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WOMEN'S REPRODUCTIVE RIGHTS IN DEVELOPING COUNTRIES
A CAUSAL ANALYSIS

DISSERTATION

Presented to the graduate council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the degree of

DOCTOR OF PHILOSOPHY

By

Guang-zhen Wang

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The issue of women's reproductive rights has become an international concern in the recent decade. Ongoing debates on women's reproductive rights in world conferences and conventions have heightened the need for empirical research and theoretical explanations of women's reproductive rights. Nevertheless, very few sociological studies have treated women's reproductive rights as a dependent variable.

This study examines the effects of family planning programs and the processes of modernization on women's reproductive rights. Several facets of modernization; processes of socioeconomic development, secularization, women's education, and levels of gender equality are considered. The study involves 101 countries identified by the World Bank (1994) as developing countries. It is argued, on the one hand, that variations in women's reproductive rights in developing nations may be explained by the social changes brought about by modernization processes. On other hand, the universality of the anti-natalistic population policies in developing countries in

the late 20th century provides a strong state control over fertility rate, which may contribute to the attainment of women's reproductive rights.

Using linear structural equation analysis, the study finds that fertility decline due to family planning programs leads to the achievement of women's reproductive rights. The empirical findings support the hypothesis that socioeconomic development has a positive effect on women's education, and that there is no statistically significant relationship between modernization and gender equality. The results of the study, meanwhile, indicate that, in developing societies, women's education is negatively related to women's reproductive rights.

The study suggests: first, family planning programs as a social policy in developing countries influence fertility decline, and enhance women's reproductive rights; second, gender equality in society is an important factor that increases the level of reproductive rights for women in developing countries; and finally, the finding that women's education reduces the attainment of reproductive rights may imply the need to develop valid scales for measuring reproductive rights. The findings of this study contribute toward the development of a structural model of reproductive rights.

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TABLE OF CONTENTS

	Page
LIST OF FIGURES	viii
LIST OF TABLES	ix
 Chapter	
1. INTRODUCTION	1
2. REVIEW OF LITERATURE	11
Overview of "Rights" in Classical and Contemporary Sociological Theories	11
The Evolution of "Rights"	22
"Rights" of people as natural rights and individual liberty	
"Rights" as social entitlement	
"Rights" in Social Movements and International Conferences and Conventions	25
3. THEORETICAL EXPLANATIONS OF WOMEN'S REPRODUCTIVE RIGHTS	33
Fertility Explanation	34
Women's Education Explanation	47
Gender Equality in Society Explanation	52
4. METHODOLOGY	58
The Hypotheses	58
Model Dimension: Conceptualization	59
Operational Definitions of the Variables	66
Measurement and Sources of the Variables	70
Procedures of Statistic Analyses	
I. Tabulation of the raw data	74
A. Frequencies distribution	74
B. Histogram and boxplot	74
C. Descriptive statistics	75
D. Normality	75
E. Scatter plot and KS significant	76
F. Decision on the use of variables	76
G. Correlations of the chosen observations	76

II. Structural equation analyses	76
5. ANALYSES AND RESULTS	81
Descriptive Statistics	82
The Measure of Associations	88
The Measurement Model	90
The Structural Model and Test of the Hypotheses	93
Overall Model Fit	97
6. CONCLUSIONS AND DISCUSSION	99
APPENDICES	117
Appendix A. Chronology of International Legislation on Human Rights, Women's Rights, and Reproductive Rights	117
Appendix B. International Organizations on Human Rights	125
Appendix C. Hiliary Clinton's Remark for the UN Fourth World Conference on Women, Beijing, China	128
Appendix A. List of Countries under Study	139
REFERENCES	142

A LIST OF FIGURES

Figure	Page
1. The Proposed Model	104
2. The Reduced Model	106

LIST OF TABLES

Table	Page
1. The Variables in the Theoretical Model, Descriptive Statistics (N=101)	107
2. Correlations of the Variables in the Equation	109
3. Measurement Model Parameter Estimates: Slope, Error Variance, and Squared Multiple Correlations (SMC) .	112
4. Structural Model, LISREL Estimates (Maximum Likelihood), Unstandardized and Standardized Parameter Estimates, and Standard Error	114
5. The Structural Model, Research Hypotheses, and Empirical Findings	115
6. Overall Fit of the Model, Chi Square, Degree of Freedom (df), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index, and Root Mean Square Residual (RMSR)	116

CHAPTER 1

INTRODUCTION

There is world-wide concern about the adverse effects of rapid population increase on the well-being and freedom of people in developing countries. Family planning programs and policies in developing countries that are designated to reduce fertility rate have, meanwhile, aroused international debates. The focus of the debates over population policies has turned to reproductive health and reproductive rights (Isaacs 1995). The issue of women's reproductive rights has found full expressions in international conferences and conventions in the recent decades. The rhetoric from the international legal and political institutions still dominates the "rights" field (Correa 1994); and sociologists have, meanwhile, neglected the empirical issue of "rights" (Turner 1993: 489). This dissertation proposes a theoretical model of women's reproductive rights in developing countries and tests the proposed model.

By 1990, world's population had reached 5.3 billion, of which 4.1 billion, 77 percent lived in developing countries (World Resources Institute 1992: 76). According to the United Nations' population projections, a global population

of 8.5 billion will have been reached by the year 2025 if death rates remain constant. The greatest population increase will occur in poor countries especially in Africa, where the population is projected to nearly triple, between 1990 and 2025. The disparity in numbers between the developing and developed countries will thus be widened. About 84 percent of the world population will be living in developing countries by the year 2025 (World Resources Institute 1992: 76).

When international community gathered in Teheran, Iran in 1968 at the International Conference on Human Rights, the delegates envisioned worldwide overpopulation especially in developing countries as a menace that has to be dealt with at the highest international level. If unchecked, the Conference claims, population growth will present a potentially insurmountable obstacle to socioeconomic development and the enjoyment of the wide range of human rights. The delegates at the International Conference on Population and Development, held at Cairo, Egypt in 1994, state that the spiralling populations especially in developing countries have been eating away the fruits of their development efforts.

The rapid population growth in developing countries is depicted as an international dilemma, a major threat to political stability, and the biggest bar to economic development and to the progress of the world. Population

growth, says Mehra (1994), is not a "neutral phenomenon," rather it has seriously jeopardized environmental sustainability and human livelihood. Continued population growth threatens the survival of the society and promises irreparable harm to the present or future generations (Isaacs 1995: 365). The World Bank (1994) declares that the rapid population growth rate in developing countries is intensifying the environmental degradation, widespread and persistent poverty as well as social and economic inequalities (P. 5).

"Overpopulation" thus carries with it fearful images of teeming cities with starving people, desperate women with hungry children, massive environmental degradation with overcrowded slums, garbage dumps, climate turmoil, and above all, the abuse of human rights. "The population bomb threatens to create an explosion as disruptive and dangerous as an explosion of the atom, and with as much influence on prospects for progress or disaster, war or peace."

(Greissimer 1954: 40). Freedman and Isaacs (1993) warn, "The grim scenarios of global devastation are beginning to fill the air" (P. 21). Overpopulation has caused human destitution and misery.

To alleviate people from poverty and misery, and to ensure human progress, the international conferences on world population held in Bucharest (1974), Mexico City (1984), and Cairo (1994), despite some widely divergent

viewpoints, reached consensus to control population growth in developing countries. The preamble of the Program of Action adopted at the Cairo Conference (1994) states that the Conference represents "the last opportunity in the 20th century to collectively address the critical challenges and interrelationships between population and development" (P.8).

The International Conferences on Population and Development have deliberated various ways to curb population growth in developing countries over the next 20 years, and to stabilize world population growth at below estimates of 7.5 billion by the year 2015. In a 1986 policy study entitled "population growth and policies in Sub-Saharan Africa," the World Bank (1986) claims population assistance as the highest priority in developing nations, especially in Africa, to control unchecked population growth.

Fertility policies aiming at limiting and reducing population size in developing countries have thus been funded by the United States Agency for International Development (USAID) research centers, consulting firms, family planning nongovernmental organizations (NGOs), and United Nations agencies, such as United Nations Fund for Population Activities (UNFPA) (until 1986) and the World Bank. The United States government has consistently been the largest donor for population programs (Gillespie and Seltzer 1990: 563).

While international efforts to curb population growth in developing countries reached the maxima in the recent decade, fierce debates on the issue of population control policies and women's reproductive rights found full expressions in international conferences and conventions .

What is "reproductive rights?" The first formal declaration of reproductive rights appeared in the United Nations International Conference on Human Rights in Teheran, Iran (1968). "Reproductive rights" is defined as the freedom of choice in reproduction to decide freely and responsibly on the number and spacing of children and a right to adequate education and information in this respect. The World Population Plan of Action adopted in Bucharest reaffirmed the right to reproductive decision-making to individuals.

"All couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so; the responsibility of couples and individuals in the exercise of this right takes into account the needs of their living and future children, and their responsibilities towards the community" (United Nations 1974, at f).

The six-day debates at the Cairo Conference (1994) supported the premise that population policies must be based on freedom of choice and rights of women to have control over their own bodies. The 1995 Fourth World Conference on Women (held in Beijing, China) reinforced women's reproductive rights and called for the removal of the inequalities imposed on women in labor force participation

and policy-making.

There are mainly two schools of thought regarding women's reproductive rights, the voluntary school and involuntary school. The international debates on reproductive rights among the two schools of thought involve two major issues. The first issue concerns who controls women's reproductive behavior, public censorship or women themselves. The second issue centers on the controversy that family planning programs tend to promote the welfare of future generation(s) by means of reproductive regulations.

The voluntary school views reproductive rights as being void of any coercive forces. The freedom thesis holds that the "stewardship" argument that population growth should be restricted through coercive methods must be displaced by the protection of liberty in people's personal lives and by fertility policies to promote their well-being and freedom.¹ China's one-child policy, India's use of economic incentives to encourage sterilization, Romania's compulsory gynecological examinations instituted in workplaces, and the alleged forced sterilization of Gypsies in Eastern Europe, all have mustered an international concern that a violation of reproductive rights has taken

1. Sen (1991) provided an example of well-being and freedom. One person starved to death out of choice because of his religious beliefs. The other died because she was very poor and lacked the means to command food. Even though both persons achieved the same level of well-being, the first person's well-being freedom is greater than the second person's.

place (because the element of coercion is clear).

The principal point of the voluntary perspective is that population policies must direct themselves to women's reproductive rights as individual freedom.

On the other hand, the involuntary school views reproductive regulations imposed on individuals by the state authority as enabling sustainable development and benefiting future generation(s). The "stewardship" thesis holds that individual welfare cannot be advanced without collective action to limit population size.

While the Chinese family planning program has recently come to the forefront of world attention due to "human rights abuse," Li (1993) argues that scarce resources, inaccessible health care, and social and cultural pressure in some of the developing countries often result in the lack of decision-making power and reproduction-related diseases on the part of women. Defining reproductive rights as absolute freedom from coercion from the state sets an impossible standard and obstacle for social and economic development, and will eventually perpetuate more discrimination against women (Li 1993: 5).

Rather than viewing reproductive rights as the freedom in the absence of "coercion" or "state intervention," Li (1993) maintains that the term "reproductive rights" in its western discourse does not necessarily apply to the Chinese context and the context of developing countries. The

patriarchal family system and economic conditions in those countries fail to provide women with sufficient control over their sexuality and reproductive decision-making. Li (1993) argues that theories of rights have generally not paid sufficient attention to the severity of such oppression (P. 6). Only when social and economic conditions necessary to enable women to protect their basic right to reproductive health are entailed, can women of those countries make responsible reproductive choices (Li 1993: 6).

"If a Chinese rural couple seeks to act responsibly toward their descendants and environment, they are likely to lack the material resources and access to health care necessary to raise healthy children.... To emphasize people's freedom from coercion alone - their right not to be interfered with in their reproductive choices - may leave them in abject and hopeless economic and health conditions, lacking any real choices or opportunities. This is the case in some developing countries (such as India and Mexico) where, although women are ostensibly freer in their reproductive decision-making, they lack adequate access to reproductive health care and family planning facilities, so their reproductive options are severely restricted.... A concept of reproductive rights that focused solely on freedom from coercion would provide little impetus or justification for efforts to create those conditions." (Li, Xiao-rong 1993: 6-7)

The "stewardship" model of involuntary mechanism, thus, follows that unrestricted population growth is a hindrance for social and economic development, and that it is the state's responsibility to control its population size for the good of the public and future generation(s). The principal point of the involuntary perspective is that reproductive rights, if understood as individual liberties, are meaningless since they cannot be realized in poor

countries where enabling conditions of social welfare, personal security, and political freedom do not exist (Correa 1994: 107).

The two schools of thought are thus built on the consensus that overpopulation hinders socioeconomic development, and that contraceptive techniques and family planning programs provide an effective means to control population growth. But the voluntary and involuntary approaches take different stands toward the means and strategies to limit population size. Voluntary approach attempts to advance individual well-being without government intervention. Government policies should focus on the structural apparatuses that entail contraceptive availability, health services, and public education on the basis of the respect for individual decision-making (Anand 1994). This freedom to exercise individual reproductive choices regardless of societal conditions such as economic development level are taken for granted. The "stewardship" mechanism, however, believes that too much emphasis on individual freedom in reproductive decision-making during the early stages of economic development of society may obstruct the provision of reproductive rights.

The debates between the two schools of thought demand a full-fledged examination of the effects of family planning programs and factors of socioeconomic development on reproductive rights. However, very few studies have ever

tested a causal model of women's reproductive rights. Sjoberg and Vaughan (1993) state that American sociologists have ignored a fundamental empirical issue of "rights."

"Although human rights concerns have been addressed explicitly in declarations of the United Nations, and although this problem area has been widely debated on the world scene, American sociologists have conveniently sidestepped this major societal and global issue. Human rights serve as a striking case study of how sociologists have disregarded a far-reaching cross-national or cross-cultural issue to which they are capable of making a substantial theoretical (and empirical) contribution." (P. 114)

The purpose of this study is, therefore, to propose a theoretical model of women's reproductive rights in developing nations in relation to family planning programs and socioeconomic development, and to test the proposed model using linear structural relation modelling.

CHAPTER II

REVIEW OF LITERATURE

In line with sociological theories on "rights," and international documents on human rights--women's rights--reproductive rights, the related literature is reviewed in three sections. The first section presents an overview of "rights" in classical and contemporary sociological theories. The second section describes the evolution of "rights." The third section includes social movements and international conferences and conventions on "rights."

Overview of "Rights" in Classical and Contemporary Sociological Theories

With particular attention to the law of social gravity, Emile Durkheim (1858-1917) in The Division of Labor in Society (originally published in 1893) defined the rights of individuals as obligations, sanctions, and morality. In his analysis of the two ideal types of societies, Durkheim (1893) contends that mechanical solidarity with little or no division of labor is characterized by relatively undifferentiated social structure. As a result of an increase in "dynamic density," the more modern type of

society, organic solidarity, has a much greater and more complex division of labor. A society of organic solidarity is held together through "collective conscious," a belief shared by the whole community. According to Durkheim, "collective conscious" is a system of normative constraints that circumscribes individual behavior to the extent that it conforms to general consensus and/or system of legality. In heterogeneous societies, the "morality" and "collective conscious" that hold society together are rooted in the interdependence and formal relations brought by a highly developed and specialized division of labor, whereby individual members in society become less alike, and more tolerant of dissimilarities. "Rights" of individual members, according to Durkheim, is operated in the need to reinforce the moral unity and normative boundary lines of society.

In contrast to Durkheim's thesis on "rights," the synthetic philosophy of Herbert Spencer on antigovernment individualism asserts that social whole exists to facilitate the achievements of its members (Spencer 1862). The welfare of the members in the society cannot rightly be sacrificed to some supposed benefits of the State, and the State is to be maintained solely for the benefits of its members since the living units of the society do not and cannot lose individual consciousness, and the community as a whole has no corporate consciousness. And the corporate life of the

society must be subservient to the lives of its members, instead of the lives of the members being subservient to the corporate life (Spencer 1884: 369). In The Man versus the State, Spencer wrote:

"Such an interpretation soon brings us to the inference that among men's desires seeking gratifications, those which have promoted their private activities and their spontaneous cooperations, have done much more towards social developments than those which have worked through governmental agencies. That abundant crops now grow where once only wild berries could be gathered, is due to the pursuit of individual satisfactions through many centuries. The progress from wigwams to good houses has resulted from wishes to increase personal welfare; and towns have arisen under the like prompting. Beginning with traffic at gatherings on occasions of religious festivals, the trading organization, now so extensive and complex, has been produced entirely by men's efforts to achieve their private ends.... The very language in which its laws are registered and the orders of its agents daily given, is an instrument not in the remotest degree due to the legislator, but is one which has unawares grown up during men's intercourse while pursuing their personal satisfaction." (Spencer 1884: 100-101)

"... we have here a tolerably decided contrast between bodies-politic and individual bodies; and it is one which we should keep constantly in view. For it reminds us that, while, in individual bodies, the welfare of all other parts is rightly subservient to the welfare of the nervous system, whose pleasurable or painful activities make up the good or ill of life; in bodies-politic the same thing does not hold or holds to but a very slight extent. It is well that the lives of all parts of an animal should be merged into the life of the whole, because the whole has a corporate consciousness capable of happiness or misery. But it is not so with a society; since its living units do not and cannot lose individual consciousness, and since the community as a whole has no corporate consciousness. This is an everlasting reason why the welfare of citizens cannot rightly be sacrificed to some supposed benefit of the State, and why, on the other hand, the State is to be maintained solely for the benefit of the citizens. The corporate life must here be subservient to the lives of the parts, instead of the lives of the parts being subservient to the corporate life." (Spencer 1884: 369)

Hence, the functions of governments "ought not only guarantee men the unmolested pursuit of happiness, but should provide the happiness for them." (Spencer 1897: 125)

Spencer (1892) conceives of individual freedom as a societal struggle for survival in which the self-sufficient and strong will overcome. Society, argues Spencer, is superorganic, and organized as a social entity in the same way that a body is organized as a biological entity. Individuals in society, while competing for space, food, and shelter amid the scarce resources, either toward decay or higher states of perfection. "The survival of the fittest" in society manifests the natural selection and realization of the natural rights of the human species.

Karl Marx (1848/1972), differing from Durkheim and Spencer, is highly critical of the principles of "rights" that emerged from the French Revolution (Sjoberg and Vaughan, 1993, P. 117). Marx views rights of individuals as being class distinct, and structured toward antagonism of classes and the demise of capitalism.

In "The Communist Manifesto" (originally published in 1848), Marx and Engels (1848) assert that the capitalist society consists of two contradictory classes based on the ownership or nonownership of the means of production and the personal freedom enjoyed by the owners of such property, which consequently deny the rights as human beings of those who do not own property.

According to Marx, all prior struggles are simplified in the confrontation between the bourgeoisie and proletariat, the propertied owners and propertyless workers or those who own the means of production and those who are excluded from such ownership. "Before our eyes," says Marx (1848), there exists, on the one hand, a disparity between property relations and productive forces, so a crisis has been reached in the social relations between the bourgeoisie and the proletariat. On the other hand, mechanization has alienated the workmen from the product of his labor. Proletarian work is a mechanized slavery. The proletarian is simply an appendage to a machine. "Not only are they slaves of the bourgeois class, and of the bourgeois state; they are daily and hourly enslaved by the machine, by the overlooker, and above all, by the individual bourgeois manufacturer himself." (Marx and Engels 1848: 11). Even outside the factory, the proletarian is prey to the bourgeois conspiracy, and is exposed to other forms of economic indenture.

Added to alienation and exploitation, Marx declares, there is desocialization. The proletarian cannot be considered owners of property, since they have none. Their families are not families in the bourgeois sense. Nor are they citizens of any particular nation in the same way as the bourgeois are citizens. The proletarian have no country. In their lives, law, religion, and morality

symbolize nothing except bourgeois prejudices of society.

Under capitalism, according to Marx, the ownership to the means of production and the employment of the surplus value produced by the workers demarcate the possession of "rights." The proletarian are deprived of the equal rights to their own products through alienation, but meanwhile, they are supplied with class consciousness, whereby the bourgeois supremacy based upon mechanized productivity and the creation of a subservient working class will be cut off from under its own feet. A new classless society will enable the working class with full enjoyment of human rights. Women's reproductive rights in societies where there exist oppression and exploitation are subordinate to their class membership. Women of the working class reproduce to supply the capitalists with cheap labor force.

Max Weber (1921/1968), however, believed that human agents in modern societies are incapable of resisting the iron cage of bureaucratic life. The "steel-hard cage" of modern, bureaucratic instrumentalism is, in large part, "escape proof," and it is one of the rational structures that is playing an ever-increasing role in modern society. Nobody can evade the possibility of being a "cog in a bureaucratic machine," and a "cheerful robots." (Mills 1961)

"Rational calculation ... reduces every worker to a cog in this bureaucratic machine and seeing himself in this light, he will merely ask how to transform himself into somewhat bigger cog The passion of bureaucratization drives us to despair." (Weber 1921/1968:1111)

According to Weber, a bureaucracy is one of the rational structures that is playing an ever-increasing role in modern society, and there is no possible alternative. "The needs of mass administration make it today completely indispensable. The choice is only between bureaucracy and dilettantism in the field of administration." (1921/1968)

Weber (1921/1968) defined bureaucracy as one of the structural forms of legal authority.

"From a purely technical point of view, a bureaucracy is capable of attaining the highest degree of efficiency, and is in this sense formally the most rational known means of exercising authority over human beings. It is superior to any other form in precision, in stability, in the stringency of its discipline, and its reliability. It thus makes possible a particularly high degree of calculability of results for the heads of the organization and for those acting in relation to it. It is finally superior both in intensive efficiency and in the scope of its operations and is formally capable of application to all kinds of administrative tasks." (Weber 1921/1968: 223)

Modern society, according to Weber, is a form of bureaucracy that is characterized by a complex division of labor, a conception of rationality, and a hierarchy of authority and power.

One of the most important sociological questions for Weber is the issue of how power confines individual's "free choices" and operates in social life. Weber (1962) defined "power" as the "the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance" (Weber 1962) According to Weber, the State secures its privileged position by

establishing a "monopoly of the legitimate use of physical force in the enforcement of its order." (Weber 1962: 154) Weber (1962) maintains that States govern legitimately by the use of either traditional authority, charismatic authority, or rational-legal authority. "The needs of mass administration make it today completely indispensable. The choice is only between bureaucracy and dilettantism in the field of administration." (Weber 1962: 223) The "mean-ends rationality" and "value rationality," according to Weber, are meaningful products made by rational beings to achieve personal goals in the structural and normative phenomena. Human freedom in modern societies means making informed choices amongst the alternatives available in the bureaucratic system. The realization of individual autonomy and freedom in modern societies, therefore, means choosing and acting toward the goal(s) through informed rational choices within particular social context. The modern society provides individuals with leisure and material comfort as a result of scientific and technological development. But the inhumane rationalizing trends of the modern world order that contradict to the philosophy of Enlightenment give an illusory rhetoric of freedom of individuals and human values. The role of large-scale organizations in modern societies is undermining human rights.

Parsons (1951), like Weber, believed that human action

cope with and adapts to the needs of society through four functional imperatives that are necessary for all systems to survive. They are adaptation (A), goal attainment (G), integration (I), and latency (or pattern maintenance) (L). The AGIL action scheme functions at all levels of social system, cultural system, personality system, and behavioral organism.

Parsons (1951) viewed the basic unit of social system as the "status-role." Status refers to a structural position within the social system; and role is what the actor does in such a position. The social system runs through the processes of socialization of its actors whose need-dispositions can be satisfied in accordance with the extent of social control and individual conformity. Human agents perform their AGIL action in social system by means of their adaptation to the subsystems of economy, polity, the fiduciary system, and societal community.

Parsons (1951) defined cultural system as a patterned, ordered system of symbols that are objects of orientation to actors, internalized aspects of the personality system, and institutionalized patterns in the social system. Because of its symbolic and subjective characteristic, the cultural system, according to Parsons, is the major force binding the action system, and transmitting one social system to another through diffusion and from one personality to another through learning and socialization.

Personality system, according to Parsons, is the organized system of orientation and motivation of action of the individual actor, and derived from social and cultural systems through socialization. The system becomes "an independent system through its relations to its own life experience (Parsons 1970: 82). The basic component of the personality is the "need-disposition."² Parsons (1951) identified three types of need-dispositions. The first type impels actors to seek love, approval, ... from social relationships; the second type includes internalized values that lead actors to conform to cultural standards; and the third type is the role expectations that lead actors to give and get appropriate responses. According to Parsons, personality system functions in society in the way that actors learn to fit with the places they occupy in society and to attach their statuses in society to the role expectations.

The fourth component of Parson's action system is behavioral organism.³ It is the source of energy for the other three systems and based on genetic constitution.

2. Parsons and Shills (1951) differentiated need-dispositions from drives, the former being "the most significant units of motivation of action," the latter being "the physiological energy that makes action possible." (P. 111) In other words, need-dispositions are drives that are shaped by the social setting and acquired through the process of action itself; whereas the innate drive is part of the biological organism.

3. Parsons, in his later work, labelled "behavioral organism" as "behavioral system." (1975: 104)

Parson's structural functionalism based on the AGIL scheme for the four actions systems, therefore, presents a picture of "the freedom of human action" that is circumscribed by the social structure, and internalized by human adaptive upgrading skills.

Sjoberg and Vaughan (1993), based on Weber's bureaucratic structure theory and Parson's AGIL action schemes, identified four systems of bureaucratic structure within the global context that enframe the freedom of choice of individuals in society. The first are those organizations associated with finance capital that shape the economic and political and even cultural orientations of nation-states. The second large-scale bureaucratic structure has emerged in the form of the technological/scientific/education complex, whose significance stems from the fact that modern economic systems depend on scientific innovation and by which the complex expands and thrives. The third set of organizations is the mass media which serve to shape the nature of public opinions. The final bureaucratic complex is related to the production of goods. Human agents, Sjoberg and Vaughan (1993) argue, both shape and are shaped by these bureaucratic organizations. These bureaucratic structures mold the manner in which human agents interact with one another, and they restrain the alternatives from which individuals in society choose. Rights of people under

modern economies are thus affected by the bureaucratic structures.

Both classical and contemporary sociological theories broadly touch the issue of "rights." Reproductive rights, however, are left underaddressed in sociological theories, probably because reproductive rights of women are assumed to be part of women's rights and human rights. Meanwhile, very few theories in sociology have associated women's reproductive rights with modernization and social policy dimensions.

The Evolution of "Rights"

The concept "rights" originated in the seventeenth- and eighteenth-century theories about "natural" or "inalienable" rights of man. Theories about individual liberties underlying the French and American revolutions paved the way for later ideas about economic and social rights, and entitlement.

"Rights" of people as natural rights and individual liberty:

The origin of "rights" of individuals can be traced back to early philosophical, sociological, and legal theories of the "natural law" and "natural rights," which assume that individuals are entitled to certain immutable rights. The liberal thought, in its European sense, assumes that the State is a threat rather than a help when it comes

to the exercise of the "rights" of man (de Laubier 1985: 259). The evolution of this notion of the seventeenth- and eighteenth-century Western thought is embodied in the English Bill of Rights of 1689, the American Bill of Rights of 1789, and the Declaration of Rights of Man and of the Citizen adopted by the French National Assembly in 1789. Ideas about individual liberties found full expression in the French and American revolutions.

In line with the 18th century Enlightenment tradition, human beings are thought to be rational beings and thus entitled to certain rights as human beings. During the late eighteenth and early nineteenth centuries, governments began to recognize the inherent rights of individuals in their national laws. The American Declaration of Independence of 1776 proclaimed the inalienable rights of all men to life, liberty, and the pursuit of happiness. These rights followed from eighteenth-century European theories of the individual as autonomous in nature. In 1789, the French Revolution produced the declaration of the Rights of Man and of Citizen. The United States and French examples were followed in written constitutions of Netherlands (1798), Sweden (1809), Spain (1812), Norway (1814), Belgium (1831), Liberia (1847), Sardinia (1848), Denmark (1849), and Prussia (1850). The conception of individuals as being autonomous, self-containing, and self-determining was the by-product of the growth of the civil society in Western nations.

The theory that the "rights" of members in society are "natural" and "inalienable" was challenged by the notion that the "rights" of people are those of social entitlement.

"Rights" as social entitlement:

The development of socialism in the nineteenth century expanded the concept of "rights" as natural rights to include not only the right to be free from State intervention, but also the right to have the State redress economic equality. The socialist model of thought sought to supplement equality in the social sphere rather than individual liberty (de Laubier 1985: 260). The theory of individual rights as social entitlement emphasizes the responsibilities of society and the State to guarantee not only freedom of opportunities to its citizens but also the achievement of results, and affirms that all persons are assured of certain entitlement (Dixon-Mueller 1993: 6). These entitlement are often called economic and social rights, or "welfare rights," as distinct from the civil and political rights. As set forth in the Universal Declaration, these rights include the rights to an adequate standard of living, to education, to work, to just and favorable conditions of work, and to protection against unemployment. These rights and freedoms are intended to apply to everyone "without distinction of any kind, such as race, color, sex, language, religion, political or other

opinion, national or social origin, property, birth or other status" and without regard to the "political, jurisdictional or international status of the country or territory to which a person belongs." (United Nations 1973: 1)

The transition from individual liberty to social entitlement, meanwhile, carries obligations for citizens. For example, the "right" to health is accompanied by an obligation to vaccinate one's children against certain infectious diseases; the "right" to education is followed by a moral obligation for parents to send children of a certain age to school. Simon Vei (1978), France's former minister of health remarks that we have therefore arrived at a curious reversal of things: out of liberty is born obligation, and the exercise of a right is rendered essentially compulsory.

"Rights" in Social Movements and International Conferences and Conventions

Attention to the issue of "rights" in social movements and legislation began to develop in the sixteenth and seventeenth centuries (Appendix A provides a cross-national chronology of international conferences and social movements). It focused on the protection of religious minorities. Military interventions sought to replace or punish the state found to be abusing its minorities. The nineteenth century efforts to abolish slave trade and to

protect the right of workers demonstrated a growing international concern for the rights of man. Slavery had existed in most regions of the world for centuries, but it was not until the nineteenth century that collective international measures were taken to eradicate slavery and the slave trade (Weissbrodt, 1988). Opposition to the slave trade continued throughout the nineteenth century and was codified in 1926 in the League of Nations Convention to suppress the Slave Trade and Slavery. The 1956 Supplementary Convention on the Abolition of Slavery, the Slave Trade and Institutions and Practices Similar to Slavery, augmented the 1926 convention's condemnation of slavery and servitude. Human rights concerns also led to the establishment of the International Labor Organization (ILO) in 1919 (Appendix B).⁴

The nineteenth century also saw the beginning of the codification of the protection for the victims of war and of restraints on the methods and means of warfare. The International Committee of the Red Cross (ICRC) was founded at the 1869 Geneva International Conference for the purpose of reducing the horror of war (Appendix A). Following the First World War, the principle of self-determination became

4. ILO instruments which are implemented by the international labor Office deals with the protection of industrial workers from exploitation and improvement of working conditions. It also deals with fundamental rights and freedoms, such as, freedom of association, freedom from forced labor, and equality of opportunities and treatment in employment.

one of the basic components of the minority treaties. In addition to protecting minorities, the League of Nations created a mandate system to guarantee freedom of conscience and religion in the former colonial territories of Germany and Turkey.

In response to the issue of rights of man after the Second World War, the four Geneva conventions of 1949 supplemented the Geneva Convention of 1864 (Appendix A). The first three conventions provided for the treatment of the sick and wounded members of the armed forces in the field and at sea, and the treatment of prisoners of war. The fourth Geneva Convention extended to the protection of the civilians in time of war.

The Universal Declaration of Human Rights adopted in 1948 with no dissenting votes is recognized as providing the most authoritative definition of the "rights" obligations (Appendix A). Following the adoption of the Universal Declaration, the UN Commission on Human Rights drafted the remainder of the International Bill of Rights: the International Covenant on Economic, Social, and Cultural rights, and the Optional Protocol to the Civil and Political Covenant (Appendix A). The two covenants make the provisions of Universal Declaration into legal binding treaties.

Beginning in the nineteenth century, liberal reformers and radical utopians proposed that rights of man be extended

to women, which led to women's emancipation movements. In 1947, the Commission on the Status of Women was established. It was not until the 1950s, that a number of U.N. documents began to address "rights" issues specially concerning women. The Convention on Political Rights of Women (1952), the Convention on the Consent to Marriage, Minimum Age for Marriage and Registration of Marriage (1962), and the Convention on Nationality of Married Women (1957) directly address issues related to the status of women (Appendix A).

The major instrument relating particularly to the status of women, however, is the Convention on the Elimination of All Forms of Discrimination against Women (Appendix A). At the International Women's Year Conference held in 1975 in Mexico, a world plan of action on the equality of women and their contribution to development and peace was adopted. In 1980 a second World Conference of the United Nations Decade for Women was held in Copenhagen, focusing not on the themes of the decade but also on three subthemes: employment, health, and education. Following the conference, a new convention on the elimination of discrimination against women was issued in 1981 (Appendix A). It is the most comprehensive international legal instrument to date covering the rights of women. In July 1985 a third conference was held in Nairobi, to review and appraise the achievements of the decade for women, and to develop strategies for overcoming obstacles still remaining

(Appendix A). In September 1995, women all over the world gathered in China's capital city, Beijing. The Fourth World Conference on Women called for socioeconomic and political equalities of women (Appendix A)

Women's social movements and international legislation have contributed to the improvement of women's status in the society. However, the rights of women in their reproductive decision-making have far from being codified.

The first formal declaration of reproductive rights appeared in the International Conference on Human Rights held in Teheran in 1968. Reproductive decision-making rights were reserved to "parents" who can "decide freely and responsibly on the number and spacing of their children;" and reproductive rights are the right to "adequate education and information in this respect." The World Population Plan of Action adopted in Bucharest (1974) also included language reaffirming the right to reproductive decision-making: "All couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so; the responsibility of couples and individuals in the exercise of this right takes into account the needs of their living and future children, and their responsibilities towards the community" (United Nations, 1974 at 14f). The Bucharest language differed from the Teheran declaration in several respects: first, it expanded the right from

"parents" to "couples and individuals;" second, it stated that people should have the means, as well as the information and education, to assert the right; and third, it tried to define the elusive concept of responsible decision-making (Freeman and Isaacs 1993: 22). The next international population conference was held a decade later in Mexico City. The statement of the Mexico City conference on population (1984) further clarified what "responsibly" means. "Any recognition of rights also implies responsibilities: in this case, it implies that couples and individuals should exercise this right, taking into consideration their own situation, as well as the implications of their decisions for the balanced development of their children and of the community and society in which they live. (United Nations 1984, Recommendation 26).

In the last decade or so, the concept of women's reproductive rights as freedom to decide on the number and spacing of their children and, the information and education in the field was extended to include reproductive health movement (Fathalla 1992). This approach began to emerge around 1985 when the health field began to give increasing attention to women's health for its own sake. Deborah Maine together with Allan Rosenfield looked at what is called the maternal child health field (MCH Field), and asked in an article they wrote in "The Lancet," the very simple question: "Where is the 'M' in 'MCH'?"

With the growth of the reproductive health movement, a new movement began to emerge in recent years on the world scene in echo to the family planning programs in developing nations. At the essence of the movement is the notion that every woman has the right to have control over her body, her sexuality, and her reproductive life. The DAWN (Development Alternatives with Women for a New Era) speaks for women when it states: "Control over reproduction is a basic need and a basic right for all women. Linked as it is to women's health and social status, as well as the powerful social structures of religion, state control and administrative inertia, and private profit, it is from the perspective of poor women that this right can best be understood and affirmed. Women know that childbearing is a social, not purely personal, phenomenon; nor do we deny that world population trends are likely to exert considerable pressure on resources and institutions by the end of this century. But our bodies have become a pawn in the struggles among states, religions, male heads of households, and private corporations. Programs that do not take the interests of women into account are unlikely to succeed (Sen and Grown 1987: 49).

The basis for this right remains a matter of disagreement. The voluntary and involuntary approaches toward the issue found full expression in the Vienna

conference (the 1993 World Conference on Human Rights) and the Cairo process (the 1994 International Conference on Population and Development). Despite the controversy, the Fourth World Conference on Women (held in September 1995, Beijing, China) reaffirmed women's reproductive rights as the rights to decide freely and responsibly on the number and spacing of their children free from political and religious persecution. Women's reproductive rights also include the right to have control over their own sexuality and reproductive behavior (see Appendix C). The Beijing's Action called for the removal of the inequalities imposed on women in the workplace as well as within the family.

CHAPTER III

THE THEORETICAL EXPLANATIONS OF WOMEN'S REPRODUCTIVE RIGHTS

Family planning programs that are designated to reduce fertility rate are hypothesized to increase the extent of women's reproductive rights through fertility decline. Modernization processes in developing countries have brought about tremendous changes in the social structure and the functions of social institutions. Modernization theories have been used extensively to explain demographic phenomena. Studies about the effect of modernization processes on women's reproductive rights have been few. In the study, women's reproductive rights are hypothesized to be affected by modernization processes in developing countries. The increase in women's educational attainment and gender equality due to modernization processes have impact on the achievement of women's reproductive rights.

I propose a theoretical model which involves three major explanations in regard to women's reproductive rights, namely, fertility explanation, women's education explanation, and gender equality explanation.

Fertility Explanation

Fertility refers to actual birth performance. Fertility rate is the number of living children born to women (per thousand) (Weeks, 1994).

It was not until the recent decade that the relationship between fertility decline and women's reproductive rights became a hotly debated topic both in academia and in international conventions. The relationship is however left underexplored empirically.

How does limiting the number of childbearing influence the exercise of women's reproductive rights?

First, keeping family size small makes it easy for women to work outside home and pursue their education, which enables women to be better qualified for their jobs, establish themselves in professions, and ensure their economic security. Having large families, however, intensifies women's vulnerability and limits their capacity to exercise equal rights with men in paid employment and in education. It was found that delaying the first birth within marriage or avoiding a non-marital pregnancy had the strongest effect on women's participation in paid labor force and school enrollment (Dixon-Mueller 1993: 119). The economic security brought about by participation in education and outside home employment on the part of women provides women with more autonomy in reproductive decision-making and freedom during marriage or at its dissolution.

Dixon-Mueller (1993) puts it:

"Where continuation through secondary and perhaps into post-secondary education is the norm, ... as in Sri Lanka and Hong Kong, Kuwait and South Korea, or Argentina and Chile, then a woman's ability to avoid or terminate an untimely pregnancy can be crucial."

Secondly, limiting or avoiding births enables women to exercise more freedom within marriages or consensual unions. It can improve a woman's ability and situation to terminate an unsatisfactory relationship with less personal cost (Dixon-Mueller 1993: 117). Therefore, women who delay or avoid births can bring about significant economic advantages over those with large families; and delaying or avoiding births may enable women to complete their education and vocational training to qualify for their jobs and establish themselves in professions. Having a large family, on the contrary, intensifies women's vulnerability and limits their capacity to exercise equal rights with men in paid employment, education during marriage or at its dissolution.

Finally, limiting or avoiding births enables women to exercise their political rights more fully insofar as these involve time, education, and community work or public sector employment. The geneses of the social stigma in terms of women's reproductive rights come from the "culture of silence," the powerlessness of women as a group in society. Historian Rosalind Petchesky (1990) states that the right to choose means little when women are powerless as a group in the society (P. 11). Limiting or avoiding births entails

more opportunities for women to participate in education, paid employment, and community work, which would eventually threaten the very foundations of male dominance in the society and within the family, and enable women to organize themselves as a social group to break through the "culture of silence" and gain more power for the decision-making of their pregnancy, marriage, and other reproductive rights.

Hypothesis 1: Fertility rate is negatively correlated with women's reproductive rights. The lower the fertility rate, the more the women's reproductive rights.

One of the major components of fertility decline is the "modern contraceptive revolution" fueled by family planning programs world wide. Family planning programs are the organized endeavor a country has made to limit its population size. Family planning programs are designated to provide the knowledge of birth control, the use of contraceptive devices and facilities, and the availability as well as accessibility of birth control services and techniques. Typically, family planning programs lower the market costs by providing free information about birth control and services free or below cost and also lower subjective costs by lending legitimacy to practicing birth control (Easterlin 1975: 56).

The programs have mobilized huge material resources and expert support mechanisms only to reduce the inflated rate

of growth (Jain and Bruce, 1993). Population policies in developing countries have come to be equated with fertility reduction due to the intense concern with the high rate of population growth as a result of declining mortality levels while fertility rate remains high. The policies still persist in many developing countries today (Zurayk et al. 1994: 423). Global data on family planning policies (Ross, Mauldin, and Miller 1993) suggest that family planning has now become a state-led policy world wide and has great impact on fertility decline. Global contraceptive sales reached between \$2.6 billion and \$2.9 billion per year during the 90s (Fathalla, 1994). Substantial fertility declines have been recorded in developing countries. Nearly all have occurred during a period when family planning facilities have been made widely available (Caldwell 1982).

Family planning programs provide effective methods by which women (and men) control their reproduction and limit the size of their families. The Lapham and Mauldin model of family planning programs effort in developing countries suggests that rapid fertility decline can occur in the absence of social and economic development when contraceptive devices are made widely available.

Hypothesis 2: Family planning program effort is negatively related to fertility rate. The greater the family planning program effort, the lower the fertility rate.

A second factor that affects fertility decline is social and economic development brought about by modernization. Although modernization processes follow different patterns in different countries, the characteristics of the modernization processes are common to all (Kerr, et al. 1960: 659). Modernization is perhaps one of the most important agents to bring about changes in the social structure and functions of social institutions at a global level in the 20th century.

Modernization refers to the process of economic and social changes that are brought about by the introduction of industrial mode of production. Robertson (1981) defined modernization as the process that accompanies technologically induced economic growth (P. 613). The process is sweeping the globe as the less developed nations of the world follow the patterns established by the more advanced industrial societies (Robertson 1981). The modernization affects virtually every area of society, including physical, social, and economic infrastructures involved in the production, distribution, and consumption of services. Boserup (1970) maintains that the reduction in the proportion of the population engaged in agriculture goes hand-in-hand with economic development (P. 174). The wide-ranged abandonment of subsistence production creates frequent changes in the skills, responsibilities, occupations of the work force, and also in the ways of

earning a living (Kerr 1960: 660).

Moore (1965) contends that the first-order consequences of industrialization appears in labor force shift from one economic sector to another (from agriculture and fishing to industry and service), in urbanization, ideology and religious practices, family structure, community organization, and women's status in the society.

The development and increasing importance of science and technology accompanying the process of modernization pose questions for society in four ways. First, industrialization brings about a shift in the patterns of employment. The percentage of labor force in agriculture decreases and the proportion of people engaged in industry and services increases. Boserup (1970) argues that the economic level reached by a given country is often measured in terms of the proportion of its people engaged in agriculture (P. 174). As a result of the shift from agriculture to industry and the demand for labor force in industry, migration from rural areas to urban industrial bases will increase. The increasing rate in urbanization meanwhile provides people with more alternatives for employment, and opportunities for social mobility, which in turn will speed up socioeconomic development and urbanization. Easterlin and Crimmins (1985) states that urbanization and the shift in employment patterns from agriculture to industry or service reduce the demand for

children by lowering the price of goods relative to children, and increasing alternative life chances. Secondly, the change from a primitive subsistence economy in the village to semi-modern or modern town economy results in a division of labor which is much more specified. The economic development due to industrialization is tantamount to the progress toward a more intricate specialization and division of labor outside the individual household. The social relations created by the more refined division of labor imply new hierarchial relations in the work situation. Having children per se rarely satisfies an end in itself but is generally a means to other ends. The open society gives rise to opportunities and desires for the change of statuses in the social hierarchy. The perceived advantages of having fewer children (Coale 1973) may lead to fertility decline.⁵ Thirdly, the change in the social relationships due to urbanization and the increasing proportion of labor force in industry and service will result in the change in ideology, life style, family structure. The Western model of conjugal and nuclear families, and the cult for leisure time have reduced the motivation for having large families. Finally, the changes in social relations and social structures as

5. Ansley Coale (1973), in his revised approach to demographic transition, states that there are three preconditions for a substantial fertility decline: (1) the acceptance of calculated choice as a valid element in marital fertility, (2) the perception of advantages from reduced fertility, and (3) knowledge and mastery of effective techniques of control.

well as the development of science and technology will bring about changes in belief systems and women's status in the society. Nearly everywhere in the world, the better educated or higher in social position a woman, the fewer children she is likely to have (Weeks 1994: 138).

The classical demographic transition theories link the process of industrialization to fertility. Warren Thompson (1929) categorized countries into three main groups according to their pattern of population growth in relation to socioeconomic development. Group A: countries (e.g., the United States, Northern and Western Europe) that move from having high rates of natural increase to low rates of natural increases and will become stationary and start to decline in numbers (Thompson, 1929:968). Group B: countries (e.g., Italy, Spain, and Central Europe) with decline in both death and birth rates, but probably more rapid decline in death rates (Thompson 1929:969). Group C: rest of the world with little evidence of control over either births or deaths (Thompson 1929: 969).

Sixteen years after Thompson's work, Frank Notestein (1945) provided labels for the three types of growth patterns which he called GA pattern as "incipient decline," GB pattern as "transitional growth," and GC pattern as "high growth potential" (Notestein 1945:39). Thus was born the term demographic transition that a country is moving from high birth and death rates to low birth and death rates,

from high growth potential to incipient decline. Notestein (1945) regarded urban industrial society as the crucible of demographic transition and concluded that the development of technology was essential.

Between the mid-1940s and late 1960s, rapid population growth became a worldwide concern. George Stolnitz (1964) reported that demographic transitions rank among most sweeping and best-documented trends of modern times ... based upon hundreds of investigations, covering a host of specific places, periods of events (P. 20). Thus, demographic transition is roughly divided into three stages in accordance to levels of social and economic development. On the first stage, there is high growth potential because both birth and death rates are high. This usually happens in countries of lower levels of social and economic development. Second stage is the transition from high to low birth and death rates. The growth potential is realized as the death rate drops before the birth rate drops, resulting in rapid population growth. The final stage is a time when death rates are as low as they are likely to go, while fertility may continue to decline to the point that population might eventually decline in numbers. This pattern of population change is found in countries with higher levels of development.

Huber's (1983) historical overview of societies from preindustrial to industrial illustrates how technological

changes has led to fertility decline.

"Industrialization first turned the cost-benefit ratio of children upside down. Then wives were drawn into the labor force, raising the opportunities cost of their time and thereby the cost of children. Now below-replacement fertility in the West has highlighted the problem of population maintenance. Parenthood may have to be made more attractive by limiting the hours of responsibility But [this] would raise women's status in the family and in society in ways that were unimaginable a few decades ago." (Chapter 1)

Hypothesis 3: Socioeconomic development is negatively related to fertility rate. The higher the levels of socioeconomic development the lower the fertility rate.

A third factor that affects fertility is women's education. One of the direct consequences of the increase in women's education is the decline in fertility. The relationship between women's educational level and fertility is compelling.

A women's schooling is among the strongest determinant of her contraceptive knowledge and use and of family size, especially in high fertility countries (Dixon-Mueller 1993: 121). Most studies show that the educational level of the wife is more strongly and inversely correlated with a couple's fertility than is the educational level of the husband after controlling for other influences (Cleland and Rodriguez 1988).

Coale (1973) found that many provinces of Europe experienced a rapid drop in birth rate. The data suggested that one of the more common characteristic of those areas

was the rapid spread of women's education.

Dixon-Mueller (1993) states that education beyond the primary level is often associated with factors such as openness to new ideas, higher standard of living, exposure to an urban environment, higher occupational achievement, and a greater range of other options and interests outside the home; and any of these could be responsible for the apparent influence of education on fertility (P. 121). Thus the investment in female education appears to have a greater impact in reducing family size.

There are three ways that women's education affects fertility. First, by delaying marriage and increasing the probability of non-marriage; second, by creating aspirations for a higher level of living and stimulating their interest and involvement in activities outside home. Strong attachment of women to the labor force promotes concerns about child quality (Becker 1960), foster individualistic values (Lesthaeghe and Surkyn 1988), and consumer aspiration (Easterlin 1975, 1978) that reduce fertility independent of relative cohort size. Finally, by exposing women to knowledge, attitudes and practices favorable to birth control (Dixon-Mueller 1993: 122). Increase in the levels of women's education, therefore, may result in changes in the motivation to have a large family.

According to a recent population survey, women in Mexico with high school education or above bore an average

of fewer than three children, while women less than high school education bore an average of more than seven children. In the United States, women with college education or above bore an average of 1.3 children, while women with less than college education bore an average of 2.5 children.

Hypothesis 4: Women's education is negatively related to fertility rate. The higher the educational levels of women, the lower the fertility rate.

The level of fertility is also related to gender equality in society. The extent of gender equality in society has direct impact on women's ability to determine the number and spacing of their children. The relationship between gender equality and fertility, although varied cross-nationally due to other factors such as kinship relations, has been found to be negative.

The obstacle to gender equality is the patriarchal system. The essence of patriarchy is that women have little control over the circumstances under which they live, the returns of their labor, their sexuality, the timing and number of their children (Dixon-Mueller 1993: 25). Dixon-Mueller (1993) puts it:

"Patriarchy has both a material base and an ideological justification. The material base involves, to varying degrees, control by elder male heads of a linkage, extended family, and/or household, or by the male in a couple, over the means of production and reproduction, that is, over valued property and its uses; over family (especially

female) labor and its returns; and over the circumstances under which family (especially female) members enter and leave sexual unions and have children. The ideological justification consists of assertions in various forms of the "natural" or "divine" origins of filial obligation, male dominance, and female subordination, their expression in legal and moral codes of behavior." (P.24)

Under patriarchal system, social institutions are structured in ways that perpetuate gender-based division of labor, thus reinforcing female inferiority, and curtail women's abilities to abide their reproductive behavior to the norms favored by males. Male control over women affects fertility in the following ways. First, patriarchal system defines women as serving the functions of bearing and rearing children. As a result, a significant portion of the cost of children is shifted to women. Husbands may benefit from children's labor but bear few of the costs of their rearing. Hence they have little incentive to reduce fertility (Kritz and Gurak 1989: 10). Secondly, patriarchal control in society not only deprives women of their right to make decisions on their fertility, but also highlight the value of children as positive economic and spiritual benefits, which, in turn, contributes to fertility increase. Finally, patriarchal family and community systems impose the will of the older and males on women. The reproductive behavior of women and their sexuality are controlled by the older and males of the family or the community to meet with the expectations of the family and/or the community rather than the expectation of women themselves. On the contrary,

a more egalitarian relationship between men and women in the society leads to more gender equality in family relationships, whereby women have more power to decide their own sexuality and reproduction without considering the expectations from the family and community.

Hypothesis 5: Gender equality in the society is negatively related to fertility rate. The higher the levels of gender equality, the lower the rate of fertility.

Women's Education Explanation

Education provides the means for people to obtain knowledge as well as the change in traditional value systems, which, in turn, enables women with independence and power in the society to ensure their reproductive rights.

Education, first, provides more skills and opportunities for out-of-home employment. Social, economic, and demographic benefits are more likely to accrue when women are ensured of sufficient education and employment that provide income over which women have direct control. This, in turn, offers women basic economic security, which is considered to be status-enhancing (or status-neutral) rather than status degrading. The change in the economic situation of women in the society will reinforce women's power to control their bodies and sexuality, which facilitates women's reproductive rights. Secondly, education enables women with more opportunities in the labor

market which is likely to broaden women's horizon, introduce new forms of authority, and organizations that compete with familial hierarchies, and offer a taste of independence. Schooling is more likely to prepare women to take advantage of the opportunities in public spheres, and to have a wider social network, new reference groups, and greater exposure to the modern world, which, in turn, empower women to take control of their own destiny. Third, education widens women's ability to selectively utilize a wide range of ideas and values for personal enhancement. Ideas of "rights" that call for democratization and respect for individual freedom underscore the current definitions of being modern. Education can also provide women with opportunities to participate in the process of modernization and organize for bringing about changes in the economic and social situations of women. Education enhances the opportunities for women to organize themselves as a social group to challenge patriarchy and to win their rights in the sphere of reproduction. These changes are brought about by women for women through education (Correa 1994).

Hypothesis 6: Women's education is positively related to women's reproductive rights. The higher the levels of education of women, the more reproductive rights they have.

The processes of modernization and economic development influence women's life chances in several ways. One of the

most important effects socioeconomic development in society imposes on the change of women's life opportunities is the increase in women's education attainment.

Boserup (1970) argues that the movement from village to town due to industrialization in developing countries profoundly changes the nature of subsistence (P. 160). Economic development changes the traditional way of thinking and value system of female inferiority. Economic development also demands for more labor force and higher skills. Thus schooling becomes a prerequisite for both males and females to enter the modern world.

Industrialization brings about the development in public educational institutions. They are more accessible and affordable, especially in urban areas.

The change in the way of life and the rising standard of living as a result of socioeconomic development give rise to higher expectations for women in the society and within the family. The accessibility and affordability of public education, and the rising expectations for women allow more opportunities for women to enter school and pursue their education.

Hypothesis 7: Socioeconomic development is positively related to women's education. The higher the levels of socioeconomic development, the higher the levels of women's education.

The second factor that contribute to women's education is secularization of society. Hess et al. (1996) states that one of the crucial dimension of modernization is the process of secularization, a process which focuses on the ability of human reason and the technology to solve problems (P. 386). The secularization thesis points to at least two dimensions. The first dimension is the transformation from communities to societies,⁶ and the second dimension is rationalization.⁷ Kelly and Cutright (1980), in their study of fertility declines, associated secularization with industrialization and modernization although secularization is broader and thus harder to pin down. Weeks (1994)

6. In his Book Community and Society (1887, 1963. Translated and edited by Charles P. Loomis. New York: Harper and Row), German sociologist Ferdinand Tonnies (1855-1936) refers to the social evolution from traditional society to modern (rational) society as *Gemeinschaft* and *Gesellschaft*.

Gemeinschaft consists of social relationships of an intimate or primary sort. Within the *Gemeinschaft* form of social order, a homogeneity of views, the ties of kinship, a common language, and a sense of place are the basis of an organic unity (solidarity). Social control is left to consensus, custom, religious precept, and physical punishment for deviance.

Gesellschaft, the creation of the rational will, "society" represents the more impersonal means-to-end forms of social relationships. The identity born of community surrenders to the anonymity of mass society. Social relationships are based on special needs, class interests, and heterogeneity.

7. Max Weber (1921) defined rationality on the basis of action. He differentiated between two types of rationality, means-ends and value rationality (Ritzer, 1996). Kalberg (1980) identified four basic types of rationality in Weber's work. They are practical rationality, theoretical rationality, substantive rationality, and formal rationality (1980: 1151).

maintains that it is difficult to know exactly why such attitudes arise when and where they do, but we do know that industrialization and economic development are virtually always accompanied by secularization (P. 79).

Hoult (1972) described a secular society as the type of society where practically all significant procedures, norms, beliefs, and associations are generally judged in terms of rational, utilitarian values and when found wanting, are relatively readily discarded for that which is regarded as more practical, contrasted with sacred society (P. 268-269). Kurtz (1991) believed that in a secular society the church should not dominate all human interests, but should allow the wide range of human activities to prevail independently of it, nor it be allowed to define public standards of morality for everyone (P. 25). Wilson (1978) outlined the range of application that a "diminution in the social significance of religion" entails such things as the sequestration by political powers of the property and facilities of religious agencies; the shift from religious to secular control of various activities and functions of religion; the decline in the proportion of their time, energy, and resources which men devote to super-empirical concerns; the decay of religious institutions; the supplanting, in matters of behavior, of religious precepts by demands that accord with strictly technical criteria; and the gradual replacement of a specially religious

consciousness (which might range from dependence on charms, rites, spells, or prayers, to a broadly spiritually-inspired ethical concern) by empirical, rational, instrumental, cognitive, and positivistic orientations.

The Eleventh Congress of the International Humanist and Ethical Union, held at the Free University of Brussels in Belgium in August 1990 based secularization of society on liberty, equality, and fraternity in the society. Thus a secular society is a democratic society characterized by its political and civil freedoms.

The political and civil freedom due to secularization processes thus makes it possible the rising status of women and their participation in educational and economic activities. Caldwell (1982) argues that the principal measure of secularization is education, which changes people's view of the world. The transition from community to society and the process of rationalization brought about by secularization of society thus enhance women's education attainment.

Hypothesis 8: Secularization of society is positively related to women's education. The higher the levels of social secularization, the higher the levels of women's education.

Gender Equality in Society Explanation

The gendered differentiations in society can be found

in every sphere of human life. The hierarchical division of labor based on sex differences has affected the statuses of women in the society, which has further escalated women's reproductive rights in society.

Then how does women's location in the gendered hierarchy affect their sexuality and the ability to determine the number and spacing of their children? How much control rests with the women themselves, and how much with male relatives and males outside the households? What is the relationship between gender equality and women's power to exercise their rights to choose their sexuality and reproductive behavior?

Gender relations are embedded in social, economic, and political institutions and reinforced by everyday social interactions. It follows that women's reproductive choice is influenced by the opportunity structures resulting from the interaction among individuals and the distribution of resources in the community.

Perhaps the most fundamental threat to women's reproductive rights of self determination is the patriarchal family system (Dixon-Mueller 1993: 23). Patriarchal control in society has direct impact on women's reproductive decision-making freedom, for the control of men over women enhances men's power in almost every sphere of life.

Mason and Palan (1981) defined patriarchy as a set of social institutions that deny women the opportunity to be

self-supporting, thereby making them dependent on male relatives for survival, and that otherwise favor men in the intrafamilial allocation of resources and power.

Gender inequality in society affects women's reproductive rights in the following ways. First, Patriarchy is a social system where the value and existence of women are defined in favor of men. Therefore, where there is patriarchal system, there is gender inequality; and where there is gender inequality there is hardly freedom for women to decide on their reproduction. Secondly, gender inequalities in society are mirrored in women's limited chances in employment in comparison to men's. The disparity in employment between men and women reduces the economic independence on the part of women. The resource theory holds that the greater material and social resources a woman bring into her marriage relative to those of her husband, such as, education, paid employment, higher social position, etc., the greater is her power and influence over reproduction decision-making controlled for the woman's ideological orientation. Because women as a group have fewer social and human resources compared with men, women tend to have less power to decide on their reproductive behavior.

Hypothesis 9: Gender equality in the society is positively correlated with women's reproductive rights. The higher the level of gender equality, the more the

reproductive rights for women.

The extent of gender equality is associated with social and economic development. Socioeconomic development affects gender equality in the following ways. First, technological revolution fueled by industrialization plays a crucial role in economic development. Economic growth is by and large associated with the demand for labor, and a social structure with more opportunities. This process is made possible by the rapid growth of industrial investment in the city. As a city grows in population and subsidiary productions develop around each city's main specialized industrial branches, external economies for these main industries will increase, which in turn will create greater demand for labor force. As a result, more women would take the opportunity to become wage earners.

Secondly, women's participation in outside-home employment increases their economic independence and challenge the traditional image of women as merely child bearers and child rearers. The changes of women in status, roles and labor participation bring to the forefront new issues with regard to their role as producers of labor. The traditional roles as bearers and rearers of children conflict with their new extra-familial roles. The change of statuses of women in the family and society will give rise to the changes in the family relations, social organizations

as well as the traditional patriarchal norms and practices. Blumberg (1991) argues that the control over economic resources is the main (though not sole) predictor of a wide variety of gender stratification systems (P. 12).

Finally, social and economic development provides women with more opportunities for education and vocational training, whereby women are able to challenge men's superiority in both power and economic gains, and will eventually bring about changes in gender inequality.

Modernization theories suggest that social and economic development has a positive effect on gender equality by providing women access to key resources, such as education and paid employment, and by altering traditional family systems, thus freeing women from many constraints.

Hypothesis 10: Socioeconomic development is positively related to gender equality in the society. The higher the socioeconomic development, the more the gender equality in the society.

Secularization of society is associated with gender equality. The secularization thesis argues that there is a diminution in the social significance of religion and acceleration of the beliefs in and reliance on technology and rational calculation as a result of modernization and mass education.

With the diminishing authority of religious

institutions and widespread quest for cognitive and rational values of human knowledge, the mythical and artistic interpretations of Nature and society will be displaced by scientific and logical thinking that helps create the "age of reason," when the traditional norms that guide people's action are challenged by more practical and egalitarian beliefs and practices. The processes of secularization thus entail a shift from religious to more secular control over people's everyday activities. The shift in beliefs and practices will result in a redefinition of the roles and statuses of women in the society which is in opposition to that in societies where religious forces have major control over people's everyday lives.

Hypothesis 11: Secularization of society is positively related to gender equality in the society. The higher the levels of social secularization, the higher the levels of gender equality.

The explanations for the theoretical framework specify the effects of family planning programs and modernization processes on women's reproductive rights in developing nations. The explanations provide conceptual and theoretical aspects of women's reproductive rights. They need being tested for the purpose of providing empirical evidence in the field.

CHAPTER IV

METHODOLOGY

This chapter is divided into five sections, namely, the hypotheses, model dimension: conceptualization, operational definitions of the variables, measurement and sources of the variables, and the procedures of statistic analysis.

The Hypotheses

Figure 1 shows the hypothesized model.

The hypotheses are:

Hi1: Fertility is negatively related to women's reproductive rights.

Hi2: Family planning program effort is negatively related to fertility.

Hi3: Socioeconomic development is negatively related to fertility.

Hi4: Women's education is negatively related to fertility.

Hi5: Gender equality in society is negatively related to fertility.

Hi6: Women's education is positively related to women's reproductive rights.

Hi7: Socioeconomic development is positively related to women's education.

Hi8: Secularization of society is positively related to women's education.

Hi9: Gender equality in society is positively related to women's reproductive rights.

Hi10: Socioeconomic development is positively related to gender equality.

Hi11: Secularization of society is positively related to gender equality.

Model Dimension: Conceptualization

The independent variables in this study are family planning program effort, socioeconomic development, and secularization of society.

A country's family planning effort refers to the organized endeavor a country has made to limit its population size. Drawing on earlier work by Freedman (1961-62 and 1975), Easterlin (1978), Panel on Fertility Determinants, and the National Academy of Science (1982), Lapham and Mauldin (1985) conceptualized family planning program effort as "the sum of policies adopted and implemented; the activities carried out to provide family planning knowledge, supplies, and services; the availability and accessibility of fertility regulation methods; and the monitoring and evaluation of all of these." (P. 120) The

four components of program effort are "policies, resources, and stage-setting activities;" "service and service-related activities;" "statistical record-keeping, evaluation, and management's use of evaluation findings;" and "availability and accessibility: contraception, sterilization, abortion." (Lampham and Mauldin 1985: 120). Family planning program effort orients toward making it possible for people to regulate their fertility in desired ways (Lapham and Mauldin 1985: 118). Family planning program effort is measured by family planning effort scores and the prevalence of contraceptive use.⁸

8. According to Ross, Mauldin, and Miller (1993), thirty indices were employed to obtain family planning program scores. The indices are grouped into four components. The first component is comprised of policies, resources, and stage-setting activities that a government (or private organizations) undertakes to underpin, organize, and implement a family planning program. There are eight items for policy and stage setting activities. These activities include the setting of population-related policies, especially as regard to fertility regulation, funding, and other resources concerning direct provision of family planning supplies and services. These activities also include the involvement of other ministries or government agencies in promoting and providing information about population concerns and family planning activities, in appointing senior officials to direct family planning programs, and in encouraging private sector population activities.

The second component is service and service-related activities that are designed to make it easier for people to obtain and use a variety of family planning methods. The thirteen items of the second component include information, education, and communication (IE&C) activities; the training of personnel; supervision; community-based distribution of programs, social marketing programs; other service delivery actions; use of civil bureaucracy to underscore the importance of the program and help carry it out; providing incentives for increased use of contraception; the involvement of other ministries or government agencies in

Previous concept of development has often given exclusive attention to economic growth, on the assumption that growth will ultimately benefit everyone (United Nations Development Program 1992: 13). Socioeconomic development refers to both human and economic development of a country. The United Nations Development Program (1990) proposed a new measure, the Human Development Index (HDI) for the measurement of socioeconomic development. The first report by the United Nations Development Program in 1990 defined human development as "a process of enlarging people's choices." (United Nations Development Program 1992: 12) Income is certainly one of those choices, but it is by no means the only one.

"Human development index offers a much broader and more inclusive perspective. It demonstrates that economic growth is vital because no society has in the long run been able to sustain the welfare of its people without continuous economic growth. But growth on its own is not sufficient, it has to be translated into improvements in people's lives

providing services or information and education; and clinic-based service delivery systems.

The third component, record keeping and evaluation consists of three items, namely, record keeping, evaluation, and management use of evaluation findings. The last component refers to the availability and accessibility of contraceptive techniques and devices.

Contraceptive prevalence is estimated on the basis of available survey information. The procedure is described in W. Parker Mauldin and John A. Ross (1992), "Contraceptive Use and Commodity Costs in Developing Countries, 1900-2000." International Family Planning Perspective 18 (4): 4-9. Contraceptive rate is defined as the percentage of couples in the reproductive ages (15-44) using contraception at a point in time (Mauldin and Segal 1986: 7). Estimates are based on the number of first-time acceptors of a family planning method, multiplied by a drop-out or discontinuation factor.

Economic development is not the end of human development, it is one important means." (United Nations Development Program 1992: 12)

Human development does not focus on social issues at the expense of economic issues. It, however, stresses the need to develop human capacities and how "those capacities are used by people who can participate freely in social, political and economic decision-making, and who can work productively and creatively for development." (United Nations Development Program 1992: 12) The 1991 Report developed the human development concept further. It focused on the role of national governments in generating the resources to promote human development (United Nations Development Program 1992: 13). Human development includes three key components: longevity, knowledge, and income (United Nations Development Program 1992: 91).⁹ The other indicator for socioeconomic development is agriculture as a percentage of the distribution of gross domestic product (GDP). GDP is the final output of goods and services produced by the domestic economy, including net exports of goods and nonfactor services. Agriculture as a percentage of GDP refers to the percentage of GDP spent on agriculture

The third factor is secularization of society.

9. According to United Nations Development Program (1992), longevity is measured by life expectancy at birth; knowledge is measured by two educational stock variables, adult literacy and mean years of schooling. For income, HDI is based on the premise of diminishing returns from income (P. 91).

According to Webster's, the term "secular" pertains to "the worldly or temporal as distinguished from the spiritual and eternal, not under church control; nonecclesiastical; civil." (Webster 1989: 1061) Secularization is defined as the extent to which one feels a sense of responsibility for one's own well-being, or personal autonomy. Leasure (1982) defined secularization as an attitude (or spirit) of autonomy from other-worldly powers and a sense of responsibility for one's own well-being. Hout (1972) suggested six contemporary usages in terms of secularization: A. religious decline; B. stress on present-day physical living rather than on a spiritual future; C. separation of society from religion; D. assumption of religious functions by non-religious organizations; E. disappearance of the idea of sacredness; and F. replacement of sacred society by secular society (P. 286).

Based on theories on secularization of society, the indicators I am going to use for secularization of society in this dissertation are urban population as a percentage of total population, percentage of total population in cities with at least 1 million inhabitants, thousands % of labor force in agriculture, percentage of adult literacy, total tertiary enrollment ratio, and technological efficiency.

Urban population as a percentage of total population and percentage of total population in cities with 1 million or more inhabitants are based on midyear population

estimates. Technological efficiency is calculated by dividing commercial energy per capita (Gijajoules) by GNP per capita (US dollars). It is used as one of the measurements of secularization in society on the assumption that an increase in the amount of energy required for producing a unit of per capita income means a decrease in the level of technological efficiency, and that higher levels of technological efficiency indicates higher levels of technological development and greater reliance on technological advancement.

The intervening variables are women's education, gender equality in society, and fertility.

Women's education refers to the knowledge and development resulting from an educational process on the part of women. The observed variables for the construct are percentage of adult female literacy and percentage of females of relevant age enrolled in secondary school. An illiterate person, as defined by UN-ESCO, is a person who cannot both read with understanding and write a short and simple statement on his or her everyday life (World Resources Institute 1992: 259). Gender equality in the society refers to the parity between men and women in their life chances in the society. According to Chafetz (1990), the gender system includes systems of gender stratification and differentiation, as well as the gender division of labor, gender social definitions, and power inequalities

between the gender (P. 28-29). Young et al. (1994) defined gender inequality as the departure from parity in the representation of women and men in key dimensions of social life (P. 55). In contrast to the still commonly used concept, "women's status," the notion of gender equality points to the parities in the distribution of women and men in the central arenas of social life (Young, et al. 1994: 55). The indicators for gender equality in the society are thus female and male ratio of mean years of schooling, female male gap in labor force, political and legal equality for women, and socioeconomic equality for women.

Fertility refers to the actual reproductive performance of a group or of an individual as distinguished from fecundity which is the physical capacity to reproduce. Fertility is measured by total fertility rate and average annual growth rate. Total fertility rate refers to the number of live births per thousand potentially fertile women (usually 15-44) with regard to a given time period and a given population. Average annual growth of population takes into account total fertility rate, mortality rate and the rate of immigration.

The dependent variable is women's reproductive rights. The word "right" is defined as "something which one has a just claim" (Websters 1989: 1015). In accordance with the documentation from international conferences and conventions on human rights, women, and population, women's reproductive

rights refer to the freedom to decide on the number and spacing of children, information and education in the field, and the right to have control over their sexuality.

The observed variables of women's reproductive rights in this dissertation are legal abortion rights; personal rights to interracial, interreligious, or civil marriages; personal rights to equality of sexes during marriage and for divorce proceedings; personal rights to use contraceptive pills and devices; and support for distribution of contraceptives and limits to accessibility of contraceptives.

Operational Definitions of the Variables

The variables used in this dissertation are operationalized as follows:

Family planning program effort is measured by family planning program effort scores and prevalence of contraceptive use. Family planning program effort scores are obtained from Lapham and Mauldin's 30-item program effort scores (1989). The variable ranges from 0 to 120. Contraceptive prevalence is estimated for the common date of 1990 for all countries on the basis of available survey information (Ross, Mauldin, and Miller 1993: 70).

The indicators for socioeconomic development are Human Development Index (HDI) and agriculture as percentage of gross domestic product (GDP). The three key components of

HDI (longevity, knowledge, and income) are combined in a three step process to arrive at an average deprivation index (United States Development Program 1992: 91). Longevity is measured by life expectancy at birth; knowledge is measured by two educational stock variables, adult literacy and mean years of schooling. For income, HDI is based on the premise of diminishing returns from income for human development using an explicit formulation for the diminishing return (United Nations Development Program 1992: 91). A maximum of 1.00 and a minimum of 0.00 are used to indicate high or low HDI.¹⁰ The other observed variable for the construct is agriculture as a % of GDP. It is the percentage of distribution of gross domestic product in agriculture.

Secularization of society is measured by urban population as a percentage of total population, percentage of total population in cities with at least 1 million inhabitants, thousands % of labor force (15-64 years-old) in agriculture, percentage of adult literacy, total tertiary enrollment ration, and technological efficiency. The observed variables range from 0 to 1.

Women's education is measured by adult female literacy

10. According to United Nations Development Program 1992, Canada was ranked 1 with HDI value of 0.982. Japan was ranked 2 (0.981). Three is Norway with HDI value of 0.978. Switzerland was ranked 4 (0.978). Sweden was ranked 5 (0.976). The United States was ranked 6 (0.976). Australia was ranked 7 (0.971). France was ranked 8 (0.969). Netherlands was ranked 9 (0.968), and the United Kingdom was ranked 10 (0.962). The lowest HDI value was 0.052 for Guinea.

and percentage of females of relevant age enrolled in secondary school. The two observable variables are coded by percentage.

Gender equality in society is measured by female male ratio of mean years of schooling, female male gap in labor force, political and legal equality for women, and social and economic equality for women. The female male ratios of mean years of schooling and the percentage of adult literacy are obtained by dividing female percentage by male percentage. A figure of more than 1 indicates female average being greater than male's. Female male gap in labor force is expressed in relation to the male average, which is indexed to equal 100. The smaller the figure, the bigger the gap, the closer the figure to 100, the smaller the gap. A figure above 100 indicates that female average is higher than the male's. The measurement for political/legal and social/economic equality is obtained from Humana's World Human Rights Guide (1992). The assessment of each country was based on the questionnaires which had been drawn totally from UN instruments. Political/legal and social/economic equalities for women are operationalized as 0 to 3. "0" (NO) indicates severe violations of the freedoms and rights. "1" (no) indicates frequent violations of the freedoms and rights. "2" (yes) qualifies otherwise satisfactory answers on the grounds of occasional breaches of respect for the freedoms and rights. "3" (YES) represents respect for the

freedoms and rights.

The observed variables for fertility are total fertility rate and average annual population growth rate. They are both measured by percentage (0-100).

The dependent variable women's reproductive rights are measured in terms of legal abortion right, personal rights to interracial, interreligious, or civil marriage, personal rights for equality of sexes during marriage and for divorce proceedings, personal rights to use contraceptive pills and devices, and support for distribution of contraceptives and limits to accessibility of contraceptives. There are 3 categories for the legal status of abortion: illegal (no exception), legal for medical reasons, and legal for other reasons. The second category "legal for medical reasons" includes "life," "health," and "eugenic." The third category "legal for other reasons" includes "juridical," "socioeconomic," and "on request." Illegal is coded as 0. Each of the reasons in the second category and the first two of the third category weighs 1. Legal "on request" is coded as 6 since in countries where abortion is permitted on request, it is also permitted where necessary to protect women's lives or health, and on eugenic, juridical, and socioeconomic grounds (Ross, Mauldin, and Miller 1993: 111). Personal rights to interracial, interreligious, or civil marriage; for equality of sexes during marriage and for divorce proceedings; and to use contraceptive pills and

devices are operationalized as 0 to 3. "0" (NO) indicates a constant pattern of violations of the freedoms and rights. "1" (no) indicates frequent violations of the freedoms and rights. "2" (yes) qualifies otherwise satisfactory answers on the grounds of occasional breaches of respect for the freedoms and rights. "3" (YES) represents the respect for the freedoms, rights, or guarantees of the article or indicator of the questionnaire. Support by government for distribution of contraceptives and limits to accessibility of contraceptives is coded as 1=major limits on access: no support; 2=no major limits: no support; 3=no major limits: indirect support; and 4=no major limits; direct support.

Measurement and Sources of the Variables

Family planning program effort scores are measured through the 30 items on the program effort scale based on its four components by Lapham and Mauldin. The score range for each scale item is from zero to four, with four indicating a strong policy or much activity on an item. (However, a score of four does not mean that the maximum possible is being accomplished in the country.) With 30 items, the scoring range is from zero to 120.

Data for prevalence of contraceptive use are estimated through a series of three questionnaires sent to 100 countries since 1987 (Ross, Mauldin, and Miller 1993). The data are obtained from the Population Council Databank for

all countries on the basis of the survey information as drawn from Demographic and Health Surveys (DHS) series and other sources. It is a percentage measure with a maximum value of 100 indicating a complete coverage of contraceptive use, and a minimum value of 0 indicating that there is no contraceptives available in the country. The highest proportion of contraceptive prevalence, 80 percent, is found for Mauritius, and a lowest proportion of 0 percent was found for Madagascar.

United Nations Development Program (1992) uses Human Development Index (HDI) to measure socioeconomic development. The assumption for the measurement is that economic growth has to be translated into improvements in people's lives. A scale of 1 to 0 is used to indicate high or low levels of socioeconomic development of countries. The highest HDI value as estimated 0.982 for Canada, and lowest HDI value is found for Guinea (0.052).

Percentage distribution of GDP in agriculture is measured in terms of the proportion of GDP spent on agriculture. The sources of the data are World Resources 1992-93 (World Resources Institute, 1992) and Social Indicators of Development (World Bank, 1994).

The data for Urban population as a percentage of total population are obtained from World Resources Institute (1992) and World Bank (1993). Urban population as a percentage of total population refers to the portion of the

total population residing in urban areas (World Resources Institute 1992: 268). It is measured in terms of the proportion of the number of people in urban areas in comparison to the total number of the population. Data for the variable of thousands % of labor force in agriculture are obtained from Social Indicators of Development (World Bank 1994). It is measured in terms of the percentage of the population aged 15 to 65. Percentage of total population in cities with at least 1 million inhabitants (1990) is calculated using figures for populations of urban agglomerations of 1 million or more residents reported in urban and rural areas in 1990 and total national population estimates and projections for 1990 in World Population Projects (1990).¹¹ Percentage of adult female literacy (1990) is estimated in accordance to the percentage of people over the age 15 who can read and write; and it is measured by percentage to the total population. The data sources for the variable, percentage of female of relevant age enrolled in secondary school (1990) are World Development Report and Social Indicators of Development by World Bank. It is measured in terms of percentage.

Female-male ratios of mean years of schooling and of percentage of adult literacy are calculated by dividing

11. The United Nations defined "urban agglomeration" as "comprising the city or town proper and also the suburban fringe or thickly settled territory lying outside of, but adjacent to, the city boundaries (World Resources Institute 1992: 268).

female percentages by male percentages. Female male gap in labor force is measured in relation to male average (which is indexed to equal 100). The data for political/legal and social/economic equalities for women are obtained from Charles Humana's World Human Rights Guide (1992).

Total fertility rate and average annual growth rate are ratio variables. The sources of the data come from World Resources Institute (1992).

Legal abortion right is measured by a scale ranging from 0 to 6, with 0 indicating the illegal status of abortion in a country, and 6 indicating legal right under circumstances of "on request." The data come from Dixon-Mueller (1993) and the Population Council (1992). Personal rights to interracial, interreligious or civil marriage, for equality of sexes during marriage and for divorce proceedings; and to use contraceptive pills and devices are measured by a scale ranging from 0 to 3 with 0 indicating constant pattern of violation of the rights and 3, respect for the freedoms and rights. The data come from Humana's human rights index¹² which is constructed using data from international human rights documentation of Universal Declaration of Human Rights (UDHR), International Covenant on Economic, Social and Cultural Rights (ICESCR), and

12. The questionnaires cover 40 indicators from the UN treaties, each of which requires answers that are graded into one of the four categories or levels: YES (3), yes (2), no (1), and NO (0).

International Covenant on Civil and Political Rights
(ICCPR).

Procedures of Statistic Analyses

To conduct the cross-national research on women's reproductive rights, I follow the following procedures.

I. Tabulation of the raw data

A. Frequencies distribution: The first step in organizing numerically the raw data is to determine the number of valid cases for each observation. Frequency distribution is a table of the outcomes of a variable and the number of times each outcome is observed in a sample (Bohrnstedt and Knoke 1988).

B. Histogram and boxplot: Corresponding to frequency distribution, histograms use bars to represent the frequency, proportion, or percentage of cases associated with each outcome or interval of outcomes of a variable. Histograms can also be used to detect the features of the type of frequency curves. They include unimodel (symmetrical or skewed curves), bimodel (frequency curve has two maxima), multimodel (frequency curve has more than two maxima), U-shape (curve has maxima at both ends), and J-shape or reversed J-shape (maximum occurs at one end).

Boxplot diagrams (box and lines) are used to detect central tendency and variability. A boxplot tells the

following: (1) from the median, determine the central tendency; (2) from the length of the box, assess the spread or variability of observations; (3) if the median is not in the center of the box, the observed values are skewed. If the median is closer to the bottom of the box than the top, data are positively skewed. If the median is closer to top than the bottom, data are negatively skewed.

Boxplot includes two categories of cases with outlying values. Cases with values more than 3 box-lengths from upper or lower edge of the box are called extreme cases (E). Cases with values between 1.5 and 3 box-lengths from the edge of the box are called "outliers" (O).

C. Descriptive statistics: Data are obtained using measure of central tendency and variations; mean, median, mode, standard deviation, skewness, kurtosis, range ... are computed.

D. Normality: A normal distribution of an observation suggests that 68.27 percent of the cases are included between $\bar{X}-SD$ and $\bar{X}+SD$, that is one standard deviation on either side of the mean; 95.45 percent of the cases are included between $\bar{X}-2SD$ and $\bar{X}+2SD$, that is two standard deviation on either side of the mean; and 99.73 percent of the cases are included between $\bar{X}-3SD$ and $\bar{X}+3SD$, that is three standard deviation on either side of the mean.

E. Scatter plot and KS significant: Scatter plot is a type of diagram that displays the covariation of two

continuous variables as a set of points on a Cartesian coordinate system (Bohrnstedt and Knoke, 1988).

F. Decision on the use of variables: To decide whether the variable can be used for statistic analyses, I look at the following properties of the observation. (1) skewness is less than 1, (2) missing cases for each variable are no more than one third of the observations, (3) distribution curve: unimodel, J-shape or reverse-J-shape are preferred, (4) no "E" cases (cases with values more than 3 box-lengths from upper or lower edge of the box), (5) normal distribution or close to normal distribution, and (6) the value of KS significant is less than 0.05.

G. Correlations of the chosen observations are used to assess multicollinearity and internal validity of the observed variables in relation to constructs.

II. Structural equation analyses

To test the research hypotheses, I use SPSS LISREL 7 for the model set for the hypotheses.

LISREL (linear structure relation)

LISREL is a statistical technique used to estimate and test linear relationships among variables. It is basically a multiple regression model using a factor analytical method.¹³

13. Factor analysis according to Long (1983) is a statistical procedure for uncovering a (usually) smaller number of latent variables by studying the covariation among

Figure 1 shows both the latent and observed variables. The ovals in Figure 1 represent the latent variables (factors). They are the underlying theoretical variables of interest. The latent variables in Figure 1 are family planning effort (ξ_1), social-economic development (ξ_2), secularization of society (ξ_3), women's education (η_1), gender inequality in society (η_2), fertility (η_3), and women's reproductive rights (η_4). There are two types of latent factors, exogenous and endogenous.¹⁴ The exogenous factors are indicated by X-variables, and the endogenous factors are measured by Y-variables (Figure 1). The latent factors contribute toward the variance in the observed variables.

The unenclosed variables are the measured (observed) variables. They are family planning effort scores (X1), prevalence of contraceptive use (X2), human development index (HDI) (X3), agriculture as a percentage of GDP (X4), urban population as a percentage of total population (X5), percentage of total population in cities with at least one million inhabitants (X6), thousands percentage of labor force in agriculture (X7), percentage of adult literacy

a set of observed variables (Confirmatory Factor Analysis, P. 11). Or we can say that factor analysis attempts to explain the variation and covariation in a set of observed variables of a set of unobserved factors.

14. Exogenous latent variables are synonymous with independent variables, and endogenous variables are synonymous with dependent variables.

(X8), total tertiary enrollment ratio (X9), technological efficiency (X10), percentage of adult female literacy (Y1), percentage of females of relevant age enrolled in secondary schools (Y2), female male ratio of mean years of schooling (Y3), female male gap in labor force (Y4), political legal equality for women (Y5), social and economic equality for women (Y6), total fertility rate (Y7), annual growth rate (Y8), legal abortion rights (Y9), personal rights to interracial, interreligious or civil marriages (Y10), personal rights to equality for sexes during marriage and divorce proceedings (Y11), personal rights to use contraceptive pills and devices (Y12), and support for distribution of contraceptives (Y13).

Each of the observed variables loads on a certain latent factor as shown in Figure 1. Family planning program effort scores and prevalence of contraceptive use load on the latent factor, family planning program effort. Socioeconomic development is measured by the observed variables human development index (HDI) and agriculture as a percentage of GDP. Secularization of society is measured by urban population as a percentage of total, percentage of total population in cities with at least one million inhabitants, percentage of labor in agriculture, percentage of adult literacy, proportion of tertiary enrollment, and technological efficiency. Percentage of adult female literacy and percentage of females of relative age enrolled

in secondary schools load on women's education. Gender equality has four observed variables, namely, female male ratio of mean years of education, female gap in labor force, political-legal equality for women, and social-economic equality for women. Fertility is measured by fertility rate and annual growth rate. The dependent variable women's reproductive rights is measured by five indicators. They are legal abortion rights, personal rights to interracial, interreligious, or civil marriages, personal rights for equality of sexes during marriage and for divorce proceedings, personal rights to use contraceptive pills and devices, and support for distribution of contraceptives and limits to accessibility of contraceptives.

When independent variable(s) is (are) measured without error, multivariate least-squares (or maximum likelihood) regression techniques serve this purpose very well. But when independent variable(s) is (are) measured with errors, then the so-called "error-in-variables" problem arises and the estimates of the regression coefficients are biased. The LISREL model assumes that observed variables are measured with error (Long, 1983, P. 13).

$$x = \lambda \xi + \zeta$$

LISREL analysis contains the measurement and structural models. The measurement model defines the relations between the observed and latent variables. The measurement component of the covariance structure model consists of a

pair of confirmatory factor models formally identical to those developed in CFA (Long 1983; 19). It specifies the pattern by which measures load onto a particular factor. The structural model defines the relations among the unobserved latent factors, or the relationship between common factors.

CHAPTER V

ANALYSES AND RESULTS

The study involves 101 countries (cases) identified by the World Bank (1994) as developing countries (Appendix D).¹⁵ This chapter is divided into five sections. The first section presents descriptive statistics, the mean, median, mode, range, standard deviation, skewness, and kurtosis. The second section describes the correlations of the variables used in the study. The third section presents the estimates of the measurement model. Section four describes the estimates from the structural equation model, and evaluates the status of the proposed hypotheses. The final section explains the overall model fit.

Descriptive Statistics

Table 1 shows the variables used in the study.

Descriptive statistics consists of measure of central tendency, and the measure of variance. The measure of central tendency includes the mean, median, and mode. The

15. Taiwan was dropped from the study due to lack of information.

measure of dispersion (variance) includes range and standard deviation. The measure of the degree of asymmetry of frequency distribution is skewness. The measure of the peakedness of frequency distribution is kurtosis.

Table 1 shows that the average value for family planning program scores (X1) is 50.595 ranging from zero to 100.85, and the median falls at 51.935. Thus, family planning program effort scores in developing countries vary from zero to a complete coverage of 100.85. The large variation of family planning program effort scores across nations indicates the gap in implementing family planning programs in developing countries. The standard deviation for family planning program effort scores is 25.943. The skewness is $-.268$, and kurtosis is a negative $.633$. This indicates that a large proportion of developing countries tend to have high scores on family planning programs.

The prevalence of contraceptive use (X2) has a mean of 30.789 and a median of 28. The contraceptive prevalence in developing countries varies from zero to 80 percent. The positive skewness ($.321$) of contraceptive prevalence indicates that a large proportion of developing nations tend to have low percentage of contraceptive prevalence.

In spite of the relatively high scores of family planning program effort, the contraceptive prevalence is low. This suggests the need to improve the efficiency of family planning programs in order to increase contraceptive

prevalence in most developing countries.

Human development index (HDI) (X3) is a measurement of socioeconomic development. It ranges from 0 to 1. Values closer to one indicate higher levels of socioeconomic development. In this case, "HDI" varies largely from a low .052 to a high .927. The mean (.448), median (.446), and standard deviation (.255) demonstrate that most developing countries have low levels of human development.¹⁶

Table 1 shows a diverse pattern of the frequency distribution for the percentage of adult literacy (X8) in developing countries. The mean is 64.841, the median is 66.000, and the skewness is -.210. All these indicate that most developing nations are characterized by high levels of adult literacy rates. This may be due to the emphasis laid on literacy through country- and region-wide literacy programs.

The mean for the variable urban population as a percentage of the total (X5) is 42.6, and the median is 40.4. The mean for X6 (percentage of total population in cities with at least one million inhabitants) is 11.8, and the median is 6.6. Both variables have positive skewness of .465 and 2.3 respectively. Thus most developing nations have low levels of urbanization and the proportion of the

16. The United Nations Development Program (1992) divided human development index into three categories, high, medium, and low. For high human development, HDI is .800 and above; for medium human development, HDI is .500 to .799; and for low human development, HDI is below .500.

population in metropolitans with at least one million inhabitants. On the other hand, most developing countries are found to have low percentage of agriculture in GDP (X4) (mean=25.9, median=24.7, skewness=.599). The low levels of urbanization and percentage of agriculture in GDP suggest that most developing countries are experiencing the processes of industrialization, and that there exists great potential for urbanization in developing countries.

The variable "technological efficiency" (X10) has a mean of .02, and a median of .012. The skewness is 8.895 and the kurtosis is 82.5. The high positive value of skewness and kurtosis indicate that most developing countries have low levels of technological efficiency.

The mean for Y2 (percentage of females of relative age enrolled in secondary schools) is 34.6, and the median is 31. The skewness is .509. This suggests that most of the developing countries have low percentages of female secondary school enrollment.

Political and legal equality for women is found to have a mean of 1.486, and a median of 2.000. The skewness is a negative .720. This indicates that most developing countries meet the requirements for otherwise the respect for political and legal equality for women. The mean for social and economic equality for women is 1.22, and the median is 1.000. The skewness is .590. Thus women in most developing countries have low levels of social and economic

equality although political and legal systems allow for otherwise the equality for men and women in the society.

The mean for fertility rate (Y7) is 5.112, and the median is 5.5. The skewness is $-.293$. This indicates that women (aged 15 to 44) in most developing countries borne an average of more than 5 children.

The mean for legal abortion rights (Y9) is 2.053 (with a range from .000 to 6.000, and 6=abortion on request). The value 2.053 implies that legal abortion rights in developing countries, on average, are granted on the basis of health concerns. The descriptive analysis indicates that legal abortion rights in most of the developing countries are not permitted for socioeconomic reasons or on request but rather on life and health grounds.

The mean for Y10 (personal rights to interracial, interreligious, or civil marriages) is 2.379 within the range of .000 (no rights) and 3.000 (guarantee of the freedom). The skewness is -1.331 . It indicates that the freedom for interracial, interreligious, or civil marriages in developing countries, on the average, is fairly satisfactory except for occasional violations of the freedom.

The mean for personal rights for equality of sexes during marriage and for divorce proceedings (Y11) is 1.527. The median is 2.000. The skewness is $-.167$. This suggests that the equality between men and women during marriage and

for divorce proceedings is otherwise satisfactory in most developing countries on the grounds of occasional violations.

The mean of Y12 (personal rights to use contraceptive pills and devices) is 2.878. The mean of Y13 (support for distribution of contraceptives and limits to accessibility of contraceptives) is 3.758.¹⁷ The median is 2.9 and 3.8 respectively. The skewness of both variables are negative (-3.170 for Y12, -2.605 for Y13). This suggests that there is almost no restriction imposed on contraceptive use in most developing countries.

The descriptive analyses of the variables in the theoretical model reveal several notable characteristics of the developing nations. These countries have high rates of fertility, low levels of human development, and urbanization. However, the percentage of agriculture in GDP is found to be low for most of the nations. This points to the processes of industrial and economic development in the developing nations. Most countries in the developing world show a high percentage of adult literacy, while the proportion of people enrolled in secondary schools is low for most developing countries, which leaves the potential for developing nations to enhance secondary education.

17. The variable "support by government for distribution of contraceptives" is coded as 1=major limits on access: no support, 2=no major limits: no support, 3=no major limits: indirect support, and 4=no major limits: direct support.

Family planning programs vary largely in terms of the effort scores and contraceptive prevalence. Family planning program effort scores tend to be high in developing countries, whereas contraceptive prevalence is found to be low for most nations. While levels of political-legal equality for women is fairly high in most developing nations, social-economic equality for women lags behind.

In terms of women's reproductive rights, personal rights to use contraceptives, and support for contraceptive distribution are found to be satisfactory. This indicates that family planning programs aiming at lowering fertility rate in developing countries have gained wide popularity both in practices and government policies. Personal rights for inter-marriages, and equality during marriage and for divorce proceedings are found to be violated occasionally. Legal abortion rights, meanwhile, in most developing countries are permitted only on life and health grounds rather than for social reasons.

The Measure of Associations

Table 2 shows the correlation coefficients of the variables used in the study.

The correlation coefficient between family planning program effort scores (X1) and contraceptive prevalence (X2) is .656. The positive relationship between family planning scores and contraceptive prevalence indicates that the

higher the family planning program is rated, the higher the contraceptive prevalence.

The degree of human development (X3) and percentage of agriculture in GDP (X4) are negatively related with each other (-.745), that is, the higher the level of human development, the lower the percentage of agriculture in GDP.

Percentage of urban population (X5) is positively related to proportion of population in cities of more than one million inhabitants (X6) (.666), but negatively related to proportion of labor force in agriculture (X7) (-.563). Proportion of labor force in agriculture (X7) is found to be negatively associated with adult literacy (X8) (-.547), and the rate of tertiary enrollment (X9) (-.624), whereas tertiary enrollment ratio (X9) is positively related to the percentage of urban population (X5) (.672). This tells us that in developing countries people engaging in agricultural work are less likely to have higher levels of education than those in urban areas.

The correlation between female literacy rate (Y1) and percentage of females of relative age enrolled in secondary schools (Y2) is positive (.762). And political-legal (Y5) and social-economic equality for women (Y6), meanwhile, is found to have positive effect on female male ratio of mean years of schooling (Y3). The correlation coefficients are .463 and .491 respectively. This indicates that the higher the levels of political-legal and social-economic equality

for women, the more likely women have opportunities for education attainment.

Fertility rate (Y7) is found to have a positive relationship with annual growth rate (Y8) (.776). In terms of women's reproductive rights, personal rights for inter-marriages (Y10) are positively associated with equal rights during marriages and for divorce proceedings (Y11) (.641); and personal rights to use contraceptives (Y12) are positively related to support for contraceptive distribution (Y13) (.509). Legal abortion rights (Y9) are positively correlated with personal rights for inter-marriages (Y10) (.304), support for contraceptive distribution (Y13) (.276), and equal rights during marriages and for divorce proceedings (Y11) (.268).

The correlation coefficients, on the whole, provide evidence for the internal validity of the observed variables in relation to their underlying constructs.

The Measurement Model

The measurement model consists of the relations between the observed and unobserved variables. It specifies the pattern by which observed measures load onto a particular factor.

The variables contain measurement errors. The unexplained variance in the endogenous factors is the residual error. The measurement errors in Xs are written as $\zeta_1, \zeta_2, \zeta_3, \zeta_4, \zeta_5, \zeta_6, \zeta_7, \zeta_8, \zeta_9, \zeta_{10}$. The measurement errors in Ys are denoted by $\Sigma_1, \Sigma_2, \Sigma_3, \Sigma_4, \Sigma_5, \Sigma_6, \Sigma_7, \Sigma_8, \Sigma_9, \Sigma_{10}, \Sigma_{11}, \Sigma_{12}, \Sigma_{13}$ (Figure 1).

The coefficients $\lambda_{11}, \lambda_{21}, \lambda_{32}, \lambda_{42}, \lambda_{53}, \lambda_{63}, \lambda_{73}, \lambda_{83}, \lambda_{93}, \lambda_{10,3}$ represent regression coefficients.

The value of Y can be written as

$$Y = \lambda \eta + \Sigma$$

Joreskog and Sorbom (1988) suggested several approaches to estimate the reliability and validity of the indicators in relation to their latent variables, which involve factor loadings (slope), squared multiple correlations, and error variance.

Table 3 presents the congeneric factor analytic results. In this study, factors are assigned a scale for measurement. Each latent factor shares a scale of one with one of its indicators. The parameter estimates (ML) suggest that all the factor loadings are high (from .675 to .983)

except for X10 (technological efficiency) (.243) on ξ_3 (secularization of society), and Y4 (female male gap in labor force) on η_2 (gender equality in society) (.112). Factor loadings having absolute values exceeding .2 or more are considered significant. The loadings of X-variables are all statistically significant. The loadings of Y-variables are statistically significant except Y4 (female male gap in labor force), and the fixed parameters.

The error variance of the variables, as shown in Table 3, are above .200, and statistically significant except for the fixed variances.

In addition to factor loading and error variance, squared multiple correlations (SMC) are used to estimate the reliability of the observed variables in relation to the constructs.

Table 3 shows that the value of squared multiple correlations for family planning program effort scores (X1) is as high as .807, and X2 (contraceptive prevalence) is .588. This means that about 81 percent of the variance in X1 (family planning program effort scores) can be accounted for by the latent variable (family planning program effort) controlling for other factors, and 58 percent of the variance in X2 (prevalence of contraceptive use) can be explained by family planning program effort net of other factors. Table 3 shows that nine out the 23 observed variables have SMC value of above .60. They are program

scores on family planning program effort, HDI on socioeconomic development, percentage of urban population and percentage of labor force on secularization of society, percentage of adult female literacy and percentage of female secondary school enrollment on women's education, fertility rate and annual growth rate on fertility.

The total coefficient of determination is a measure of how well the X-variables (Y-variables) jointly serve as measurement instruments for ξ -(η)-variables. Table 3 indicates that the total coefficient of determination for X-variables is .992, and the total coefficient of determination for Y-variables is .993. The total coefficient of determination for structural equations is .933.

Considered together, the confirmatory factor analysis results provide reasonable empirical evidence of the construct validity of the proposed latent traits that are hypothesized to influence the indicators. It is found that 9 out of 23 observed variables have reliability rates greater than .60. They are program scores, contraceptive prevalence, human development index, percentage of urban population, percentage of labor force in agriculture, and percentage of females of relative age enrolled in secondary schools.

The Structural Model and Test of the Hypotheses

The structural portion of the model consists of the relations among the latent variables. In this section, I examine the empirical support for the hypothesized relations within the dimensions of fertility, women's education, gender inequality in society, and women's reproductive rights.

Fertility is hypothesized to be negatively related to women's reproductive rights. The lower the fertility rate, the more the women's reproductive rights. The regression coefficient is $-.512$ (unstandardized) and $-.651$ (standardized) with standard error being $.174$. The relationship is significant at the $.05$ level (Table 4).

The second hypothesis proposes a negative relationship between family planning program effort and fertility. The regression coefficient is $-.317$. The empirical findings support the hypothesis that family planning program effort is negatively related to fertility rate. The relationship between family planning program effort and fertility decline is significant at the $.05$ level (Table 4).

Third, socioeconomic development is hypothesized to be negatively related to fertility rate. The regression coefficient is $.338$ (unstandardized), and $.358$ (standardized) ($SE=.258$). The relationship between socioeconomic development and fertility rate is not significant at the $.05$ level (Table 4).

The fourth hypothesis states that women's education is negatively related to fertility. The regression coefficient is $-.782$ (unstandardized), and $-.868$ (standardized) ($SE=.224$). The relationship between women's education and fertility is significant at the $.05$ level (Table 4).

Gender equality in society is hypothesized to be negatively related to fertility. Table 4 shows that the regression coefficient is $-.367$ (unstandardized), and $-.290$ (standardized) ($SE=.242$). The relationship between gender equality and fertility is not significant at $.05$ level.

The next hypothesis is that women's education is positively related to women's reproductive rights. The regression coefficient is $-.997$ (unstandardized), and -1.406 (standardized) ($SE=.177$). The relationship between women's education and reproductive rights is significant at $.05$ level. The empirical findings, however, indicate a reverse relationship between women's education and reproductive rights (Table 4).

Hypothesis seven states that socioeconomic development is positively related to women's education. The regression coefficient is $.505$ (unstandardized), and $.483$ (standardized) ($SE=.248$). The relationship between socioeconomic development and women's education is significant at $.05$ level (Table 4).

Another hypothesis proposes that secularization of society is positively related to women's education. The

regression coefficient is .349 (unstandardized), and .333 (standardized) (SE=.236). The relationship between secularization and women's education is not significant at .05 level (Table 4).

The next hypothesis maintains that gender equality in society is positively related to women's reproductive rights. The regression coefficient is .506 (unstandardized), and .509 (standardized) (SE=.218). The relationship between gender equality in society and women's reproductive rights is significant at .05 level (Table 4).

Hypothesis ten proposes that socioeconomic development is positively related to gender equality in society. The regression coefficient is .340 (unstandardized), and .456 (standardized) (SE=.266). The relationship between socioeconomic development and gender equality is not significant at .05 level (Table 4).

The last hypothesis states that secularization of society is positively related to gender equality in society. The regression coefficient is .143 (unstandardized), and .191 (standardized) (SE=.256). The relationship between secularization of society and gender equality is not significant at .05 level (Table 4).

Table 5 shows the proposed and supported hypotheses. The hypotheses that are not rejected by empirical tests are: Hypothesis one, fertility is negatively related to reproductive rights. Hypothesis two, family planning

program effort is negatively related to fertility. Hypothesis four, women's education is negatively related to fertility. Hypothesis seven, socioeconomic development is positively associated with women's education. And hypothesis nine, gender equality in society is positively related to women's reproductive rights.

The empirical tests, however, indicate that women's education, rather than positively related to reproductive rights as hypothesized, has a strong negative effect on women's reproductive rights.

Overall Model Fit

LISREL produces fit statistics that provide data about the adequacy of the model. The most frequently used measure is the likelihood-ratio chi-square statistics. A statistically significant chi-square indicates that the discrepancy between the data (variance-covariance matrix) and the model (variance-covariance matrix implied from the maximum-likelihood parameter estimates) is greater than expected by chance. A significant chi-square suggests that the model can be rejected. A chi-square measure that is statistically insignificant indicates a good fit of the model to the data.¹⁸

Chi-squared tests whether the differences between the predicted matrix and the actual matrix approach zero. For a "fit" model, chi-square should be small in relation to the degrees of freedom. The ratio of chi-square to degrees of freedom is often cited as an indication of model fit.¹⁹ A X^2/df ratio of less than 5 is an indication of model fit. Table 6 tells that the chi-square is 674.23 with a degree of

18. In most statistical analyses, if an estimated value (for example, a regression coefficient) is larger than would be expected by chance, the null hypothesis is rejected, and the research hypothesis is said to be "confirmed."

19. Chi-square statistics is sensitive to sample size. According to Lavee (1988), the model is more likely to be "fit" when a small sample is used. Chi-square statistics assumes multivariate normality which is difficult to assume. With these limitations, Joreskog and Sorbom (1989) suggested alternative ways in addition to X^2/df ratio to assess model fit.

freedom of 227 ($P=.000$). The ratio of chi-square and degrees of freedom is 447.23. The chi-square statistics indicates that the model does not adequately fit the data.

The goodness of fit index (GFI), adjusted goodness of fit index (AGFI) are used to estimate goodness of fit. GFI measure is not affected by sample size and is robust against departure from normality (Lavee 1988:944). Theoretically, GFI ranges from 0 to 1. A value closer to one indicates a better fit. A small difference between GFI and adjusted GFI (AGFI) also indicates that the model fits well to the data. In this case, the value of GFI is .632. The value of AGFI is .552 (Table 6). The difference between GFI and AGFI is .08. Although the difference is small, this is not an indication of good model fit since both GFI and AGFI are small in magnitude.

Another measurement for model fit is the mean square residual (RMSR). RMSR is a measure of the mean discrepancy between data and the implied variance and covariances. It represents the average deviation of the predicted from the actual correlation matrix. The lower the index the better the fit of the model to the data. Table 6 shows that the value of the RMSR is .168 which indicates a poor fit.

In short, chi-square statistics, values of GFI, AGFI, and RMSR, considered together, indicates that the overall fit of the model to the data is not satisfactory.

CHAPTER VI

CONCLUSIONS AND DISCUSSION

Although the issue about women's reproductive rights has aroused international concern, it is still contingent on political and legal domains and sheltered with human rights, and women's rights. Very few studies have focused on women's reproductive rights as an empirical and theoretical issue in sociology. The international debates on women's reproductive rights have heightened the need for empirical studies and theoretical explanations of women's reproductive rights. The dissertation proposes a theoretical model of women's reproductive rights in relation to family planning programs and modernization processes in developing nations. It is argued, on the one hand, that variations in reproductive rights in developing societies may be accounted for by broad social changes which may result in fertility decline, increase in the levels of women's education, and emergence of gender equality. These societal trends are seen as resulting from broad societal transformations brought about by economic development and secularization. On the other hand, the universality of anti-natalistic population policies in developing countries in the late 20th

century provides a strong state-sponsored social control over fertility rate. The model is tested using data from 101 developing countries as defined by the World Bank (1994) (Appendix D). The results of the study provide partial support for the proposed model and implications for social policy making.

The empirical findings support the hypothesis that family planning programs increase the attainment of women's reproductive rights through fertility decline. Family planning programs in developing countries as being funded by the United Nations organizations and the United States government are designated to reduce fertility rate and entail social and economic prosperity in those countries. Cassen (1994), in addressing the role of the government in population activities, points out that three potentially damaging social effects can accrue from government's not taking measures to limit population size. They can slow the increase of living standards, worsen poverty and the distribution of income, and deteriorate the enjoyment of reproductive rights. To promote reproductive rights in developing countries, therefore, government policies should encourage family planning programs, and improve contraceptive prevalence in spite of the wide controversy on family planning campaigns in developing countries.

Although in many ways the trajectories of modernization are increasing the inclusion of women in social, economic,

and political activities, socioeconomic development in developing nations is found to have no statistically significant impact on gender equality as it is hypothesized. This finding poses a question on the relationship between modernization processes and patriarchy. The question of whether modernization will ultimately displace patriarchy or patriarchy is an intrinsic part of modern capitalism is at issue both in sociological theories and practices in society. Marxists argue that the societal inferiority of women in modern capitalism is built on the social, economic, and political inequalities based on the ownership of the means of production in accordance with the economic class. Feminists view patriarchy as coexisting with capitalism and being conjoined with sexual inequality. Functionalism conceptualizes gender inequality as being necessary, beneficial, functional, and moral (Lehman 1995: 908).²⁰

20. Durkheim, in his The Division of Labor in Society, portrays two kinds of division of labor, social division of labor and sexual division of labor. In the section "Cases Where the Function of the Division of Labor Is to Bring Forth Groups Which Would Not Exist Without It," Durkheim invokes the functional interpretation of patriarchal system. According to Durkheim, the sexual division of labor is the source of conjugal solidarity (1964:56). Under mechanical solidarity, marriages are in a "completely rudimentary state," and conjugal solidarity is "very weak." In modern societies (organic solidarity), marriages develop because sexual labor is more divided. "Today, among cultivated people, the woman leads a completely different existence from that of the man. One might say that the two great functions of the psychic life are thus dissociated, that one of the sexes takes care of the affective functions and the other of the intellectual functions" (1964:59-60).

Structural differentiations leads to differentiations in functional specializations. "One may ... see in female

The findings from 101 developing countries suggest that socioeconomic development does not necessarily lead to the demise of patriarchy, and gender equality may not accompany the progress of modernization. The transformation from patriarchy to gender equality requires that social policies provide means and opportunities for society at large to fulfil a substantial change in both traditional ideologies and current gender inequalities.

Both findings of fertility and gender equality epitomize a critical approach to social policies to facilitate structural changes. Both findings suggest the necessity for social policies to address population policies and social equality of the sexes for the purposes of increasing the extent of women's reproductive rights.

The processes of modernization in developing countries increase the possibilities for women to go to school. Women's education in developing nations, however, has a negative relationship with women's reproductive freedom.

The empirical result that women's education is negatively related to reproductive rights contradicts the

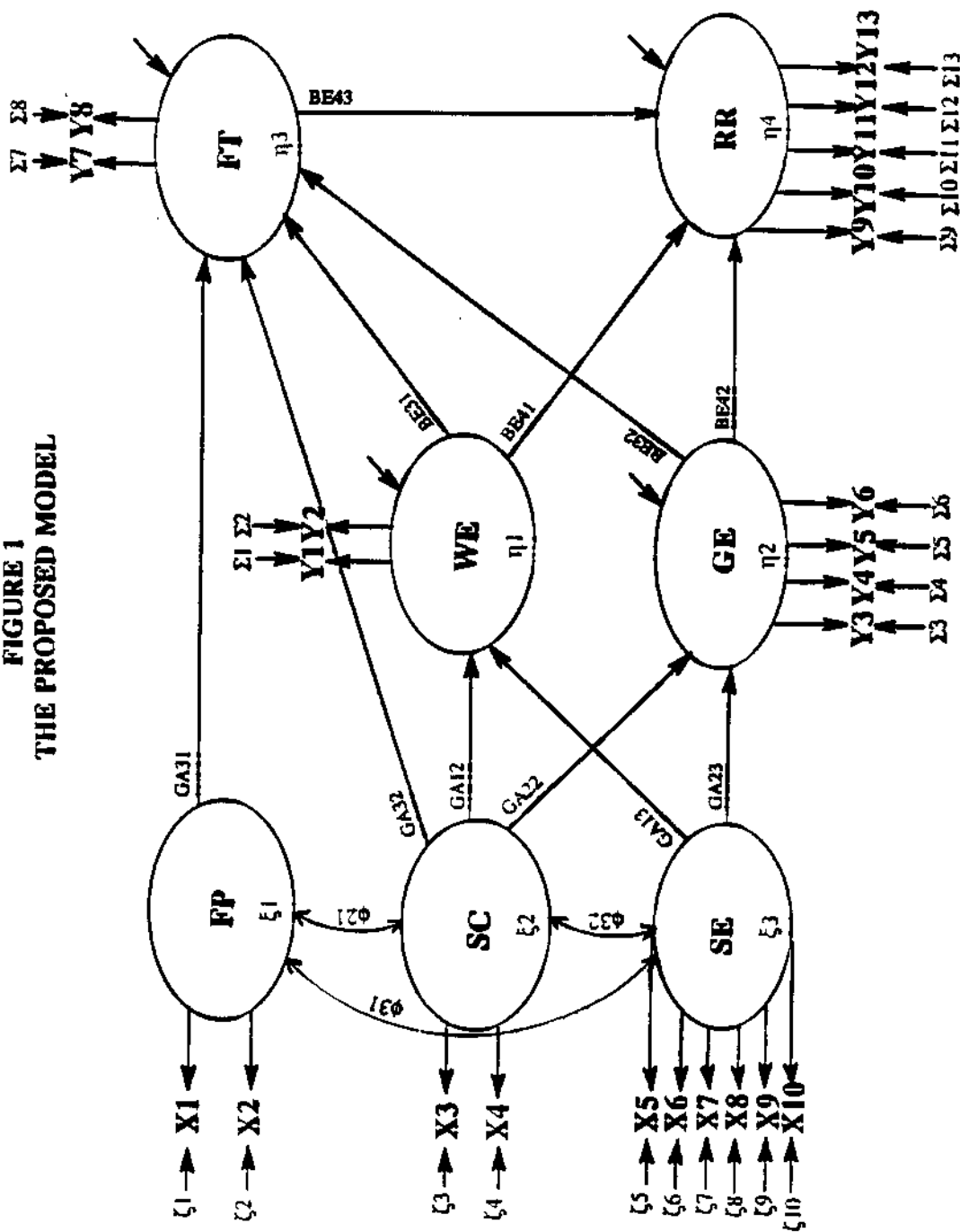
form the aboriginal image of what was the one and only type from which the masculine variety slowly detached itself.... With the progress of civilization, the brain of the two sexes differentiates itself more and more.... To render societies possible which, without it, would not exist.... Permit the sexual division of labor to recede below a certain level of conjugal society would eventually subsist in sexual relations preeminently ephemeral. If the sexes were not separated at all, an entire category of social life would be absent" (1964:57, 60, and 61).

proposed hypothesis that women's education is positively related to women's reproductive rights. It is not clear that the negative relationship between women's education and reproductive rights is due to measurement error or intervening factors.²¹ Further research is needed to explore the relationship between women's reproductive rights and women's education attainment due to the on-going modernization processes in developing nations.

Data for this study are obtained from a number of sources including United Nations Demographic Yearbooks, World Bank reports, and international documents. Most recent data are available for 1991. This study of women's reproductive rights has some limitations due to the lack of data availability and measurement issues. The measurement for women's reproductive rights is based on the standards given by the international conferences and conventions on human rights, women, and population without taking into consideration the societal variations. There, therefore, exists a tremendous potential for sociologists to probe into the issue of reproductive rights and to develop measurement scales of women's reproductive rights.

21. Malhotra et al (1995) states that some empirical evidence shows that while women in most societies gain higher levels of education as a result of socioeconomic development, it is not necessarily true for reproductive rights because gender inequality still prevails.

FIGURE 1
THE PROPOSED MODEL



THE PROPOSED MODEL: CONSTRUCTS AND INDICATOR VARIABLES

FP: FAMILY PLANNING PROGRAM EFFORT

- X1: FAMILY PLANNING PROGRAM EFFORT SCORES (OBTAINED
- X2: PREVALENCE OF CONTRACEPTIVE USE (PERCENTAGE OF AT RISK WOMEN WHO ARE USING A METHOD OF CONTRACEPTION)

SC: SOCIAL AND ECONOMIC DEVELOPMENT

- X3: HUMAN DEVELOPMENT INDEX
- X4: AGRICULTURE AS A % OF GDP

SE: SECULARIZATION OF SOCIETY

- X5: URBAN POPULATION AS A PERCENTAGE OF TOTAL POPULATION
- X6: PERCENTAGE OF TOTAL POPULATION IN CITIES WITH AT LEAST ONE MILLION INHABITANTS
- X7: PERCENTAGE OF LABOR FORCE IN AGRICULTURE
- X8: PERCENTAGE OF ADULT LITERACY
- X9: TOTAL TERTIARY ENROLLMENT RATIO
- X10: TECHNOLOGICAL EFFICIENCY

WE: WOMEN'S EDUCATION ATTAINMENT

- Y1: PERCENTAGE OF ADULT FEMALE LITERACY
- Y2: PERCENTAGE OF FEMALES OF RELEVANT AGE ENROLLED IN SECONDARY SCHOOLS

GE: GENDER EQUALITY

- Y3: FEMALE MALE RATIO OF MEAN YEARS OF SCHOOLING
- Y4: FEMALE MALE GAP IN LABOR FORCE
- Y5: POLITICAL LEGAL EQUALITY FOR WOMEN
- Y6: SOCIAL AND ECONOMIC EQUALITY FOR WOMEN

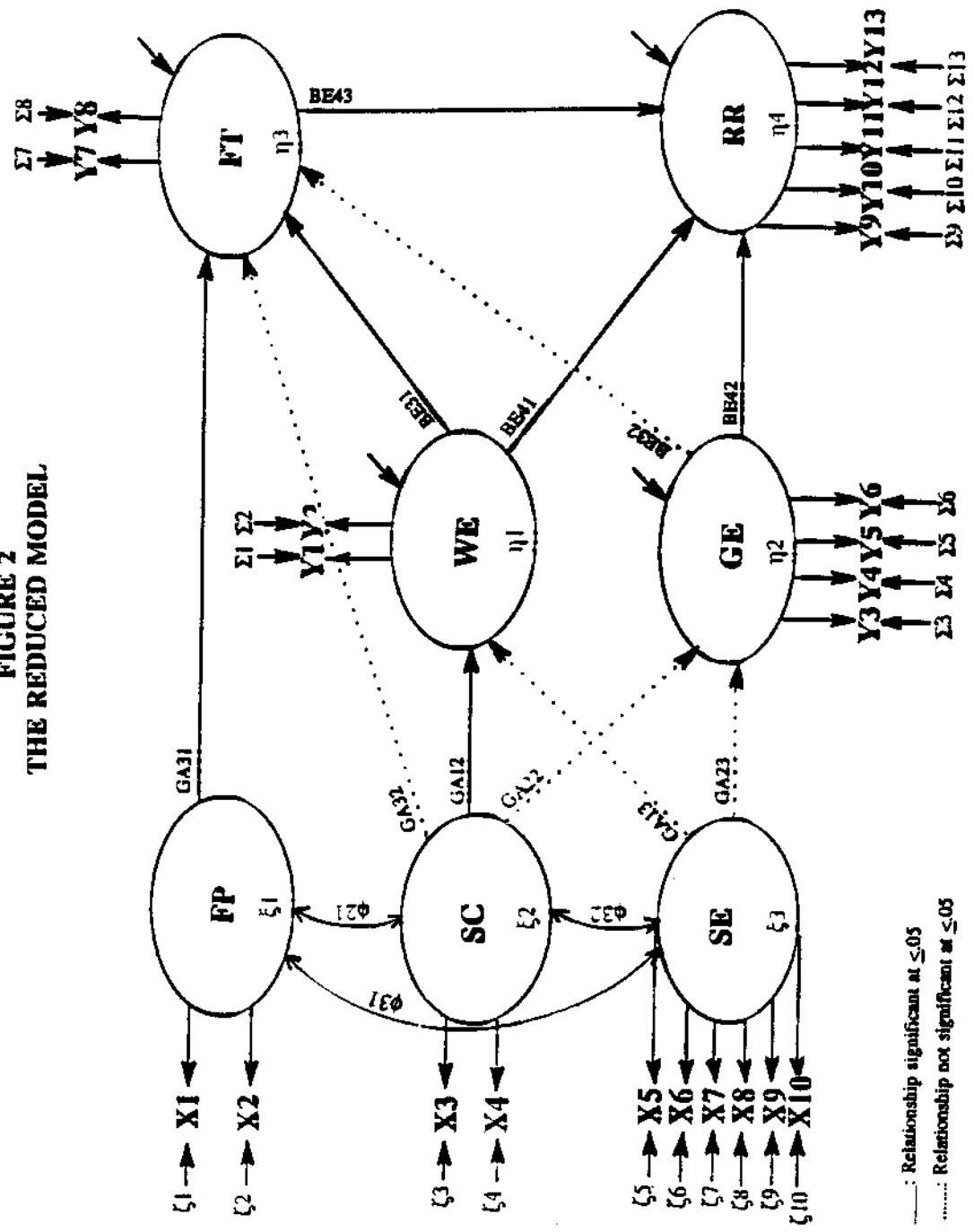
FT: FERTILITY

- Y7: FERTILITY RATE
- Y8: ANNUAL GROWTH RATE

RR: WOMEN'S REPRODUCTIVE RIGHTS

- Y9: LEGAL ABORTION RIGHTS (A SCALE OF 0 TO 6)
- Y10: PERSONAL RIGHTS TO INTERRACIAL, INTERRELIGIOUS, OR CIVIL MARRIAGE (A SCALE OF 0 TO 3)
- Y11: PERSONAL RIGHTS TO EQUALITY OF SEXES DURING MARRIAGE AND FOR DIVORCE PROCEEDINGS (A SCALE OF 0 TO 3)
- Y12: PERSONAL RIGHTS TO USE CONTRACEPTIVE PILLS AND DEVICES (A SCALE OF 0 TO 3)
- Y13: SUPPORT FOR DISTRIBUTION OF CONTRACEPTIVES (1-4)

FIGURE 2
THE REDUCED MODEL



—: Relationship significant at $\leq .05$
: Relationship not significant at $\leq .05$

Table 1
The Variables in the Theoretical Model, Descriptive Statistics
(countries N=101)

Variables	Frequencies	Mean	Median	Mode	Std dev	Kurtosis	Skewness	Min.	Max.
X1.Program scores	96	50.695	51.935	.000	25.943	-.633	-.268	.000	100.85
X2.Contraceptive prevalence	95	30.789	28.000	.000	25.245	-1.353	.321	.000	80.00
X3.Human development index	100	.448	.446	.088	.255	-1.273	.122	.052	.927
X4.Agriculture as a % of GDP	92	25.947	24.750	1.000	16.976	-.115	.599	.300	72.50
X5.Urban pop. as a % of total	100	42.606	40.400	28.30	23.936	-.620	.465	4.200	100.0
X6.% of total pop. in cities w/at least 1 million inhabitants	98	11.752	6.900	.000	16.093	8.489	2.303	.000	100.0
X7.Percentage of labor force (15-64) in agriculture	98	54.755	57.500	70.00	24.930	-.909	-.391	2.000	93.000
X8.% of adult literacy	88	64.841	66.000	99.00	23.938	-1.193	-.210	18.00	99.000
X9.Proportion of total tertiary enrollment	88	9.239	5.000	1.000	10.154	3.211	1.766	.000	50.000
X10.Technological efficiency	91	.020	.012	.010	.054	82.543	8.895	.002	.522
Y1.% of adult female literacy	83	53.741	51.000	40.00	27.195	-1.318	.016	9.000	99.000
Y2.% of females of relative age enrolled in secondary schools	96	34.635	31.000	4.000	25.755	-.875	.509	2.000	96.000
Y3.Female male ratio of mean years of schooling	99	0.596	0.580	0.330	0.301	-.791	.371	.100	1.480
Y4.Female male gap in labor force	99	48.222	49.000	64.00	24.446	-.879	-.015	5.000	96.000
Y5.Political & legal equality									

for women	74	1.486	2.000	2.000	.602	-.417	-.720	.000	2.000
Y6.Social & economic equality for women	74	1.216	1.000	1.000	.476	.142	.590	.000	2.000
Y7.Fertility rate	99	5.112	5.500	7.100	.725	-1.167	-.293	1.700	8.100
Y8.Annual growth rate	98	2.597	2.700	2.070	.816	.472	-.787	.150	3.960
Y9.Legal abortion rights	96	2.053	1.000	1.000	1.759	-0.068	.889	.000	6.000
Y10.Personal rights to inter- racial, interreligious, or civil marriages	74	2.378	3.000	3.000	1.003	0.340	-1.331	.000	3.000
Y11.Personal rights for equality of sexes during marriage & for divorce proceedings	74	1.527	2.000	2.000	.815	-.422	-0.167	.000	3.000
Y12.Personal rights to use contraceptive pills and devices	74	2.878	3.000	3.000	.368	10.306	-3.170	1.000	3.000
Y13.Support for distribution of contraceptives & limits to accessibility of contraceptives	99	3.758	4.000	4.000	.624	5.998	-2.605	1.000	4.000

Table 2
Correlations among the Variables in the Equation

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	
X1	1.000																			
X2	0.656**	1.000																		
X3	0.341**	0.801**	1.000																	
X4	-.172	-.564**	-.745**	1.000																
X5	0.073	0.543**	0.765**	-.654**	1.000															
X6	0.125	0.424**	0.556**	-.430**	0.666**	1.000														
X7	-.116	-.584**	-.805**	0.704**	-.804**	-.563**	1.000													
X8	0.310**	0.649**	0.736**	-.479**	0.488**	0.359**	-.547**	1.000												
X9	0.137	0.551**	0.650**	-.467**	0.672**	0.493**	-.624**	0.502**	1.000											
X10	0.156	0.173	0.250	-.217	0.200	-.039	-.260	0.219**	0.011	1.000										
Y1	0.447**	0.804**	0.856**	-.583**	0.566**	0.424**	-.664**	0.935**	0.613**	0.270**	1.000									
Y2	0.375**	0.731**	0.836**	-.675**	0.693**	0.467**	-.771**	0.640**	0.650**	0.279**	0.762**	1.000								
Y3	0.310**	0.655**	0.690**	-.455**	0.497**	0.271**	-.542**	0.749**	0.561**	0.194	0.828**	0.617**	1.000							
Y4	0.179	0.037	-.188	0.370**	-.299**	-.218**	0.414**	0.103	-.226**	-.084	0.024	-.243**	0.085	1.000						
Y5	0.231	0.341**	0.302**	-.041	0.187	0.098	-.152	0.440**	0.240	0.094	0.448**	0.294*	0.463**	0.135	1.000					

Y6	0.159	0.435**	0.436**	-.226	0.371**	0.255*	-.387**	0.413**	0.395**	0.237	0.504**	0.399**	0.491**	0.129	0.488**	1.000			
Y7	-.509**	-.876**	-.712**	0.449**	-.465**	-.246*	0.570**	-.574**	-.548**	-.226*	-.741**	-.683**	-.649**	0.013	-.263**	-.389**	1.000		
Y8	-.497**	-.704**	-.413**	0.223*	-.316**	-.232*	0.403**	-.359**	-.442**	-.176	-.495**	-.474**	-.461**	-.125	-.304**	0.468**	0.776**	1.000	
Y9	0.344**	0.248*	0.036	0.135	-.005	0.077	0.100	0.073	-.058	-.068	0.066	0.001	0.045	0.349**	0.148	0.118	-.101	-.225*	1.000
Y10	0.322**	0.344**	0.097	0.166	0.025	-.129	0.119	0.409**	0.079	0.040	0.405**	0.004	0.473**	0.613**	0.553**	0.372**	-.206	-.342**	0.304
Y11	0.283*	0.492**	0.354**	-.120	0.241	0.060	-.195	0.446**	0.337**	0.093	0.512**	0.341	0.577**	0.273*	0.559**	0.515**	0.435**	-.538**	0.268*
Y12	0.407**	0.264*	-.015	0.017	-.121	-.052	0.059	0.146	-.027	0.035	0.138	0.038	0.136	0.275*	0.147	0.152	-.217	-.274*	0.153
Y13	0.589**	0.267**	-.115	0.189	-.173	-.080	0.137	0.098	0.042	0.025	0.098	-.027	0.137	0.264**	0.276*	-.111	-.165	-.335**	0.276**

	Y10	Y11	Y12	Y13
Y10	1.000			
Y11	0.641**	1.000		
Y12	0.349**	0.262*	1.000	
Y13	0.449**	0.164	0.509**	1.000

*: $p \leq .05$ (two-tailed)
 **: $p \leq .01$ (two-tailed)

- X1: Family planning program effort scores
- X2: Prevalence of contraceptive use
- X3: Human development index
- X4: Agriculture as a % of GDP

- X5: Urban population as a % of total
- X6: Percentage of total population in cities with at least one million inhabitants
- X7: Percentage of labor force (15-64) in agriculture
- X8: Percentage of adult literacy
- X9: Proportion of total tertiary enrollment
- X10: Technological efficiency

- Y1: Percentage of adult female literacy
- Y2: Percentage of females of relative age enrolled in secondary schools
- Y3: Female male ratio of mean years of schooling
- Y4: Female male gap in labor force
- Y5: Political and legal equality for women
- Y6: Social and economic equality for women
- Y7: Fertility rate
- Y8: Annual growth rate
- Y9: Legal abortion rights
- Y10: Personal rights to interracial, interreligious, or civil marriages
- Y11: Personal rights for equality of sexes during marriage and for divorce proceedings
- Y12: Personal rights to use contraceptive pills and devices
- Y13: Support for distribution of contraceptives and limits to accessibility of contraceptives

Table 3
Measurement Model Parameter Estimates: Slope, Error Variance, and Squared Multiple Correlations (SMC)

<u>Variables</u> <u>Latent</u>	<u>Observed</u>	<u>Slope</u>	<u>Error</u> <u>Variance</u>	<u>SMC</u>
Family Planning Program Effort	X1: family planning program effort scores	.913*	.200	.807
	X2: prevalence of contraceptive use	.802*	.450*	.588
Socioeconomic Development	X3: human development index	.983*	.200	.829
	X4: agriculture as a % of GDP	-.774*	.529*	.531
Secularization of Society	X5: urban population as a % of the total	.946*	.200	.817
	X6: percentage of total population in cities with at least one million inhabitants.	.662*	.685*	.390
	X7: % of labor force (15-64) in agriculture	-.928	.285*	.751
	X8: percentage of adult literacy	.676*	.667*	.406
	X9: proportion of total tertiary enrollment	.747*	.572*	.494
	X10: technological efficiency	.243*	1.044*	.054
Total coefficient of determination for X-variables=.992				
Women's Education	Y1: percentage of adult literacy	1.000	.500	.686
	Y2: percentage of females of relative age enrolled in secondary schools	.922*	.255*	.785
Gender equality in Society	Y3: female male ratio of mean years of education	1.000	.500	.526
	Y4: female male gap in labor force	.112	1.093*	.006
	Y5: political and legal equality for women	.768*	.768*	.299
	Y6: social and economic equality for women	.874*	.670*	.388
Fertility	Y7: fertility rate	1.000	.500	.640
	Y8: annual growth rate	.907	.410*	.641
Women's Reproductive Rights	Y9: legal abortion rights	1.000	.500	.524
	Y10: personal rights to interracial, interreligious, or civil marriages	1.084*	.523*	.553
	Y11: personal rights for equality of sexes during marriage and for divorce	.925*	.680*	.409
	Y12: personal rights to use contraceptive pills and devices	.675*	.876*	.223

Y13: support for distribution of contraceptives and limits to accessibility of contraceptives	.808*	.779*	.316
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Total coefficient of determination for Y-variables=.993

Total coefficient of determination for structural equation=.933

*: $p \leq 0.05$ (two-tailed)

Table 4
Structural Model, LISREL Estimates (Maximum Likelihood), Unstandardized and Standardized
Parameter Estimates, and Standard Error

Exogenous Factors	Endogenous Factors			
	WE	GE	FT	RR
FP	---	---	-.317* -.336 (.114)	---
SC	.505* .483 (.248)	.340 .456 (.266)	.338 .358 (.258)	---
SE	.349 .333 (.236)	.143 .191 (.256)	---	---
WE	---	---	-.782* -.868 (.224)	-.997* -1.406 (.177)
GE	---	---	-.367 -.290 (.242)	.506* .509 (.218)
FT	---	---	---	-.512* -.651 (.174)

*: $p \leq .05$ (two-tailed)

FP: family planning program effort

SC: socioeconomic development

SE: secularization of society

WE: women's education

GE: gender equality in society

FT: fertility rate

RR: women's reproductive rights

Table 5
The Structural Model, Research Hypotheses, and Empirical Findings

Hypotheses	T-value (Sig.*)
Hi1: Fertility is negatively related to women's reproductive rights.	-2.937*
Hi2: Family planning program effort is negatively related to fertility.	-2.768*
Hi3: Socioeconomic development is negatively related to fertility.	1.312
Hi4: Women's education is negatively related to fertility.	-3.499*
Hi5: Gender equality in society is negatively related to fertility.	-1.518
Hi6: Women's education is positively related to women's reproductive rights.	-5.644*
Hi7: Socioeconomic development is positively related to women's education.	2.038*
Hi8: Secularization of society is positively related to women's education.	1.476
Hi9: Gender equality in society is positively related to women's reproductive rights.	2.324*
Hi10: Socioeconomic development is positively related to gender equality.	1.275
Hi11: Secularization of society is positively related to gender equality.	1.467

Table 6
Overall Fit of the Model,
Chi Square, Degree of Freedom (df),
Goodness of Fit Index (GFI),
Adjusted Goodness of Fit Index (AGFI),
and Root Mean Square Residual (RMSR)

Chi Square	674.23
df:	227
GFI	.632
AGFI	.552
RMSR	.168

APPENDIX A

CHRONOLOGY OF INTERNATIONAL LEGISLATION ON
HUMAN RIGHTS, WOMEN'S RIGHTS, AND REPRODUCTIVE RIGHTS

Chronology of International Legislation on
Human Rights, Women's Rights, and Reproductive Rights

1789. The French Revolution produced The Declaration of the Rights of Man and Citizen.

1869. Geneva International Conference
Founded the International Committee of the Red Cross (ICRC) for the purpose of reducing the horror of war.

1926. League of Nations Convention
To suppress the slave trade and slavery.

1945. The United Nations
With the horrors of Nazi Germany fresh in their minds, the victorious allies came together to create the United Nations, and they were determined to construct a new world order after the massive devastation in Europe and Asia.

Among the specific purposes of the UN outlined in its Charters is "to promote ... universal respect for, and observation of, human rights and fundamental freedoms for all without distinction as to race, sex, or religion" (United Nations, 1945).

1948. The Universal Declaration of Human Rights
(International Bill of Human Rights)

It is the first international document on human rights. Adopted and proclaimed by General Assembly

resolution on December 10, 1948 with no dissenting votes, it is recognized as providing the most authoritative definition of human rights obligations.

The international Bill of Human rights was declared at a time when international community was eager to construct a new world order after the massive devastation in Europe and Asia and the horrors of Nazi Germany came to an end. It "reaffirmed the faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women" (United Nations, 1949).

Article One maintains that "All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act toward one another in a spirit of brotherhood."

Article Three proclaims that "Everyone has the right to life, liberty and security of person."

The Preamble reaffirmed "the equal rights of men and women" (p. xvii).

Following the adoption of the Universal Declaration, the UN Commission on Human Rights drafted the remainder of the International Bill of Rights: International Covenant on Economic, Social, and Cultural Rights, and The Optional Protocol to the Civil and Political Covenant. These two covenants make the provisions of Universal Declaration into legal binding

treaties.

1949. Geneva Conventions

The first three conventions provided for the treatment of sick and wounded members of the armed forces in the field and at sea, and the treatment of prisoners of war.

The fourth Geneva Convention extends protection to civilians in time of war.

1952. The Convention on Political Rights of Women

1957. The Convention on Nationality of Married Women

1962. The Convention on the Consent to Marriage, Minimum Age for Marriage and Registration of Marriage

These three conventions (1952, 1957, and 1962) directly addressed issues related to women.

1968. International Conference on Human Rights (held in Teheran)

The first formal declaration of reproductive rights appeared in the Conference. "All parents can decide freely and responsibly on the number and spacing of their children." Reproductive rights are also defined as the rights to "adequate education and information in this respect."

1974. World Population Conference (held in Bucharest)

The World Population Plan of Action adopted in Bucharest also included language reaffirming the right to reproductive decision-making: "All couples and

individuals have the basic human right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so; the responsibility of couples and individuals in the exercise of this right takes into account the needs of their living and future children, and their responsibilities towards the community" (United Nations, 1974 at 14f).

1975. International Women's Year Conference (held in Mexico)

A world plan of action on the equality of women and their contribution to development and peace was adopted. The 1,000-plus delegates at the Conference (more than 70 percent of them were women) included the right to reproductive autonomy in their Declaration. In contrast to Teheran and Bucharest, the Conference grounded its assertion of the right to reproductive choice on a notion of bodily integrity and control:

Article 11: It should be one of the principal aims of social education to teach respect for physical integrity and its rightful place in human life. The human body, whether that of woman or man, is inviolable and respect for it is a fundamental element of human dignity and freedom.

1979. Convention on the Elimination of All Forms of Discrimination against Women

The stated aim of this convention was to achieve equality between men and women in their right and ability to control reproduction, which created a legal basis to address issues related to women's health

1980. World Conference of the United Nations Decade for Women (held in Copenhagen)

Focused not only on the themes of the decade but also three subthemes: employment, health, and education.

1981. Convention on the Elimination of Discrimination against Women

It is the most comprehensive international legal instrument to date covering the rights of women.

It is the first international treaty attempted specially to address the concerns and rights of women with the United Nations General Assembly's adoption of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW).

1984. World Population Conference (held at Mexico City)

The Reagan government did a 180* turn on the population development issues. Rather than urging developing countries to take measures to curb population growth, the representatives of the Reagan administration declared that "population growth is of itself a neutral phenomenon" (United Nations, 1984), that is, the means through which to quality life was

not population control but instead development, and the route to development was economic growth fueled by free markets and privatization.

1985. The Third World Conference on Women (held in Nairobi)

To review and appraise the achievements of the decade for women, and to develop strategies for overcoming obstacles still remaining.

1993. World Conference on Human Rights in Vienna

Strengthened international commitment to the fundamental principle that women's rights are human rights (Pine, 1994, P. 26).

1994. International Conference on Population and Development

Included women's reproductive rights as the empowerment of women in reproductive decision-making over their own bodies.

Beginning around 1985, Deborah Maine together with Allan Rosenfield looked at what is called the maternal child field (MCK Field), and asked in an article they wrote in the "The Lancet," the question; "Where is the 'M' in 'MCH'?"

With the growth of the reproductive health movement, two broad trends were reflected in the Cairo document. First, women's health is important in its own right, because women are not just mothers of

children, but they are important, valuable members of society in their own right. Second, women's health cannot be understood as biological processes, but we have to see biology as embedded in, and deeply influenced by, social, economic, and political conditions that affect everyone's everyday life in societies around the world and at all levels, family, community, and state.

1995. The Fourth World Conference on Women (held in Beijing, China)

Called for the removal of the restraints in women's lives and inequalities in women's participation in economy and policymaking.

Sources: Cooks, Rebecca J. 1995, 1993, and 1992

APPENDIX B

INTERNATIONAL ORGANIZATIONS ON HUMAN RIGHTS

International Organizations on Human Rights

* International Labor Organization (ILO)

It was founded in 1919. ILO instruments which are implemented by International Labor Office deal with the protection of industrial workers from exploitation and improvement of working conditions.

It also deals with fundamental rights and freedom, such as freedom of association, freedom from forced labor, and equality of opportunity and treatment in employment.

* The League of Nations

It created a mandate system to guarantee freedom of conscious and religion in the former colonial territories of Germany and Turkey.

* UN Commission on Human Rights

It is the most important body in the global human rights regime. It has served as the principal forum for negotiating international human rights norms (including the Universal Declaration and the Covenants).

* The Human Rights Committee

It is also a principal body of the global human rights regime. It consists of eighteen independent experts established to monitor compliance with the International

Covenant on Civil and Political Rights. The principal function of the committee is to review periodic reports, which must be submitted every two years.

APPENDIX C

HILARY CLINTON'S REMARK
FOR THE U.N. FOURTH WORLD CONFERENCE ON WOMEN
BEIJING, CHINA
September 1995

Hillary Clinton's Remark
for the U.N. Fourth World Conference on Women,
Beijing, China

Mrs. Mongella, distinguished delegates and guests: I would like to thank the secretary General of the United Nations for inviting me to be part of the United Nations Fourth conference on Women. This is truly a celebration - a celebration of the contributions women make in every aspect of life: in the home, on the job, in their communities, as mothers, wives, sisters, daughters, learners, workers, citizens and leaders. It is also a coming together, much the way women come together every day in every country. We come together in fields and in factories, in village markets and supermarkets, in living rooms and board rooms. Whether it is while playing with our children in the park, or washing clothes in a river, or taking a break at the office water cooler, we come together and talk about our aspirations and concerns. And time and again, our talk turns to our children and our families. However different we may be, there is far more that unites us than divides us. We share a common future. And we are here to find common grounds that we may help bring new dignity and respect to women and girls all over the world - and in so doing, bring new strength and stability to families as well.

By gathering in Beijing, we are focusing world

attention on issues that matter most in the lives of women and their families: access to education, health care, jobs, and credit, the chance to enjoy basic legal and human rights and participate fully in the political life of their countries. There are some who question the reason for this conference. Let them listen to the voices of women in their homes, neighborhoods, and workplaces. There are some who wonder whether the lives of women and girls matter to economic and political progress around the globe Let them look at the women gathered here and at Hairou ... the homemakers, nurses, teachers, lawyers, policymakers, and women who run their own businesses. It is conferences like this that compel governments and peoples everywhere to listen, look and face the world's most pressing problems. Wasn't it after the women's conference in Nairobi ten years ago that the world focused for the first time on the crisis of domestic violence? Earlier today, I participated in a World Health Organization forum, where government officials, NGOs, and individual citizens are working on ways to address the health problems of women and girls. Tomorrow, I will attend a gathering of the United Nations Development Fund for Women. There, the discussion will focus on local - and highly successful - programs that give hard-working women access to credit so they can improve their own lives and the lives of their families. What we are learning around the world is that, if women are healthy and educated, their

families will flourish. If women are free from violence, their families will flourish. If women have a chance to work and earn as full and equal partners in society, their families will flourish. And when families flourish, communities and nations will flourish. That is why every woman, every man, every child, every family, and every nation on our planet has a stake in the discussion that takes place here.

Over the past 25 years, I have worked persistently on issues relating to women, children and families. Over the past two-and-a-half years, I have had the opportunities to learn more about the challenges facing women in my own country and around the world. I have met mothers in Jojakarta, Indonesia, who come together regularly in their village to discuss nutrition, family planning, and baby care. I have met working parents in Denmark who talk about the comfort they feel in knowing that their children can be cared for in creative, safe, and nurturing after-school centers. I have met women in South Africa who helped lead the struggle to end apartheid and are now helping build a new democracy. I have met with the leading women of the Western Hemisphere who are working every day to promote literacy and better health care for the children of their countries. I have met women in India and Bangladesh who are taking out small loans to buy milk cows, rickshaws, thread and other materials to create livelihood for themselves and

their families. I have met doctors and nurses in Belarus and Ukraine who are trying to keep children alive in the aftermath of Chernobyl. The great challenge of this conference is to give voice to women everywhere whose experiences go unnoticed, whose words go unheard.

Women comprise more than half the world's population. Women are 70 percent of the world's poor, and two-thirds of those who are not taught to read and write. Women are the primary caretakers for most of the world's children and elderly. Yet much of the work we do is not valued - not by economists, not by historians, not by popular culture, not by government leaders. And this very moment, as we sit here, women around the world are given birth, raising children, cooking meals, washing clothes, cleaning houses, planting crops, working on assembly lines, running companies, and running countries. Women also are dying from diseases that should have been prevented or treated; they are watching their children succumb to malnutrition caused by poverty and economic deprivation; they are being denied the right to go to school by their own fathers and brothers; they are being forced into prostitution, and they are being barred from the ballot box and the bank lending office. Those of us who have the opportunity to be here have the responsibility to speak for those who could not. As an American, I want to speak up for women in my own country - women who are raising children on the minimum wage, women

who can't afford health care or child care, women whose lives are threatened by violence, including violence in their own homes. I want to speak up for mothers who are fighting for good schools, safe neighborhoods, clean air and clean airwaves ... for older women, some of them widows, who have raised their families and now find that their skills and life experiences are not valued in the workplace ... for women who are working all night as nurses, hotel clerks, and fast food chefs so that they can be at home during the day with their kids ... and for women everywhere who simply don't have time to do everything they are called upon to do each day. Speaking to you today, I speak for them, just as each of us speaks for women around the world who are denied the chance to go to school, or see a doctor, or own property, or have a say about the direction of their lives, simply because they are women. The truth is that most women around the world work both inside and outside the home, usually by necessity. We need to understand that there is no formula for how women should lead their lives. That is why we must respect the choices that each woman makes for herself and her family. Every woman deserves the chance to realize her God-given potential. We also must recognize that women will never full dignity until their human rights are respected and protected. Our goals for this conference, to strengthen families and societies by empowering women to take greater control over their own destinies, cannot be

fully achieved unless all governments - here and around the world - accept their responsibility to protect and promote internationally recognized human rights. The international community has long acknowledged - and recently affirmed at Vienna - that both women and men are entitled to a range of protections and personal freedoms, from the right of personal security to the right to determine freely the number and spacing of the children they bear. No one should be forced to remain silent for fear of religious or political persecution, arrest, abuse or torture.

Tragically, women are most often the ones whose human rights continues to be used as an instrument of armed conflict. Women and children make up a large majority of the world's refugees. And when women are excluded from the political process, they become even more vulnerable to abuse. I believe that, on the eve of a new millennium, it is time to break our silence. It is time for us to say here in Beijing, and the world to hear, that is no longer acceptable to discuss women's rights as separate from human rights. These abuses have continued because for too long, the history of women has been a history of silence. Even today, there are those who are trying to silence our words. The voices of this conference and of the women at Hairou must be heard loud and clear. It is a violation of human rights when babies are denied food, or drowned, or suffocated, or their spines broken, simply because they are born girls. It

is a violation of human rights when women and girls are sold into the silvery of prostitution. It is a violation of human rights when women are doused with gasoline, set on fire and burned to death because their marriage dowries are deemed too small. It is a violation of human rights when individual women are raped in their own communities and when thousands of women are subjected to rape as a tactic or prize of war. It is a violation of human rights when a leading cause of death world wide among women ages 14 to 44 is the violation they are subjected to in their own homes. It is a violation of human rights when young girls are brutalized by the painful and degrading practice of genital mutilation. It is a violation of human rights when women are denied the right to plan their own families, and that includes being forced to have to have abortions or being sterilized against their will. If there is one message that echoes forth from this conference, it is that human rights are women's rights And women's rights are human rights. Let us not forget that among those rights are the right to speak freely. And the right to be heard. Women must enjoy the right to participate fully in the social and political lives of their countries if we want freedom and democracy to thrive and endure. It is indefensible that many women in on-governmental organizations who wished to participate in this conference have not been able to attend - or have been prohibited from fully taking part.

Let me be clear. Freedom means that right of the people to assemble, organize, and debate openly. It means respecting the views of those who may disagree with the views of those who may disagree with the views of their governments. It means not taking citizens away from their loved ones and jailing them, mistreating them, or denying them their freedom or dignity because of the peaceful expression of their ideas and opinions.

In my country, we recently celebrated the ta anniversary of women's suffrage. It took 150 years after the signing of our Declaration of Independence for women to win the right to vote. It took 72 years of organized struggle on the part of many courageous women and men. It was one of America's most divisive philosophical wars. But it was a bloodless war. Suffrage was achieved without a shot fired. We have also been reminded in V-J Day observances last weekend, of the good that comes when men and women join together to combat the forces of tyranny and build a better world. But we have not solved older, deeply-rooted problems that continue to diminish the potential of half the world's population.

Now it is time to act on behalf of women everywhere. If we take bold steps to better the lives of children and families too. Families rely on mothers and wives for emotional support and care; families rely on women for labor in the home; and increasingly, families rely on women for

income needed to raise healthy children and care for other relatives. As long as discrimination and inequalities remain so commonplace around the world - as long as girls and women are valued less, fed less, fed last, overworked, underpaid, not schooled and subjected to violence in and out of their homes - the potential of the human family to create a peaceful, prosperous world will not be realized. Let this conference be our - and the world's - call to action. And let us heed the call so that we can create a world in which every woman is treated with respect and dignity, every boy and girl is loved and cared for equally, and every family has the hope of a strong and stable future.

Thank you very much. God's blessings on you, your work and all who will benefit from it.

Source: The White House, The First Lady's Press Office

APPENDIX D

LIST OF COUNTRIES UNDER STUDY

List of Countries under Study

Sub-Saharan Africa

001 Angola	002 Benin
003 Botswana	004 Burkina Faso
005 Brundi	006 Cameroon
007 Central African Republic	008 Chad
009 Congo	010 Cote d' Ivoire
011 Ethiopia	012 Gabon
013 Ghana	014 Guinea
015 Guinea Bissau	016 Kenya
017 Lesotho	018 Liberia
019 Madagascar	020 Malawi
021 Mali	022 Mauritonia
023 Mauritius	024 Mozambique
025 Nambia	026 Niger
027 Nigeria	028 Rwanda
029 senegal	030 Sierra Leone
031 Somalia	032 South Africa
033 Sudan	034 Tanzania
035 Togo	036 Uganda
037 Zaire	038 Zambia
039 Zimbabwe	

Latin America/Caribbean

040 Argentina	041 Bolivia
042 Brazil	043 Chile
044 Columbia	045 Costa Rica
046 Cuba	047 Dominican Republic
048 Ecuador	049 El Salvador
050 Guatemala	051 Guyana
052 Haiti	053 Honduras
054 Jamaika	055 Mexico
056 Nicaragua	057 Panama
058 Paraguay	059 Peru
060 Puerto Rico	061 Trinidad and Tobago
062 Uruguay	063 Venezuela

Middle East/North Africa

064 Algeria	065 Egypt
066 Iran	067 Iraq
068 Jordan	069 Kuwait
070 Lebanon	071 Libya
072 Morocco	073 Oman
074 Saudi Arabia	075 Syria
076 Tunisia	077 Turkey
078 United Arab Empirates	079 Yemen

Asia

080 Afghanistan	081 Bangladesh
082 Bhutan	083 Cambodia
084 China	085 Hongkong
086 India	087 Indonesia
088 Korea (Democratic)	089 Korea (Republic)
090 Laos	091 Malaysia
092 Mongolia	093 Myanmar (Burma)
094 Nepal	095 Pakistan
096 Papua New Guinea	097 Philippines
098 Singapore	099 Sri Lanka
100 Thailand	101 Viet Nam

Source: World Bank 1994

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