban ones. Rural respondents without any education were less likely to work in labor force as long as those who had some school experience.

Results of the ANOVA in Table 6 indicated that rural samples had a significant gender difference in paid work time at the .001 level and a slight significance for the difference in paid work time by education at the .05 level. There was no significant interaction between paid work time and education. As for urban samples, no significant indication could be found for any parameters.

Income. Both women's and men's paid labor time was responsive to their wage level such that the more they earned, the more time they spent in paid labor. There was also a gender gap in paid work time, but the pattern was different for urban and rural samples. Urban women worked longer than their men, whereas rural men worked longer than their women.

Table 6 showed that the gender gap was highly significant for both urban and rural samples at the .001 level. The difference in paid work time between low income group and high income group was also highly significant. The interaction between sex and income was highly significant for urban samples

at the .001 level, but slightly significant for rural samples at the .05 level.

Marital status. The gap in paid labor time between unmarried women and men was smaller than the gap between married women and men. Married urban women spent 1 more hour per day in paid labor than did married urban men. Conversely, married rural men spent nearly one more hour in paid work than did married rural women. Phrased differently, married urban men spent 89% as much time in paid labor as married women, whereas married rural women spent 91% as much time as married rural men. For unmarried respondents, there was no gender difference in paid work time in urban areas, but the gender difference did exist in rural areas.

Expectedly, the significance level for the gender gap in paid work time for urban samples only stayed at the .05 level, but the significance level for the gender gap for rural samples was much higher at the .001 level. The gap in paid work time between married and unmarried respondents was not significant for either urban or rural samples. The interaction between sex and marital status was slightly significant at the .05 level for both urban and rural samples.

First child's life stage. The examination of Table 6 revealed that the gender gap in paid work time was not associated with the life stage of the child. Rather, whether one had a child or not seemed to be associated with men's paid work time. Men with child(ren) of any life stage worked in the labor force

longer than childless men. Being a parent did not affect urban women's labor force participation, but it had an impact on rural women. Rural women worked as long as their men did in paid work before they became parents; however, once having a child, rural women would cut more than one hour per day of working in labor force. It was not until the child went to school that rural women would have their paid work time increased again. But, being mothers, they could hardly work as much as when they were childless. The only significant indication (at the .001 level) under the KIDSTAGE in Table 7 was for the gender gap between rural men and women.

Multiple regression analysis of paid work time. Table 8 displayed the regression results for paid work time predicted by the selected independent variables. This test was conducted only on those who were employed. The results would be reported one by one to determine whether or not the hypothesis being addressed was confirmed.

Insert Table 8 about here

Hypothesis 1 Men spent more time in paid labor force than women did, ceteris paribus.

Because this was a gender study, sex was assumed to be the most influential factor for the three dependent variables. In light of the tradition that men were bread-earners and women

homemakers, paid work time was expected to be longer for men than for women.

In this study, the effect of gender per se on paid labor time was not significant, although the size of the coefficient was large in the two equations. This indicated that the observed gender difference in paid work time of employed women and men was due to differences either in their individual or in family characteristics. The hypothesis was not supported.

Hypothesis 2 The relationship between one's age and paid work time was curvilinear, ceteris paribus.

The impact of age on paid labor time was somehow complicated. The association between age and paid labor time was significantly curvilinear for urban women and men at the .001 level. Although the ANOVA result in Table 7 showed a significant interaction between sex and age, the regression results did not confirm the interaction effect to be significant, after taking into account other factors. In order to ascertain the ages at which women's and men's paid work time starts to decline, calculations for the turning point on the curvilinear line were made by determining the critical point on the curve. This was done simply with the following formulas:

$$X_m = -b_1 / 2b_2$$

$$X_w = - (b_1+b_3) / 2(b_2+b_4)$$

Where X_m = men's critical turning point on the curve and X_w = women's critical turning point; b_1 = coefficient for age, b_2 =

coefficient for age², b_3 = coefficient for the interaction between age and sex, and b_4 = coefficient for the interaction between age² and sex.

It was found that urban men's paid labor time generally increased with age up to 37 and then it began to decrease, whereas for urban women, paid labor time started to decline when they were 33 years old. As for rural women and men, no significant relationship between age and paid work time was found. The hypothesis was partially supported.

Hypothesis 3 Education was positively associated with paid work time for women and men, ceteris paribus.

In this study the positive relationship between education and paid work time was found to be significant only for rural respondents at the .01 level. For each additional year of school experience, rural women and men spent an additional 8.7 minutes per day in paid labor. The hypothesis was partially supported.

Hypothesis 4 Income was positively associated with paid work time for women and men, ceteris paribus.

Once again, only the rural equation provided a significant coefficient at the .01 level for the relationship between income and paid work time. Every one Chinese Yuan increase was related with .03 more minute spent in paid work per day for rural women and men, while taking other variables into consideration. The hypothesis was partially supported.

Hypothesis 5 Based on American literature, it was hypothesized

that marital status had a different impact on women's and men's paid work time, ceteris paribus.

Married men were expected to work more than unmarried men, whereas married women were expected to work less than unmarried women.

The findings from preliminary analyses showed an entirely different pattern -- Chinese married men worked less than unmarried men, whereas Chinese married women worked more than unmarried women. Nonetheless, the regression results did not give any significant indication for these differences. The hypothesis was not supported.

Hypothesis 6 Ceteris paribus, scores of traditional gender-role attitudes were negatively associated with one's paid work time and the effect was more distinctive for women than for men.

Table 8 did not display any significant findings for such relationships.

Summary The urban equation only accounted for 3% of the variation in predicting paid labor time. Of all the independent variables, only age showed a steady effect on urban respondents' paid labor time. The finding suggested that though there was little gender difference in the participation of labor market activities in cities, a life-cycle effect on women and men did exist.

The rural equation inferred a different picture. Socio-

economic status measured by one's education and income was found to have significant impact on women's and men's paid work time. However, there was no indication that the effects of education and income were significantly greater for women than for men or vice versa. The R^2 for the rural equation was relatively higher than the urban R^2 , that is, 9% of the variation in paid work time was explained by the rural data.

By and large, these findings indicated that although a wide variety of factors associated with paid work time were identified in preliminary analyses, only a small number of predictors were found to have significant influence, while holding other variables constant.

Section II. Gender differences in housework time

Results of bivariate and two-way ANOVA analyses of household labor time. Tables 5.2, 9 and 10 concerned mean differences between women and men in household labor time.

Insert Tables 5.2, 9 and 10 about here

Table 9 documented quantitatively that the gender difference in housework time varied by background factors. To obtain an overall picture of gender differences in housework time, we looked at the figures of the average housework hours at the upper part of the table. These figures indicated that urban women reported doing an average of 4.3 hours of household labor per

day, compared to 2.2 hours per day for urban men. Thus the gender gap in housework time in urban areas was nearly 2 hours. For rural respondents, the gender gap was larger. Rural women spent 5.4 hours per day on domestic work and rural men spent 2.4 hours -- a 3 hour difference. At face value and by world standards, these averages and disparities were high, which indicated that housework was a time-demanding activity for Chinese people, particularly for women.

Table 5.2 indicated that the gender gap, the urban-rural difference and the interaction between sex and residence were all significant at the .001 level. Table 10 arrayed the results of the two-way ANOVA tests which indicated whether there was significant difference in housework time between women and men, whether there was a significant disparity between a given treatment, and whether there was a significant interaction between sex and the treatment. All the results were highly significant. Based on Table 9, the following section described how the gender difference in housework time was further affected by other personal characteristics.

Age Women's and men's household labor time varied by their age. Younger women and men (18-25 years old) spent less time on household labor than did older women and men. The logical explanation for this was that fertility age had increased significantly in China during the past few decades. Chinese young adults had to wait until their late twenties before they

started childbearing (Tien, 1983). Our results showed that the SCWSS sample members' household labor time began to increase at their mid-twenties when they had started their own families. Hence, the variation in household labor time by age cohorts might reflect differences in household composition as well. The relationship between age and household labor time was generally positive for all the subsamples.

Women had longest housework time at old age. The finding suggested that child care was still women's complete responsibility in China. The largest share of household labor was done by men aged 36 to 45. During this time, urban men spent 51% and rural men spent 46% as much time on household labor as women. This relatively high proportionate share was probably due to a peak in paid work time for women of this age cohort, as previously identified in Table 5. This pattern might reflect a trend that younger women and men were more likely to shift the division of household labor than older generations. The mechanism underlying this change might lie in a relatively higher degree of younger generations' assimilation to the ideas of egalitarianism. However, the youngest men and women living in the countryside still had a relatively unequal division of household labor, which suggested that the impact of traditions dragged more heavily in rural areas.

Table 10 showed high statistical significance for the gender difference, age difference, and interaction between sex and age

for the urban sample. The gender gap and age difference in household labor time were also significant for the rural sample, but the interaction between the two independent variables was not significant.

Education. Household labor time was negatively associated with level of education for urban women and rural respondents, including women and men. That was, the more education a Chinese had, the less time he or she would spend on household labor.

Generally, men's proportionate share of household labor with women was larger for urban respondents than for rural ones. Interestingly, urban men with the highest education had the highest rate of sharing with women (78%), whereas rural men with highest education had the lowest rate of sharing with women (39%). These findings implied that education was related with an egalitarian attitude only for Chinese urban respondents, but not so much correlated for rural respondents. For the latter, the increase of men's education might become a source of patriarchal power which further strengthened the role segregation within the home.

The results of the two-way ANOVA analyses in Table 10 indicated that the gender gap in household labor time was highly significant for both urban and rural samples. The difference in household labor time across levels of education was also highly significant for the both. As for the interaction between sex and education, Table 10 showed only a significant level at .01 for

urban subsamples.

Income. Income was negatively associated with household labor time for the four subsamples. Those who earned 1,000 Chinese Yuan or less every year were likely to spend more time on housework than those who had an annual income higher than 1,000. Table 10 demonstrated high significance levels for housework time according to sex, income groups and the interaction between sex and income, except that the difference varied by income groups for the rural sample was only significant at the .05 level.

Employment status. Not surprisingly, employment status was associated with domestic labor time, and the variation was similar for women and men. Those who were not in the labor force spent one more hour or so on household labor each day than those who were employed. Employment status had little effect on rural women's household labor time. This was because women's work in rural China had not been clearly defined thus far. Women working on farmland might have included some of their housework as paid work or vice versa.

Though the gap in household labor time according to employment status was not large, the gender gap varied by women and men was substantial. Women in any employment or residential category spent extra time on housework which doubled the amount spent by their men. Tables 9 and 10 showed that women, whether employed or unemployed and whether living in urban or rural areas, spent at least two more hours every day on household

chores than men did, and this gender difference was highly significant. Further, Table 10 indicated a significant interaction between sex and employment status for urban samples, but not for rural samples.

Marital status. A gender difference in domestic labor time emerged when marital status was considered. Both married women and married men spent more time in household labor than those who were not married, but the increase of housework time was larger for married women than for married men. Once being married, men spent less than one more on housework per day, whereas women spent longer than an additional hour on household chores. Moreover, married men were less likely than unmarried men to share household labor -- urban married men spent only 47% and rural married men spent 44% as much time on household labor as married women, but among those who were not married, urban unmarried men spent 50% and rural men spent 49% as much time as unmarried women.

Table 10 indicated that women spent significantly more time on household labor than men did, whether living in urban or rural areas. Married respondents also spent more time on housework than the unmarried did, with the significance level of urban parameters higher than that of rural ones (the .001 level vs. the .01 level). The interaction between sex and marital status was slightly significant for rural samples at the .05 level, but not significant for urban samples.

Child's life stage. The life stage of the first child in the household was associated with both women's and men's household labor time but, again, there was more variation for women than for men. Among those with no children, urban men did 66% and rural men did 53% as much household labor as women did, whereas for those with children, the percentages were relatively lower. Thus, although men with children in the household spent more time on housework than those with no children, the impact of children on women's household labor is greater, with the result of a larger gap between women and men with children than that between those without children.

Results of multiple regression analyses of domestic labor time. Table 11 presented the results of the regression coefficients for housework time.

Insert Table 11 about here

Hypothesis 1 Women performed more household labor time than men, ceteris paribus.

The findings regarding this hypothesis showed different patterns for urban and rural respondents. It was found that women living in urban areas had to spend nearly 100 more minutes on household chores every day than their men counterparts, but when the effects of other factors were taken into account, the impact of sex on housework time was not significant. It could be

argued that this did not mean that gender was unrelated to household labor time, but only that the effect was not direct. It was very likely that the observed gender gap in urban women's and men's household labor was a function of differences either in their characteristics or in the impact of their characteristics on household labor time.

By contrast, holding other variables constant, the gender difference in housework time was still significant at the .001 level for rural samples. Being a rural woman required working two more hours at home per day than men. The hypothesis was partially supported.

Hypothesis 2 Paid work time was negatively associated with housework time and the effect was more apparent for women than for men, ceteris paribus.

As expected, paid work time was negatively associated with both urban and rural respondents' household labor time at the .001 significance level. It was also found that the effect of paid work time was significantly different for women and men. For each additional minute women spend in paid labor, they spent about .13 to .12 fewer minutes on household labor. The evidenced effect for women indicated a strong association between women's paid work time and their household labor time. The hypothesis was supported.

Hypothesis 3 Education was negatively associated with housework time, ceteris paribus.

The regression findings showed that although education was not significantly associated with urban respondents' household labor time, it was so with rural respondents' at the .001 level. Thus, holding all things constant, each additional year of school experience enabled those who lived in rural China to spend six fewer minutes on household labor. This was consistent with the contention that better educated rural respondents spent more time on household labor. The hypothesis was partially supported.

Hypothesis 4 The relationship between age and household labor time had remained obscure in literature. This study originally expected a negative relationship, that was, the younger one was, the more household time he/she has to spend.

Conversely, the preliminary results in Table 9 demonstrated a positive relationship between age and household labor time for all the respondents. The regression results, however, did not give any significant indication for the difference varied either by age or by sex. The hypothesis was not supported.

Hypothesis 5 Income was negatively related with household labor time, ceteris paribus.

Although the coefficients shown in both urban and rural equations were negative, they were not significant at any level. The hypothesis was not supported.

Hypothesis 6 Those who were employed were expected to work less on household chores than those who were unemployed,

ceteris paribus.

The variable EMSTAT was not included in the urban equation. As for the rural equation, the regression results did not show any significance level for the relationship between employment status and housework time or for the interaction between sex and employment status. The insignificant effect of employment status on housework time was indicative of employed women's "double day" with responsibility for both paid labor and household labor. The hypothesis was not supported.

Hypothesis 7 Ceteris paribus, married respondents spent more time on household labor than unmarried ones, and the effect of marital status was larger for women than for men.

The results for urban and rural equations were closely identical. After holding other variables constant, married women and men living in cities spent one extra hour on household labor, compared to unmarried women and men, and the coefficient was significant at the .001 level; married respondents also spent about 42 more minutes on housework than those who were not married. The effect of marital status on housework time was not significantly different for women and men. The hypothesis was partially supported.

Hypothesis 8 Ceteris paribus, traditional gender-role attitudes had differential impact on women's and men's household labor time. That was, the higher a

woman's score, the more housework she did; however, the higher was a men's score, the less housework he did.

The gender-role ideology explanation for the division of household labor was not supported by the regression analyses for housework time. Although the positive coefficients might indicate that respondents with more conservative gender-role attitudes spent more time on household labor than those with more liberal gender-role attitudes, they were not significant at any level. The hypothesis was not supported.

Summary. Overall, the urban equation explains 42% of the variation in household labor time and the rural equation showed 53% of the variation. Thus, not all of the observed variation in household labor time was accounted for the equations, we explained a significant amount of the variance. One of the most important findings for both urban and rural equations was that paid work time and marital status were significantly associated with household labor time even when the effect of other variables were taken into account. The effect of paid work time was also different for women and men. In addition, sex itself and education has significant negative influence on rural respondents' housework time.

Section III. Gender differences in leisure time

Results of bivariate and two-way ANOVA analyses of leisure time. In this section we examined the general patterns of

Chinese women's and men's leisure time. Tables 5.3 and 12 offered an interesting contrast of these patterns. As shown, women living in both urban and rural China had significantly less time spent in leisure activities than their men counterparts. The gender gap in leisure time might reflect a variety of differences between women and men, including differences in the labor force status. Table 13 presented significance levels for the gender gap and the difference associated with background variables.

Insert Tables 5.3, 12 and 13 about here

Age. The relationship between leisure time and age was curvilinear for the four subsamples. For those in their early middle ages (36-45), both women and men had the least leisure time. Women in this age cohort also had the smallest proportion of men's leisure time. Rural women of the later middle age cohort (46-55) had an even smaller share of leisure time with their men. However, Table 13 did not indicate that age had significantly differential effect on women's and men's leisure time.

Education. Both women's and men's leisure time varied by their education level. Those with more education generally spent more time on leisure than those with less education. Hence, the relationship between leisure time and education was invariably

positive. Women had less leisure time than men; the gender gap, however, was larger for rural samples than for urban samples. As expected, the significance levels indicating the gender gap in leisure time, shown in Table 13, were much higher for rural samples than for urban ones (the .001 level vs. the 0.5 level). The differences in leisure time across education levels were significant only for rural samples at the .05 level. There was no significant interaction between sex and education.

Income. The association between income and leisure time was similar for women and men. Those in the low income category had less leisure time than those in the high income category. Table 13 showed significance levels at the .001 level for the differences varied by sex and income as well. However, there was no significant interaction manifest.

Employment statu. Although unemployed respondents had more leisure time than employed ones, women had less leisure time than men did, regardless of their employment status. Men of any employment and residential status reported that their everyday leisure time was one hour more than women's. The gender gap was significant at the .001 level and so was the significance level for the difference between those who were employed and those who were not employed. For rural samples, the interaction between sex and employment status was also significant at the .01 level.

Marital status Married respondents spent less time on leisure than unmarried respondents and the impact of marital

status was similar for women and men. In urban areas, unmarried women and men spent 1.11 and 1.15 more hours, respectively, than their married counterparts; in rural areas, the figure for the discrepancy between unmarried and married respondents was less than an hour. The gender gap and the difference across marital status in leisure time were highly significant. However, there was not significant indication for the interaction between sex and marital status.

First child's life stage Like paid work time, but in a reversed manner, leisure time was more likely to be associated with parental status than with the child's life stage. Both women and men diminished their leisure activities when they had children. In rural areas, the relationship between children's life stage and leisure time was negative -- the older the child, the less leisure time the parent had. Table 13 showed that the differences by sex and child's life stage were significant at the .001 level. Marital status had differential effects on women's and men's leisure time at the .05 significance level. But, such an effect was not held for the rural women and men.

Results of multiple regression analyses of leisure time.

Table 14 presented the regression results for leisure time predicted by the independent variables.

Insert Table 14 about here

Hypothesis 1 Women had less leisure time than men,
ceteris paribus.

Again, the urban-rural difference emerged here. The results showed a significant gender difference in leisure time for rural samples, but not significant for urban samples. Holding other variables constant, being a peasant woman meant having approximately 2.5 fewer hours per day for leisure than a man had. The coefficient for this direct gender effect was significant at the .05 level. The hypothesis was partially supported.

Hypothesis 2 The increase of paid work time was associated with a decrease in leisure time.

This hypothesis was supported by the two equations. As shown in Table 14, the relationship between paid work time and leisure time was significantly negative at the .001 level for both urban and rural respondents. As one worked one more minute in the labor force, one would have her or his leisure time reduced by a factor of .40 minute for urban respondents and .53 for rural respondents. Paid work time did not have a significantly differential impact on women's and men's leisure time. The hypothesis was supported.

Hypothesis 3 Ceteris paribus, housework time was negatively associated with leisure time, and the effect was larger for women than for men.

This hypothesis was also consistently supported for urban and rural samples in this study. For every one minute increase

that one spent on household labor, urban respondents spent .36 fewer minute and rural respondents spent .63 fewer minute on leisure. The hypothesis that housework time had greater effect on women's leisure time was not supported here. The hypothesis was partially supported.

Hypothesis 4 Education was positively related with leisure time, ceteris paribus.

As expected, education had a significant positive effect on leisure time for both urban and rural respondents, after the effect of other variables had been removed. For each additional year of education, urban respondents spent 7.41 more minutes on leisure activities per day and rural respondents spent 3.65 more minutes. The hypothesis was supported.

Hypothesis 5 Ceteris paribus, the relationship between leisure time and age was curvilinear.

The curvilinear relationship between leisure time and age was significant at the .01 level for rural respondents, but not significant for urban respondents once the effect of other variables was considered. Determination of the age at which the association between age and leisure time changed was based on the same formula as used for the relationship between age and paid work time. The calculated results showed that women's and men's leisure time began to increase at about the same time -- when they were 42 or 43 years old. The hypothesis was partially supported.

Hypothesis 6 Ceteris paribus, income was negatively related with leisure time, given that income might be associated with more paid work time.

Results in Table 14 supported the hypothesis only for rural samples at the .01 significance level and the significant coefficient was very small (.01). It meant that in rural China, every one Chinese Yuan increase in one's annual income was associated with .01 more minute for leisure. The hypothesis was partially supported.

Hypothesis 7 The employed had less leisure time than the unemployed, ceteris paribus.

The exploratory analyses had shown that employment status was associated with leisure time, and women, whether employed or not, had significantly less leisure time than men. The regression results indicated, however, that when other variables were taken into consideration, the effects of employment status and its interaction with sex on leisure time were not significant. The hypothesis was not supported.

Hypothesis 8 Marital status as a family demand was negatively associated with leisure time, ceteris paribus.

Like employment status, once other factors were considered, the effect of marital status was not significant. However, the examination of the coefficients revealed that even though the effect of marital status on leisure time was not significant, the association was negative. These coefficients might imply that

married respondents had less leisure time than did unmarried ones. The hypothesis was not supported.

Hypothesis 9 Scores on the scale of traditional gender-role attitudes were negatively associated with leisure time, ceteris paribus.

This hypothesis was not supported by the results in Table 13.

Summary The regression models for the prediction of leisure time explained 33% of the variation in leisure time for urban respondents and 48% for rural respondents, respectively. In brief, time spent on leisure was largely determined by time spent in paid work and household labor and education even when the effects of other variables were taken into account. Urban and rural respondents differed in that income and age also had significant effects on rural respondents' leisure time.

Conclusion. The results of time expenditures by Chinese urban and rural respondents were all reported thus far. To give the reader a quick visual understanding of the extent to which this study was consistent with previous American literature, a summary of the support of the hypotheses was presented in Table 15.

Insert Table 15 about here

CHAPTER V

DISCUSSION AND CONCLUSIONS

This chapter was a continuation of the previous one. Based on the empirical results presented in Chapter IV, discussion and conclusions were made here with regards to three aspects. First, the reader would be led to see to what extent that the current research was consistent with previous American studies. Second, the prospect of reducing the gender gap in time use in China was discussed on policy-making levels. Finally, the limitations of the study were pointed out so that the directions for future research were highlighted.

The Degree of Consistence with the Previous Literature

One of the most important findings in this study was that paid work time was strongly negatively associated with housework time, and later, these two time allocations were found to be significantly influential on leisure time. This relationship, phrased as the time constraint hypothesis, was raised by home economists. As Nickols and Metzen (1978) argued, if labor force hours had not been predetermined constraints, but rather had been determined simultaneously with household production time, this part of the theory would be questionable. In other words, one's labor force decisions should be exogenous to household time decision-making. The present study convincingly indicated that a Chinese person must first decide his or her labor force hours and subsequently decide the household time. The model for a

developmental process in time use thus found its theoretical relevance in a China-based study. Apparently, economists' simultaneous model (e.g., Becker 1974; Hawrylyshyn, 1977) would be viewed as problematic if it were applied to a Chinese context.

Some other initial hypotheses in the empirical model for time allocations were confirmed in this study. First, the findings supported family sociologists' assumption that changes in family time evolve over the life cycle as couples passed through different developmental stages and confronted different developmental tasks (e.g., Albrecht et al., 1979; Schafer & Keith, 1981). The first important variable indicative of individual or family development was age. In this study, the curvilinearity hypothesis linking age with both paid work time and leisure time was supported. The curves of these two curvilinear lines were clearly opposite to each other. The respondents in the SCWSS sample had their peak time for paid employment in their middle ages and their lowest time for leisure at the lowest point at the same time.

By contrast, for both urban and rural respondents, time devoted to household labor had a linear, rather than a curvilinear relationship with age. Although the relationship was not significant, a linear line deduced from the exploratory analyses indicated that age captured a cohort effect, that was, the older the Chinese cohort, the more time its members spent on household production. These findings reflected a cultural

difference in elderly people's life between China and America. Evidently, Chinese parents continued to engage in a significant amount of housework after their children left them and had their own families. The finding was consistent with some cross-cultural observations that Chinese elderly parents were intensively involved in giving their married children help and support (Fry, 1980; Sokolovsky, 1983; Streib, 1987). In this regard, it was also noticed that Chinese old women were particularly active in a variety of household economic activities, compared with their men (Croll, 1981; Dalsimer & Nisonoff, 1987).

Marital status was another variable that had a significant impact on Chinese people's household labor time. This finding was consistent with family developmentalists' perspective that the division of housework time was a function of change in one's family status (Coverman, 1985; Coverman & Sheley, 1986). In this approach, one's employment status and age of children were proposed as indicators for "family demand." For some reason, these two variables were not relevant to the regression analysis. As a proxy, marital status supported the hypothesis.

Most frequently, family sociologists hypothesized that socioeconomic resources were positively associated with paid work time and leisure time (e.g., Blood & Wolfe, 1960; Condran & Bode, 1982; Rodman, 1972). In this study, the effects of education and income on time use were particularly evident in the findings

derived from the rural data. Rural people of higher educational levels spent more time on paid work and leisure activities, but less time on housework. It seemed that the opportunity cost for not taking remunerative jobs was particularly high for better educated people in rural areas.

On the whole, the extent of the applicability of the models varied from urban to rural settings. The difference was resulted from substantial variations in China's urban and rural political and socioeconomic systems. For example, the aggregate findings indicated a one-hour gender difference in paid work time for rural respondents, but no gender difference for urban respondents. Given the fact that female labor force participation in urban China was not out of personal choice, the gender equality in paid work time evidenced for urban samples should not be understood as a sheer product of socio-demographic or ideological transformation. The context of rural China was similar to that of Western societies in that peasant women were not legally required to work outside the home, and entry to the market labor in the countryside was often competitive based on sex, education, and some other factors.

Bearing in mind this background information, the theoretical underpinning of the model for paid work time could not be applied pari passu to the urban context of China, but to some extent, it was a workable model for the rural society in China. Hence, it was understandable that the variation of paid work time was

explained marginally for urban respondents in this study, but more substantially for rural respondents. Moreover, the different outcomes of the paid work model reinforced the importance of understanding the context when applying a theory.

Some of the variables were not significant for at least three reasons. First, the reduced applicability of socioeconomic variables to the urban respondents might not necessarily mean that they had little impact on urban people's daily lives. Rather, these findings might be empirically coincident with the essential urban-rural difference and logically or theoretically connected to that difference. In traditional patriarchal Chinese families, all males were superior to females, there was "emotional estrangement" between husband and wife, and roles were rigidly segregated. In those families, individual characteristics were likely to affect other family members' lives or well-being. Due to the dramatic changes brought about by modernization and urbanization in Chinese cities, family relationships were reverberantly undergoing changes. In families that were geared toward a conjugal, egalitarian relationship pattern, the characteristics of one spouse relative to the other might be more attributable to the dynamics of family life. Along this theoretical line, it could be argued that the lack of theoretical relevance of the resources hypothesis to the urban setting was due to the fact that in actuality, hypotheses related to it were not tested in this study because the disparity score

indicating differences in a couple's resources were not used.

Second, measures of some variables used in this study, for example, the scale of gender-role attitudes, might be problematic for various reasons. Gender-role attitudes was a composite made of four items. Compared with American studies using the same construct (e.g., Atkinson & Juston, 1984; Barnett & Baruch, 1987), these measures did not seem to be weighed enough to have covered the full range of the concepts associated with the variable. China's record on gender-role segregation had lasted for thousands of years. Confucius' elaborated teachings on gender rules were still, to varying degrees, affecting Chinese people's lives today. Apparently, more sophisticated measures for gender-role attitudes were needed for gender research in China. In addition to developing more valid and reliable measures for the construct of gender-role attitudes, other variables could be included in the model, for example, socialization pattern and family background. As Perrucci, Potter and Rhoads (1978) found, an individual raised in a family that was relatively more egalitarian in its norms might be assumed to themselves adopt such norms as their own during adulthood.

Third, as previously discussed, it was important to study individuals or families in China from a developmental perspective. However, only one variable indicating the life cycle or family stage was used in this study. In addition to the respondent's age, length of marriage and spousal age difference

were also variables representative of development. Most American family sociologists emphasized the importance of the child's age (Godwin, 1991). Unfortunately, due to its high correlation with the respondent's age, this variable was excluded from the regression analysis, and thus its effect was untested. To explicate the demand hypothesis, a more rigorous design incorporating the child's age was required.

The relationship between employment status and time use was not supported in this study, either. It was speculated that employment status might have an impact on unmarried people's time allocation; however, when exploring its impact on married women and men, the effect of employment might reside more in the work status of the spouse than in that of the respondent. As Wheeler and Arvey (1981) explained:

...the spouse with more time than the other will perform household tasks. When the wife is not employed outside the home, she becomes available to complete homemaking responsibilities (p.11).

This perspective was similar to that of home economists regarding constraints on family members' household production. It presumed the importance of interaction effects between a couple in terms of their time allocations. Because the majority of respondents in this study were married, the employment status of the spouse might be a better indicator than that of the respondent.

Conclusion. The variation of time use in this study was largely explained by the variables proposed by family

developmentalists and home economists. The contribution of socioeconomic resources, family life-cycles and family demand to time allocation was either fully or partially confirmed by the results of this study. Of all the variables examined, the hypothesis of three dependent uses of time seemed to form a most unified and well-developed model. The developmental process model was relatively stable in the China study for two reasons. First, it explained an appreciable amount of variation in housework and leisure time. Second, it was efficiently applied across the urban and rural samples in this study. All in all, the results of this study highlighted the theoretical importance of a development model for time use studies and called for the continuing efforts to integrate diverse perspectives and approaches. However, the results of this study might need to be reevaluated within the expanding efforts to refine a time use theory specifically applied to China.

Implications of the study for policy-making

The results of this study suggested that there were persisting and substantial distinctions in the amount and structure of time allocation for women and men in China. Specifically, the contrasts of time expenditures were striking in household labor and leisure, but small in paid employment. According to the Hubei data in the Survey of Chinese Women's Social Status, the gender gap in paid work time in cities was almost nil. However, the gap of women's and men's time spent in

household labor and leisure activities was glaring.

It warranted a reminder here that the relatively high rate of female employment and a small gender gap in paid employment time in China was not an indicator of women's emancipation as heralded in America. Neither was it a reflection of an equal job market situation in China's current macro-economic environment. For Chinese women, equal rights for equal jobs, as manifested in the country's constitution, meant a simultaneous acquisition of two roles: a full-time paid worker and a traditional wife and mother. When American women were fighting for their rights to work outside home, Chinese women in cities were required to experience both. Among Chinese women nowadays, the saying was, "The sky is broadly open, but our wings are too heavy."

This study, revealed gender differences in time use in both urban and rural China. In quantitative terms, China had accomplished its goal of recruiting women into the work force, and Chinese women's employment rate was higher than that in many Western countries. However, an optimistic conclusion was not warranted because this study showed significant differences between women and men in other dimensions of a job market. For example, women earned less than men. Although the study did not closely examine the characteristics of women's work, the phenomenon of occupational segregation was evident in other recent studies (e.g., Tsai, 1987; Walder, 1989).

On the other hand, this study discovered that the

proportion of women in labor force was not as large as it was 10 years ago. The presented data indicated that 67% of urban women were working outside the home, while the same indication in the 1982 Hubei Census was 91% (The Hubei Census, 1982). A 1986 national survey reported that 82% of urban Chinese women were in the labor force (Wan, 1988). Evidently, the economic reforms have created some negative influence on women's labor force participation, and a certain proportion of women might have retreated from paid work.

In rural areas, the gender gap in paid work time was pronounced. Although 90% of the rural women in Hubei participated in labor force, the descriptive statistics showed that their average work time was only 77% of men's. Table 6 indicated that part-time work was very strongly a feature of female employment in rural China. Compared with urban women's longer work hours, rural women had fewer opportunities for full- or over-time work. Or, they might have underestimated the amount of their paid work time because some of the economic activities might have been mistakenly regarded as housework. As some researchers recently observed (Dai, 1991; Dalsimer & Nisonoff, 1987), in a cooperative household economy, peasant women often engaged in economic activities within the household, for example, food processing and handcraft making. Dalsimer and Nisonoff (1987) explicitly described:

The new agricultural labor practices reprivatize a woman's

labor back into the patriarchal family. Gone are her public labor visibly, her earned work points, and her chances to work with non-family members in field tasks (p. 591).

Under these circumstances, it was very likely that rural women's economic activities were obscured with household labor.

The substantive findings of this study suggested a huge gender gap in housework time and leisure time. Chinese women of any socio-demographic background had to do more housework and enjoy less leisure. On a daily basis, urban women spent approximately two more hours and rural women spent three more hours on household labor than did men; urban women had one hour fewer and rural women had two hours fewer on leisure than men. Thus, the 1990 findings concerning the expenditure of housework time did not substantially diverge from a 1987 national Chinese survey (Tan, 1987).

The gender differences in these regards were often enlarged for those who were married. Although the regression results did not give any significance level to the coefficient for the interaction term between sex and marriage, the preliminary results indicated that married women's average time spent on housework doubled married men's, and the latter were less likely to share housework than their unmarried counterparts. During the 1980s, the Chinese authorities were attempting to mobilize women into social production, while ideological campaigns were launched to exhort women to be good family members. All this amounted to a virtual perpetuation of the double work day for Chinese women.

The findings of this study suggested that married women in China had to work extremely hard for the large society and for their families. In comparison, men seemed to be more privileged because of their less role in household chores. These phenomena have led some Chinese feminist authors to conclude that women torn by conflicting role demands should abandon the search for love and marriage and find fulfillment through their dedication to a career (Roberts, 1989).

The relationships among education, paid work, and housework for rural populations in China have been well established by demographers (e.g., Aird, 1982; Robinson, 1988). In the mid-1970s, Davin (1976) found that one of the sources of Chinese women's disadvantageous position in political leadership and socio-economic ranks was their unappreciated family roles and unshared family responsibilities. This study discovered that when other variables were held constant, education was most closely related to rural respondents' time allocation. Reasons for the loosening connection between paid work time and other variables in urban areas were discussed earlier. Although education did not show any significant effect on housework time for urban respondents once the effects of other variables were held constant, the preliminary results depicted some interesting patterns. Looking across Table 9, the higher the education, the lower the household labor and the more education an urban man had, the more likely he was to share the task with the woman;

however, the more education a rural man had, the less likely he was to share in the housework.

Education was the supposedly historic avenue to individual success in Chinese society. The findings suggested some subtle changes related to the impact of education on Chinese men. It seemed that education was positively associated with urban men's affiliation to an egalitarian ideology, but its impact on rural men was just the opposite. This finding implied some cultural change in urban China, where the practice of a non-traditional pattern of family activities among better educated couples might be emerging. Perhaps this healthy change will gather force in the decades ahead and expand its influence to the countryside.

By and large, the findings of this study should have weighty implications for Chinese women to take concerted action to improve their lot; and on a higher level, they might have ideological effects to generate a feminist theory of gender equality. But, ensuring of gender equality in the Chinese family and society might be a prolonged and complex process. To be more realistic and pragmatic, the following space was used to briefly discuss how Chinese policy-makers should be sensitized to the human dimensions of reducing extreme gender discrimination in China.

In light of the fact that the engagement in paid employment was a pivotal part of most Chinese women's lives, policies were needed to directly improve the continuity and adequacy of support

for female employment and family life. The findings of this study suggested that paid work and family responsibilities not only affect each other but also might conflict. That was, time spent in one sphere meant less time spent in another. If commitments to paid labor and household labor called for full-time participation in both, that time must come either at the expense of leisure, or else some of the demands of paid labor and household labor must go unmet. Given this situation, the aim of new policies, if any, must take into consideration the family responsibilities and to give them more priority in the policy-making process. The route to this achievement must be a series of specific avenues that could relieve women from paid work in order to accommodate family responsibilities. These innovations could be adapted from America or European countries though the implementation of these initiatives was just under way in these countries. The following outlined five areas where the prospect of helping Chinese women combine work and family could be seen.

1. On societal levels, improvements in domestic services were recommended. These facilities included food ordering, public laundry, household technologies, etc. To a certain extent, they might free women from the choking drudgery of household chores.

2. Employers should retain their commitment to the provision of preschool child care institutions. The shortage of child care was a local as well as a national issue in China because more than half the Chinese population was under age 21 (Tien, 1983).

Thus, the problem of childrearing should assume dominance over the issue of women's equality and should be made imperative for the government to get involved with employers in designing child care assistance programs.

3. Schools should operate an extended-day system for children of lower age groups in order for them to avoid the "latchkey child" syndrome. In rural areas, cheap and readily available child care facilities could be provided so that elder female children should be released from the child caring tasks and attend school.

4. In a society that was undergoing accelerating economic booming, policy-makers should start to think about the possibilities of designing work schedules that would allow employees to have a certain measure of control over when they should work and for how long. This was particularly important for working mothers. Some measures could be taken to reduce the conflict between work and family life, such as part-time work and flexitime. The practice of these measures might create a dramatic change in the way Chinese women allocated their time.

5. Chinese scholars of social science should coordinate with policy-makers and monitor any possible changes brought about by the new policies. Rather than proposing strategies that allowed women to combine household and paid labor responsibilities, family researchers' energy should be more fully expended on efforts to redistribute family responsibilities and change work

expectations for both women and men. In addition to identifying the complex interrelationships among paid labor, household labor, and leisure, they should make efforts to redefine work to include both paid and unpaid work, and also to redefine the family. In the long run, the impact of these works on the lay Chinese people would expect to be profound once they paved the way to cultural changes at a larger scale.

Conclusion. Although significant social changes in China's laws, family organizations, and educational and occupational institutions had, to some extent, allowed women to advance and change their condition of inequality with respect to men, those changes had not been sufficient to produce a notably increasing similarity for women's and men's roles in the household division of labor, and neither was their share in other domains of family activities. In order for women's labor force participation to be associated with women's lightened burdens and improvement of family life, social scientists and policy-makers should be obliged to do something specific to promote gender equality in China.

Limitations of the Study and Recommendations for Future Research

Like every piece of research, this study suffered from certain theoretical and methodological limitations. Identifying these limitations might not only help clarify the merits and shortfalls of the current study, but more importantly, it might also provide recommendations for future research in the same

area.

This study had theoretical implications for future research in China and in America as well. The findings in this study illuminated the importance of development theory in a Chinese context. During the past few years, this theory was introduced to China for research on the developing child, but it gave relatively little attention to studies of family life or women's experiences. The narrow focus on traditional demographic and sociological surveys among China's social science scholarship obviously ignored many other factors that might lend impact. Of those unexamined approaches or models, a development theory was perhaps of the most heuristic value.

On the other hand, although the contribution of this study was limited to a Chinese academic audience and policy makers, it might be able to serve as a catalyst for mapping out a research agenda for theory testing in America. This study did not add much theoretical richness, but it did verify some theories and heighten the awareness of the need for an integrative perspective on people's overall time structure. The results implied that anything as complex and ubiquitous as family time allocation must have multiple causes. They showed that family time was determined by real constraints and demands reflecting both the environment in which people lived and by previous decisions they had made. People must use their resources within some boundaries of societal norms, their socialization experiences and their own

attitudes. Taking into consideration the data available for this study and the results, it was apparent that a useful theoretical framework for time use research must involve an interdisciplinary integration of all the paradigms.

In retrospect, perhaps there were several ways in which the 1990 SCWSS data could have been used to do a better study. First, this research had only examined the amount of time expenditures. The nature and quality of time expenditures remained unexamined. The study of these time dimensions was important because they provided us further insights into gender roles and gender relations within Chinese families or individual well-being implied by the time outcome. Future investigators should shed light on some psychosocial questions concerning people's subjective feelings about their behavior patterns, besides objective, observable measures of time. For example, measures of work satisfaction and marital quality should be included.

Second, this study only looked at the large chunk of time devoted to broad activity categories. These aggregate time-use figures were not very effective for furthering understanding of daily behavior at the level of the individual. Further studies should look at people's specific work or leisure experiences, instead of focusing on a unified world of work, as was done in this study. More detailed statistics would reveal more dynamics in people's everyday life.

Third, although the size of gender gap in household labor time and leisure time shown in this study was significantly large, the model used in this study was not able to fully identify the sources of the gender gap. To validate the hypothesis of relative resources proposed by family sociologists, future research should pay attention to the impact on household labor time or leisure time determined by the interaction between women's and men's characteristics. In other words, a respondent's household labor time should be seen as affected by the spouse's relative characteristics, including his/her socioeconomic resources and time availability. Efforts should be made to specify and assess the effects of the relative characteristics of the spouse. The information concerning the spouse's socioeconomic characteristics was available in the data set and could be compared in future analyses.

Finally, longitudinal research of time expenditures utilizing comparable measures and samples were needed, particularly when trends in time use patterns were under investigation. Such research was important because it could unravel convergence, divergence, or stability in how women and men spent their time over a period of time. Small time use shifts between one period and another might look unimportant at first glance, but they might represent significant harbingers of social change at the most basic level, that was, people's everyday activity patterns. Along with more data bases to be

established, the 1990 SCWSS data set could serve as a solid benchmark from which it might be possible to gauge clearly and accurately how daily life in China would change in future generations.

Conclusion

This study was a significant start in understanding how Chinese women and men used their time in their daily life. Guided by a theoretical framework integrating different American approaches on time use, the study used a nationally representative Chinese data set to examine patterns of time use and to identify the determinants of time spent in paid work, unpaid housework, and leisure, as well as sources of the gender gap in these time allocations. The descriptive analyses indicated a large gender gap in housework time and leisure time. When the association between sex and a given time category was further examined in relation to other variables, most of these gender differences were still significantly evident. When the simultaneous effects of all the proposed variables were considered, certain socio-demographic and family characteristics still had their impact loom large. Specifically, of all the predictors of time use examined in the model, the major factors associated with paid work were age for urban respondents and socioeconomic resources for rural respondents. The variables that explained appreciable amounts of variance in housework time were paid work time and marital status in urban areas. For rural

respondents, two additional variables had their significant impact, sex and education. Of the factors that affected leisure time, paid work time, housework time, education emerged as most important from multivariate analyses. For rural respondents, sex, age, and income explained further variance in the data. The directions of these relationships were generally consistent with those that were previously hypothesized.

The empirical evidence of the study was discussed and evaluated in theoretical and policy-making perspectives to corroborate a concern for future research and for possible policy changes in China. Because the study provided a useful compendium of knowledge about a rarely-studied area, it might be regarded as a unique contribution to the understanding of Chinese people's daily life and also of women's inequitable state in contemporary China.

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APPENDIX A

FIGURES & TABLES

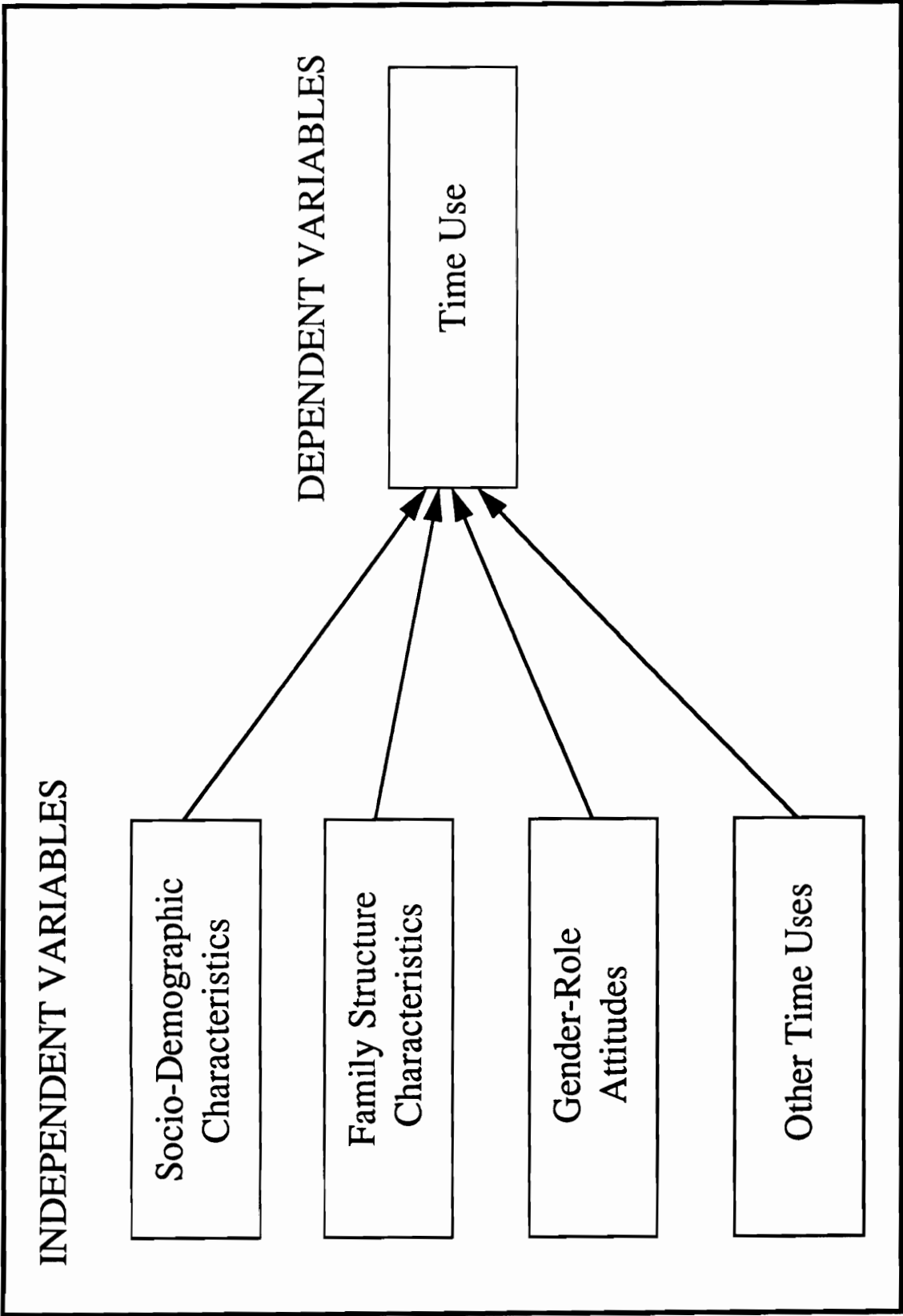


Figure 1. Outline of Theoretical Model for Time Use in China

INDEPENDENT VARIABLES

Socio-demographic characteristics

- Sex
- Age
- Education
- Income
- Employment status

Family structure characteristics

- Marital status
- Age of first child

- Gender-role attitudes

DEPENDENT VARIABLES

Paid work
time

Housework
time

Leisure
time

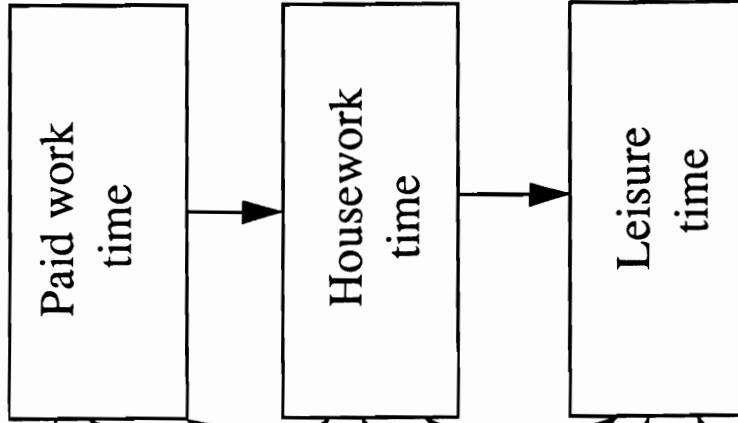


Figure 2. Theoretical Model of Time Use in China

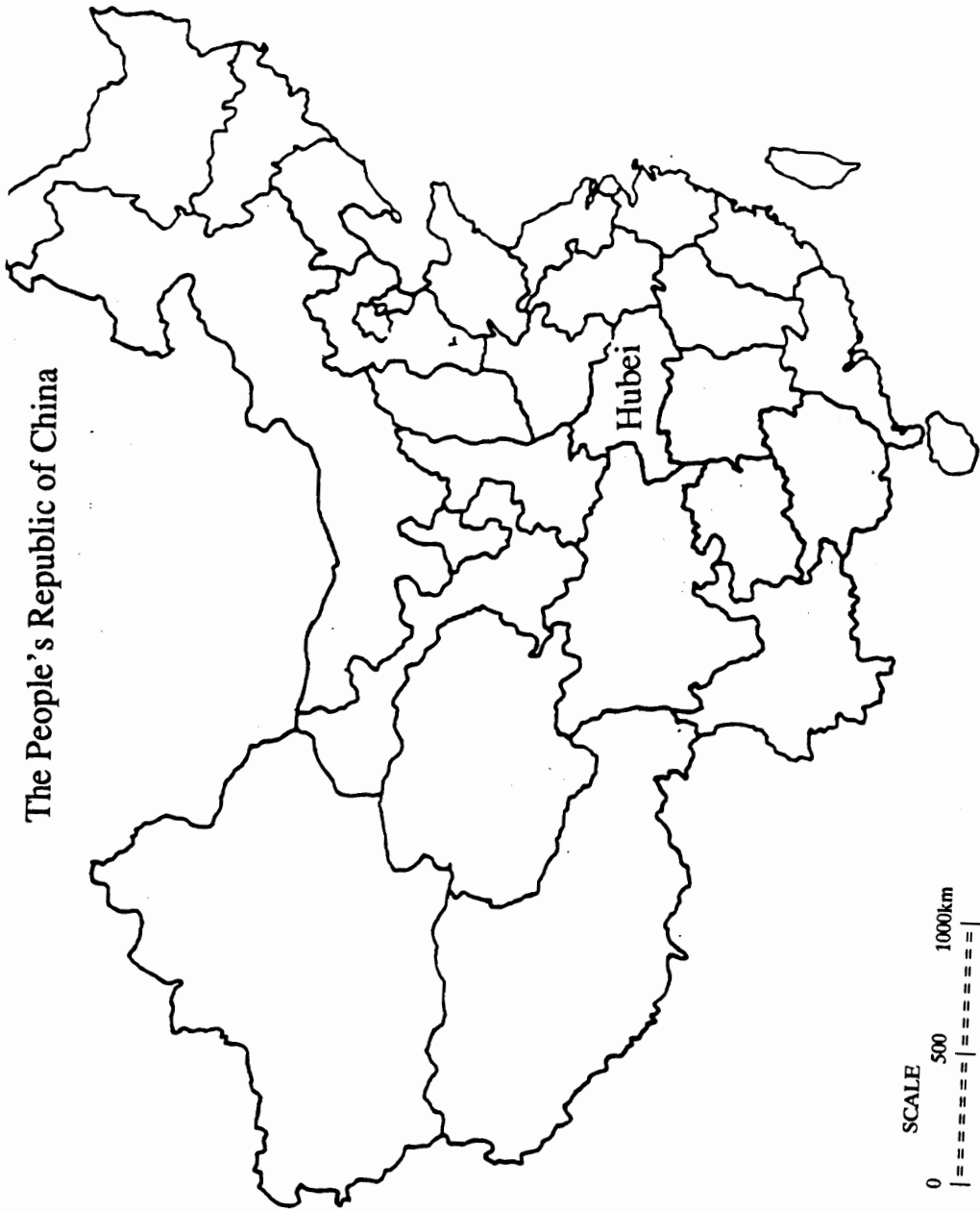


Figure 3. Geographical Location of Hubei Province in China

Table 1

Definitions and Measures of Variables for Bivariate and ANOVA Analyses

Variable index	Definition	Unit of measure
<u>Socio-demographic characteristics</u>		
SEX	Sex of respondents	1=female 0=male
AGEGP	Age groups of respondents	Number of years
INCGP	Income groups	1=Y 0-1,000 2=Y 1,001+
EDUGP	Educational groups	1=Illiterate 2=primary school 3=junior high 4=senior high 5=college
EMSTAT	Employment status	1=employed 0=unemployed
<u>Family structure characteristics</u>		
MARSTAT	Marital status	1=married 0=unmarried
KIDSTAGE	Life stage of first child	1=1-4 years old 2=5-9 years old 3=10-14 years old 4=15+ years old 5=childless
<u>Time use</u>		
PWTIME	Paid work time	Minutes per day
HWTIME	Housework time	Minutes per day
LSTIME	Leisure time	Minutes per day

Table 2

Definitions and Measures of Variables for Regression Analyses

Variable index	Definition	Unit of measure
<u>Socio-demographic characteristics</u>		
SEX	Respondent's sex	1=female 0=male
AGE	Respondent's age	Number of years
ANINCOME	Annual income	Number of Yuans
SCHOOLYR	Years of school attendance	Number of years
EMSTAT	Employment status	1=employed 0=unemployed
<u>Family status</u>		
MARSTAT	Marital status	1=married 0=unmarried
KIDAGE	Age of first child	Number of years
<u>Gender-role attitudes</u>		
GENDATT	Gender-role attitude	5-point of Likert scale
<u>Time use</u>		
PWTIME	Paid work time	Minutes per day
HWTIME	Housework time	Minutes per day
LSTIME	Leisure time	Minutes per day

Table 3

Socio-demographic Characteristics of the SCWSS Sample^a

Variables	Urban areas		Rural areas	
	M ^b (n=414)	F ^c (n=504)	M (n=449)	F (n=498)
MARSTAT (<u>freq.</u> & <u>%</u> ^d)				
Married	343 (83%)	431 (86%)	362 (81%)	434 (87%)
Not married	71 (17%)	73 (15%)	87 (19%)	64 (13%)
EMSTAT (<u>freq.</u> & <u>%</u>)				
Employed	357 (86%)	338 (67%)	434 (97%)	450 (90%)
Not employed	57 (14%)	166 (33%)	15 (03%)	48 (10%)
AGE (<u>M</u>)	36.46	39.10	34.93	33.43
(<u>SD</u>)	11.39	12.49	11.20	10.27
SCHOOLYR (<u>M</u>)	9.29	7.63	6.29	4.74
(<u>SD</u>)	3.11	4.00	3.05	3.25
ANINCOME (<u>M</u>)	1788.44	1491.52	1066.37	929.31
(<u>SD</u>)	898.59	900.66	930.34	980.79

^a. N = 1,865.
^b. M = male.
^c. F = female.
^d. % = percentage of the total subsample.

Table 4

Correlation coefficients for Independent Variables

	2	3	4	5	6	7	8	9	10
Urban Respondents (n=918)									
1. SEX	-.18	.42	-.22	.11	-.16	.05	-.22	.04	.18
2. PWTIME	--	-.47	.33	-.30	.28	-.06	.79	.14	.48
3. FWTIME		--	-.44	.34	-.13	.02	-.43	.13	.38
4. SCHOOLYR			--	-.44	.14	.08	.37	-.01	.50
5. AGE				--	.18	-.10	-.29	.28	.94
6. INCOME					--	-.06	.25	.21	.00
7. GENDATT						--	-.03	-.08	-.00
8. EMSTAT							--	.17	-.49
9. MARSTAT								--	-.23
10. KIDAGE									--
Rural Respondents (n=947)									
1. SEX	-.25	.49	-.24	-.07	-.07	.00	-.13	.09	-.06
2. PWTIME	--	-.48	.17	.02	.09	.01	.10	.05	-.04
3. FWTIME		--	-.28	.05	-.10	-.12	-.12	.12	-.02
4. SCHOOLYR			--	-.43	.12	.13	.13	-.01	-.47
5. AGE				--	.00	-.08	-.08	.24	.90
6. INCOME					--	-.00	.10	.09	-.04
7. GENDATT						--	-.02	-.07	.01
8. EMSTAT							--	.17	-.49
9. MARSTAT								--	-.32
10. KIDAGE									--

Table 5

Two-Way ANOVA Results for the Dependent Variables by Sex and Residence

Table 5.1 Paid Work Time by Sex and Residence

Source	<u>df</u>	<u>SS</u>	<u>F</u>
SEX	1	865263.3	31.45***
RESIDENCE	1	4867633.8	176.93***
SEX*RESIDENCE	1	1102191.3	40.06***

Table 5.2 Housework Time by Sex and Residence

Source	<u>df</u>	<u>SS</u>	<u>F</u>
SEX	1	11162556	548.80***
RESIDENCE	1	644827	31.70***
SEX*RESIDENCE	1	305341	15.01***

Table 5.3 Leisure Time by Sex and Residence

Source	<u>df</u>	<u>SS</u>	<u>F</u>
SEX	1	1754557.3	76.16***
RESIDENCE	1	1027595.9	44.61***
SEX*RESIDENCE	1	40896.3	1.78

*p<.05. **p<.01. ***p<.001.

Table 6.

Mean Number of Hours per Day Devoted to Paid Labor by Sex and Other Independent Variables (Employed Respondents Only)^a

VARIABLES	Urban areas		Rural areas	
	M ^b (n=357)	F ^c (n=338)	M (n=434)	F (n=450)
Grand means	8.17 (99%) ^d	8.27	7.19 (130%)	5.51
AGEGP				
18-25 years old	7.68 (93%)	8.29	8.19 (145%)	5.64
26-35 years old	8.34 (101%)	8.26	7.20 (134%)	5.36
36-45 years old	8.32 (98%)	8.48	7.44 (127%)	5.86
46-55 years old	8.50 (111%)	7.63	6.88 (118%)	5.84
56-64 years old	6.63 (82%)	8.09	7.42 (232%)	3.20
EDUGP				
Illiterate	8.43 (99%)	8.53	5.79 (116%)	4.99
Elementary	7.92 (96%)	8.21	7.21 (126%)	5.74
Junior high	8.09 (100%)	8.12	7.07 (128%)	5.53
Senior high	8.42 (101%)	8.31	7.07 (125%)	5.67
College	7.87 (86%)	9.15	.00	.00
INCGP				
Y 0-1,000	7.73 (91%)	8.53	5.86 (114%)	5.13
Y 1,001+	8.17 (99%)	8.26	7.56 (132%)	5.71
MARSTAT				
Married	7.75 (89%)	8.72	6.47 (110%)	5.87
Unmarried	8.23 (100%)	8.21	7.36 (135%)	5.47
KIDSTAGE				
0-5 years old	8.30 (100%)	8.32	7.17 (155%)	4.63
6-10 years old	8.23 (100%)	8.27	7.50 (135%)	5.56
11-14 years old	8.38 (100%)	8.34	7.39 (136%)	5.43
15+ years old	8.10 (100%)	8.10	7.28 (124%)	5.88
Childless	7.74 (90%)	8.63	6.57 (101%)	6.16

^a. N=1,579.

^b. M = male.

^c. F = female.

^d. % = men's time as a percentage of women's.

Table 7

Two-Way ANOVA Results for Paid Work Time by Sex and Each of the Independent Variables (Employed Respondents Only)^a

Source	df	SS		F	
		Urban	Rural	Urban	Rural
SEX	1	19837.3	1762277.9	1.41	46.77*** ^b
AGEGP	4	120314.5	291710.5	2.13	1.46
SEX*AGEGP	4	139013.4	272114.8	2.46*	1.81
SEX	1	21217.5	1432854.5	1.47	38.40***
EDUGP	4	57215.9	511350.7	.99	4.57*
SEX*EDUGP	4	70477.2	149753.3	1.22	1.34
SEX	1	844097.4	1016883.2	30.57***	27.57***
INCGP	1	4755407.2	793074.2	172.20***	21.50***
SEX*INCGP	1	1053146.1	188303.1	38.14***	5.10*
SEX	1	59504.4	624176.1	4.14*	16.58***
MARSTAT	1	57.9	24234.0	.00	.64
SEX*MARSTAT	1	63955.1	168117.7	4.45*	4.47*
SEX	1	19282.3	2004203.3	1.36	53.40***
KIDSTAGE	4	20551.3	180457.1	.36	1.20
SEX*KIDSTAGE	4	56267.2	338047.8	.99	2.25

^a. N=1,579.

^b. *p<.05. **p<.01. ***p<.001.

Table 8

Regression Results for Paid Work Time Predicted by Sex, Age, Age2, Income, Education, Marital Status, Gender-Role Attitudes and Sex Interaction Terms

Predictor	Urban Equation		Rural Equation	
	<u>b</u>	<u>SE</u>	<u>b</u>	<u>SE</u>
SEX ^a	209.80	124.14	-178.97	147.30
SCHOOLYR	-.85	1.51	8.70** ^b	3.50
SEX*SCHOOLYR			-4.44	4.82
AGE	14.01**	4.76	3.99	5.95
SEX*AGE	-8.09	7.04	8.63	7.75
AGE*AGE	-.19***	.06	-.04	.08
SEX*AGE*AGE	.10	.09	-.13	.10
INCOME	.01	.00	.03**	.01
SEX*INCOME	-.01	.01	-.04	.01
MARSTAT	.17	24.21	-11.82	22.47
SEX*MARSTAT	42.63	34.59		
GENDATT	-.36	1.85	-.30	2.64
SEX*GENDATT	.20	2.80	1.60	3.45
Constant	237.37		264.95	
R ²	.03		.09	
Number	695		884	

^a. Coded as men = 0 and women = 1.

^b. *p<.05. **p<.01. ***p<.001.

Table 9

Mean Number of Hours per Day Devoted to Housework by Sex and Other Independent Variables

VARIABLES	Urban areas		Rural areas	
	M ^a (n=414)	F ^b (n=504)	M (n=449)	F (n=498)
Grand means	2.18 (50%) ^c	4.34	2.37 (44%)	5.39
AGEGP				
18-25 years old	1.89 (47%)	4.03	2.01 (42%)	4.83
26-35 years old	2.33 (48%)	4.85	2.50 (45%)	5.52
36-45 years old	2.32 (51%)	4.51	2.46 (46%)	5.37
46-55 years old	2.42 (43%)	5.65	2.29 (44%)	5.17
56-64 years old	2.71 (41%)	6.64	2.74 (38%)	7.30
EDUGP				
Illiterate	3.20 (50%)	6.43	3.20 (49%)	6.48
Elementary	2.27 (44%)	5.13	2.29 (45%)	5.14
Junior high	2.34 (53%)	4.40	2.46 (49%)	4.98
Senior high	2.34 (60%)	3.91	1.82 (39%)	4.93
College	2.49 (78%)	3.19	.00	.00
INCGP				
Y 0-1,000	2.36 (44%)	5.38	2.99 (54%)	5.49
Y 1,001+	2.19 (52%)	4.25	2.18 (41%)	5.33
EMSTAT				
Employed	2.21 (49%)	4.54	2.33 (44%)	5.35
Unemployed	3.00 (50%)	6.02	3.49 (61%)	5.74
MARSTAT				
Married	2.35 (47%)	5.01	2.42 (44%)	5.53
Unmarried	1.95 (50%)	3.92	2.18 (49%)	4.44
KIDSTAGE				
0-5 years old	2.39 (48%)	5.02	2.59 (42%)	6.15
6-10 years old	2.32 (52%)	4.50	2.49 (49%)	5.09
11-14 years old	2.41 (49%)	4.96	2.56 (49%)	5.76
15+ years old	2.37 (43%)	5.54	2.30 (41%)	5.64
Childless	1.91 (66%)	3.47	2.03 (48%)	3.81

^a. M = male.

^b. F = female.

^c. % = men's time as a percentage of women's.

Table 10

Two-Way ANOVA Results for Housework Time by Sex and Each of the Independent Variables

Source	df	SS		F	
		Urban	Rural	Urban	Rural
SEX	1	1332567.8	5133336.9	76.05***	246.70*** ^a
EDUGP	4	539051.8	544338.4	7.69***	8.72***
SEX*EDUGP	4	254129.3	55105.8	3.63**	.88
SEX	1	3545940.9	5697998.0	217.89***	269.42***
AGEGP	4	1576820.9	446314.7	24.22***	5.28***
SEX*AGEGP	4	585898.6	128309.9	9.00***	1.52
SEX	1	106687669	11312224	527.44***	547.09***
INCGP	1	700770	110171	34.58***	5.33*
SEX*INCGP	1	380081	276625	18.76***	13.38***
SEX	1	2637933.5	1085131.9	165.28***	50.47***
EMSTAT	1	1450243.1	93371.3	90.86***	4.34*
SEX*EMSTAT	1	411697.1	22917.7	25.79***	1.07
SEX	1	1745816.2	3223197.3	92.96***	151.09***
MARSTAT	1	296615.8	196663.6	15.79***	9.22**
SEX*MARSTAT	1	17391.6	80647.7	.93	3.78*
SEX	1	2283273.1	6554273.4	131.47***	315.46***
KIDSTAGE	4	950102.9	661069.1	13.68***	7.95***
SEX*KIDSTAGE	4	411251.9	296448.4	5.92***	3.57**

^a. *p<.05. **p<.01. ***p<.001.

Table 11

Regression Results for Housework Time on Sex, Paid Work Time, Age, Age²,
Income, Education, Employment Status, Marital Status, Gender-Role Attitudes
and Sex Interaction Terms

Predictor	Urban Equation		Rural Equation	
	<u>b</u>	<u>SE</u>	<u>b</u>	<u>SE</u>
SEX ^a	99.19	54.96	141.08*** ^c	37.76
PWTIME	-.15***	.03	-.33***	.03
SEX*PWTIME	-.13**	.04	-.12**	.04
SCHOOLYR	-.62	1.95	-6.10***	1.44
SEX*SCHOOLYR	-3.67	2.52		
AGE	.42	.61	-.13	.43
SEX*AGE	1.84	.80		
INCOME	-.01	.01	-.01	.00
SEX*INCOME	.01	.01	.00	.01
EMSTAT			11.82	16.04
SEX*EMSTAT				
MARSTAT ^b	64.91***	11.74	42.59**	15.23
SEX*MARSTAT			23.68	21.90
GENDATT	1.18	1.54	.07	1.60
SEX*GENDATT	-.45	2.10	.63	2.06
Constant	134.01		285.40	
R ²	.42		.53	
Number	918		947	

^a. Coded as men = 0 and women = 1.

^b. Coded as unmarried = 0 and married = 1.

^c. *p<.05. **p<.01. ***p<.001.

Table 12

Mean Number of Hours per Day Devoted to Leisure Activities by Sex and Other Independent Variables

VARIABLES	Urban areas		Rural areas	
	M ^a (n=414)	F ^b (n=504)	M (n=449)	F (n=498)
Grand means	5.16	4.29 (83%) ^c	4.53	3.35 (74%)
AGEGP				
18-25 years old	5.59	4.33 (77%)	5.16	4.01 (78%)
26-35 years old	4.62	3.59 (78%)	4.38	3.37 (77%)
36-45 years old	4.48	3.20 (71%)	4.25	2.84 (67%)
46-55 years old	4.65	4.04 (87%)	4.35	2.57 (59%)
56-64 years old	5.31	5.08 (96%)	4.63	3.60 (78%)
EDUGP				
Illiterate	4.29	3.38 (79%)	4.20	2.88 (69%)
Elementary	4.57	3.68 (81%)	4.54	3.29 (72%)
Junior high	4.87	3.99 (82%)	4.60	4.50 (98%)
Senior high	5.08	4.12 (81%)	4.51	4.43 (98%)
College	5.21	4.56 (88%)	.00	.00
INCGP				
Y 0-1,000	4.65	3.48 (75%)	4.32	3.16 (73%)
Y 1,001+	5.60	4.23 (84%)	4.60	3.46 (75%)
EMSTAT				
Employed	4.82	3.61 (75%)	4.45	3.33 (75%)
Unemployed	7.32	5.67 (77%)	6.92	3.54 (51%)
MARSTAT				
Married	4.62	3.67 (79%)	4.36	3.24 (74%)
Unmarried	5.77	4.78 (83%)	5.25	4.11 (78%)
KIDSTAGE				
0-5 years old	4.76	3.71 (78%)	4.46	3.73 (84%)
6-10 years old	4.58	3.59 (78%)	4.46	3.35 (75%)
11-14 years old	4.67	3.21 (69%)	4.33	3.29 (76%)
15+ years old	4.63	3.92 (85%)	4.35	2.73 (63%)
Childless	5.67	4.85 (86%)	5.06	4.14 (82%)

^a. M = male.

^b. F = female.

^c. % = women's time as a percentage of men's.

Table 13

Two-Way ANOVA Results for Leisure Time by Sex and Each of Independent Variables

Source	df	SS		F	
		Urban	Rural	Urban	Rural
SEX	1	144494.64	524258.26	5.60*	25.91*** ^a
EDUGP	4	25209.84	181311.16	.24	2.99*
SEX*EDUGP	4	118255.53	107197.84	1.15	1.77
SEX	1	442067.3	882784.81	18.15***	44.16***
AGEGP	4	1149196.0	530467.81	11.79***	6.63***
SEX*AGEGP	4	134388.0	49533.12	1.38	.62
SEX	1	1649906.0	1738860.6	70.85***	74.16***
INCGP	1	562046.3	329821.0	24.14***	14.07***
SEX*INCGP	1	50875.6	7471.0	2.18	.32
SEX	1	996209.8	792428.49	43.85***	39.38***
EMSTAT	1	2554463.2	282149.51	112.44***	14.02***
SEX*EMSTAT	1	24097.8	199869.11	1.06	9.93**
SEX	1	369315.68	570255.54	14.84***	28.39***
MARSTAT	1	820740.38	349868.70	32.98***	17.42***
SEX*MARSTAT	1	7173.46	18.54	.29	.00
SEX	1	806180.2	923221.28	33.80***	45.93***
KIDSTAGE	4	1115121.3	385190.80	11.69***	4.79***
SEX*KIDSTAGE	4	227494.9	83339.95	2.38*	1.04

^a. *p<.05. **p<.01. ***p<.001.

Table 14

Regression Results for Leisure Time on Sex, Paid Work Time, Housework Time, Age, Age2, Income, School Year, Employment Status, Marital Status, Gender-Role Attitudes and Sex Interaction Terms

Predictor	Urban Equation		Rural Equation	
	<u>b</u>	<u>SE</u>	<u>b</u>	<u>SE</u>
SEX ^a	-23.10	49.46	-163.30* ^c	63.11
PWTIME	-.42***	.04	-.53***	.03
SEX*PWTIME	-.07	.02	.02	.04
HWTIME	-.36***	.06	-.62***	.05
SEX*HWTIME	.05	.08	.13	.06
SCHOOLYR	7.43***	1.44	3.66**	1.31
AGE	-2.95	2.93	-8.19**	3.18
SEX*AGE			.48	4.03
AGE ²	.04	.04	.10**	.04
SEX*AGE ²	.01	.01	-.01	.05
INCOME	.00	.01	.01***	.00
EMSTAT ^b			-.94	.76
SEX*EMSTAT			.99	.26
MARSTAT	-25.39	15.23	8.17	11.91
GENDATT	-2.68	1.75	-1.05	1.43
SEX*GENDATT	-1.78	2.39	1.05	1.84
Constant	580.96		798.69	
R ²	.33		.48	
Number	918		947	

^a. Coded as men = 0 and women = 1.

^b. Coded as employed = 1 and unemployed = 0.

^c. *p<.05. **p<.01. ***p<.001.

Table 15

Summary of Support for the Hypotheses

Prediction of Paid Work Time		
Predictor	Expected relationship	Result yielded
SEX ^a	-	Not supported
AGE ²	Curvilinear	Supported for urban samples
SEX*AGE		Not supported
AGE	+	Supported for rural samples
EDUCATION	+	Supported for rural samples
SEX*EDUCATION		Not supported
INCOME	+	Supported for rural samples
SEX*INCOME		Not supported
MARSTAT ^b	+	Not supported
SEX*MARSTAT		Not supported
GENDATT	-	Not supported
SEX*GENDATT		Not supported
Prediction of Housework Time		
Predictor	Expected relationship	Result yielded
SEX	+	Supported for rural sample
PWTIME	-	Supported
SEX*PWTIME		Supported
AGE	?	Not supported
SEX*AGE		Not supported
EDUCATION	-	Supported for rural samples
SEX*EDUCATION		Not supported
INCOME	-	Not supported
SEX*INCOME		Not supported
EMSTAT ^c	-	Not supported
SEX*EMSTAT		Not supported
MARSTAT	+	Supported
SEX*MARSTAT		Not supported
KIDAGE	+	Not supported
SEX*KIDAGE		Not supported
GENDATT	+ for women & - for men	Not supported

Table 15

Summary of Support for the Hypotheses (Contin.)

Prediction of Leisure Time		
Predictor	Expected relationship	Result yielded
SEX	-	Supported for rural samples
PWTIME SEX*PWTIME	-	Supported for Not supported
HWTIME SEX*HWTIME	-	Supported Not supported
AGE ² SEX*AGE ²	Curvilinear	Supported for rural samples Not supported
EDUCATION SEX*EDUCATION	+	Supported Not supported
INCOME SEX*INCOME	-	Supported for rural samples Not supported
EMSTAT SEX*EMSTAT	-	Not supported Not supported
MARSTAT SEX*MARSTAT	-	Not supported Not supported
GENDATT SEX*GENDATT	-	Not supported Not supported

Note: + = positive relationship; - = negative relationship; ? = unknown.

^a. Coded as men = 0 and women = 1.

^b. Coded as unmarried = 0 and married = 1.

^c. Coded as unemployed = 0 and employed = 1.

APPENDIX B

PERMISSION LETTER

Permission Letter

This letter is a proof that the data of the Survey of Chinese Women's Social Status collected from Hubei Province is provided to Nina Xiang for her dissertation research. Nina Xiang is a Ph. D. candidate at the Department of Family and Child Development, Virginia Polytechnic Institute and State University.

Research Team of Urban Social Economy
Hubei Statistics Bureau
People's Republic of China
April 1, 1993

证 明

兹提供《中国妇女社会地位调查》湖北地区调查资料，予美国弗吉尼亚理工大学家庭儿童发展系，博士候选人向妮娜用于博士论文。特此证明。

湖北省统计局

城市社会经济调查队

办



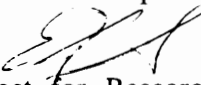


Research Division

306 Burruss Hall
Blacksburg, Virginia 24061-0244
(703) 231-6077 FAX (703) 231-4384

MEMORANDUM

TO: Nina Xiang
Family and Child Development

FROM: Ernest R. Stout 
Associate Provost for Research

DATE: October 22, 1993

SUBJECT: IRB EXEMPTION/"Gender Differences in Time Use in China"
Ref. 93-180

I have reviewed your request to the IRB for exemption for the above referenced project. I concur with Dr. Bird that the research fall within the exempt status.

Best wishes.

ERS/php

c: Dr. Bird

CERTIFICATION OF EXEMPTION OF PROJECTS INVOLVING HUMAN SUBJECTS

93-180

3

Principal Investigator(s): NINA XIANG
Department(s): FAMILY & CHILD DEVELOPMENT
Project Title: GENDER DIFFERENCES IN TIME USE IN CHINA
Source of Support: Departmental Research Sponsored Research Proposal No. _____

The criteria for "exemption" from review by the IRB for a project involving the use of human subjects and with no risk to the subject is listed below. Please initial all applicable conditions and provide the substantiating statement of protocol.

a. The research will be conducted in established or commonly established educational settings, involving normal education practices. For example:

- 1) Research on regular and special education instructional strategies;
- 2) Research on effectiveness of instructional techniques, curricula or classroom management techniques.

b. The research involves use of education tests (cognitive, diagnostic, aptitude, achievement), and the subject cannot be identified directly or through identifiers with the information.

c. The research involves survey or interview procedures, in which:

- 1) Subjects cannot be identified directly or through identifiers with the information.
- 2) Subject's responses, if known, will not place the subject at risk of criminal or civil liability or be damaging to the subject's financial standing or employability;
- 3) The research does not deal with sensitive aspects of subject's own behavior (illegal conduct, drug use, sexual behavior or alcohol use);
- 4) The research involves survey or interview procedures with elected or appointed public officials, or candidates for public office.

*Already completed by
Research & Assessment
with IRB (10/1/93)*

d. The research involves the observation of public behavior, in which:

- 1) The subjects cannot be identified directly or through identifiers;
- 2) The observations recorded about an individual could not put the subject at risk of criminal or civil liability or be damaging to the subject's financial standing or employability;
- 3) The research does not deal with sensitive aspects of the subject's behavior (illegal conduct, drug use, sexual behavior or use of alcohol).

Research & Assessment

e. The research involves collection or study of existing data, documents, recording pathological specimens or diagnostic specimens, of which:

- 1) The sources are publicly available; or
- 2) The information is recorded such that the subject cannot be identified directly or indirectly through identifiers.

2. I further certify that the project will not be changed to increase the risk or exceed exempt condition(s) without filing an additional certification or application for use by the Human Subjects Review Board.

Note: If children are in any way at risk while this project is underway, the chairman of IRB should be notified immediately in order to take corrective action.

Nina Xiang Sept 26, 93
Principal Investigator(s) Date

[Signature] 10/22/93
Principal Investigator(s) Date

[Signature] Oct 10, 1993
Departmental Reviewer Date

[Signature] 10/22/93
Chair, Institutional Review Board Date

APPENDIX C

SURVEY METHODS OF THE SCWSS

Survey Methods of the SCWSS

I. Purpose of the Study

In order to give an all-round reflection on Chinese women's current social status, to confirm the achievement of women's movements during the past forty years in China, to study and analyze what influences and factors had changed women's status, to establish long- and mediate-term goals for women's emancipation movement at rudimentary stages of socialist development, and to provide scientific bases for the improvement of gender progress, All-China Women's Association and the National Bureau of Statistics decided to start a large-scale national survey project on Chinese women's social status. The survey would be conducted at multiple levels, from multiple perspectives, and by means of multiple methods.

II. Survey Content and Major Index

The investigation indices of the SCWSS were designed based on China's current socioeconomic level and with the comparison of the index developed by the United Nations to estimate women's status in Asian Pacific areas. The survey contents included the following seven aspects: (1) legal rights; (2) demography and health; (3) education; (4) labor participation and employment; (5) social and political participation; (6) marriage and the family; (7) self-actualization and social awareness; (8) life style. The major indices for each of those content areas were as follows:

1. Legal Rights

- (1) Whether established any legal institutes to coordinate and protect women's legal rights;
- (2) Whether still existed any discriminative rules or items in the current laws;
- (3) Whether implemented any special laws or items to protect women's legal rights;
- (4) Whether implemented any special measures to ensure women's legal rights.

2. Demography and Health

- (1) Rural/urban structure of age for female population;
- (2) Nutrition, health, and long levity for men, women, and children;
- (3) Fertility number/preference and contraception for women of various ranks;
- (4) Attitude toward male and female infants.

3. Education

- (1) Literacy rate, average age for school and educational attainment among female population;
- (2) Number and gender ratio of enrollment, graduates, and dropouts in all kinds of schools;
- (3) Number of females in occupation/higher education and their education assignment;
- (4) Gender ratio in adult education.

4. Labor and Employment

- (1) Employment rate of female labor resources
- (2) Ratio of non-agricultural workers vs. female employers;
- (3) Occupational structure of female employers;
- (4) Pay and benefits for female employers;
- (5) Women's purpose of/access to employment and their stay rate.

5. Social and Political Participation
 - (1) Female ratio in leadership at different levels of the Party, government, and social groups;
 - (2) Female ratio in government agencies;
 - (3) Ratio and nature of women's issues and problems in the agenda of the Party and government;
 - (4) Women's willingness to participate in political activities and other social interactions.
6. Marriage and the Family
 - (1) Women's average age for first time marriage;
 - (2) Women's autonomy in mate selection and family decision-making;
 - (3) Women's participation and power in family affairs before and after marriage;
 - (4) Extent of emotional dependence and trust between husband and wife.
7. Self-actualization and social awareness
 - (1) Men's and women's cognition of women's ability;
 - (2) Women's individual value orientations;
 - (3) Men's and women's attitude toward women and women's problems.
8. Life Style
 - (1) Arrangement for time and leisure time;
 - (2) Desires for individual development in education.

III. Survey Research Methods

The SCWSS employed survey methods at three levels: (1) questionnaire for individuals, (2) direct statistical survey within communities and work places, and (3) statistical survey on existing literature.

1. There are two kinds of individual questionnaire: Questionnaire for individuals and questionnaires for female representatives. The former was the major form.
2. There are five kinds of direct statistical survey within communities and work places: Surveys in village committees, in work places, in schools, in maternity hospitals, in welfare institutes, and in government agencies.
3. Statistical survey on literature was based on existing information provided by statistics bureaus, employment personnel, departments of education, legality, health, and family planning. The fundamental data were derived from those collected at the end of the year 1989. The lowest survey unit was the sampled county.

The standard time for the questionnaire investigation was September 15, 1990.

VI. Study Subjects and Sampling Methods

The study subjects of the SCWSS were all male and female citizens, aged 18 and above, staying at home in the aforementioned time.

In order to not only generalize from the sample to the whole population, but also make independent comparisons among each subarea participated in the study and among provinces, each province was required to have an equal sample size of 2,000 subjects. Within each province, the sampling methods employed

were stratification, multistage, probability sampling. First, the basic unit sampled was stratified according to its socioeconomic characteristics. Then, 30 counties and/or cities were selected by means of multistage and probability sampling. Two city streets or rural areas were selected from each of those counties or cities, and two village or neighborhood communities were selected from each of those streets or areas. Lastly, ten households were randomly selected from each of those villages or communities. The final sample was a randomly selected household member aged 18 and above. The number of the sampled men and women were equal.

To ensure the sampling quality, the selection of the area unit was controlled by the SCWSS research team, and selection of households and individuals was controlled by research teams and investigators at provincial, city, area levels.

V. Leadership and Research Personnel

Specific research procedures were conducted by the SCWSS research team coordinated by the Research Institute affiliated to either the All-China's Women Association or Sociology Department of the National Statistics Bureau, People's Republic of China. Women's Associations and Statistics Bureaus at provincial, city, and area levels were required to coordinate with the investigation of the SCWSS as one of the important tasks on their 1990 agenda. At least one leader was assigned to take charge.

The SCWSS research team was responsible to prepare in advance for the implementation of the project, to mobilize research efforts nationwide, to enter data collected into computer, and to write national reports. The research team at provincial, city, and district levels was responsible for the investigation organization and report writing within its own area. Every sampled county or city was required to assign one to two supervisors who were responsible for writing literature, directly supervising the survey processes, and checking individual questionnaire survey of various kinds. The enumerator was in charge of filling out the individual questionnaire form. The criteria to select interviewer and enumerator were that he or she must have attained education of junior high, gained some experience in doing social science survey, and were serious and responsible. The research team of the SCWSS was in charge of research personnel training at provincial, city, and district levels. The research team at provincial, city, and district levels was in charge of the training for all the investigators and supervisors. The time period for actual training should not be more than five days.

IV. Quality Control of Survey Materials

In order to ensure investigation quality and minimize errors, the SCWSS set up meticulous rules to examine the data originally collected. The enumerator was required to check every returned questionnaire form on the day the interview was conducted. Upon discovering any mistakes, unclarifications, or missing items, the enumerator must go back to verify them. The supervisor would check all the questionnaire forms returned by the enumerator. The research team at provincial, city, and district levels would randomly check 10% of all the returned questionnaires. During this process, all the discovered errors, particularly those of systematic ones, would be verified or corrected. The research team of the SCWSS randomly examined 2% of all the returned questionnaire forms.

VII. Investigation Procedures and Timetable for chronological stages

1. Stage for Preparation: (April, 1989 - August, 1990)

Major tasks:

- (1) Set up index system of the project, establish investigation methods, and consult with scholars of a wide variety of expertise.
- (2) Collect literature, including statistical and literary information on Chinese women's status domestically and abroad.
- (3) Design questionnaire forms.
- (4) Test the feasibility of major indices.
- (5) Set up standards for sampling and coding, and design handbooks for investigators.
- (6) Organize research teams and train investigators.

2. Stage for Interviewing:

(September, 1990 - end of 1990)

Major tasks:

- (1) Individual questionnaire investigation was completed by October, 1990;
- (2) Direct statistical investigation was completed by October, 1990;
- (3) Statistical literature investigation was completed by November, 1990, expect statistics from the fourth census, which was completed by the end of 1990.

3. Stage for Data Analysis and Preliminary Analysis

(December, 1990 - March, 1991)

Major tasks:

- (1) Arrange and differentiate data.
- (2) Data entry, data gathering, and statistical analysis.
- (3) Data processing, logic induction, correlational analysis, and forms for the preliminary report.
- (4) Completion of the preliminary report

4. Stage for In-Depth Data Analysis and Conclusion

(March, 1990 - March, 1991)

VIII. Sampling rules and operation methods

1. Sampling methods: Within each province, autonomous area and city, use area selection, stratification, multistage sampling, probability sampling, and simple random sampling.

a. Area selection: Areas are determined by urban and rural residences within one province. Urban areas refer to people living in cities and other non-agricultural populations living in counties or county towns. Rural areas include people living in the countryside and suburban areas as well.

b. Stratification: In order to reduce the rate of sampling errors and increase the accuracy of sampling, besides the division of urban and rural areas, subareas are further stratified. A city is stratified into those that are large (with a population of 500,000 and above) and small (with a population less than 500,000). A rural area is stratified according to its geographical features. There are three main areas: hilly counties, mountain areas and plain areas.

While sampling, the sampling size of each stratified area is required to be in proportion.

- c. Multistage sampling: All the participated provinces will employ the following four-stage sampling:
- Stage 1: Using probability sampling methods to have about 30 cities and counties sampled within each participated province as the most basic sampling unit.
 - Stage 2: Using probability sampling methods to have about four street blocks (or county towns) selected within each sampled city (or county) as secondary sampling units.
 - Stage 3: Using probability sampling methods to have two urban (or rural) residential districts selected within each sampled street block (or county towns) as sampling units of the third level.
 - Stage 4: Within each selected district, based on the number of all the households, proportionally calculating the number of households that are required to be sampled. Making a list of all the households and using simple random sampling methods to have 20 urban (or 10 rural households) selected. Finally, selecting one person as the respondent according to the "X Form of Selection" and the demographic situation of the household.

In order to guarantee for the sampling quality, the sampling of the first three stages will be systematically conducted by research efforts at national levels. The sampling of the fourth stage will be conducted by supervisors and investigators at different local levels. All the materials used in the sampling process, including lists of households, sampling ratios, time periods, lists of selected households, will be submitted to the research institute of the All-China's Women Association for purposes of quality checking.

2. Operation methods of the fourth stage
First, gather all the households in a selected district, make a list and give them ID numbers. Then:
 - a. How to calculate the number of households that should be selected?
If the actual number of households within the district is equal to the number of households sampled out of the third stage sampling, 20 or 10 households should be selected. If the actual number is not equal, the number of households to be sampled should be adjusted according to the following formula:

$$d = N \times f_4$$

- Where, d is the number of households that should be selected,
N is the actual number of households within each sampled district,
f₄ is the sampling ratio for the fourth stage sampling,
f₄ = 20(10)/the number of households in the sampling frame

For example, if the number of households originally reported by a village is 250 and there are actually 300 households, the number of households that should be selected (d) can be calculated as follows:

$$\begin{aligned} N &= 300 & f_4 &= 10/250 = 1/25 \\ d &= N \times f_4 = 300 \times 1/25 = 12 \end{aligned}$$

b. How to determine the sampling interval?

If the sampling interval is K , then $K = N/d = 1/f_4$

If N is not in complete times with d , then f_4 is not an integer. In this situation, K can be rounded to one decimal point.

c. How to randomly select the first household?

Use the affiliated form of random numbers to randomly select the first household just before K on the list of households. The first selected household should be numbered as $<K$.

d. How to select the whole sample?

When selecting households or respondents, the investigator should pay attention to the following points:

(1) During the interview, the investigator must first of all explain to the respondent the purpose of the interview and have understanding, trust and support from the respondent. Try every possible means to avoid non-response.

(2) The investigator must be familiar with the survey questionnaire and avoid the situation that the respondent misunderstands questions and concepts.

(3) If the respondent is not clear about the question being asked, the investigator should be patient and use the local dialect to clearly explain it. If the respondent is distracted from the subject, the investigator should politely lead him/her back to the subject.

(4) The investigator should try to understand the question that the respondent has raised, make a correct understanding of the question, and write it down on the questionnaire. If the answer to the respondent's question is not related to the questionnaire, the investigator should consult with the supervisor for the solution. If the supervisor feels that he/she cannot take charge, help should be immediately sought from the Research Institute of the All-China Women's Association.

(5) During the investigation, the investigator should not use any clues and hints to lead the respondent. A neutral attitude is required. Be faithful to the respondent's true replies. The investigator should not try to criticize or give any judgmental assessments to the respondent. Confidentiality must be guaranteed for every respondent.

(6) There are two ways to fill out the questionnaire:

- a. Questions with standardized answers. Only one answer should be given except that the question is asked to have two answers. For any answers that do not fit into the given category, the investigator must fill it out in the category of "others."
- b. Questions without standardized answers. Use the language or Arabic numerals to fill out. The hand-writing must be clear and neat. Use double lines to cross out a written error and rewrite it above the double lines.

(7) If the investigator finds any respondents or question items missing after the interview, he/she must make efforts to go back shortly to make up the loss. Only when the interview has been checked without any errors, should the investigator hand it in to the supervisor and have the case signed.

APPENDIX D

SCWSS QUESTIONNAIRE

Area Code

--	--	--	--	--	--

Household Code

--	--	--	--	--	--

Format No.: WSS 01
Format Institute:
All-China Women's Association
Sponsor Institute:
National Statistics Bureau

SURVEY OF CHINESE WOMEN'S SOCIAL STATUS
(SCWSS)

Questionnaire for the Individual Respondent

_____ County, Town, Street
_____ Village, Community

Survey Time _____ Signature of Investigator _____
Exam Time _____ Signature of Supervisor _____

Dear Compatriot: How are you?

As each of two distinct sexes, men or women, we were born into this world and entered society. Differences in gender result in many differences in our study, work, and life. We build our country by cooperating to divide our work and by giving respect and love to each other. However, at times, we have misunderstanding and friction due to our gender differences. ... In order to better improve gender relations, to promote societal progress, and to compare with other countries in the world, we have designed this questionnaire for the Party, government, and women's association at varying levels to conduct this research.

The fact that you are chosen as one of our respondents is purely a result of our random selection. We hope that through your response, we will be able to understand many other people who have worked and lived their life as you do.

The questionnaire will be filled out by our investigators through personal interview with you. There is no wrong or right answers to any questions. You don't have to be hesitant or cautious. What we need is information that can reflect your true thinking and situation. Thank you very much for your support and cooperation.

All-China Women's Association

September, 1990

Coding for household members:

Relationship with household head: (This item is filled out by the language during the investigation, while coded according to the following number afterwards).

1. Household head
2. Spouse
3. Children
4. Grandchildren
5. Parents
6. Grandparents
7. Other relatives
8. Other non-relatives

Gender:

1. Male
2. Female

Age:

- 00—Less than one year old
99—Ninety-nine years old or older

Residential location:

1. Local county or city
2. County or city beyond local areas
3. Abroad

Educational level:

1. Illiterate or barely literate
2. Elementary junior
3. Elementary senior
4. Junior high
5. Senior high
6. Technical secondary school
7. Technical advanced school
8. College and above

Employment or school enrollment (please refer to the survey handbook for coding numbers):

Marital status:

1. Unmarried
2. Married
3. Widowed
4. Divorced

Survey Format

EI Type Form

No. for household member 18-64 years old No. for Selected member

1	1
2	2
3	3
4	4
5	5
6+	6+

Characteristics of Household Members:

No. For every member Age 6 and above Age 15 and above
*Relation Sex Age *Resid. *Edu. *Employ. *Sch. Marital Status

- * Relation - Relationship with household head
- * Resid. - Current residence
- * Employ. - Employment status
- * Sch. - School enrollment

Questionnaire for the Individual Respondent

- Q1. How many years did you attend school? | | |
- Q2. What was the main reason that you couldn't continue your education? | |
(Only for those whose education level is lower than junior high)
1. Family poverty
 2. No school to attend
 3. Failed entrance exam
 4. Handicapped
 5. Not permitted by parents
 6. Didn't have self-motivation
 7. Other ()
 8. Not applicable
- Q3. Do you have any sister(s) in your family who couldn't continue their schooling? | |
1. Yes
 2. No
 3. Not applicable
- Q4. Do you have any brother(s) in your family who couldn't continue their schooling? | |
1. Yes
 2. No
 3. Not applicable
- Q5. Are you currently or have you ever received any adult education? | |
(Please choose two according to level of importance).
1. Advanced adult education
 2. Technical secondary adult education
 3. Literacy raising class
 4. Training for special knowledge
 5. Training for special techniques
 6. Specialization study in your interested area(s)
 7. Other ()
 9. Not received any adult education
- Q6. Why do you want to work? (Please choose two items that are most that are most close to your current thinking) | | |
1. To maintain family and own life
 2. To become economically independent
 3. To make more money
 4. To make greater contribution to society
 5. To display own potential
 6. To live in collective environment
 7. To fulfill life
 8. Because everyone else is working
 9. Not applicable
- Q7. In which year did you start to work? | | |
() year
99 - Not applicable
- Q8. What was your first occupation? | | |
(This item was filled out by language and later coded according to survey handbook).
()

Q9. How many times did you change your job? () times | | |

Q10. What was the reason that you changed your last job? | | | | |
(You can choose two items).

- 01. To join the spouse
- 02. To shorten the distance between home and work
- 03. To have higher income
- 04. To increase occupational prestige
- 05. To improve work conditions
- 06. To gain more expectations from work leaders
- 07. To conform to relocation arranged by government
- 08. To have opportunities for personal growth and development for personal interest or hobbies
- 09. To have better interpersonal relationships
- 10. To have something new because get bored with old job
- 11. To marry or give birth to child
- 12. Because original work place was closed, or affiliated to another institution.
- 13. Other ()
- 99. Not applicable

Q11. What was your last occupation before you changed your job? | | |
(This item was filled out by language and later coded according to survey handbook).

Q12. How did you obtain your current job? | |

- 1. Replace parent's occupation
- 2. Government's assignment
- 3. With the help of relatives or friends
- 4. By own efforts or through capacity tests
- 5. Self-owned business
- 9. Not applicable

Q13. What did you care about when you chose your job? | | | | |
(Please refer to your current thinking and choose two items according to the degree of importance).

- 01. Job provides high income and sufficient benefits.
- 02. Work place is close to home.
- 03. Job is stable and secured.
- 04. Job is comfortable and not demanding.
- 05. Job allows personal autonomy.
- 06. Job has high occupational prestige.
- 07. Job is good for individual career development.
- 08. Job enables me to take full advantage of my resources (knowledge/skills, land, financial investment, tools, etc.).
- 09. I chose this job in order to conform to the country's needs.
- 10. Other ().
- 99. Not applicable.

Q14. The following includes various aspects of a job. How do you feel about those aspects?

	Very satisfied	Satisfied	So So	Dissatisfied	Very dissatisfied	NA
1. Income	1	2	3	4	5	9
2. Intensity	1	2	3	4	5	9
3. Autonomy	1	2	3	4	5	9
4. Likeness	1	2	3	4	5	9
5. Opportunity to develop potential	1	2	3	4	5	9
6. Achievement acknowledged by leaders	1	2	3	4	5	9
7. Occupational prestige	1	2	3	4	5	9
8. Stability	1	2	3	4	5	9

Q15. What is your monthly income last month? | | | | |
 Of this, how much is earned from work other than your formal job? (This item is only for those who work in town or city).
 () Yuan
 () Yuan

Q16. What is your annual income last year? | | | | |
 (This item is only for those who work in the countryside).
 () Yuan

Q17. What kind of the ownership is your work place? | | |
 10. State-owned
 20. Collective-owned
 30. Foreign company owned
 40. Co-owned by Chinese and foreign companies
 50. Individual-owned
 51. You are the owner.
 52. You are the employee.
 60. Other ()
 99. Not applicable

Q18. Can you enjoy the following social securities from your work place?
 1. Retirement pension
 1. Yes 2. No 3. Not applicable | |
 2. Medical care
 1. Yes 2. No 3. Not applicable | |
 3. Income provided on medical leave
 1. Yes 2. No 3. Not applicable | |
 4. Income provided on maternity leave
 1. Yes 2. No 3. Not applicable | |

- Q19. What is your current work status? | |
1. Working on full time
 2. Studying in work place
 3. Being on long-term medical leave/not able to work due to illness
 4. Being on long-term maternity leave/child care at home
 5. Staying at home
 6. Still holding the job but without any income gained
 7. Waiting for employment
 8. Other ()
 9. Not applicable
- Q20. What is your attitude toward what happens in your work place and living community? | |
1. Very concerned and often give own ideas and suggestions;
 2. Somewhat concerned and at times give own ideas and suggestions;
 3. Pay a little attention, but usually do not say anything;
 4. Do not care much about it except for own job;
 5. Do not have any interest.
- Q21. Do you know who is in the following leadership roles?
- | | | | | |
|---|----------|----------|---------------|--|
| 1. Chair of our country | 1. Right | 2. Wrong | 3. Don't know | |
| 2. Premier of our government | 1. Right | 2. Wrong | 3. Don't know | |
| 3. General secretary of Chinese Communist Party | 1. Right | 2. Wrong | 3. Don't know | |
| 4. General secretary of Soviet Union | 1. Right | 2. Wrong | 3. Don't know | |
| 5. President of the United States | 1. Right | 2. Wrong | 3. Don't know | |
- Q22. Have you ever become an advanced worker or work model? | |
1. I have been a national work model.
 2. I have been a provincial work model.
 3. I have been a municipal work model.
 4. I have been a district or county work model.
 5. I have been a work model in work place.
 6. I have not been a work model or advanced worker.
 9. Not applicable.
- Q23. How frequently have you ever thought about being chosen as a People's Representative? | |
1. I have thought of it many times.
 2. It just occurred to me once.
 3. I have never thought of it.
- Q24. If you were chosen as a people's representative, you would: | |
1. make all your efforts to do it well;
 2. do your best according to what your were told to do;
 3. have to do it since you were chosen;
 4. think about quitting because you don't think you were able to do it well;
 5. refuse to take the responsibility;
 6. not know what to do.

Q25. Whom did you discuss with important issues within the past half year? (Please choose three items according to the degree of importance) | | | | | |

- 01. Spouse
- 02. Parents
- 03. Children
- 04. Siblings
- 05. Other relatives
- 06. Colleagues
- 07. Senior leaders in work place
- 08. Junior workers in work place
- 09. Friends
- 10. Neighbors
- 11. Classmates
- 12. Others ()
- 99. Not applicable

Q26. Among five people with whom you most often discuss important issues, how many were female? | |
()

Q27. What were the important issues you discussed? (Please choose two items according to the degree of importance). | | |

- 1. Political issues
- 2. Social problems
- 3. Information exchange related to occupation
- 4. What happened in work place and/or community
- 5. What was going on in one's work and study
- 6. Important personal affairs
- 7. what was going on with friends and/or neighbors
- 8. Other ()
- 9. No applicable

Q28. What is the farthest place you have ever been? | |

- 1. Local town
- 2. Local city
- 3. Local metropolitan city
- 4. External town or village
- 5. External metropolitan or medium-size city
- 6. Abroad
- 7. I have never been far away from home.

Q29. During the past two months, have you done the following:

	4 times+	2-3 times	1 time	Never
1. Go to cinema	1	2	3	4
2. Sightseeing	1	2	3	4
3. Picnic	1	2	3	4
4. Go to theater	1	2	3	4
5. Read book/newspaper	1	2	3	4
6. Buy book for self	1	2	3	4

Q30. During the past two weeks, your meals include the following:

	Everyday	Intake Frequency		
		Often	At times	Never
1. high protein food	1	2	3	4
2. bread/cake as staple food	1	2	3	4
3. bread/noodle/rice as staple food	1	2	3	4
4. vegetable/fruit/bean-made food	1	2	3	4
5. pickles	1	2	3	4

Q31. What was your time arrangement yesterday?

1. time for work	()	minute				
2. Time for transportation to work	()	minute				
3. Time for shopping	()	minute				
4. Time for cooking	()	minute				
5. Time for laundry	()	minute				
6. Time for other house work	()	minute				
7. Time for study	()	minute				
8. Time for watching TV	()	minute				
9. Time for personal freedom	()	minute				
10. Time for sleep	()	minute				

Q32. How old were you when you married for the first time? | | |

() years old

Q33. Who made the decision for your marriage? | |

1. Myself
2. Parents
3. My spouse and I
4. Work leaders
5. Other ()
9. Not applicable

Q34. When did you marry your current spouse? | | |

() year
 How much did you spend for your wedding?
 Your husband spent () Yuan.
 Of this, () Yuan to your family.

--	--	--	--	--	--	--

Q35. What is your current marital status? | |

1. Unmarried
2. Married (first time)
3. Remarried
4. Divorced or separated
5. Widowed

Q36. Who in your family makes or participates in making the following decisions?

	Husband	Mutual	Wife	Others		Not Applicable
				Male	Female	
1. Household production	1	2	3	4	5	9
2. Housing locat./const.	1	2	3	4	5	9
3. Financial control	1	2	3	4	5	9
4. Labor division	1	2	3	4	5	9
5. Purchase of luxury goods /large production tools	1	2	3	4	5	9
6. Investment or loans	1	2	3	4	5	9
7. Children's education/ occupation choice	1	2	3	4	5	9
8. Supervision of children	1	2	3	4	5	9
9. Participation in community activities	1	2	3	4	5	9
10. Participation in neighborhood activities	1	2	3	4	5	9

Q37. Before you were married, did you have independent control over your income? | |

1. had total personal control
2. had partial personal control
3. had to all the income to parents
9. not applicable

Q38. Of the following family members, whom do you most frequently get along with?

	Husband's parents	Wife's parents	Married son	Married daughter	Not applicable
1. Mutual aid in production	1	2	3	4	5
2. Daily caring	1	2	3	4	5
3. Economic support	1	2	3	4	5

Q39. How do you feel when you communicate with your spouse?

	Often	Sometimes	At times	Never	NA
1. feel pleasant	1	2	3	4	9
2. no commonly interested topics to talk	1	2	3	4	9
3. responded without any enthusiasm	1	2	3	4	9
4. feel belittled	1	2	3	4	9

Q40. In each of the following aspects, who relies more on the other?

	Entirely rely on husband	Relatively rely on husband	Almost same	Relatively rely on wife	Entirely rely on wife	Not Applic.
1. Emotion	1	2	3	4	5	9
2. Economics	1	2	3	4	5	9
3. Daily life arrangement	1	2	3	4	5	9

Q41. Compared with your spouse, who has relatively more personal spending? | |

1. Husband
2. Wife
3. Almost the same
9. Not applicable

Q42. During the past half year, did the following situations ever occur to your sexual life?

	Always	Often	Sometimes	Rarely	Never	NA
1. I had sexual life only to please my spouse	1	2	3	4	5	9
2. I was the one who initiated sexual desire	1	2	3	4	5	9

Q43. At present, who is the one that is adopting birth control methods? | |

1. Husband only
2. Mainly husband
3. Mainly wife
4. Wife only
5. We are not currently taking any methods.

Q44. Did your spouse ever physically abuse you when you had intense conflict with him or her? | |

1. My spouse frequently hit me.
2. My spouse sometimes hit me.
3. My spouse occasionally hit me.
4. My spouse never hit me.
9. Not applicable

Q45. How do you feel about your status at home? | |

1. Very high
2. Relatively high
3. So so
4. Relatively low
5. Very low

Q46. How many children do you have? | | |

() number | | |

Eldest child is: 1. male; 2. female; 9. not applicable | |

Q47. When was your first child born? | | |

() year | | |

99 - not applicable

Q48. Did you have prenatal examination before your first child was born? | |

1. Frequently
2. Once or twice
3. No prenatal exam
9. Not applicable

Q49. Who gave birth delivery for your first child? | |

1. Medical staff in maternity hospital
2. Professional midwife at home
3. Non-professional midwife
4. Neighbor or family member
5. Husband or wife herself
6. Other ()
9. Not applicable

Q50. Please recall, did you ever have the following celebration activities before your first child reached one year old?

	Whether held it	No. of relatives & friends participated
1. Full-month party		
2. Birthdate party		
3. Other ()		

Coding for "Whether held it":

1. Yes
2. No
9. Not applicable

Q51. What is the minimum educational level that you expect your first child to achieve? | |

1. Only above illiteracy level
2. Elementary school
3. Junior high
4. Senior high
5. Technical secondary school
6. College and above'
7. Don't care
9. Not applicable

Q52. What kind of occupation do you expect your first child to have? | |

1. Farm work
2. Worker
3. Army
4. Business
5. Administration
6. Professional
7. Other ()
8. Don't care
9. Not applicable

Q53. Not taking into account the one-child policy, how many children do you want to have in your life?

() number | |

Of these, how many boys? () number | |

Q54. At present, in your family, there are () children aged from 7 to 16 who are not attending school. | |

Of them, () are male. | |

The reason for being unable to attend school:
 (Only refer to the youngest male or female child among those children):

	Family poverty	School too far away	Exam failure	Handicap	Without parental permission	No self-motivation	house work burden	NA
Male	1	2	3	4	5	6	7	9
Female	1	2	3	4	5	6	7	9

Q55. In your opinion, how should a married daughter inherit her natal family's property? | |

1. Equally share with brother(s)
2. Inherit less than brother(s)
3. Inherit more than brother(s)
4. She'd better not to assume the right.
5. She is not supposed to inherit it.
6. Don't care.

Q56. Do you wish that you were born as a male or female? | |

1. Male
2. Female
3. Don't care

Q57. Do you agree with the following:

	Highly agree	Agree	Don't care	Disagree
1. I wish I could surpass the opposite sex who has the same level of education with me.	1	2	3	4
2. I feel I am able to carry position of higher responsibility.	1	2	3	4
3. I feel I am short of some special skills.	1	2	3	4
4. I would hate myself if I couldn't achieve anything.	1	2	3	4

Q58. Do you see any gender inequality existing around you?
 (Refer to the two that you strongly feel).
 Gender inequality in:

| | |

1. setting up standard exam scores for school enrollment
2. employment opportunities
3. work and pay
4. Women are more likely to be fired.
5. It is very difficult for women to get divorced.
6. Women are more likely to be insulted and harassed.
7. Women giving births to a female child are discriminated.
8. It is difficult for daughters to have inheritance.

Q59. In your opinion, comparing women and men of the same background (education, age, and work history) around you, how do they fare?

	Male very high	Male rel. high	Almost same	Female rel. high	Female very high	Not sure
1. Income	1	2	3	4	5	6
2. Promotion opportunity	1	2	3	4	5	6
3. Opportunity for potential develop.	1	2	3	4	5	6
4. Learning opport.	1	2	3	4	5	6
5. Special training opportunity	1	2	3	4	5	6
6. Employment opport.	1	2	3	4	5	6
7. Expectation from senior leaders	1	2	3	4	5	6

Q60. Please give an objective assessment, how is women's present status in our country, compared with men's?

	Male very high	Male rel. high	Equal	Female rel. high	Female very high
1. Political status	1	2	3	4	5
2. Legal status	1	2	3	4	5
3. Economic status	1	2	3	4	5
4. Home status	1	2	3	4	5
5. Social values	1	2	3	4	5

Q61. What is your attitude toward the following opinions?

Opinions	Completely agree	Agree	No opinion	Disagree	Completely disagree
1. Men's sphere is society while women's is family.	1	2	3	4	5
2. Men are inherently stronger than women in terms of capabilities.	1	2	3	4	5
3. A woman should avoid surpass her husband in social status.	1	2	3	4	5
4. Husband's success is wife's success. Thus wife should support her husband with all her efforts.	1	2	3	4	5
5. Let your children carry mother's family name.	1	2	3	4	5
6. In actuality, women in our country have not been able to play the role of holding up the half sky.	1	2	3	4	5
7. Men should be responsible for some of the household tasks, particularly interaction with the outside world.	1	2	3	4	5
8. Widowed women should leave her property to her ex-husband and children or other family members when she marries again.	1	2	3	4	5

Q62. If society acknowledges and rewards, in various means, the value of housework, what choice would you opt? | |
 1. Work 2. Home

Q63. Your spouse's age? () years old | | |

- Q64. Your ethnicity? () | | |
 (Please refer to the investigator's handbook for coding)
- Q65. What is your spouse's educational level and occupation?

 Education Occupation

 Your spouse
 -----|----- | | | |
 Your father
 -----|----- | | | |
 Your mother
 -----|----- | | | |
- Q66. What is your spouse's total income last month? | | | | |
 (For urban respondents only) _____ Yuan
- Q67. What is your spouse's total income last year? | | | |
 (For rural respondents only) _____ Yuan
- Q68. What is your literacy rate? | | | |
 () number of Chinese characters you know

APPENDIX E

SCWSS CODING BOOK

SCWSS Coding Book

(Only Variables Selected for the Study)

Codes for the Cover page:

1. Age should be filled out in one's full year of the age. The full year of the age is counted from the date, month and year when one is born up to the time point when the interview is conducted. The reported ages by respondent in traditional methods, such as nominal age, zodiacal signs, etc., should be recalculated according to the Contrast Form of Full Year of Ages.

2. Current status of job employment or school enrollment:

This item is filled out in language during the interview. "Employment status" refers to people who are engaged in societal production with certain wages or income. Employed people include those who are currently working in their work places, or those who are on medical leave, vacation, full-time study or probation, or those who are temporarily out of their jobs due to bad weather, production breakdown, seasonal time-out, enterprise reorganization, etc. The occupation should be specified according to the current job that the respondent is undertaking. In cases that the respondent has more than one job, the investigator should choose the occupation that has been taken for a longer time to fill out.

3. Occupational prestige:

"10": Occupations with special skills This category includes scientific research fellows, medical doctors, lawyers, industrial and agricultural engineers, educators, economists, etc. Those who hold high-rankings are coded as 11; middle-rankings as 12, low-rankings as 13; and without any rankings as 14.

"20": Party and government officials Those who hold high-rankings are coded as 21; middle-rankings as 22; low-rankings as 23.

"30": Administrators This category includes clerical workers, secretaries, and other common agency workers. The coding is 30.

"40": Commercial workers This category includes sales clerks, purchasers, and those who provide consumer services. The coding is 40.

"50": Service workers This category includes waiter and attendants, bus conductor, kindergarten teacher, cook, barber, cleaner and garbage collectors, etc.

"60": Industrial production workers This category includes miners, machinists, loaders, operative and kindred workers, construction workers, plumbers, textile operatives, etc.

"70": Agricultural workers This category includes those who work in farming, fishery, forestry, animal husbandry, poultry, etc. The coding is 70.

"80": Other laborers This category includes those who have retired and returned to employment again as part-time workers (the coding is 81) and those who work in fields that do not belong to any one of the above-mentioned categories. The coding is 80.

"90":. Unemployed people This category includes those who are currently enrolled as students or waiting for school enrollment, homemakers, handicapped, and retirees.

4. School years: This item has two columns and should be filled out in Arabic figures. If the number of school years is 9 or less, the first column should be filled out with "0." "00" should be filled out for those who have never attended school and "99" for those who refuse to reply.

5. Urban monthly income: This item is limited to urban respondents. It refers to personal income, including Chinese Yuan monthly pay, subsidies of various forms and other cash earnings. In cases that the respondent is the owner of small family business, the investigator should ask the respondent to estimate the percentage rate of his/her own earnings out of the total family income. Only net income should be counted for small business owners, excluding the part of their income that has been used to pay tax rates and investments. There are four columns for this question. "9999" should be filled out for unemployed urban respondents and all the rural respondents.

6. Rural annual income only refers to personal income, not family income. The calculation method of individual income is the same as that used for urban family business owners. This question has three columns, with the last digit as the unit of hundreds. "999" should be filled out for unemployed rural respondents and all the urban respondents.

7. Current work status: "Long-term medical leave or maternity leave" refers to the leave that has been longer than half a year. "Waiting for employment" refers to those who worked before and are waiting to be reemployed. "9" refers to those who have never been employed.

8. The age of the oldest child: This item has two columns to indicate the year when the child was born. "99" refers to childless or unmarried respondents.

9. Gender role attitudes is a 5-point Likert scale ranging from completely agree (1) to completely disagree (5).

10. Daily time arrangement: The addition of time spent in all the items should not be greater than 24 hours. During the interview, the investigator should ask, "How many hours did you spend on ..." Later, the unit of hours should be reckoned into minutes to be filled out in the columns. It is likely that two activities can be done in the same time. For example, one can watch TV while washing clothes. In such cases, the investigator should probe into the relative amount of energy spent in each activity and fill out the relative time into separate categories. The total amount of time for the two activities should not be greater than 240 minutes.

Work time includes time for work preparation, actual job performance, extra work hours and transportation from home to work or vice versa.

Other housework time includes time for house cleaning, sewing and mending clothes, taking care of other family members, furniture or housing construction for one's own family, and dumping trash cans.

Study time refers to self-learning and/or studying in a formal educational setting, with purposes of improving one's scientific skills and cultural knowledge.

Other time for personal autonomy includes time for activities such as newspaper reading, radio listening, cinema or theater going, supervising children, socializing, running errands for relatives and friends, etc.

VITA

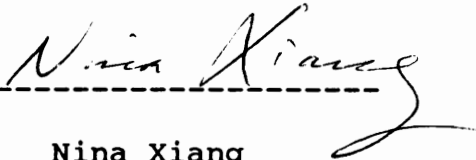
Nina Xiang was born in Wuhan, People's Republic China on January 1, 1955. She barely finished her primary school. During the Cultural Revolution (1966-1976), she was stranded at home without further school experience. At the age 16, she went to work as an apprentice assembler in a factory in her home town. It was not until the end of the revolution that she had the chance to continue her education.

Nina Xiang earned a B.A. degree in English, with honor, from Wuhan University, China, in 1982. Her minor was French. Upon graduation, she taught English and Mandarin Chinese to non-native speakers in the Military Institute of Telecommunication Technologies, China. After three years' service in the army, she worked as a research associate in the Institute of Sociology, Hubei Social Science Academy. She also worked part-time as an editor for a women's journal.

In 1987 Nina came to America for graduate studies. She earned an M.S. in Family Ecology from University of Utah in 1989. Then she returned to her home country. In 1990 she went back to America again and started her doctoral program in family studies at Virginia Polytechnic Institute and State University. During her studies at Virginia Tech, she was primarily interested in gender relations and ethnic minority families in America.

Nina Xiang presented papers during her graduate studies and submitted research reports to professional journals in English, and she also used her native language and published numerous articles, in the content of both social science and literature. She is a member of National Council of Family Relations in America and also a member of National Society for Women's Studies and of National Association for Bilingual Workers in China.

Besides academic and professional pursuits, Nina has a variety of interests about life. She is a nature and art lover and also likes to search for human spirit, meditate on higher truths, and study different cultures. If she had time, she would love to enjoy many common things in life, such as music, sports, cooking and handcrafts. However, over the past few years, she has tried in vain to keep a good balance between work and leisure.



Nina Xiang