

THE EFFECTS OF SOCIAL ROLE ATTITUDES ON
THE PLANNING BEHAVIOR OF FIRST NATIONS MOTHERS

by

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Abstract

A common perception by non-natives is that First Nations people do not plan. Conversely, this study takes the position that planning is a universal human ability embedded in social relations and investigates how First Nations families plan. The pattern of planning and social role expectations of the First Nations mother were investigated in the Family Resource Management Framework (Deacon & Firebaugh, 1989) for which the authors claim cross cultural utility. Using the framework, the "Maternal Social Role Attitude and Planning Model", was developed to guide the study in a bicultural context. Guided by this model, the relationships between the personal value of and commitment to (salience) social expectations of First Nations mothers in four life roles, the sociodemographic attributes of mothers and families, and their planning behaviors were explored. Forty First Nations mothers with school aged children responded to the survey through First Nations organizations and affiliations. The three-part questionnaire included demographic measures, the Planning Behavior Scale and the Life Role Salience Scale. Scale management, validation, and performance with this population were discussed. Three dimensions of planning were identified (morphostatic planning, morphogenic planning, and adherence to rules). Social role attitudes in order of salience were: parental role, home care role, occupational role, and marital role. Salience of occupational role attitudes and income were the most important predictors of planning generally. Lower levels of educational status specifically predicted planning by adherence to rules. A multiple regression test of the model revealed characteristics of the family and maternal systems and maternal social role attitudes that contributed significantly to explaining three dimensions of planning behavior in First Nations families. Adherence to rules and morphostatic planning were explained by the maternal social attitude, occupational role salience, and income. Morphogenic planning was explained by, income, living in a smaller community, and the maternal social attitude, occupational role salience. The maternal social role attitude, occupational role salience, was shown to make an important positive contribution to the planning of First Nations mothers. The performance of the model as an analytical tool has provided some knowledge about the planning behavior of First Nations mothers.

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Chapter I

Introduction

First Nations people have been characterized as non-planners by individuals outside their cultural milieu (Goldthrope, 1975; Stepien, 1978; Smith, 1975; Ridington, 1990). Ridington (1990) cites Mr. Justice Addy's decision on November 4, 1987 which found against the Dunne-za/Cree that these people "also lacked to a great extent the ability to plan or manage, with any degree of success, activities or undertakings other than fishing, hunting, and trapping. It seems that many of their decisions could better be described as spontaneous or instinctive rather than deliberately planned" (p. 188). Goldthrope (1975) suggests that First Nations culture does not include planning or saving. He reasons that native culture consists of sharing and living for today.

Historically, foresight into the unfolding of future events was highly valued by First Nations people and particularly developed by some (Brody, 1981; Ridington, 1988). Of particular value was the contribution of insight about the relationships between everyday personal choices and behaviors and future large scale events and activities (e.g., mythical, environmental, social, personal, etc.). Understanding such relationships was known to be useful to envision future goals from which to develop expectations and action plans for their accomplishment (Ridington, 1988). Historically, special effort was made to investigate and to manage such relationships.

Smith (1975) maintains that First Nations people do not manage their finances or purchase decisions. Stepien (1978) concluded that daily shopping by First Nations mothers (including Dunne-za) was a social activity rather than a planned, purposive purchasing strategy. These low income mothers lived in remote areas where food costs were 32% to 82% higher than in urban areas. Her conclusions were based on the common logic of authorities (Goldthrope, 1975; Smith, 1975) and the lack of evidence of budgeting and meal planning as defined in her study. These conjectures are however suspect considering empirical findings by Hawthorn, Belshaw, and Jamieson (1958) who concluded that due to legal, social, and geographic isolation from mainstream society, First Nations people lacked access to

historically valued resources as well as modern resources. They considered that it was this lack of access to resources and opportunities which reduced the planning horizon of First Nations people to daily choices. Thus the planning horizon of First Nations people may have become a victim of poverty originating in the socioeconomic change of colonization rather than a culture of poverty inherent in traditional First Nations people.

A controversy exists. First, there is a claim based on expert opinion and the ensuing interpretation of data, that First Nations people not only do not plan but that they do not have the inherent human and cultural ability to plan. Second, there is a claim that a scarcity of resources and an abundance of acculturative demands have reduced the material and social ability of First Nations people to plan except at a daily level. If First Nations people are perceived to lack the ability to plan as a part of their inherent humanity and culture, alternative explanations for their behavior will be formulated by authorities from outside their culture. If First Nations people have the ability to plan as part of their humanity and culture but do not appear to plan as non-natives would expect, there may be another explanation for their behavior.

The characterization of First Nations peoples as non-planners may be an example of a cultural judgment reflecting ethnocentric criteria. Such judgments, which focus exclusively on inter-cultural differences and use one's own culture as the norm, may have problems with validity similar to those found in psychometric testing in cross-cultural studies (Das & Khurana, 1988; Irvine & Berry, 1989; Klich, 1988; Kline, 1988; McShane & Berry, 1988; Pooringa & van der Flier, 1988; Vernon, Jackson, & Messick, 1988). These generalizations or stereotypes about an individual or group may represent the relatively unchanging nature of cultural information processing and cue utilization which contribute to differences in attitudes across cultures (Segall, 1986). When culturally specific processes dominate perception rather than those necessary to represent abilities, anticipate outcomes, reconstruct events, and interpret context specific changes in objects (McGillicuddy-De Lisi, De Lisi, Flaugh, & Sigel, 1987), misperceptions may abound. Misperceptions about First Nations people generally may obscure evidence of their planning process, outcomes, abilities, and values.

Historical evidence of planning provided by Cole and Chaikin's (1990) accounts of the potlatch issue, Boelcher's (1988) in-depth documentation of lineage resource management, Jarvenpa and Brumbach's (1988) analysis of human and material resource management by social group reorganization, and Brody's (1981) account of individual and group interaction concerning resource management, suggests that a great deal of deliberate consensual planning was done in First Nations social systems. In fact, "quelas", a Salishan word for potlatch is translated "something which has been planned for a long time" ("Wiseest of Indians," 1961) which suggests the deliberate and future orientation of First Nations planning. These accounts go against Justice Addy's conclusions. That the planning was invisible and its outcomes not valued by non-natives, while natives claimed that it was their whole existence (Cole & Chaikin, 1990), suggests that there were indeed misperceptions in the interaction between First Nations peoples and officers of Canadian social institutions (Barman, 1991).

First Nations families have been persistent in the maintenance of value principles in the face of increasing change, poverty, and expectations that they as a people will vanish (Castile, 1978). Baker (1979) suggests that family system persistence is associated with values maintained as principles and managed by a process that envisions family values as goal and resource expressions in new situations. Identifying expressions of private and group values that have relevance to real-world environments under unfamiliar or changing environmental conditions is a challenge (Sternberg & Wagner, 1989) for individuals and families. Judging by the persistence of First Nations families the challenge is apparently being met (Carson, Dail, Greeley, & Kenote, 1990).

Relationships between everyday choices and activities and large scale patterning of events (e.g., mythical, environmental, social, personal, etc.) have been of particular interest to First Nations people for envisioning the future (Ridington, 1988). Planning has been identified as the process of envisioning future goals, events, and activities (Deacon & Firebaugh, 1989). In this process the values of individuals and families are used to produce new goal orientations, achievements, development, and change (Das, 1988). The development of values takes place in such resources as family and personal capacities and qualities, income,

and net worth (Deacon & Firebaugh, 1989). If persistence in family systems is associated with both the process of planning and the expression of the value principles of the group, then an examination of planning decisions by First Nations may provide insight into their perceptions of relationships between everyday choices and large scale sociocultural patterns. Therefore it seems to be important to ask how First Nations families plan since they persist as family systems under changing sociocultural environmental conditions.

Purpose

The first purpose of this study was to discover the relationship between sociodemographic variables (maternal characteristics and characteristics of family systems) and the pattern of planning behaviors (producing morphostatic or morphogenic system functioning). The second purpose was to examine the relationship between social role attitudes (marital, parental, occupational, and home care) of First Nations mothers and their planning behaviors. The third purpose was to investigate the pattern of relationships between maternal and family characteristics, maternal social role attitudes, and planning behaviors of First Nations mothers. Planning was expected to be influenced by the bicultural adaptation or acculturation of these mothers, their social orientation to the norms of non-native social roles, and their socioeconomic status (maternal and family system characteristics).

Review of Related Literature

This section brings together the concepts of planning and social role expectations for First Nations mothers representing the sociocultural environment in which plans are embedded. First, the concept of planning is illustrated by historical examples of planning outputs of First Nations social systems. Second, sociohistorical influences unique to the development of contemporary sociocultural role expectations of First Nations women are explained. Third, evidence is presented of selective, domain specific socioeconomic role participation of contemporary women who belong to First Nations or ethnic sociocultural traditions. Finally, evidence is presented of planning behavior by contemporary women in the majority sociocultural tradition participating in occupational and family roles. This literature is presented to indicate the manner in which individual qualities affecting planning (i.e.,

demographic characteristics, time orientation, and perceptions of control) (Deacon & Firebaugh, 1989) pertain to First Nations women.

Planning in First Nations Social Systems

Examples of large scale planning outcomes in First Nations social systems serve to illustrate the variety of demands and resources used. These illustrations come from groups that vary by features of mobility (sedentary or nomadic), economic base (fishing, hunting, and agricultural), and social organization (matrilineal, patrilineal, and bi-lineal) to better demonstrate the traditional range of planning behaviors of First Nations people. These illustrations indicate outcomes of mainly within group planning except possibly the potlatch that requires cooperation between rival groups.

Strategic planning of major social and economic significance for First Nations communities was conducted with great enterprise by First Nations peoples of the potlatch. The potlatch is a highly complex institution characterized by "patshatl" or "giving" in which exchanges of material or intellectual goods promote the development of social status (Cole & Chaikin, 1990). This institution in part perpetuated formal complex reciprocal social and economic relationships among peoples within and between groups such as the Nuu-chah-nulth (a.k.a., Nootka), the Haida, the Tlingit, the Kwakiutl, the Salish, and the Carrier. The planning horizon for potlatches stretched far into the future, sometimes concerned with the fortunes of children yet unborn (Boelcher, 1988). Such planning would include a range of activities and often took many years to complete. Material goods to be given to witnesses to seal the contract of the occasion had to be produced. Art work to commemorate the occasion had to be commissioned in advance. Food stuffs to permit physical harmony and satiety at the feasts required gathering and preservation. Entertainers and ritualists practiced their crafts to demonstrate the wealth and greatness of their chiefs. Hospitality for guests would be organized (Boelcher, 1988; Cole & Chaikin, 1990). Detail would be given meticulous attention because the complex social structure had long since formalized many of these roles into heritable positions (Boelcher, 1988). These nations occupied main village sites, had a

relatively secure subsistence economy based on fishing and hunting and were socially highly differentiated.

In the 1800's, First Nations people brought this social organization to bear in vigorous participation in the newly established trade economy, bringing material wealth into their social system. As the trade economy gave way to the establishment of a colony with a growing social system the development of First Nations was sharply curtailed. By 1884, the Canadian government, under pressure by moralists, government agents, and social reformers, outlawed the custom in an attempt to bring European "order" into the lives of natives (Cole & Chaikin, 1990). Government thus effectively reduced the competitive edge of First Nations by eliminating the social expression of their intrinsic value of trade.

Boelcher (1988) documents the highly complex management of systems of planning among the Haida fishers, a matriarchal society based on a group of islands off the northwest coast of British Columbia. This management of real and symbolic worlds continues today perpetuating ancient systems of meaning among the Haida which organize the social and economic relationships of individuals, families, lineages and villages. The matriarchies of the Haida fishers continue to reconcile available resources with contemporary demands to meet strategic and domestic goals which are socially oriented to perpetuate historical identities within the cultural group and contemporary society.

Jarvenpa and Brumbach (1988) document the spacio-temporal quality of Chipewyan planning. Chipewyans were historically a bi-lineally ordered society with a matrilineal emphasis living in what is currently central Canada. Their lifestyle included seasonal rounds within a given territory and seasonal reorganization of the membership of the group. Chipewyan planning included conjugal pairs allying themselves with clusters of from 20 - 50 people during the winter months and dispersing during the summer months. Chipewyans formed large sedentary groups in times of scarcity and conservation of harvested resources and dispersed into small mobile groups in times of seasonal resource harvesting when subsistence was assured. Planning and decision making for this structural approach occurred in the household and group. This approach was predicated on organizational flexibility promoted

through bilateral lineage systems. Mobilization of human and material resources was critical for these First Nations people who relied on their ability to manage and harvest resources over a vast expanse of land.

Brody (1981) documents the planning process among the highly individualistic Dunne-za hunters. The Dunne-za planners used "dreams" to purposively access perceptions unavailable in waking states to envision game (goals), hunting conditions (activities) and events (gatherings of people). Hunting partners could "dream" the same dreams having access to the same perceptions, environmental cues, and expected outcomes. The type of planning described by Brody (1981) has evolved over thousands of years by a people who not only live in the territory but also consider themselves an organic part of the territory. This type of planning is predicated upon cultural knowledge and intimate contact with the environment and with each other. These First Nations people know that knowledge is power and that personal knowledge gained through a Dunne-za type of experience the most highly prized because it promotes foresight and predictability (Ridington, 1990) which translates into survival and psychological security.

These examples of planning in First Nations communities suggest that the technical aspects of planning activities may be embedded in the sociocultural ecology (Randall, 1987). That plans were invisible to non-natives should not be surprising since Friedman, Scholnick, and Cocking (1987) maintain that plans are "blueprints for thinking", in which models are developed which specify how to meet desired goals. Ogbu (1981) suggests that the ability to envision with what and how to meet desired goals requires an operational intelligence developed in the cultural ecology in which the activity occurs. Today, the cultural ecology of First Nations families has expanded from a local territory to including all of non-native society both at a local and a global level. Consequently, the ability of First Nations mothers to understand their whole cultural ecology which includes both a First Nations and a non-First Nations cultural perspective, becomes important. Understanding their social roles and those of their families would seem to be important for the advantageous functioning of First Nations

and other ethnic women, in the management of resources and demands in cross cultural settings.

Sociocultural Role Expectations for First Nations Women

The cultural ecology of First Nations people has changed in "continuous and patterned ways... especially relating to physical status,... physical containment and geographical limitation, alterations of sociopolitical structures..." (McShane, 1986, p. 80) in transactions with the majority culture. Individuals respond to such change with stable individual qualities attempting to "perpetuate and promote that society/culture's basic values and foundations" (McShane, 1986, p. 80). Such stable, culture perpetuating qualities result in a "lack of fit" for individuals caught in the gap between the directions and goals of two interacting cultures. Individual qualities which focus on the maintenance of First Nations culture were, until recently (McShane, 1986), maintained at the cost of social exclusion from the majority culture.

This tide of exclusivity seemed to peak by the late 1960's when colonization peaked internationally (Atleo, E. R., 1990). By 1970, the Canadian government had begun to promote bicultural policies. The government of Canada offered equality to First Nations people by another re-assignment of status (Government of Canada, 1969). First Nations people refused to comply and delineated the terms of the new relations to be based in mutual agreements and understanding developed in a negotiated consensus, a developmental solution, and a de-colonization process (Indian Chiefs of Alberta, 1970).

First Nations people perceived that cultural assumptions held by non-natives obscured claims and aspirations of First Nations (Indian Chiefs of Alberta, 1970). Since First Nations people maintain their cultural difference from the larger society it follows that they may not necessarily conform to behavioral norms or customs of the majority society. Their social motivations may thus be obscured to individuals of the larger society and this may have historically and recently permitted their characterization as "non-planners" (Goldthrope, 1975; Smith, 1975). Consequently, the sociocultural influences specific to social role expectations of First Nations people, especially women, become important factors in understanding the sociocultural context in which First Nations women and families plan today.

First Nations people seem to differ from the larger society particularly in those qualities (i.e., social status, time orientation, foresight, and perception of control) that Deacon and Firebaugh (1989) suggest affect planning outlook and skills. Berry (1990) maintains that the outlook of First Nations people as a group are organized by the legal definition of their involuntary minority status. He suggests that their legal status distinguishes them socially not only from the larger society but also from other minorities such as ethnic groups, immigrants, sojourners, and refugees. If their legal status differentiates them from other social groups, their development of those qualities which affect planning could also be expected to be different.

The specificity of acculturation of those qualities which affect planning would be based on pre-contact conditions, purpose of contact, length and permanence of contact, relative population size and cultural qualities (Berry, 1990). Individual qualities developed in response to the acculturative pressure of First Nations group experience could be expected to result in selective, possibly domain-specific adaptation. An awareness of the sociohistorical influences which shaped these qualities may be expected to contribute to the understanding of the perceptual organization of these individuals which developed in the interaction between First Nations people and the colony/nation of Canada.

Historical influences on social role expectations. The sociohistorical environment has provided harsh adaptive conditions for the physical and cultural survival of First Nations families (Carson et al., 1990) in a context of colonization which has been hostile (Chrisjohn, Towson, & Peters, 1988; Herring, 1992; McShane, 1986) and exclusive (Atleo, E. R., 1990). The hostility should not be surprising considering that among the objectives of colonization was displacement of these people from their traditional lands and resources for the benefit of immigrant settlers and European home markets. Colonizers expected to "civilize" First Nations people into behaviors based on European culture and, by legislating such behaviors, to eradicate native traditions and behaviors.

The Indian Act (Government of Canada, 1985) stands as a legal record of the objectives of the civilization process especially towards First Nations women (Joseph, 1990).

This parliamentary act re-defined diverse nations of people as one group, yet did not recognize their individual rights of citizenship through the franchise until 1960. The Act selectively intervened in sociocultural practices, disrupting patterns of rights and obligations in marriage, inheritance, leadership, and social membership of traditional culture (Knight, 1978). The Act intervened in the traditional social roles of First Nations people through legal prescriptions which constrained the development of modern social roles through acculturation.

Before 1930, mission societies in British Columbia encouraged two different social responses (Knight, 1978). Protestant missionaries encouraged First Nations to adapt to European social behaviors as a proof of their Christian conversion. Catholic missionaries under the Durieu system (a system of indirect rule) encouraged First Nations to assimilate Christian ideology into their social system. Both systems offered new ways to enhance status in First Nations society and especially in mission villages brought the opportunity for upward mobility in societies hitherto in social gridlock (Knight, 1978). Thus while there seemed to be some social leeway in the acculturation process, as society and industries became increasingly regulated, the social role ideology of the dominant culture through legislation and policy increasingly intruded into the most private aspects of the lives of First Nations women.

First Nations people were in the majority at the onset of Canadian colonization. First Nations populations dropped dramatically due to disease and resource limitations as the reserve system was instituted to make room for non-native colonists. First Nations survivors currently constitute approximately 4% of the Canadian population (Statistics Canada, 1990). They are currently one of the fastest growing populations in Canada. First Nations women bear almost twice as many children at every age as their non-native counterparts (Statistics Canada, 1984; 1990). The birth rate possibly reflects the value of children for First Nations communities who envision them as their future (White & Jacobs, 1992). While First Nations people see these children as their future, their role as parents in preparing the children has been undermined as children were removed from their communities by government authorities who had a different vision for these children (White & Jacobs, 1992).

The first of these interventions began in the late-1800's and lasted until the early 1970's. Children were removed from their homes and communities to boarding schools first by churches and then by the state. Officials reasoned that a more direct influence on the acculturation of these children in a controlled setting away from parents was desirable (White & Jacobs, 1992). School age children, away from their communities during three quarters of all of the annual social and economic cycle, were deprived of important cultural grounding during school years. Parents were deprived of interaction with their children.

The second intervention came with the prohibition of the potlatch. Potlatches provided a public forum for acknowledging the development of individuals with rites of passage. New names confirmed each new status and developmental transition. Potlatches provided the public forum in which children were provided a model of social expectations and normative developmental progressions were acknowledged. Families resorted to private and secret acknowledgments when the potlatch was unlawful. Thus public and formal models for normative behavior increasingly became private and secret (Cole & Chaikin, 1990).

The third intervention in the 1950's subjected families on reserves to provincial child welfare legislation where no federal legislation had previously existed (White & Jacobs, 1992). Suddenly, the standards of a modern post-war nation and a British tradition were imposed wholesale on First Nations people in their homes. These First Nations people had been stripped of resources and were particularly excluded from acculturation in the British tradition lest they gain advantage (Barman, 1986). Children and infants were removed from poverty stricken First Nations communities by child protection workers "in the best interests of the child" (White & Jacobs, 1992, p. 19).

The fourth and current intervention is the psycho-emotional treatment of the whole family in residential or community settings. First Nations families have been diagnosed as dysfunctional due to their history of colonial oppression. As a consequence families and individuals are currently participating in psycho-emotional and educational developmental (healing) activities in which parents are taught modern child rearing methods (White & Jacobs, 1992). The development of the parental role of modern First Nations women has been

influenced by legislative forces that have eroded the power, authority, and legitimacy of traditional culture and parental role, substituting a basis for modern parental role expectations which originate in the larger society.

First Nations women contribute to population growth but they lag behind other Canadian women in formal social and economic development (e.g., occupations, education, and income) (Statistics Canada, 1984; 1990). Prior to European contact, First Nations women participated in social and economic roles which varied with the structural complexity, type of descent, and level of community living. In British Columbia, First Nations women participated in the labor force beside their men even in such dangerous enterprises as sealing in the Bering Sea (Knight, 1978). Some women were commercial fishers and some worked in the canneries of the coast, making homes in the company housing in coastal fishing camps. Some First Nations women recruited labor from their own and nearby villages to work in the fruit and vegetable harvests both in the interior, Fraser Valley, and Washington state. First Nations women, men, and children would make a seasonal round of harvests between early summer and late fall before returning to home villages for the winter (Knight, 1978). First Nations women participated in wage labor, at times in organizational roles.

A boarding school education prepared First Nations women, as maids, housekeepers, cooks, laundresses, seamstresses, or practical nurses, for service in private or institutional setting in which they could earn wages (Barman, 1986). Such work kept First Nations women in a position of social and economic servitude. Students demonstrating academic ability were discouraged because it upset social relations in the school, drawing the protest of parents and threatening the financial solvency of the school (Barman, 1986). Real wages and economic contributions were to be made away from villages, but increasingly First Nations women were constrained to remain in the villages to accommodate the mandatory school attendance of children.

Before trade goods were available, First Nations women produced much of the material goods used in and about the home. Skillfulness in home production in subsistence economies was considered by some the major criteria for social adulthood for women (Guemple, 1986).

Traditionally dwellings were portable because households were seasonally dismantled and reassembled in other locations (Jarvenpa & Brumbach, 1988; Ridington, 1990). Consequently, the home care focus was on the homemaking skills and care for the family by the mother rather than on the dwelling. Later, forced immobility on reserves rendered relocation skills obsolete. First Nations girls were trained in housekeeping skills in a boarding school setting, with a curriculum designed to mimic the conditions of reserve life to which they were expected to return (Barman, 1986). However, the design, function, and composition of housing and life on reserves to which most returned, did not reflect the conditions for which housekeeping skills had been taught. Single family housing represented a standard that was generally unfamiliar to First Nations mothers and unsuitable to the needs of their households. While nuclear families lived in these houses, the housing was more usually legally owned by the band rather than individuals and hence not a personal asset that could be used for credit.

In the early 1950's, regulation of formal First Nations social institutions (potlatch laws) was repealed in keeping with the spirit of Canada's post-war participation in the United Nations Declaration of Human Rights (Joseph, 1990). Subsequent to this repeal provincial child welfare legislation was made applicable to families on reserves where no previous federal legislation had existed (White & Jacobs, 1992). There were some implications of this provincial legislation to the social production of native women. Since the late 1870's, First Nations women, together with their offspring from previous relationships, had lost their status as First Nations people if they married non-native men. While non-native society viewed such a change in legal status as social advancement for First Nations women, such changes brought profound social loss as these women were alienated from their relatives and their community of origin. Such changes resulted in restructured relationships with non-natives (Jeffries, 1990; Joseph, 1990). First Nations women who married out of the First Nations community had no legal claim to physical participation with their consanguineal relations. They could not even be buried with their ancestors in historical grave sites. Thus, from a Eurocentric perspective, First Nations women who could become socially transformed into non-natives through

legislation, could with the imposition of provincial welfare legislation forfeit their children to the state if they did not parent according to the social standards of the larger society (White & Jacobs, 1992).

Contemporary influences on sociocultural role expectations. Deacon and Firebaugh (1989) suggest that time orientations, "the dominant referenced points in life" (p. 82), are affected by the enculturation of social expectations and resources. For First Nations people the dominant reference point is European contact and with contact the onset of disrupted social expectations and alienation of familiar human, material, and territorial resources. Time orientation for First Nations people, as for other ethnic groups, may be marked either by the point of contact or with reference to the present as an outcome of contact. Thus, such people may live in a historical time and/or a sociological time and locate themselves in traditional and/or modern times (Clignet, 1990). Clignet (1990) suggests that inconsistencies between these time orientations present potential conflicts for individuals. Thus, if time orientation affects planning (Deacon & Firebaugh, 1989) and inconsistencies in time orientation exist between First Nations and the larger society, there may logically exist potential conflicts for planning behaviors of First Nations peoples.

These temporal inconsistencies seem to be similar to those which Berry (1990) identifies as existing between the individuals representing differences in acculturation at the group and individual level. Since contact, the historical change of First Nations people has been absorbed in sociological time (Clignet, 1990) by the individual and family through the process of acculturation and bicultural functioning. First Nations individuals seem to achieve this by locating themselves simultaneously or sequentially in First Nations culture (historical time) and in popular culture (sociological time). Thus the bicultural social role adaptation of First Nations women may best be understood as having a traditional social orientation as the basis of her cultural identity and a contemporary socioeconomic adaptation based on the second cultural tradition.

Jones (1976) and Cruikshank (1976) give some insight into the adaptation of First Nations mothers into implicit rules of non-native sociocultural environments in urban centers.

These two groups of mothers were similar in their cultural traditions and living conditions even though Jones' Alaskan women were not under the jurisdiction of the amended Indian Act (Government of Canada, 1985) that potentially disenfranchised Cruikshank's mothers.

Jones (1976) investigated the social and psychological functioning of native men and women in the Anchorage area by looking at their work adaptations. Her focus was specifically on early socialization and work adaptation as explained both by universal and unique features of culture. Her perspective was interactional and consisted of interviews with 54 men and 47 women contacted through employers in the Anchorage area.

Jones' (1976) findings indicated that while subsistence activities are still of importance in villages the socialization or production of attitudes for such activities through childrearing still prevailed though less rigorously. Males were socialized to value skill, achievement and self-reliance whereas females were taught obedience, responsibility, and nurturance. With the subsistence activities largely absent it was the attitudes rather than the experiences which were passed on to the next generation.

Jones (1976) concluded that the central issue for her participants was the opportunity to achieve ideals consistent with First Nations enculturated expectations. Such ideal achievement was curtailed for the native man because economic opportunities were lacking but marriage and parenthood provided stability and sustained them while they were in low status jobs. For the native women, ideal achievement was possible through social opportunities to nurture others in marital and parental roles. The native women, not socialized for wage labor, could be satisfied with low status jobs because her self definition and self worth were related to marital and parental roles. These First Nations women seemed to maintain their positive self-image by helping their partners maintain an acceptable and stable self image, if not an ideal self-image. This may be an important adaptation for mothers who are not socialized for wage labor but are socialized for nurturing tasks. By nurturing their husbands, these women maintain not only the family unit but also a microcosm of the ethnic group, providing a critical point of identification for the First Nations person.

Cruikshank (1976) investigated matrifocal families in the Canadian north as part of a Canadian commission. These families were characterized as going through rapid and deleterious cultural adaptation. Families were defined as "matrifocal" if males were "empirically" absent although it was acknowledged that males were present at various times over the family life cycle. The women in this study had more to gain and less to lose by adapting to modern ways. While the hunting skills of the men were territory and culture specific, the skills and human resources of the women were portable and translatable into a new culture. Those women who had some education had normative expectations about marriage although a significant number of men and women did not marry legally. Women could fulfill the important role of motherhood and maintain a measure of control over themselves and their children by remaining legally unattached. Cruikshank (1976) suggests that stable matrifocal families were recognized by government departments as preferable to unstable intact families. While men historically had provided protection, provisions, and paternity for their offspring in a traditional sociocultural complex, sociocultural changes intervened with their ability to continue. Consequently, First Nations women minimized risks by establishing provisional rather than legally binding relationships so that their options for themselves and their offspring remained open ended (Cruikshank, 1976).

These patterns of social role adjustment by First Nations women become important indications of bicultural functioning. These adjustments reflect the manner in which the social norms of the larger society (Dill, 1988; Imamura, 1990) influence private as well as public life for women, especially mothers. When mothers fail to meet public standards for private life they may have their children apprehended by welfare agencies (Cruikshank, 1976). Social role attitudes serve as an indicator of an orientation to social life which permits social predictability. In turn, social predictability would permit planning which would aid family behavioral consistency over time and changing conditions. Orientation to social life is ordinarily gained by experience in the consanguineal family which would permit the anticipation of culturally bound normative events and appropriate role behaviors for individuals with particular status.

Contemporary socioeconomic role expectations for other mothers. The orientations of ethnic, immigrant, refugee, sojourner, and indigenous mothers socialized in another context or tradition may in fact be inconsistent with the requirements of social life in the modern milieu of their children. The socialization the mother may have received in a different social, technological, economic, geographic, or linguistic environment may provide few useful cues for self orientation in a new environment. Ethnic mothers have a special burden in the socialization of their children in that there is little if any social reinforcement for the child of valued family behaviors in the school, media, or workplace (Dill, 1988). While First Nations peoples resemble "ethnic" minorities by their minority status, they are indigenous inhabitants who have become involuntary minorities (Berry, 1988). First Nations peoples are similar to other minorities in the lack of social reinforcement of specifically valued behavior in the larger social milieu (Ogbu, 1981). An integrated hierarchy of valued social behavior between the individual, family, and larger social level has been largely absent for minority families (Dill, 1988; Ogbu, 1981).

Consequently, the bicultural functioning of women could be expected to differ based on differences in valued social behavior. Differences in valued social behavior could be derived from differences in gender role development: rate, pace and social tasks; relative importance of ascribed and achieved status in social role participation; and level of personal conflict when social expectations contravene norms of earlier socialization (Imamura, 1990). Motherhood was more important than marriage for expatriate women in cross-cultural marriages. However, expatriate mothers found that the social role motherhood required extensive informal socialization in the culture milieu in which childrearing was taking place. These mothers were acutely aware of their lack of this informal socialization. This lack of cultural experience created interactional difficulties and social distance between themselves and the cultural milieu in which the child's socialization and education were taking place. Due to such discrepancies in social orientation, these mothers found themselves in almost continuous personal conflict in their mothering role (Imamura, 1990).

Imamura's (1990) findings point to an important issue in the development of social roles. Motherhood is a social as well as a biological status. The biological status may well exist in historical time but the social status is distinctly in sociological time. Social status is based on meeting socially prescribed standards learned in extensive informal socialization in a cultural milieu. The development of social status or roles from ascribed (in name only) or achieved (role functioning) statuses would then depend upon experience in the cultural milieu in which the social judgments are made and in which social distance is assessed.

Canadian multicultural ideology suggests that social functioning in Canadian society can be learned and that the process of education about Canadian social goals can reduce social distance. Dion's (1985) findings have shown that, in the opinion of Canadians, race, ethnicity and occupation are the major personal characteristics which organize social status. Canadians judge the social desirability of people based on their occupational status. Occupational role status is judged by Canadians to be the best proximal indicator of social compatibility between individuals. Occupational achievement reflects the individually oriented achieved values of Canadian society. Occupational achievement also reflects a socialization process into Canadian society which may better approximate a common experience than race or ethnicity in a country which is highly diverse (geographically, economically, culturally and socially).

The relationship between the individualistic value of achieved status and work roles would seem to be a barrier for First Nations mothers in finding opportunities in the formal economy. As peoples with group values, First Nations people would focus on ascribed status such as group affiliations. Kinship and personal relationships would form the basis from which social distance could be judged. While there is great diversity among First Nations peoples, the value of the collective is a principle rather than a rule. The fluid nature of group affiliations would permit the most advantageous alliances as the situation would dictate. The relative importance of these life roles have been suggested by Menaghan (1989) to be based on cultural values and as such valuing would possibly affect the manner in which family rules or policies are managed in planning.

There is ample evidence that mothers strive to balance their time and energy to meet the needs of the family (Bolger, De Longes, Kessler, & Wethington, 1989; Di Salvo, Lubbers, Rossi, & Lewis, 1988; Grant, Simpson, Rong, & Peters-Golden, 1990; Greenhouse, 1988; Marks, 1977; Nieva, 1985; Otto & Call, 1990; Rose & Larwood, 1988; Small & Riley, 1990; Tiedje, Wortman, Downey, Emmons, Biernat, & Lang, 1990). One way mothers accomplish this is by adjusting their role behaviors in relation to demands and resources (Yogev, 1982). Cruikshank's (1976) mothers became heads of matrifocal families, meeting their traditional reproductive demands with little social and economic input by the dispossessed First Nations man. This suggests that mothers expect to achieve both the ideals and pragmatics of their roles which entails hard choices. Stepien's (1978) First Nations mothers met the ideal by using the preferences of their children and husband as the foremost criteria for purchase decisions and incorporated the practical by also considering quality, nutrient value, availability, and cost. Social role combinations, type of occupation and occupation of husband were however found to be barriers to positively balancing role overloads (Haynes & Feinleib, 1980). Mothers in Jones' (1976) study struggled with helping their husbands maintain their motivation and dignity based on earlier socialization while living in the current reality of low socioeconomic opportunity. In fact Baber and Monaghan (1988) found that while young college women expected to have a career they also expected to be mothers, adopting a "do-both attitude" to these life roles. First Nations mothers have attempted to satisfy household and wage earning demands either simultaneously (Jones, 1976) or sequentially (Cruikshank, 1976).

Women have been maintaining their ascriptive imperative (motherhood, ethnic identity) while developing in achieved statuses (Baber & Monaghan, 1988). Contrary to Haynes and Feinleib's (1980) conceptualization of role overload, Marks (1977) advanced the idea that an expansion approach to the issue of multiple roles should be considered. This expansion approach focuses on resource expansion rather depletion and includes choices about which aspects of roles to enact. Native women are lagging behind other Canadian women in most demographic trends by bearing almost twice as many children at every age, having larger households with more non-family members to manage and participating in formal roles such as

work and marriage at much lower rates than all other Canadian women (Statistics Canada, 1984; 1990). First Nations women also seem to be attempting to maintain ascriptive status, their traditional and contemporary ideals as mothers and producers of goods and services. The investigation of their social production or social attitudes of women, which Marks (1977) intimates may come in the form of commitments, may provide insight as to how First Nations mothers evaluate bicultural role activity.

First Nations mothers, like other racial ethnic mothers, historically have had different life experiences than their mainstream counterparts. The socialization of families which are viable, persistent and contribute to another culture has been the lot of ethnic mothers. Dill (1988) documents the hardships racial ethnic mothers have had in their parenting process. Racial ethnic mothers have had access to few of the resources of the larger culture in terms of wage labor and social resources yet they have been expected to perform to social standards which are ideals for that culture. The discrepancy between the ideal and the real in which a racial ethnic mother functions in her parental role has been vast.

Ethnicity has been found to be an important theme in socioeconomic stratification in Canadian society which may be related to structural differences in opportunities or social psychological differences in subcultures (Clifton, 1982). Understanding the macro environment would seem to be important to foresight in family functioning. Investigating resilient families, McCubbin and McCubbin (1989) found evidence for ethnic specific patterning in the participation of husbands and wives in the socioeconomic environment. In resilient Caucasian families, husbands were involved in the occupational role and the husband and wife participated as a couple in the expatriate community. In resilient black families, both husband and wife were involved in occupational roles and had little social role involvement in the expatriate community. In resilient "other ethnic" families, only the husband was involved in the occupational role; neither husband nor wife participated in social roles outside of the family. Resilient families differed by the role involvement of the parents based on ethnicity. These findings suggest that social and economic demands and resources are patterned in the environment and accessed differently in the ordering of both the " mechanisms and processes"

(Simon, 1959, p.275) by ethnic group and by gender roles within the groups. For the "other ethnic" families (including some American Indians) the occupational role involvement of the husband and the family role involvement of the wife that was related to family resilience seemed to be associated with a specialization of labor which permitted the predictability of socioeconomic reward patterns in the larger society for that family.

This ethnic specific gender patterning of role involvement may be associated with the balance between social expectations of the larger society and unique ethnic expectations for family and work role performance. This ethnic specific role patterning may be seen to support Menaghan's (1989) view that cultural values influence role activity. However, while in Menaghan's (1989) view this relationship is directional (i.e., that is cultural values result in role activity), the relationship may be as suggested by Simon (1959), interactional in that it is the "social influences on choice, which determine the role of the actor" (p. 276). Such social influence is not to be minimized since it entails "a social prescription of some, but not all of the premises that enter into an individual's choice." (1959, p. 274). The choice of which social prescriptions of the larger society to fulfill seems to become an important means to family resilience for ethnic parents.

The choice of a subset of normative aspects of role behaviors would be consistent with collectivist ethnic orientations functioning in an individualistic society (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). Such choices would be conditional on social influences which structure the role of the individual in the maintenance of ethnic identity and normative behavior in the larger society. This view is also consistent with Berry's (1990) idea of selectivity associated with acculturation. Findings by Szalay and Manday (1983) have shown that sub-cultural groups participate selectively in aspects of the majority culture. Selective participation by minorities promotes similarity between sub-cultural groups and the majority culture but differentiates between sub-cultural groups. These acculturative dynamics seem to be complex and vary by sub-cultural group. For First Nations people, the complexity and variation could be expected to be compounded by the involuntary and immobile nature (Berry, 1990) of their relationship with Canadian society.

Planning in a Family Resource Management Perspective

Beard (1975) investigated planning in families from a systems perspective and developed a planning instrument based on two ways she found systems to focus, on goals and on resources. Families that focused on goals were characterized as morphogenic systems. Such systems had authentic communication, were flexible, and were responsive to change (Deacon & Firebaugh, 1989). Families which focused on resources were characterized as morphostatic systems. Such systems had controls based on social conformity, were inflexible, and were resistant to change (Deacon & Firebaugh, 1989). Beard's (1975) premise was that families are subjected to rapid change at the societal and individual level and family systems adjust to remain viable. Consequently, her conceptual focus has contributed to the measurement of planning in the family resource management framework.

Beard (1975) tested her planning instrument with a volunteer sample of 252 married American mothers. A factor analysis of the relationships between demographic variables and dimensions of planning resulted in three solutions significant at $p < .01$: 1) adherence to rules was negatively related to income, education, and stage in the family life cycle; 2) morphogenic planning was negatively related to income and positively related to stage in the life cycle and employment status; and 3) morphostatic planning was negatively related to income and employment and positively related to education, number of children, and general satisfaction.

Buehler and Hogan (1986) used the concept of planning styles as tracers of the planning process in their investigation of 203 single mothers and fathers. Buehler and Hogan used Beard's (1975) complete planning scale and conducted a factor analysis on the data. While they identified factors with item content similar to Beard's (1975), they renamed the factors emphasizing the focus of planning (i.e., goal focused, resource focused, constrained) rather than, as Beard, on the behavior of the system (i.e., morphostatic planning, morphogenic planning, planning by adherence to rules). Their results produced three factors described as three distinct "styles" of planning: planning centered on resources (similar to morphogenic planning), planning centered on goals (similar to morphostatic planning) and planning which is constrained by conditions internal or external to the family system (similar to random

planning). Household size, age, educational and occupational status, and home ownership were predictors of planning. As household size decreased or as occupational status decreased, fathers were more inclined to use morphogenic planning. Older mothers were more inclined to use morphostatic planning and less inclined to use constrained or random planning. The age of parents was a stronger predictor of planning style than either the planning process or the stage in the family life cycle. These findings may indicate that younger parents may not have the managerial skills or the experience or may be too present oriented to plan ahead. Variables found to be related to planning were gender, occupational status, household size, age, home ownership, and education (Buehler & Hogan, 1986).

Social roles and family stages. Stage in the family life cycle and planning style differences (Beard, 1975; Buehler & Hogan, 1986) were the basis for examining the attitudinal and behavioral expectations of individuals regarding family roles. Beard (1975) found stage in the family life cycle negatively related most to planning by adherence to rules, then to morphogenic planning, and finally to morphostatic planning. Earlier in the family life cycle, adherence to rules would be used more. Garrison and Winter (1986) found that family type was a better predictor for managerial behavior than socioeconomic and demographic characteristics. Thus structural composition of the family at various stages in the life cycle has implications for planning. These findings indicated that in the presence of pre-schoolers parents used planning to meet inflexible needs (morphostatic type planning) and in the presence of adolescence, used planning to meet flexible needs (morphogenic type planning). Families that had both preschoolers and adolescents used morphogenic planning (resource centered planning) least, and used a constrained planning (random planning) most frequently. Since structure and stage of family life cycle are important for planning, the salience of the parental role may have implications for planning. Buehler and Hogan (1986) noted the importance of having a stabilizing goal orientation when children are young. This orientation may involve planning behavior which is reactive to change in order to produce stability in the family during child rearing. Such an orientation would necessitate morphostatic planning (goal centered planning style). When the stage of the family life cycle is concerned mainly with the

parental role, morphostatic planning, would further social expectations of child rearing imperatives suggested by parental role norms (Davis, 1969).

When the focus is on the parental role and planning behaviors are a product of role attitudes and expectations for role performance, then deviation from the parental role focus could be expected to bring commensurate discrepancies into the family management system. Buehler and Hogan (1986) found that social demands and resources were significantly related to resource centered planning (morphogenic planning) and constrained planning (random planning) by single mothers. Education and home ownership were positively related to morphogenic planning. Education represents human resource potential which may be readily transformable into manifest human and material resources. Home ownership is a manifest material resource which can be the source of human resources such as self esteem and security or potential material resources when it is used as collateral for a loan. The predictive nature of these factors in identifying morphostatic decision making has been demonstrated in consumer and family literature consistent with resource and exchange theory (Rettig, 1987).

Social attitudes and family organization. Corfman and Lehman (1987) concluded that the salience of resource contributions in decision making was dominated by the intensity of preferences and history of decisions. Preference intensity and decision history may be seen as an attitudinal stance that is indicative of role salience. Warner, Lee, and Lee (1986) found that the attitudes about, preferences for, and accessibility to resources affected the ability of wives to make decisions in cross-cultural situations. The resource knowledge of wives was crucial to decision making power and varied by social patterns of residence and descent. Power was based on the ability of the wife to exercise resource knowledge in the interests of the family. When resource knowledge and operational interests were separated the wife was disempowered. This lack of power was most evident when residence was patrilocal and descent patrilineal. The wife's lack of power occurred when either the knowledge of the resource base and the demands of the resource base were out of her control.

Filiatrault (1980) found resource-focused decision making was characterized by role dominance in the use of public resources and communicative consensus was significantly

influenced by the non-dominant participants, such as children, in the decision making process. Schaninger and Buss (1986) measured marital commitment and found that resource focused planning was predictive of marital happiness and contributed to marital capital. When couples were committed to the marriage they share dominant roles and resource knowledge which increased the capital of the marital relationship and contributed to marital happiness.

Inter - role conflict. Conflicts between expectations for social role behaviors based on ethnicity, gender, or generation seem to play a role in planning. Jorgensen and Klein (1979) found support for the notion that resource-based decision making in the marital role is enhanced by the diversity of resources brought together in heterogeneous marriage. Constraining traditional assumptions may be precluded by the diversity of resources and social expectations individuals bring to bear in such marriages. Consensus building, a more conscious, deliberate activity which is conducive to relationship building, may promote relationship cohesion through the process of planning based on resources. The mothers of young children did not compromise their control of resource allocation if they perceived such a loss to be detrimental to the welfare of the children. These mothers chose conflict in the marital role rather than to compromise their parental focus in child rearing. Parental role salience was higher than the marital role for the mother in the early part of the family life cycle when the children were young (Rand, Levinger, & Mellinger, 1981). This parental role focus is consistent with the "self-as-other" orientation evoked by stimuli of gender role expectations in purchase decisions. Meyers-Levy (1988) found that economic decisions made by women were on the basis of "for the other" whereas purchase decisions made by men were made on a more egocentric basis.

Gender role issues. The relationships between demographics and planning behaviors in Buehler and Hogan's (1986) study seemed to be related to gender. Factors which were most predictive of planning behavior for fathers were household size, educational level, occupational status, and age. Factors which were most predictive of planning behavior for mothers were home ownership, educational level, age, and occupational status. In the use of morphogenic planning, occupational status and household size were important for fathers;

home ownership and educational level were important predictors for mothers. As occupational status and household size decreased, morphogenic planning by fathers increased. As home ownership and educational status increased, morphogenic planning by mothers increased. As parents' age decreased, random or constrained planning increased. As mothers' occupational status decreased, random or constrained planning increased. As age increased, both mothers and fathers were more likely to use morphostatic planning.

Gender differences which seem to be implicated in the planning process may actually be capturing different levels of planning: strategic, administrative, and operative planning (Arndt & Holmer, 1978). Strategic planning was traditionally based on normative expectations in which both husband and wife participated in a long range, decision making pattern that provided continuity. Such continuity was reflected in "lifestyle", "wifestyle" or "residential style". In contemporary marriages, strategic planning may involve the consensual development of mutual expectations. Administrative planning, traditionally the domain of the husband, included the delineation of authority and responsibility of family members in the acquisition and development of material and social resources. In contemporary marriages, authority may be negotiated by the spouses and responsibilities shared. Operative planning, traditionally the domain of the wife, consisted of daily decisions. Strategic and administrative planning decisions were operationalized in the daily activities of shopping, meal preparation, home care, child care, and other family activities. In contemporary families this level of planning may also be shared by spouses. In these levels of planning, identified by Arndt and Holmer (1978), the division of labor in planning may be organized by social roles based on gender. The different patterns of planning exhibited by recently divorced fathers and mothers (Buehler & Hogan, 1986) may be reflecting their planning role in the previous marriage or a transitional in their post-divorce adjustment.

In summary, the review of literature has provided evidence that there seems to be a relationship between planning and social expectations for social roles that may be gender specific. Because women are known to adjust their role behaviors to balance demands and resources (Yogev, 1982) and roles are culturally organized it seems that, in the process of

planning, women use their social expectations to create a balance between demands and resources. For First Nations women these expectations may be complicated by the bicultural context in which they plan. As such, conflict may exist in every planning decision associated with social role expectations. The relationship of the salience of social roles and the demand and resource structure associated with planning in this review are thus examined further in the conceptual framework and model that follow.

Chapter II

The Conceptual Model

The focus of this study is on the effects of maternal and family sociodemographics and maternal social role attitudes on the planning behavior of First Nations families. Examining purposive behaviors of daily living such as planning behaviors of mothers of First Nations families would suggest the requirement for a conceptual framework with a "firm commitment to the strategic role of families and households in society" (Deacon & Firebaugh, 1989, p. xi) which is consistent with the view of the family as a proactive social institution (Sgritta, 1989) and the bicultural mother as an active agent (Thomas & Alderfer, 1989). Examining the interactions of two sociocultural systems as perceived by mothers of First Nations families operating in a single nation state would suggest the need for a systems based conceptual framework which can account for the interactions between systems.

The Deacon and Firebaugh (1989) family resource management framework consists of systems, their environments and component parts which are integrated by their functions and linkages to produce the functioning of the "universe of the family" (p. 7). The systems approach distinguishes between the components of family systems and the system itself, subsystems of the family and their respective components as well as the environments in which systems function. This conceptual framework provided the frame on which a model was developed to investigate the planning behavior of First Nations mothers.

Environments of Family Systems

Understanding planning behavior in the family system requires first an understanding of the environments in which the family system is nested and the sub-systems which it in turn nests. Understanding these environmental contexts is especially important in cross-cultural studies (Beutler, 1985). The family system is embedded in three distinct environments (Deacon & Firebaugh, 1989): a macro environment which consists of a physical and biological surround, a macro environment which consists of societal systems that include, economies, technologies, politics; and a structured system which is physical, biological and human made.

The family system interacts with microsystems such as the cognitive and physical systems in the development of its members; social institutional systems such as roles, schools, interest groups, and government agencies; intellectual and technological systems such as social theories, computer technology and software, the legal system, other cultures, a cash economy; physically structured systems such as dams, bridges, housing, urban sprawl, suburbs; and natural systems such as waterways, weather, seasonal cycles, lunar cycles, and primary resources.

First Nations families have historically been most intimately associated with natural systems and localized social systems. For the past 500 years, the relationships of First Nations people with these environments have been complicated by non-native societal systems which socially and legally mediate between the native family system and other environments. Because this mediation is recent in historical time, the native family system has been required to deal with a system of value expression which is different from its own cultural tradition. The non-native societal system becomes an additional environment with which the First Nations family must deal.

The relative openness or closedness of the family boundary determines the family's interaction with other systems. For example, systems which have more internal transfers are considered closed in comparison to those which have more exchange with other systems (Deacon & Firebaugh, 1989). Anthropologists have historically viewed traditional societies such as First Nations societies as "outsiders", viewing them as closed systems in which membership was determined by birth and death and infrequently by adoption. First Nations often identified themselves as closed systems also. First Nations people distinguished between their nations and other nations, for example, as "The People" (e.g., Dene, Inuui) or the people of a specific location (e.g., Nuuchahnulth, people living with their backs to the mountains along the length of Vancouver Island and the Olympic Peninsula).

Among these First Nations, family systems were based along kinship lines. Biological and cultural (social, political, and economic) ties formed the basis for sociocultural relations. Castile (1978) suggests that the persistence of enduring systems is their dependence upon this

dual focus of biological and cultural reproduction. A dual focus on biological and social relatedness permitted the perpetuation of family systems through a range of systems forms which were viable for survival. For example, matrilineal, patrilineal, and bi-lineal First Nations family systems were described by the Europeans (Levi-Strauss, 1963). Both matrilineal and patrilineal systems could be found in groups that were sedentary in a particular area in which subsistence was relatively predictable. Matrilineal systems generally occurred under conditions of social stability (e.g., Haida, Iroquois) and patrilineal systems under conditions of social instability (e.g., Nuu-chah-nulth) in relatively sedentary groups. Bi-lineal systems could be found among groups who ranged over great expanses and for whom there was both social and economic instability (e.g., Chipewyan). While colonial administrations focused on the need to define the social form of these First Nations systems, First Nations people continued to focus on "all their relations": the kinship ties organized the hierarchies of their particular systems.

While the First Nations systems may have been closed to the non-native systems, family systems may be viewed as systems which varied in their form and content but not in their over all membership. Inclusive memberships expanded social and material resources permitting flexibility both in form and substance. A First Nations family may be open to natural systems and closed to new technological systems. Such preferences could be expressed by living in unspoiled wilderness areas and practicing an environmentally conscious lifestyle. Such a system could be classified as relatively closed to societal system interaction but relatively open to natural system interaction. A First Nations family may be relatively open to interaction with non-native social systems through formal occupational relationships and relatively closed to informal, personal system interactions. Such a family system would be classified as highly committed to current organization and selectively open to new demands. The manner in which family systems function may be said to be expressions of their characteristics.

Nested in the macro and micro environments, the family system is composed of the systems of its members as subsystems of the family and the family as a subsystem of the social

system (see Figure 1). As the figure indicates, the Native and Non-Native Social Systems, the Individual Maternal Systems and the Family Systems interact with each other. The individual is integrated into social systems by participating in the marital, parental, occupational, and home care systems according to the social rules or norms which organize activities and goals in these systems. The social "demands" for reciprocal interaction of individuals in social activities results in integration. The individual, in this case the First Nations mother, develops her capacities and her values as she participates with other members in the managerial subsystem of the family. The First Nations mother develops as her personal and managerial systems interact, first, with her family of orientation and second, with her family of procreation.

Figure 1

Social, Individual, and Family Systems and Subsystems

Native and Non Native		Maternal	Native	
Social Systems < ----- >		Individual System < ----- >	Family System	
<u>Native Systems</u>		<u>Personal Subsystem</u>		
marital system		developmental subsystem		
parental system		value subsystem		
occupational system				
home care system				
<u>Non-Native Systems</u>	<u>Managerial Subsystem</u>		<u>Managerial Subsystem</u>	
marital system	Planning		Planning	
parental system	Standard Setting		Standard Setting	
occupational system	Demand Clarification		Demand Clarification	
home care system	Resource Assessment		Resource Assessment	

Note. Adapted from Deacon & Firebaugh (1989, pp. 20, 22, 24, 25, 77).

The personal and managerial systems of the individual are discussed here separately to clarify their functions, but are fully integrated conceptually. In the personal system, capacities are developed and values evolve. The managerial system is "a process of thought and action through which resources are utilized in the meeting of demands....The personal system represents the composite of social-psychological-physiological-spiritual development that gives integrity to management..." (Deacon & Firebaugh, 1989, p. 21). Interaction of the personal-managerial systems permits the individual to manage her own personal system by setting standards, clarifying demands, and assessing resources which are peculiar to herself as well as to her family situation and characteristics. Within the individual system the individual develops, values, and manages. The individual develops strategies to accomplish goals, conduct activities, and stage events by envisioning the reconciliation of demands and resources. The interaction between these systems is recursive and on going.

Consequently, maternal social role participation involves demands and resources from both her First Nations cultural tradition and the non-native social system in which she and her family are embedded. The maternal (personal and managerial) system is embedded within the family system of native cultural expectations (the native social system) and the cultural expectations of the non-native system (the larger society). Both the formal and informal social demands or expectations for the First Nations family and the mother come from the public sphere of the larger society. A second source of demands for both formal and informal social behavior originates in the First Nations culture. The mother then uses her personal, cultural and family resources to meet the prescribed native and non-native social demands. The dynamic balance struck by the First Nations mothers between the demands of both social traditions is expected to be highlighted by the pattern of her personal investment in social roles and her patterns of planning behaviors.

The First Nations mother's personal and managerial system receives the demands for life role behavior from both the non-native social system and the native family system. First Nations mothers may have little opportunity to learn appropriate informal behaviors in the non-native social context from which the demands of formal behavior originate (Cruikshank,

1976; Jones, 1976). For example, if health care has been mediated through an intermediary government agency then the First Nations mother may have no personal experience of the health care system. Without first hand experience with the official workings of the system the First Nations mother has limited potential to deal successfully with the system without social mediation. Consequently, the First Nations mother may be in the position of being evaluated by her ability to meet the public criteria of non-native social roles without ever having been in a position to learn the non-native context or expectations for appropriate social role behaviors.

These subsystems are "a set of components functioning together for a purpose of fulfilling the same conditions of a system and playing a functional role in a larger system " (Deacon & Firebaugh, 1989, p. 7). Each member of the family is a subsystem of the family. Each family member has their own personal systems. The individual's personal system consists of a developmental component and value component. The personal system interacts with its own managerial system in a highly integrated manner to produce personal plans and with the family managerial system to produce plans by some manner of consensus (e.g., traditional, negotiated, assumed, etc.). The personal system receives demands and resources which are both internal and external. External demands received by the developmental subsystem are family values, goals, and social norms. Internal demands received are perceptions of values and goals. External resources received by the subsystem are, for example, family and social support. Internal resources received by the subsystem are abilities and qualities. Human and social development occur in the personal system. The personal system in purposeful interaction with the environment creates the managerial system and its subsystem, planning. The purposeful activity in the interaction between the personal system and the managerial system produces the ability to perform valued, socially defined roles.

The social system is composed of institutions such as marriage, parenthood, occupation, and homemaking which are organized by sets of sanctions or norms that specify role behaviors which individuals hold to varying degrees (Rossi & Berk, 1985). These norms organize life domains into life roles which are defined as normative domains (marital, parental, occupational, and home care). These normative domains are viewed in two

dimensions: objectively as social demands for role behavior and subjectively as personal expectations for social role behavior. The objective dimension consists of organizing sets of social sanctions and rewards which are institutionally specific (Rossi & Berk, 1985) prescribing the relationships between people in the context of activity. The subjective dimension consists of organizing perceptions in a manner which has real world relevance for the individual and consequences for immediate and future behavior (Fuller, 1990; Sternberg & Wagner, 1989). Individual and family systems respond to these social demands with their perceptions of what is important in their expectations for social behavior. Such perceptions are based on the relationship between values of and resources accessible to the personal systems of individuals that make up family systems and demands of the social systems as they relate to the characteristics and organization (demands and resources) of family systems.

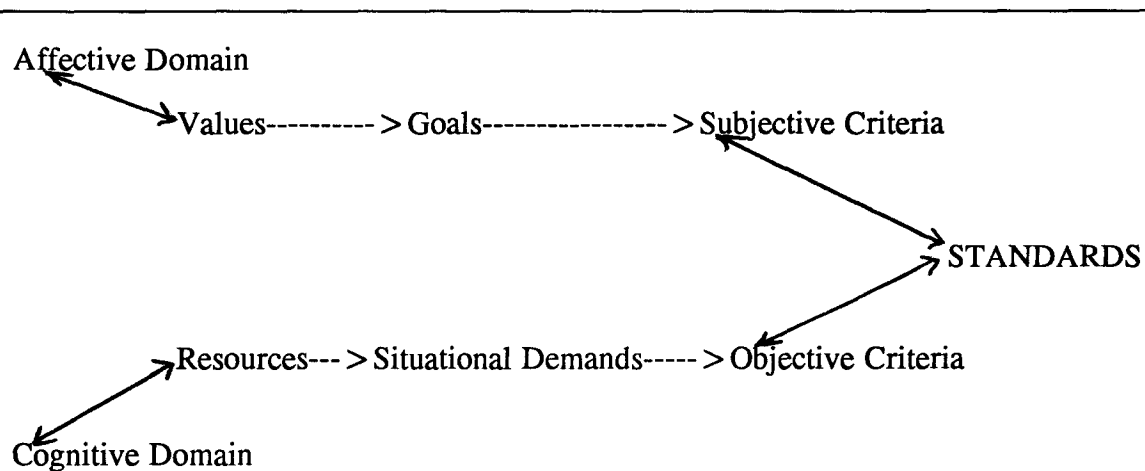
In the throughput process of the developmental subsystem of the personal system, these internal and external demands and resources are changed into developing capacities which become the cognitive, emotional, social and physical characteristics of this system (Deacon & Firebaugh, 1989). These developing capacities interact in the throughput of the value subsystem of the personal system in which intrinsic and extrinsic values evolve by becoming more differentiated and complex, producing standards for value expressions or goals. Outputs from the developmental and value subsystems of the personal system are responses to demands. Such responses involve personality dispositions, goal/value orientations, and changes in resources. These responses include changed personal capacities, personal qualities, income, and net worth.

The managerial system of the individual interacts with the developing capacities and evolving values of the personal system of the individual in the processes of planning and implementing Deacon and Firebaugh (1989). In the throughput of the planning process, the outputs of the individual personal/managerial systems are responses to environmental demands (goal orientations, goal achievements and personal development) and changes of environmental resources (personal capacities, personal qualities, material income, and net worth).

Social system demands and resources enter the personal subsystem as expectations for behavior and the means to meet those expectations. In the personal subsystem there is an assessment of the demand and the situation in concert with personal criteria (subjective goals and values) which results in a choice of planning behaviors, the development of a standard appropriate for the family. Choices, based on the attributes of the family system, become self-referential, self predictive over time contributing to the identifying characteristics of the individual or family. Morphostatic and morphogenic planning behaviors thus anticipate the permeability of the boundary, the criteria for standards and sequences of activity, the commitment to the system and the openness to adjustment to make decisions for future expectations. These personal and family systems selectively anticipate themselves. Random systems, which are spontaneous, do not anticipate their own system functions. Systems which use planning by adherence to rules anticipate their own system functions relative to demands external to the system such as the larger society.

The development of standards for behavior is illustrated in Figure 2. The affective and cognitive domains in the personal subsystem value and produce goals from both intrinsic and extrinsic orientations. Intrinsic values and goals have meaning in themselves whereas extrinsic values and goals have meaning relative to something else (Deacon & Firebaugh, 1989). An intrinsic orientation of the personal subsystem suggests that subjective criteria are matched with attributes of resources and situational demands to create objective criteria which have meaning in themselves. An extrinsic orientation suggests objective criteria found in the attributes of resources and situational demands are taken as subjective criteria and given meaning relative to intrinsic values. For example, pleasure in achievement (intrinsic value) and earning a living (extrinsic value) can be combined in a variety of ways to produce meaning and accomplish valued ends. While rapid social and technological change brings shifts in value orientations, since these orientations are not exclusively intrinsic or extrinsic, this process develops enduring standards for attitudes and behavior.

Figure 2

The Development of Standards in the Personal Subsystem

Note. Adapted from Deacon & Firebaugh (1989, p. 47).

The development of standards occurs when the personal system interacts with the micro and macro environments. Internal demands, such as thirst, a need for fresh water, are recognized and external resources which satisfy the demand are sought. The value of water for example, a basic human need, would then become a goal of having access to water. An assessment of the water resources available in relation to the value-based goal permits the development of criteria. The development of criteria based on both objective and subjective assessment produces an outcome of standards. A standard for water might be unfloridated, chlorinated water with low coliform counts. This standard would reflect a subjective value of health and an objective goal of "pure, clean" water as opposed to medicated water. The standard may remain unchanged as long as the internal and external demands are stable. If however there is change in the environment in which this process is occurring an adjustment could be expected. The adjustment may be of standards, values or goals from the affective domain or resources from the cognitive domain. In changing internal and external environments, the development of standards would seem to be an important process of which to be aware. The ability to anticipate changes and to develop a continuity of standards would seem to be an important aspect of this process. Deacon and Firebaugh (1989) suggest that management is the arena in which this ability is fostered.

The Maternal Social Role Attitude and Planning Model

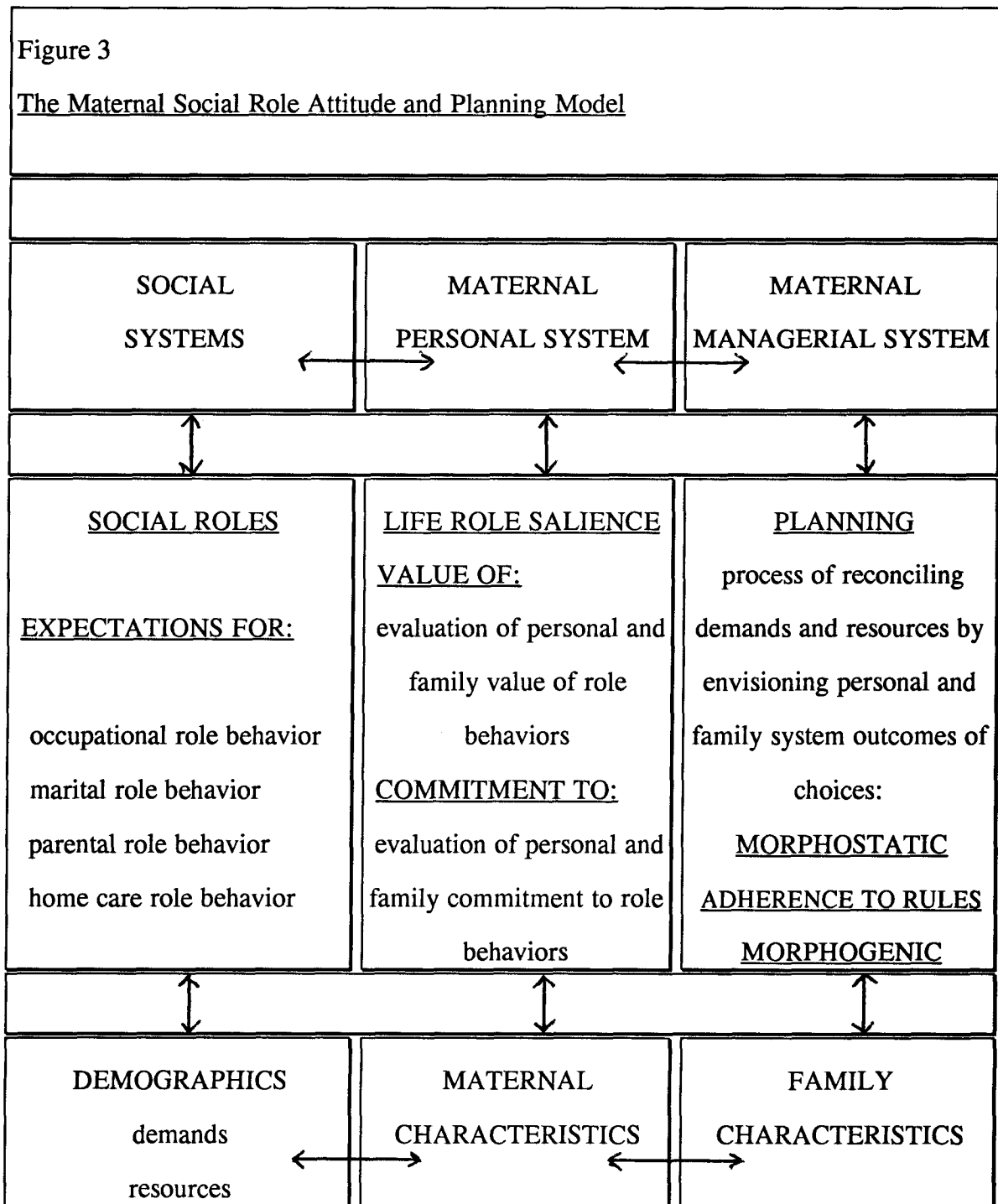
The "Maternal Social Role Attitude and Planning Model" (see Figure 3) conceptualizes more particularly the maternal and family system, their components, and the linkages to their environments as they relate to planning. This model thus provides a conceptual framework for investigating the interaction of two sociocultural systems by examining the attitudes developed by First Nations mothers in their bicultural functioning. Figure 3 illustrates the integration of the concepts of this study, demonstrating their role in the process of management. The independent variables are conceptualized to be the throughput of the individual personal system. The dependent variable is conceptualized as the planning behavior of the maternal individual managerial subsystem representing her expectations in the family managerial activity of planning.

System elements of input-throughput-output are central to defining systems. The input of systems generally are "material, energy, and information" (Deacon & Firebaugh, 1989, p. 17) which may be classified as demands and/or resources. In this study the inputs are from two sociocultural systems in which the sociodemographic attributes of women and their families are ascribed value and the social roles of women are defined. Such inputs enter into the family and personal systems and become changed or change the system. In this study the throughputs are the value of and commitment to social roles held by First Nations mothers. In this study the outputs are dimensions of planning behaviors of First Nations families.

Input

Sociodemographics. Characteristics of individuals and families described as sociodemographics are system attributes (Broderick & Smith, 1979). For example, the people living in a family, their gender and their relationships are important attributes of the family system which have implications for their resource management (Deacon & Firebaugh, 1989). First Nations mothers may prefer to live in a village on traditional territory despite few modern conveniences or opportunities for education and employment. Social preferences reflecting value orientations may differ radically for First Nations mothers compared to non-natives. Frideres (1974) enumerates a long list of cultural differences between "Whites" and

"Natives" which suggest almost polar opposites in values such as time orientation (present/future), collective emphasis (group/individual), accumulation (giving/saving), etc.. The descriptions of First Nations women (Cruikshank, 1976; Jones, 1976) as wives, workers, and mothers provide little evidence for such a polarized view.



Expectations for social roles. At the level of social systems, roles organize areas of social activity. Social or life roles are defined as normative domains consisting of "those norms that specify role behaviors" (Rossi & Berk, 1985) which consist of two dimensions: objective and subjective. The objective dimension consists of sanctions that prescribe the relationships between individuals in specific contexts of activity (e.g., the mother in the parental role, the wife in the marital role, the employee in the occupational role, the wife/mother in the home care role). Such prescriptions for social functioning are considered to be demands. The subjective dimension consists of perceptions organized in a manner that has real world relevance for the individual and consequences for immediate and future behavior (Fuller, 1990; Sternberg, 1985; Sternberg & Wagner, 1989).

Cruikshank (1976) and Jones (1976) described the enculturated expectations of traditional roles for First Nations women as complimentary to that of men in their survival tasks. Both noted that the traditional role of First Nations men as a provider by hunting has disappeared and that the men have not yet made a transition to a new task around which to build the provider role. Out of necessity, First Nations women seem to have moved on socially and economically while their potential partners are still invested in the "hunter" role (Cruikshank, 1976). The occupational, parental, marital, and home care roles enacted by First Nations mothers are of necessity a product of two cultures.

Bell (cited in Thomas & Alderfer, 1989) found these choices produced three social role patterns for these women. In the first pattern, women who valued their occupational role organized their lives around their occupations. While they worked largely in the white community they had social ties to both the majority and minority community. The tension developed between their family and occupational roles. In the second pattern, women who valued their community were distanced from the majority culture and involved in their local community. These women perceived the lack of community resources and lack of personal social support as sources of stress. For these women, working in the white community was associated with the most bicultural stress but they experienced less of the double consciousness of the career oriented women. In the third pattern, women who were focused on family roles

and worked were the least stressed. This group felt some stress about not being career oriented enough. Bell's study (cited in Thomas & Alderfer, 1989) provides evidence for levels of bicultural adaptation based on development in social role behaviors (Bennett, 1986).

Bell (cited in Thomas & Alderfer, 1989) found that women of color (black American) live in the tension of a parallel system of cultural environments, a life in two worlds. This bicultural adaptation entails a physical, cognitive, and emotional shift as the individual moves between two distinct culturally organized worlds. This shifting is associated with emotional and physical tension as the individual moves across cultural boundaries, adopting appropriate attitudes and engaging in socially appropriate behavior. These women choose the extent to which they will engage in such cross cultural movement.

Kagitcibasi (1989) found that the social organization of families changes for those in transition from traditional to modern. The change was from extended, adult-oriented socioeconomic units focused on survival to nuclear, child-oriented socioeconomic units focused on psychological satisfactions. This transition from traditional to modern transverses three types of family organization each providing a unique solution to the reconciliation of the demands and resources on the family system. Social role changes based on changing value expressions are important aspects of these family states. As modernization and urbanization occur, family relationships become less valued in concrete economic terms and more valued in abstract psychological terms. Kagitcibasi (1989) found that all three types of family organization occurred simultaneously in modern societies and at different socioeconomic levels.

The choices a First Nations mother makes to participate in bicultural social roles would be expected to have important implications for her planning behavior.

Throughput

Life role attitudes. Salience of life role attitudes is determined at the personal system level. Salience is conceptualized as the perceptions which are prominent for or have value for the individual (Sternberg & Wagner, 1989) and are evaluated by a generalization of status

characteristics (Webster & Foschi, 1988). Salience of life role attitudes occurs through a process of value clarification in the production of standards (see Figure 2).

In the personal system, salience of life roles includes two dimensions: value and commitment. The value dimension is conceptualized as "the essential meanings relating to what is desirable or what has worth" (Deacon & Firebaugh, 1989, p. 40), affective goals providing the personal importance (Amatea, Cross, Clarke, & Bobby, 1986) and the criteria with which to identify the means (Deacon & Firebaugh, 1989). The commitment dimension is conceptualized as anticipated outcomes (Deacon & Firebaugh, 1989) which provide a criteria for personal resource allocation to meet the particular objective (Amatea et al., 1986). Hence, commitment may promote the management of multiple life roles rather than role strain (Marks, 1977).

Output

Planning. The dependent variable and its components occur in the managerial system of the mother as she participates in the managerial system of the family. Planning is conceptualized as a cognitive process used to envision a behavior such as a goal, an activity, or an event (Deacon & Firebaugh, 1989). Envisioning what is to be done entails clarifying goals or events, setting standards for goals, events, and resources, as well as assessing resources and sequencing actions (Deacon & Firebaugh, 1989). Clarifying the relationships of maternal and family characteristics and maternal attitudes is an important aspect of the planning process.

Planning is considered to have morphogenic or morphostatic characteristics (Beard, 1975; Beard & Firebaugh, 1978; Deacon & Firebaugh, 1989). Morphogenic planning anticipates changes in value expressions (Beard & Firebaugh, 1978) and encourages expansive and adaptive behaviors which promote system flexibility and high levels of non-routine activities (Deacon & Firebaugh, 1989). Morphostatic planning behavior anticipates stability or no change (Beard & Firebaugh, 1978). The preference for simple style, limitations, and stability permit this style to maintain the status quo (Deacon & Firebaugh, 1989). One type of morphostatic planning is adherence to rules. Such planning is characterized by demands originating outside the family which cannot be met due to the absence of common resources

which usually satisfy the demands and permit the family system to adjust (Beard & Firebaugh, 1978).

Figure 4 provides a visual summary of the relationships between systems concepts (input-throughput-output), family resource management concepts (social, personal, and managerial systems; demands and resources, and planning components) and measures of the concepts (operationalized as expectations, value and commitment, and planning system tendencies).

Figure 4

Systems Concepts, Family Resource Management Concepts, and Measures

<i>INPUT-----> THROUGHPUT-----> OUTPUT</i>		
<u>Social Systems</u>	<u>Personal System</u>	<u>Managerial System</u>
DEMANDS	ATTITUDES	PLANNING
RESOURCES		
operationalized as:	operationalized as:	operationalized as:
Family/household characteristics:	value of and commitment to social expectations in:	management of family system components that promote morphostasis/genesis:
<i>community size</i>	<i>occupational role</i>	
<i>income</i>	<i>marital role</i>	
<i>number of members</i>	<i>parental role</i>	<i>morphostatic planning</i>
<i>leadership</i>	<i>home care role</i>	<i>adherence to rules</i>
Maternal characteristics:		<i>morphogenic planning</i>
<i>age</i>		
<i>educational status</i>		
<i>level of employment</i>		
<i>security of accommodation</i>		

Hypotheses

The hypotheses concerning relationships between sociodemographic variables and planning behavior were largely derived from three studies assessing planning behavior (Beard, 1975; Buehler & Hogan, 1986; Garrison & Winter, 1986) and a limited number of associated management studies. The hypotheses concerning social attitudes and planning were informed by literature that included First Nations and other minority mothers and families. The final hypothesis was derived from the conceptual model developed for this study, the "Maternal Social Role Attitudes and Planning Model", which is based on the Deacon and Firebaugh (1989) model of Family Resource Management.

Sociodemographics and Planning Behavior

H1: Presence of preschoolers is positively related to morphostatic planning.

Buehler and Hogan (1986) found that single parent mothers with preschool age children used morphostatic planning most, followed by constrained or random planning and least of all morphogenic planning. Beard (1975) found that the earliest stage of the family life cycle, when preschoolers are more likely to be present, is related to less morphogenic planning.

H2: Education is positively related to morphogenic planning.

Buehler and Hogan (1986) found that morphogenic planning was used most by single parent mothers with higher educational levels. Beard (1975) found that morphostatic planning was used by non-working mothers who had some college education and were in intact families. While these findings may seem contradictory it should be noted that the characteristics of the samples varied. Notably, the single parent mothers tended to be employed while the other sample consisted of non-employed mothers. In general, increased availability of resources is related to morphogenic planning. Education is considered an important human resource and thus would be expected to be related to morphogenic planning.

- H3:** Maternal age is negatively related to morphogenic planning in families.
- H4:** Maternal level of employment is negatively related to morphogenic planning.
- H5:** Renting is negatively related to morphogenic planning.

Buehler and Hogan (1986) found that single parent mothers who were younger, who lacked years of work experience, and who rented rather than owned their residences used morphogenic planning the least. All of these variables exemplify restricted material and human resources. Younger mothers would be expected to have less sociocultural experience and hence fewer social resources and less social flexibility for planning. As mothers have lower levels of employment reflecting less work experience and occupational investment they may be less able to anticipate the availability of future resources on which to base plans. While most obviously renting represents the lack of flexibility that capital investment in accommodation would provide, renting may be seen in terms of the social demands of a rental agreement in return for occupancy. Especially if bicultural standards are an issue, social compliance in return for use of the premises may be seen as a constraint to planning beyond the rental term, thus reducing the flexibility permitted by a longer term horizon. Restriction of appropriate resources is expected to curtail the ability to transform resources or change family rules which are essential for morphogenic planning.

Life Role Salience and Planning Behavior

The lives of women are organized by culturally defined life roles which consist of behavioral expectations for marriage, parenthood, work, and homemaking (Rossi & Berk, 1985). Life roles of First Nations women are influenced by two social traditions. The patterns of the social life cycles of women in these two cultural traditions can be expected to vary in terms of the rate, pace, and role content, the relative importance of ascribed and achieved status, expectations and norms (Imamura, 1990). First Nations mothers are expected to choose bicultural social role behaviors which aid in perpetuating First Nations group identity through family system functioning (Carson et al., 1990; Castile, 1978).

H6: Maternal family role salience is related to morphostatic planning.

Beard (1975) and Buehler and Hogan (1986) found that those mothers with the greatest family role demands, especially when pre-schoolers were also present, were more morphostatic in their planning behavior. Involvement in family roles is statistically normative for First Nations mothers (Statistics Canada, 1990).

H7: Maternal work and family role salience is related to morphogenic planning.

Buehler and Hogan (1986) found that recently divorced single mothers who used morphogenic planning were more likely to be employed full or part time than those who used constrained or morphostatic planning. Morphogenic planning possibly permits the new goal demands of maternal employment and new financial and human resources from employment to cross the boundary of the family system to meet the high demands and low resource levels within the family.

H8: Maternal work role salience is related to planning by adherence to rules.

Maternal work role salience is non-normative for First Nation women with less than half participating in the labor force (Statistics Canada, 1990). Jones (1976) found that First Nation women were more able to tolerate low status jobs and subordinate relationships compared to First Nations men because they did not rely on their jobs for self definition and self worth. Consequently, as the First Nations mother shifts to emphasizing the occupational role, planning is expected to, at least initially, become a rigid adherence to rules. Demands of the work environment may increasingly encroach upon native value expressions resulting in less predictability of the family system itself (Frideres, 1974).

H9: Maternal life role commitment is positively related to morphogenic planning.

Bielby and Bielby (1989) found that commitment to work and family roles produced identification with those roles and a propensity to create a balance between the role areas. Their findings indicated that the identity formation of individuals was associated with individual investment of time, energy and personal resources in role behaviors which reflect the gender based organization of cultural roles. First Nations mothers may have a choice between traditional and modern life roles. Thomas and Alderfer's (1989) review revealed that

a bicultural adaptation was related to the type of commitment women made to career, family, economic opportunity, or ethnic community. Morphogenic planning may be expected, as resource investment by the maternal personal subsystem becomes available to the family system to meet new demands.

H10: Maternal life role value is positively related to morphostatic planning.

Jones (1976) found that early socialization had permitted urban First Nations women in Alaska who were co-providers to adapt more easily to non-traditional role expectations than First Nations men. However, the transition to the role of primary wage earner, for which there was no early socialization, was fraught with personal conflict. Lack of socialization into non-traditional roles, which may limit the goals and resources of family members, is expected to be related to morphostatic planning in family systems. Maternal assessment of the personal/family value of her social role behavior is expected to be based on her ability to balance social and family demands relative to resource availability and appropriateness.

Sociodemographics, Life Role Salience, and Planning Behavior

Deacon and Firebaugh (1989) suggest that management entails a global assessment of the details in order to "comprehend the totality of the given situation" (p. 8). To test this premise, the final hypothesis was concerned with the details of family and maternal characteristics, maternal attitudes and planning dimensions.

H11: Maternal and family sociodemographics and maternal life role salience contribute to three planning dimensions (morphostatic planning, planning by adherence to rules, and morphogenic planning).

In keeping with the purpose of the study, the patterns of relationships between sociodemographic features of First Nations mothers and their families, the salience of their social role attitudes, and their planning behaviors are of particular interest in this hypothesis. These patterns are of interest because the relationships seem to be complex yet systematic with the bicultural approach of this study adding to the complexity. Thus, for example, education was identified as a human resource contributing to planning outputs in a manner that differed

by family leadership (single headed, dual headed), occupational status, and gender (Beard, 1975; Buehler & Hogan, 1986).

The relationship between demographic variables, except for age, and planning behaviors seemed to be gender specific and indicative of social reciprocity between parents (Buehler & Hogan, 1986). For women, morphogenic planning was predicted by higher educational status and home ownership and for men, predicted by smaller households and lower occupational status. For younger women, constrained planning was predicted by lower occupational status and for younger men, by higher levels of education. Both older men and women used morphostatic planning. In light of these patterns, evidence that dimensions of planning may be related to a division of labor based on gender roles (Arndt & Holmer, 1978), and the possibility that First Nations women who are socially and economically bicultural may lack social and economic reciprocity with First Nations men (Cruikshank, 1976; Jones, 1976), it is expected that different dimensions of planning may be associated with the social role priorities of First Nations women.

The social role priorities of First Nations mothers are expected to reflect their bicultural socioeconomic aspirations based on their perception of value in and commitment to the social role expectations of the larger society when their personal and family characteristics are taken into consideration. The three patterns of social role behaviors associated with women participating in two cultural systems (Thomas & Alderfer, 1989) and the three patterns of family system behavior identified to be associated with societal modernization (Kagitcibasi, 1989) suggest that social role patterns reflect the social value of personal and family system behavior. Thus the patterns of social role attitudes of First Nations mothers may be seen to reflect the acculturative transition of families from traditional to modern (Kagitcibasi, 1989) and their bicultural functioning (Thomas & Alderfer, 1989). First, if their family system is traditional and they are involved in little bicultural social interaction, their priorities are expected to be focused on parenting and family roles with formal occupational roles least salient. Second, if their family system is transitional and they are involved in some bicultural social interaction, their priorities are expected to reflect attempts to balance occupation,

parenting and other family roles. Third, if their family system is modern and they are involved in more bicultural social interaction, their priorities are expected to reflect an occupational role priority as a means to satisfying personal aspirations and family role needs. The pattern of role attitudes of First Nations mothers is expected to reflect a high level of bicultural social demands for which resources are low and supportive family organization is generally absent.

The relationship between the expectations of First Nations women and planning behavior is expected to be constrained by lack of income and by legislation that created disadvantages for groups of people, especially those in smaller (reserve) communities. Factors affecting patterns of social roles may also order role salience, role demands, available resources, relative investments, and costs inextricably involved in the planning responses (Davis, 1969) as milieu specific norms for behavior (McCubbin & McCubbin, 1989). The pattern of social role salience is expected to capture the adaptive response by First Nations mothers to this convergence of traditional and modern social life cycles from two cultures. This pattern of role salience is expected to reflect a decision history and indicate a preference intensity (Corfman & Lehman, 1987) adaptive in this convergence. Such an attitudinal stance is viewed as a pragmatic adaptation to change in resources and demands.

For example, under conditions of change Baker (1979) suggests reconciliation of demands and resources takes place through the conservation of value principles by clarifying and identifying family values as goal and resource expressions in new conditions. While First Nations families seem to conserve their family systems, their goal and resource expressions seem to be constrained. While Baker's (1979) suggestion makes common sense, in the case of First Nations families resource inequities cannot be ignored. As non-natives settled in First Nations territories and expressed their own value principles, non-natives redefined the environment. Thus, for First Nations people, traditional goal and resource expressions became redefined by non-native value principles. Consequently, the traditional value principles of First Nations families may possibly only be conserved by mothers who understand the relationship between the contemporary occupational activities (goals and resource expressions)

and goal and resource expressions "for families such as theirs". An historical comparison of the social role development of middle class white and racial ethnic mothers (Dill, 1988) suggests that the experience of First Nations mothers may be typical of an ethnic group conserving group value principles as specific goal and resource expressions while sharing an environment with a majority that redefines the environment according to their own goal and resource expressions. While Riley (1984) documents the admiration some trail and settler women had for the resourcefulness of native women in their ability to manage children and household, keenly aware of the difficulty of survival under the circumstances, these women quickly became competitors for the same resources. As culturally distinct indigenous minorities with an historical experience of demand-resource inequities, First Nations mothers are expected to be oriented to planning that conserves group identity (Carson et al., 1990; Castile, 1978) when resources are low.

Chapter III

Methods

The study was designed to investigate the relationships between family and maternal characteristics, maternal social role attitudes (occupational, marital, parental, and home care role salience) and the planning behavior of First Nations mothers with school age children. Investigating these relationships required a highly specific sample in which individuals both occupied and functioned in the social positions identified as pertinent by the "Maternal Life Role Salience and Planning Model" (Figure 3). This section reports the process of sample recruitment, special issues that may have affected sample recruitment, the ethics review and the measures in the questionnaire.

Sample Recruitment

A purposive sample of First Nations mothers of school age children was recruited. A purposive sampling strategy was used because First Nations people are not randomly distributed in the general population and a deliberate effort was required to obtain a sample which was most representative of the group as a whole.

Establishing social and self-identity of First Nations women was (from the researcher's perspective) vital to the design of the study. First Nations social identities were established by the affiliation of women with First Nations institutions (lineages, villages and programs). First Nations self-identity was confirmed by asking the respondents "Are you.... 1) a First Nations person? 2) a non-First Nations person?".

Establishing that the respondent was the mother of school age children was achieved by the mother reporting at least one child age 3 to 18 years old living with her. In this study "school age" was defined as attending programs in formal schools. The educational administration in the First Nations village that participated had established that all village children aged 3 and 4 years attend school for half days. Urban First Nations families are encouraged to enroll their 3 and 4 year old children in programs in local schools which participants anecdotally confirmed was their practice.

To achieve a measure of representativeness the design included sampling for major aspects of diversity among First Nations populations: geographic distribution and institutional involvement. Recruitment was carried out in the lower mainland, south coast, west coast and north coast of the province of British Columbia. Recruitment took place in schools, colleges, community organizations, political organizations, and family lineages. The groups and geographic areas canvassed reflected a broad sociodemographic cross-section of First Nations people.

Data Collection Context

Five types of First Nations organizations and affiliations were initially approached: lineages, village education programs, special interest associations, urban community service associations that have regular meetings or offer programs, and urban educational institutions. Those that participated were a lineage, a village education program, an urban association that offered programs, and several urban educational institutions or programs. No political or religious organizations participated.

Respondents affiliated with public and formal institutions accounted for the majority (55%) of the sample recruited from the North Coast, Lower Mainland and Vancouver Island. The village and lineage sample (45%) was from the Vancouver Island region.

Data Collection Process

Consistent with the organizational differences between the two types of institutional affiliations, two approaches were used for data collection. The "Investigator Absent" approach was used to reduce bias in populations where individuals may have been known to the investigator. The "Investigator Present" approach was used in populations where individuals were unknown to the investigator. While two approaches were used, the information used to introduce the survey, to establish investigator legitimacy, to elicit respondent co-operation, and to establish rapport with the respondents was substantively the same. Comparable results were expected through these approaches. To reduce the burden on the institutions and respondents, the survey was brought onto the site and into the existing social organization or activity (e.g., at a family event for the lineage women, in the homes of village women, in the classrooms of

women attending programs). This approach was expected to produce lower levels of intrusion which were in turn expected to facilitate research that depends on the good will and co-operation of First Nations institutions and respondents.

Data collection in formal settings. The procedure followed in obtaining participation from urban and political organizations consisted of five steps: a phone call to arrange an interview; an interview with an administrator or program manager, followed by a formal letter confirming the details of the interview; a presentation to the Board of Directors and/or staff; a recruitment presentation to potential participants; the administration of the questionnaire followed by a workshop.

This procedure permitted the development of terms of agreement between the objectives of the project and the interests of the organizations based on information and consent. A face-to-face interview with the administrator provided the investigator the opportunity to present the information and the administrator to evaluate it in terms of the value of the project balanced against the responsibility of granting permission and the allocation of institutional resources. The letter of confirmation permitted the administrator to have in hand the clearly articulated version of the terms on which he and the investigator had agreed. The presentations to the Boards of Directors and program staff informed all who might be involved about the general nature and specific aspects of the research from the measurement of concepts to the statistical treatment of the data. This process permitted a consensus to evolve between every level of the organization and the investigator. This process provided the organizational framework for the recruitment process.

Investigator contact with the respondents occurred during recruitment and in the workshop. Recruitment occurred in class time, consisting of a ten minute presentation (paralleling the explanation provided to the administration) followed by asking the students to participate. Positive expected outcomes for the participants were emphasized. Individuals gathered at the appointed time to participate, the questionnaires were distributed, and their completion was followed by a debriefing workshop.

Groups of participants completed the questionnaires during class time, during a lunch hour, or after regular class hours. The questionnaires were completed in less than forty-five minutes with most taking twenty to thirty-five minutes. The investigator was on hand to clarify problems with vocabulary and terminology for questionnaires done in organizational settings. The de-briefing workshop included a presentation about the concepts and a lively discussion of the issues by participants.

Of those individuals who completed the questionnaires during class time, 100% participated ($n = 13$). Of those who participated on their own time rather than class time, less than 10% ($n=8$) participated (appeals had been made to over 125 individuals in groups). Of those individuals recruited through an urban home school program ($n = 6$), 100% decided against participation after they had completed part of the questionnaire. Data collection occurred between July, 1991 and February, 1992.

Data collection in informal settings. Because the investigator was a member of the community, she decided to elicit the help of high school students in the data collection. The school board and administrator of the rural school were contacted in the late spring of 1991 with a request for an initial interview. An initial presentation to the school board and administrator permitted an opportunity to explain the project and ask for their participation. A follow-up letter was sent to confirm arrangements with the administrator.

In the fall of 1991, students from an accounting class were recruited to distribute and collect the questionnaires. The students were given some general background about research and specifically the nature of the research (management by First Nations people) as it related to their accounting studies and cultural heritage. The students were invited to participate in data collection and then were given instructions for the distribution and retrieval of the questionnaires.

The school administration provided an alphabetical list of parents (both elementary and secondary school) from which the teacher assigned 10 names to each of the seven students by a quasi-random process. A total of 70 questionnaires was handed out to the students. The students were given the added incentive that their participation in the data collection would

contribute to their course mark. The students distributed 25 questionnaires (35.7% out of a possible 70 questionnaires) to mothers. The students invited participating mothers to attend one of two consecutive afternoon meetings for a debriefing. The students returned a total of 20 questionnaires in sealed envelopes to the teacher during the next several weeks. The return rate was 80%. Of these twenty, 12 were satisfactorily completed and included in the data analysis.

A workshop was offered on two consecutive afternoons beginning on the day after the questionnaires were distributed by the students. Since the investigator knew who potential questionnaire recipients were and saw that none attended either workshop, she made substitute presentations about two other topics she had previously prepared. All workshop information and materials were related to very specific aspects of local history and culture. Those individuals who did attend participated enthusiastically. These workshops were not debriefings for the questionnaire.

After all the questionnaires had been returned, the investigator met with the students during class time. The students were thanked for their participation and the nature of the research was more fully explained as part of the debriefing process. Discussion of the distribution rate revealed that the students had felt uncomfortable approaching non-family members to fill out the questionnaires. Students felt awkward asking for help from non-family members with an assignment associated with school.

The group of lineage women ($n = 6$), an informal institutional affiliation, was recruited by a post secondary education student who came from the village being surveyed. She administered the questionnaires during a week-end family celebration. She returned the questionnaires in sealed envelopes as had the high school students. While this sample is associated with the village that was surveyed, the respondents were not living in the village at the time of the survey.

Comparability of Data from Diverse Settings

The process of recruiting respondents from formal and informal institutions differed. However, the two groups are considered to be two parts of a whole population and were

sampled to represent the universe of the First Nations community. In fact, respondents may have been part of both kinds of institutions.

The effects of these differences in the recruitment process were assessed by computing a variable for the two dimensions on which the groups differed: recruitment (type of institutional affiliation) and treatment (absence or presence of investigator). The variable "sampling effect" was computed by recoding the case identification codes and ordering them into two values reflecting the two groups: Group 1, Investigator Absent -- Village and Lineage Women; and Group 2, Investigator Present -- Pre-employment and Educational Programs.

Table 1

T-test Comparison of Two Groups of Respondents: Recruitment and Treatment

Variables	Group 1 ^a		Group 2 ^b		<u>n</u>	t-value
	Mean	SD	Mean	SD		
Community size	2.31	.95	3.65	1.66	34	-2.86**
Renting	.44	.51	.91	.29	36	-3.59**
Level of Employment	2.66	.59	1.95	.38	37	4.52**
Security of Accommodation	3.06	.99	2.14	.56	36	3.17*
Occupational Role	3.42	.78	4.17	.51	38	-3.66**

Note. N = 40.

^aGroup 1 is the village and lineage sample (informal institutions, investigator absent) n = 18; ^bGroup 2, the pre-employment and educational institution sample (formal institution, investigator present) n = 22.

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

Independent t-tests were conducted on 22 variables to be used in hypotheses testing to investigate whether differences between the two groups were statistically significant. Of the 22 variables only 5 variables were significantly different for the two groups (p < .05). Group 2 (formal institution, investigator present) was significantly more likely to live in a larger community, be renting and have higher occupational role salience than Group 1. Group 1 (informal institutions, investigator absent) had significantly greater security of accommodation

and higher level of employment than Group 2. Of primary interest for these two groups were dimensions of the dependent variable, planning. The t-test scores for the three dimensions of planning (morphostatic planning, morphogenic planning, and planning by adherence to rules) indicated no significant differences.

These differences could be minimized in the testing of the hypotheses by controlling for the sampling effects. Controlling for the sampling effects would permit the two groups who were subjected to different methods to be treated the same, to permit the assumption of "no difference".

Return Rate of the Questionnaires

Sixty-four questionnaires were returned. Because the canvassing for participants occurred in highly diverse groups and no one who chose to participate was refused, 19 individuals who did not meet the study criteria completed questionnaires. These individuals were: two single-parent fathers who felt they were "mothering," three grandmothers who were actively mothering, two non-native mothers who were instructors in some groups, one native mother whose child was not of school age, and eleven women who were either anticipating motherhood or whose children were no longer school age.

Of the 49 participants who met the criteria, 9 had either not answered large sections of the questionnaire or had answered several pages using the same response number. These questionnaires were eliminated from the sample. Visual inspection of the remaining 40 questionnaires revealed some missing data. The missing data occurred in the two major scales (life role salience and planning) in 15 cases across 24 items. Of these 15 cases with missing items: 1 case had four missing items, 2 cases had three missing items, 1 case had two missing items and 11 cases had one missing item. Missing items may cause serious problems in the data analysis considering the small sample size and lack of randomness. After consultation with advisors, "missing data" were imputed from a whole number average for the item. To assure 40 cases in most of the analyses, .005 or .5% of the data were imputed (24 responses out of a possible 4,640).

Special Issues Influencing Return Rate and Sample Recruitment

Special issues are believed to have had a direct influence on the rate of participation and the return rate of the questionnaire. Special issues identified were, first, the social, political, and legal environment during the recruitment period, second, a concurrent federal survey, and third, competing paradigms and definitions.

During the recruitment period the national and provincial political climate was being shaped by the ongoing redefinition of the terms of co-existence between First Nations peoples and Canadian institutions. During the period 1990 - 1992, the media, especially the medium of television news, brought the non-native perspective of the constitutional debate into the homes of First Nations families. During this same period First Nations communities were engaged in the development of consensus on constitutional issues from their own perspective. Both the larger society and the native community were actively engaged in redefining fundamental terms of co-existence with each other in a public forum. A consequence of these constitutional talks was an escalation of hostility within the aboriginal community about the manner in which they were being defined majority institutions. The re-negotiating of social terms of reference at the institution level filtered into social relations not only between natives and non-natives but also between some groups of First Nations women and official First Nations leadership. The public debates brought frustration, confusion, anger, and pain to First Nations people, especially, women ("Dispute widens", 1992).

Concurrent with this study, Statistics Canada (1991) was conducting a major and comprehensive survey in selected First Nations populations including a village in this sample. The instrument was developed in consultation with regional and national First Nations organizations and provincial, territorial and federal government departments. The Survey defined individuals as aboriginal if they had at least one Aboriginal origin and/or registration under the Indian Act of Canada (including Bill C-31 applicants) and identification with at least one Aboriginal group. Previous census definitions lacked the group identification component. The Survey covered identity, language and tradition, disability, health, lifestyles and social issues, mobility, schooling, work and related activities, expenditures and income, and housing.

The Survey was developed to meet the information needs of First Nations organizations, governments, and businesses, and to promote social and economic development for aboriginal groups. The fifty-eight page interview was lengthy, thorough, and official. It was administered in a house to house campaign by local First Nations persons trained and paid to represent Statistics Canada.

In contrast to Statistics Canada's Aboriginal Peoples Survey, this survey of First Nations mothers of school age children was conceptualized and administered by an individual included in the Survey definition (First Nation status, social identification and "origins" through band membership) rather than by an institution to serve the needs of institutions. This survey was conducted with few resources, mainly found resources which included the largesse of advisors (printing questionnaires), participating institutions and individuals (time, classroom space and staff), and an independent First Nations researcher (technical, computer, travel, and paper).

The substantive content of this survey was from the perspective of First Nations women and was designed to respectfully document the socioeconomic pattern of functioning in the "social demography" in which First Nations women live and plan. The rationale for this survey was to produce information about normative First Nations functioning by investigating planning behavior of First Nations women. This nonpathological perspective was at odds with a currently popular and pervasive orientation in formal social programming among First Nations people. In this orientation First Nations families are viewed as inherently dysfunctional due to high rates of alcoholism and colonial oppression as opposed to being adaptive in adverse circumstances. The vocabulary of a dysfunctional family systems perspective was at odds with the family resource management systems perspective used in this thesis research.

Conflicting paradigms created communication difficulties. One group of urban parents was dissuaded from participating when the preliminary explanation about the study was disrupted. One father loudly asserted his opinion that First Nations people lived spontaneously not by decisions to achieve goals or use resources. A group of students in a human service program voiced strong disagreement with the premise in the cover letter that First Nations

mothers have choices. Members of this group are not known to have participated. In yet another group, a mother related to choices from the perspective of the "scapegoat", a label she used to identify her role in her family system. These differences in perspective created unexpected problems in communicating with prospective participants and probably lowered the participation rate.

Ethics

Procedures as approved by U.B.C. ethics committee were followed (Appendix A). A covering letter for the questionnaire complied with the ethics committee requirements for disclosure to participants and for their consent. While issues of disclosure and consent were implicitly met by the ethics review process, First Nations organizations deemed it necessary to explicitly understand the substantive aspects of the research itself before granting the investigator access to their members. Examples of such substantive aspects of the research project were the methodology, the conceptual framework or model, and the tendency to investigate stereotypical differences such as on reserve and off reserve dichotomies. In one organization this process took four months, involved the active advocacy of a staff member who supported the project and hands on involvement by the Board of Directors (reading of draft of the proposal and an in-depth explanation of the proposal at meeting of Directors). At the board meeting the investigator was accompanied by a character witness, a First Nations researcher and hereditary chief associated with a prominent First Nations organization. A letter of support by the chair of the student's thesis committee to the organization was also required.

The review process clearly reflected two foci on standards. The first focus, in the academic community, was on an implicit social contract of professional practice: the standards of the ethical review process. The second focus, in the First Nations organizations and associations, was on an explicit social contract, based on the standards of the ethical review process and a consensus negotiated between officials and staff of the First Nations organizations, representative members of the First Nations community and the investigator. Both standards had to be met.

Measures

Independent Variables

Independent variables included maternal and family sociodemographic data and maternal social role attitudes measured as life role salience (see Appendix B, Questionnaire).

Maternal characteristics. First Nations membership was measured by asking respondents to circle the category indicating whether they themselves and their partners were a "First Nations person" or "not a First Nations" person.

Respondents circled the category describing their marital status: single, living together, married, separated, divorced, or widowed. The categories provided informal status such as "living with a partner" that may in some circumstances be considered a formal status.

Respondents indicated their educational status by circling one of nine levels of educational attainment: Elementary School, Grade 9, Grade 12, a Trade Program, a Technical Program, an Undergraduate Degree and a Graduate Degree level. For the analysis "Trade Program" and "Technical Program" were combined into a "Trade and Technical " category.

To determine the occupational status of respondents they were asked to complete the sentence: "My occupation is.....". The responses were classified and ranked as: 1) none identified, 2) handicrafter, 3) student, 4) laborers and processors, 5) office worker and 6) paraprofessionals and professionals. Respondents in the first three categories included those without a current formal occupational status. Respondents in the second three categories were considered to have formal occupational status based on Statistics Canada criteria. The categories were ranked in ascending order based on increasing educational requirements so that a high score indicated occupations requiring higher levels of formal education for the job.

Respondents were asked to circle the category describing their employment status: full time (more than 29 hrs. per week), part time (less than 29 hrs. per week), seasonally (many hours during some part of the year and few or none at other parts of the year), not employed, not seeking work, a student (not seeking work) and an open category in which they could define another type of employment status.

Occupational status and employment status were combined to reflect current maternal level of employment. A cross tabulation produced three distinct respondent categories: those formally employed full and part time (professionals and paraprofessionals, laborers and processors and office workers); those preparing for future employment (students); and those not formally employed (none identified, homeworkers, homemakers, and seasonal employees). Level of Employment measures the level of respondent role involvement in work and education for formal employment, reflecting the investment of time and personal resources between the formal and informal spheres of economic activity.

Family/household characteristics. Community size was indicated by the respondents circling one of six categories: "more than 500,000 people", "100,000 to 499,999 people", "30,000 -- 99,999", "less than 30,000", "Village", to "Rural, a few houses near by".

Living arrangements were indicated by the respondents checking one of six diverse residential options. This variable was used to create two other variables. To assess the economic security of living arrangements, a dichotomous variable "renting" was created. This variable has two levels "Renting" and "Other arrangements". To assess a more global level of security of living arrangements, an interval variable, "security of accommodation" was created. This variable has four levels, "Neither Economic nor Psychological Security" (living as a guest), "Psychological Security" (co-rental or co-ownership of accommodation), "Economic Security" (renting), "Both Economic and Psychological Security" (sole ownership). Score increases reflect a progression from interdependence to independence in accommodation.

Respondents were asked to indicate their current gross annual household income from all sources (wages, family allowance, welfare, unemployment insurance, pensions, etc.) by circling one of 9 income categories: from "Under \$5,000" to "\$40,000 and over" in increments of \$5,000. Two categories at the top of the range were collapsed for data analysis, which resulted in an 8 point scale anchored at the high end of the scale by "\$35,000 and over".

Respondents were asked to describe household members by "the individual's age, in years, their relationship to respondent (e.g., son, friend), circle their sex". Four variables were created from this information: "number of people in the household", "number of children

in the household", "family leadership", and "presence of preschoolers". The variable "Family/Household Size " was derived from the number of people in the household, producing three household groupings by number of members: 1 = "0 - 3 members", 2 = "4 - 6 members" and 3 = "7+ members". The variable "Number of Children per Household" was derived from the number of individuals 18 years and under per household. Family Leadership" was derived from "Marital Status" and confirmed by mothers' reports of absence or presence of husbands or partners living in the household. This variable has two levels: "Single" (mothers only) and "Dual" (mothers and husbands or partners). The variable "Preschoolers" was derived from the ages of sons and daughters by recoding ages 1, 2 to 1, ages 3 to 18 to 0. The result was a two level variable in which the "Absence of Preschoolers" = "0" and the "Presence of Preschoolers" = "1". The lower age limit was determined by availability of "Headstart" type programming in rural and in urban schools for First Nations children as young as 3 years of age and the upper limit by the age of majority after which the mother could no longer be expected to be responsible for the child's school attendance. This variable was used as an indicator of child care demands on the household by identifying whether there were only school age children or also pre-school children.

Life role salience. The independent variables, social role attitudes, consisting of value of and commitment to life roles, were measured by the Life Role Salience Scale that was developed by Amatea et al. (1986). The scale measures value and commitment in four social role domains: occupational, marital, parental, and home care. There are five items in each of the eight subscales or forty items in total. Two examples of statements from the scales are: "My life would be empty if I never married" (measuring current or expected value of marriage) and "I expect to devote whatever time and energy it takes to move up in my job and or career field" (measuring current or expected commitment to work). Possible responses on the Life Role Salience Scale are: 1) disagree, 2) somewhat disagree, 3) neither agree or disagree, 4) somewhat agree, 5) agree.

Four theoretical criteria guided the development of the Life Role Salience Scale (Amatea et al., 1986). First, value and commitment were conceptualized as role dimensions

rather than two ends of a continuum. The personal importance of the role (the role value) and the level of commitment of personal resources to the enactment of the role (the role commitment) are considered distinct. Second, the authors claimed gender neutrality for their scale validated by studies with male and female college students, academic women, and parents of new borns. Third, items were applicable to those enacting roles as well as those anticipating roles as validated by college students anticipating all life roles, by academic women involved in work and family roles and by males and females newly involved in the parental role. Finally, levels of life roles could be captured to reflect levels of role status.

There were two phases in the original scale development in which the scale was tested on a total of 1,069 individuals. The first phase had two distinct parts. A ninety-item pilot test was first administered to 143 college students (73 women; 70 men). Then a refined instrument of six, 6-item scales was first tested on a group of college students (234 women; 200 men) and second on a group of career women (192 women). The second phase, undertaken with new parents (150 men and 150 women), was a sample for whom active engagement in the parental role was the criteria. The recruitment of the latter sample was through a sampling of birth announcements. The student sample represented an anticipatory combining of roles across gender. The academic women and parents represented those actively engaged in combining roles with occupation (career) within gender. The parents represented those actively engaged in combining roles across gender.

Three statistical criteria guided the development of the Life Role Salience Scale as an instrument with strong discriminatory power. First, items below 2.0 or above 4.0 on a 5-point scale were eliminated as extreme. Second, items with too little variance (less than .50) were eliminated. Third, in comparing the factor structure similarity between the undergraduate and academic women's sample (using Cattell's salient variable similarity index, s), only the items that loaded .30 or above were considered salient and retained. Scale development began with a 90-item pool. A factor analysis of these items supported the identification of eight dimensions of this scale that resulted in the final 40-item scale. In the initial uses of the scale

(Amatea et al., 1986) the item-total correlations were only moderate at $p = .001$ but the alpha coefficients were reasonably good (between .79 and .94).

Dependent Variable

Planning. The Morphostatic -- Morphogenic Planning Scale was used to assess the planning behavior of First Nations families. The scale was conceptualized by Beard (1975) and later refined by Beard and Firebaugh (1978). These 86 statements were evaluated by ten home management experts to establish expert or face validity. The questions were pilot tested on 62 home management undergraduates. The scale was then administered to 252 women in 23 women's groups.

This scale as published by Beard and Firebaugh (1978) contained 75 of the original 86 planning statements. The authors had eliminated 11 items which did not attain a factor loading of .30. The remaining 75 planning items consisted of 38 statements suggesting morphostatic strategies (system maintenance with an end-state focus) and 37 statements suggesting morphogenic strategies (system change with a means focus). The statements elicited agreement on a five-point Likert-type scale regarding the similarity between the planning statements and planning behavior in their families. The choices ranged from "Not Like What My Family Does" to "Exactly Like What My Family Does" .

In Beard's use of the scale, reliability was assessed with a Kuder-Richardson formula (KR-20), a special version of alpha testing internal consistency for dichotomous variables (de Vellis, 1991). She re-classified planning scale items as positive or negative responses (like or not like the family). The internal reliability was a KR-20 coefficient of .82 for all 86 statements, .76 for the morphostatic statements and .73 for the morphogenic statements. Forty-nine statements (57%) had commonalities or a shared variance of .30 and above. Beard and Firebaugh (1978) condensed the scale when eight principle components were extracted in the initial factor analysis with seventy-five items loading .30 or above in an orthogonal rotation of the initial analysis. Thirty-three percent of the variance was accounted for in the first eight factors. Since this was a component factor rather than a common factor analysis it is important to note that these factors include all variance: random error, common, and specific.

According to Beard and Firebaugh (1978), five of the factors (I, II, V, VI, and VII) identify characteristics of morphostatic and morphogenic planning behavior and the remainder are of limited use in differentiating between morphostatic and morphogenic planning. Although Beard and Firebaugh consider Factors III, IV, and VIII of limited usefulness in identifying family rules for morphostasis (maintenance) or morphogenesis (change) these other factors may suggest other ways families use maintenance and change in their lives. Issues arising from planning statements which suggest descriptions for these factors hint at the level of engagement of family rules (emotional versus cognitive, community versus family, individual versus family). In Beard's (1975) analysis and Beard and Firebaugh's (1978) report of the findings, factors were classified by the behavioral content they typified as follows: Factor III, "Family coping with demands of random planning behavior", suggests a rigid adherence to rules that conserve current family functions but are not planful; Factor IV, "Community involvement", suggests a community orientation or lack thereof as a source for emerging family rules; Factor VIII, "Individual flexibility", suggests that flexibility at the individual level may serve family planning behavior differently for family change (morphogenesis) or maintenance (morphostasis). The statements contributing to these factors were retained in this study so that the "characteristics of planning behavior" could be examined for relationships between systems characteristics (Broderick & Smith, 1979), family management characteristics and family characteristics (Deacon & Firebaugh, 1989).

A large pool of items was considered desirable since the scale had not been normed in a First Nations population. Spector (1992) suggests that when internal consistency of scales break down across time and between populations the frame of reference remains the distribution of scores. The greater the number of scores the greater the probability of finding relationships between scores. Using the pool of items salient for Beard's sample was expected to permit the development of a norm with a factor analysis for our First Nations population that was comparable to Beard's study. This approach was considered more desirable than using the existing factors (Beard & Firebaugh, 1978) as norms for this First Nations population.

Chapter IV

Results

The report of findings is divided into three parts. The first part is a description of the sample, including independent variables both in their original scales and scales converted for hypothesis testing. The second part includes a report of the reliabilities of scales that make up the dependent variable, planning, the Morphostatic and Morphogenic Planning Scale (Beard & Firebaugh, 1978) and the independent variables, social role attitudes, the Life Role Salience Scale (Amatea et al., 1986), with a discussion of the decision process that produced the measures for hypotheses testing. The third part is a report of the tests of the hypotheses.

Description of the Data Set

Univariate statistics were computed to examine the statistical distribution of demographic, life role salience, and planning measures. Given the small, purposive sample and number of values for each of the variables, a one-sample non-parametric Chi-square test was computed to assess the independence of the measures. These Chi-square results indicated that a minimum of 80% of the items making up the planning and life role scales were significant at $p < .10$; size of community, marital status, educational status, current occupation, employment status, and living arrangements were significant at $p < .001$; income was significant at $p = .005$. These low probabilities provided evidence of statistical independence, probabilities not solely attributable to chance. Thus the important assumption of independence was met satisfactorily, increasing confidence in the validity of further statistical tests in the data analysis and inferences drawn from the results (Kerlinger, 1986).

Description of the Respondents

Maternal characteristics. The respondents were between 19 years and 51 years with a mean age of 32.28 years ($SD = 1.15$). The majority (70%) were married or cohabiting, with 15% single and 15% widowed, divorced, or separated. Of those women married or cohabiting ($n = 28$), 85.7% were in homogamous relationships wherein husbands or partners were also First Nations individuals ($n = 24$). Of all the respondents, 60% were in relationships with

First Nations partners, only 10% were in relationships with non-First Nations partners, and 30% were not currently in relationships.

Grade 12 was the mean level of education attained with only 10% holding university degrees. Only one third of mothers with post secondary levels of education (15%) had attended technical or trade schools. Attained levels of education were reflected in the occupational areas which were identified. Of the 50% who had formal occupational identities, 30% were para-professionals or professionals, the remainder, laborers and processors and office workers. Of all the respondents, only 5% said they had no current occupation. The employment status of this sample of respondents indicates that they were actively investing in occupational identities with 32.5% employed and 55% (students) developing skills to achieve employment. Only 70.6% of those employed were employed full time (see Table 2).

Family/household characteristics. The mean household income from all sources was between \$15,000 and \$19,999, with 70% of households receiving under \$19,999 annually. Half of the respondents lived rurally or in villages, one quarter lived in communities with populations of less than 30,000 and one quarter with populations of more than 30,000. A variety of living arrangements was evident. Rental housing with sole tenancy was the modal response.

The modal household size of these First Nations families was four to six members (55%); a more detailed analysis indicated that 65% of households had four or fewer members. The majority (82.5%) of households consisted of nuclear families with two types of extended families, one extended with relatives (10%) and the second extended with friends (7.5%). Twice the number of households were led by a spousal pair (67.5%) as by a single female (32.5%). School age children were present in all households, preschoolers were present in one third of these households. One (30%) and two child (40%) households were in the majority (see Table 3).

Table 2

Maternal Characteristics

Characteristic	Number of Respondents	Percentage of Respondents
<u>Level of Education</u>		
Elementary	3	7.5
Grade 9	12	30.0
Grade 12	16	40.0
Trade and Technical School	2	5.0
University degree	4	10.0
Missing data	3	7.5
Total	40	100.0
<u>Level of Employment</u>		
Not Trained or Employed	3	7.5
Transitional - Student	22	55.0
Trained and Employed	14	35.0
Missing data	1	2.5
Total	40	100.0
<u>Security of Accommodation</u>		
Neither Psyc/ Ec Security	1	2.5
Psychological Only	3	7.5
Economic Only	25	62.5
Psycho-Economic Security	9	22.5
Missing data	2	5.0
Total	40	100.0

Table 3
Family/Household Characteristics

Characteristic	Number of Households	Percentage of Households
<u>Type and Size of Community</u>		
Rural - Few houses	2	5.0
Rural - Village	16	40.0
Urban - less than 30,000	9	22.5
Urban - 30,000-99,999	1	2.5
Urban -100,000- 499,999	3	7.5
Urban - 500,000	5	12.5
Missing data	4	10.0
Total	40	100.0
<u>Amount of Income in 000's of dollars (CDN)</u>		
Under - 5,000	3	7.5
5,000 - 9,999	4	10.0
10,000 - 14,999	10	25.0
15,000 - 19,999	11	27.5
20,000 - 24,999	4	10.0
25,000 - 29,999	1	2.5
30,000 - 34,900	2	5.0
35,000 - Over	3	7.5
Missing data	2	5.0
Total	40	100.0
<u>Size of Family/Household</u>		
0 - 3 members	10	25.0
4 - 6 members	22	55.0
7 + members	8	20.0
Total	40	100.0
<u>Type of Leadership</u>		
Mother Only	12	30.0
Mother and Partner	28	70.0
Total	40	100.0

Reliabilities of the Morphostatic and Morphogenic Planning Scale

The dependent variable, planning, was measured by the Morphostatic and Morphogenic Planning Scale (Beard & Firebaugh, 1978). A limited sample size precluded a factor analysis which is the most desirable assessment of scale performance in a new population. Instead, using a conceptual approach, planning scale items were summed in two ways. First, eight sub-scales were created using Beard's (1975) initial conceptualization of morphostatic and morphogenic boundaries, morphostatic and morphogenic standards and sequences, morphogenic and morphostatic organizational commitment, and morphostatic and morphogenic adjustment to demands. Reliabilities of the scales produced by this approach were checked using Cronbach's alpha. The resulting alpha statistics (from .70 to .25) indicated that the instability of these summed sub-scales precluded their consideration for further data analysis (see Appendix C, Table 1).

Second, eight sub-scales were created by summing the items to correspond with the eight dimensions identified through a factor analysis of Beard's (1975) data as tentatively named by Beard and Firebaugh (1978). The eight planning dimensions included: Factor I: Morphostatic Planning Behavior, Factor II - Morphogenic Planning Behavior, Factor III - Family Coping with Demands, Factor IV - Individual Plan Flexibility, Factor V - Community Involvement - Morphostatic, Factor VI - Resource Maximization, Factor VII - Family Adherence to Rules, Factor VIII - Individual Flexibility - Morphogenic. These eight planning dimensions, as interpreted by Beard and Firebaugh (1978), identified family planning behaviors that focused on resources (Factor I), that focused on goals (Factor II), that coped with demands using both morphogenic and morphostatic planning (Factor III), that were involved in the community (Factor IV), that depended on individual plan flexibility (Factor V), that maximized resources (Factor VI), that adhered to externally imposed standards (Factor VII), and depended on individual flexibility (Factor VIII).

The number of items, means, standard deviations, and coefficient alphas for these eight planning dimension sub-scales are reported in Table 4. Of these eight sub-scales, three produced coefficient alphas which suggested acceptable levels of scale reliability: "Morphostatic Planning" (alpha = .84), "Morphogenic Planning" (alpha = .76), and "Adherence to Rules" (alpha = .72). Based on the standardized means, the level of endorsement seemed highest in "Adherence to Rules" and lowest for "Morphogenic Planning". The family managerial system named "Family Coping with Demands" by Beard and Firebaugh (1978) and consequently described as "Random" by Deacon and Firebaugh (1989) was one of the planning dimensions included in the hypotheses for this study which demonstrated insufficient reliability to be included in further analyses. Instead "Adherence to Rules" which assesses aspects of morphostatic planning behavior has been substituted. Item-scale communalities in the planning dimensions exceeding .30 were 94% in "Adherence to Rules", 90% in "Morphostatic Planning", and 87.5% in "Morphogenic Planning".

Table 4

Descriptive Statistics and Reliability Coefficients for Planning Scale Dimensions

No. of Items	Planning Scale Dimensions	Factor ^a	Mean	SD	alpha N=40
20	Morphostatic Planning ^b	I	3.35	.683	.84
17	Morphogenic Planning ^b	II	3.15	.584	.76
11	Family Coping with Demands	III	2.98	.579	.50
9	Community Involvement	IV	3.04	.451	.13
8	Individual Plan Flexibility	V	3.36	.489	.24
10	Resource Maximizing	VI	3.29	.570	.50
8	Adherence to Rules ^b	VII	3.33	.775	.72
9	Individual Flexibility	VIII	3.35	.495	.19

^a Planning factors identified by Beard and Firebaugh (1978).

^b Dimensions of the dependent variable (planning) used in this study.

Three factors of the original eight factors identified and described by Beard and Firebaugh (1978) were statistically confirmed for this sample of First Nations mothers. Because the sample on which these factors were normed was American mothers in volunteer/community associations, it is not surprising that not all of the dimensions achieved reliability for a sample of First Nations mothers. However, the three dimensions of planning identified seem to be measuring family system level planning behaviors adequately enough to proceed (see Appendix D, Table 1).

Reliabilities of the Life Role Salience Scale

Life Role Salience scales and sub-scales retained in the analysis are reported in Table 5. The standardized means highlight the level of role endorsement by First Nations mothers. Role value and commitment are highest in the parental role with the least variation ($\underline{M} = 4.45$, $SD = .30$) and lowest in the marital role with the most variation ($\underline{M} = 3.27$, $SD = .91$).

Numbers of items, means, standard deviations, and alpha coefficients of life role domains, life role compliments, and life role attitudes are reported in Table 5. Acceptable levels of reliability were found in the occupational role domain ($\alpha = .83$), the marital role domain ($\alpha = .86$), and the home care role domain ($\alpha = .75$). These alphas suggest stable measures in three life role domains. Only the parental role scale had an alpha (.13) judged to be statistically and hence conceptually unreliable for this population. Efforts to stabilize the alpha of the parental role scale as suggested by de Vellis (1991) (e.g. reverse scoring items, deleting items) were unsuccessful. The high mean and low variation, yet lack of item-to-scale correlation in the parental role measure resulted in an unacceptable level of reliability and convergent validity. However, the measure was retained because its statistical failure may be indicating something of theoretical value and will be discussed in the limitations.

Table 5

Number of Items, Descriptive Statistics and Reliability Coefficients for the Life Role Salience Scale

No. of Items	Life Role Salience Scale	Mean	SD	alpha N=40
<u>Life Role Domains^a:</u>				
10	Occupational Role Value & Commitment	3.84	.741	.83
10	Parental Role Value & Commitment	4.45	.300	.13
10	Marital Role Value & Commitment	3.27	.913	.86
10	Home Care Role Value & Commitment	4.22	.600	.75
<u>Life Role Compliments^b:</u>				
40	Salience of Four Social Roles	3.94	.382	.78
30	Salience of Three Family Roles	3.98	.411	.75
<u>Life Role Attitudes^b:</u>				
20	Value of Four Social Roles	4.00	.461	.67
20	Commitment to Four Social Roles	3.89	.424	.69

^a Life Role Salience Scale (Amatea et al., 1986). ^bAdapted from Amatea et al. (1986).

A correlation matrix was computed to confirm the convergent and discriminant validity claimed for the life role salience scales by Amatea et al. (1986), and to assess the relative performance of the summed subscales. The correlations between "Life Role Domains" were, as expected, mainly weak, positive and nonsignificant with one exception; the "Parental Role" was positively ($r = .30, p < .05$) associated with the "Marital Role" and negatively ($r = -.30, p < .05$) associated with the "Home Care Role". The significant association of the "Parental Role" with these two roles provides a theoretical rationale for including it in the analyses. The "Occupational Role" was independent of other life roles and consequently considered useful for further analyses. The Role Compliment, "Salience of Three Family Roles", a summation of the salience of Parental, Marital and Home Care Roles, was independent of the "Occupational Role" ($r = .14, n.s.$) and therefore also considered useful for further analyses, as were "Value of Four Social Roles" and "Commitment to Four Social Roles". In summary, the life role domain measures seemed to perform adequately, with the exception of the Parental Role, achieving measures of life role salience which were judged to be stable and valuable independent variables to be included in the tests of the hypotheses.

Tests of Hypotheses

Sociodemographics and Planning Behavior

The associations between categorical variables were assessed by analysis of variance. Association between interval variables were assessed with partial correlations. The sampling effects were entered as controls in all assessments.

Hypothesis 1

Presence of preschoolers is positively related to morphostatic planning.

An analysis of variance was conducted with the dichotomous variable "Preschool" (Absence of Preschoolers = 0, Presence of Preschoolers = 1) and the interval variable "Morphostatic Planning", controlling for sampling effects. The main effects of the presence of preschoolers on "Morphostatic Planning" did not reach significance ($F(2,38) = .04$, $p = .84$) and consequently the hypothesis was rejected.

Hypothesis 2

Education is positively related to morphogenic planning.

The association between two interval variables, "Educational Status" and "Morphogenic Planning" was tested by computing a partial correlation coefficient which permitted sampling effects to be controlled. Educational status was negatively and moderately, but not significantly ($r = -.21$, $p = .22$) related to "Morphogenic Planning". This hypothesis was rejected.

Hypothesis 3

Maternal age is negatively related to morphogenic planning.

The association between two interval variables, "Age" and "Morphogenic Planning" was tested by computing a partial correlation coefficient which permitted sampling effects to be controlled. Age was weakly, negatively and not significantly ($r = -.04$, $p = .79$) related to "Morphogenic Planning". While the direction was correct, and younger mothers did use morphogenic planning less, the strength of the association and achieved level of significance did not warrant acceptance of this hypothesis.

Hypothesis 4

Maternal level of employment is negatively related to morphogenic planning.

An analysis of variance was conducted on the independent ordinal variable "Level of Employment" and the dependent interval variable "Morphogenic Planning", controlling for sampling effects. The main effects of level of employment ($F(3,35) = .03$, $p = .97$) did not achieve significance and the hypothesis was rejected.

Hypothesis 5

Renting is negatively related to morphogenic planning.

An analysis of variance was conducted on the "dummied" dichotomous variable "Renting" and interval variable "Morphogenic Planning", controlling for sampling effects. Main effects of renting on morphogenic planning did not reach significance ($F(2,38) = 1.45$, $p = .24$). While renting approached significance, the test revealed no significant difference and consequently the hypothesis was rejected.

Life Role Salience and Planning Behavior

The associations between interval measures of life role domains, life role attitudes, life role compliments and planning behaviors were assessed with partial correlation coefficients in order that the contribution of sampling effects could be controlled in tests of these hypotheses. Partial correlation coefficients are reported to indicate the remaining contribution of the independent variable in predicting the dependent variable after the sampling effects were removed.

Hypothesis 6

Maternal family role salience is related to morphostatic planning.

A partial correlation coefficient measured the association between two interval variables, "Family Roles" and "Morphostatic Planning", controlling for sampling effects. Family role salience was weakly and positively but not significantly ($r = .16$, $p = .33$) associated with "Morphostatic Planning". This hypothesis was rejected.

Hypothesis 7

Maternal occupational and family role salience (all life roles) is related to morphogenic planning.

A partial correlation coefficient measured the association between two interval variables, "All Life Roles" and "Morphogenic Planning", controlling for sampling effects. Occupational and family role salience were positively but weakly ($r = .18$, $p = .27$) associated with "Morphogenic Planning". This hypothesis was not significant and was rejected.

Hypothesis 8

Maternal occupational role salience is related to planning by adherence to rules.

A partial correlation coefficient measured the association between two interval variables "Occupational Role" and "Adherence to rules", controlling for sampling effects. Occupational role salience was strongly, positively and significantly ($r = .36$, $p = .02$) related to planning which emphasizes rules. The hypothesis was not rejected.

Hypothesis 9

Maternal life role commitment is positively related to morphogenic planning.

A partial correlation coefficient measured the association between two interval variables, "Commitment" and "Morphogenic planning", controlling for sampling effects. This life role attitude was positively but weakly ($r = .17$, $p = .30$) related to "Morphogenic planning". This hypothesis failed to achieve significance and was rejected.

Hypothesis 10

Maternal life role value is positively related to morphostatic planning.

A partial correlation coefficient measured the association between two interval variables, "Values" and "Morphostatic Planning", controlling for sampling effects. This life role attitude was moderately, positively but not significantly ($r = .22$, $p = .18$) related to "Morphostatic Planning". This hypothesis was rejected.

Post hoc analysis. A post hoc analysis was conducted on the relationships between sociodemographic variables, maternal life role salience measures, and planning dimensions not hypothesized from the literature. Income was included as a variable and analyzed in

association with all planning dimensions. Five additional, statistically significant, partial correlations were found when sampling effects were controlled. Occupational role salience was positively related to morphostatic planning ($r = .36, p = .02$). Educational status was inversely related to "Adherence to Rules" ($r = -.51, p = .001$). Income was inversely related to all three planning dimensions (i.e., planning by adherence to rules and morphogenic planning, ($r = -.30, p < .10$) morphostatic planning ($r = -.43, p < .01$).

The Maternal Social Role Attitude and Planning Model

Hypothesis 11

Maternal and family sociodemographics and maternal life role salience contribute to planning (morphostatic planning, planning by adherence to rules, and morphogenic planning).

The contributions of family and maternal socio-demographics and maternal life role salience to three dimensions of planning were investigated using a multiple regression. A controlled method of entry was employed in which variables were entered based on the theoretical model "Maternal Social Role Attitudes and Planning Behavior". Variables were entered in two steps. First, the sampling effects were entered to check the significance of the effects of methodology and possible sampling bias. Second, all the other variables were entered.

The basic multiple regression model was:

Planning = B (sampling effects) + B (family and maternal sociodemographics and four maternal life roles).

Three conceptual equations were generated, one for each dependent variable, according to the additive multiple regression model:

Planning by Adherence to Rules = B (sampling effects) + B (Family Sociodemographics [size of community + income + number of persons in the household + type of family leadership] + Maternal Sociodemographics [age + educational status + level of formal employment + security of accommodation] + Maternal Life Roles [occupational role salience + parental role salience + marital role salience + home care role salience]).

Morphogenic Planning = B (sampling effects) + B (Family Socio-demographics [size of community + income + number of persons in the household + type of family leadership] + Maternal Socio-demographics [age + educational status + level of formal employment + security of accommodation] + Maternal Life Roles [occupational role salience + parental role salience + marital role salience + home care role salience]).

Morphostatic Planning = B (sampling effects) + B (Family Sociodemographics [size of community + income + number of persons in the household + type of family leadership] + Maternal Sociodemographics [age + educational status + level of formal employment + security of accommodation] + Maternal Life Roles [occupational role salience + parental role salience + marital role salience + home care role salience]).

Before proceeding with these analyses, several data checks were made to deal with critical assumptions of the regression analyses: independence of variables, levels of tolerance, and normal distribution. Since the independent variables were the same for each planning dimension these checks are reported only once but apply to all three models. First, a correlational matrix was computed to deal with the assumptions of independence among the variables in the equation. Ten percent of the relationships between the fourteen independent variables were significantly interrelated. The highest interrelationship was between number of persons living in the household and family leadership ($r = -.60$). Second, after entering the variable to control sampling effects, the tolerances of the remaining variables not in the equation were assessed. The lowest level of tolerance was in level of employment (.68).

Tolerances (proportions of unexplained variance) were considered to be acceptable posing minimal threat to assumptions of independence. Third, an examination of the residual analysis indicated that there were no outliers in the casewise plots. In the standardized residual plot the range was between 1.00 and -1.00 ($n = 31$). A visual inspection of the normal probability plots indicated that generally the distribution of the observed values was relatively close to the regression line and the distribution was generally linear.

The resulting statistics of the three regression equations were (see Table 6):

Planning by adherence to rules:

$$Y = 6.02 + (-.09) + (-.24) + (-.58) + (.04) + (-.09) + (-.05) + (-.17) + (-.03) + (.15) \\ + (.63) + (.17) + (.13) + (-.06) + \text{error}.$$

Morphogenic planning:

$$Y = 6.30 + (.00) + (-.44) + (-.55) + (.21) + (-.21) + (-.10) + (.00) + (-.08) + (.07) \\ + (.37) + (.28) + (.11) + (-.30) + \text{error}.$$

Morphostatic planning:

$$Y = 4.61 + (-.17) + (.12) + (-.47) + (.32) + (.02) + (.08) + (-.08) + (.07) + (.21) \\ + (.80) + (.02) + (.16) + (-.01) + \text{error}.$$

Adherence to rules. Standardized beta coefficients and F-ratios for the regression model "Adherence to Rules" are reported in Table 6. The sampling effect was entered in step one and the R^2 of .03 was not significant ($F(1,29) = .99, p = .33$) and explained only 3% of the variance in this model. Family and maternal characteristics and maternal life role salience were entered in the second step. The significant R^2 change of .64 ($F(13,17) = 2.83, p = .03$) indicated the goodness of fit of the "Maternal Social Role Attitude and Planning Model". The model explained 64% of the variance when sampling effects were controlled.

Occupational role salience and income contributed significantly to explaining "Adherence to Rules". As occupational role salience increased and income decreased, "Adherence to Rules" increased.

Table 6

Regression of Family and Maternal Characteristics, Salience in Life Role Domains on Planning Behavior

Independent Variables	Adherence ^a to Rules	Morphogenic ^b Planning	Morphostatic ^c Planning
	Beta	Beta	Beta
<u>Family Characteristics:</u>			
Size of community	-.24	-.44**	.12
Income	-.58***	-.55**	-.47*
Household size	.04	.21	.32
Leadership	-.09	-.21	.02
<u>Maternal Characteristics:</u>			
Age	-.05	-.10	.08
Educational status	-.17	.00	-.08
Level of employment	-.03	-.08	.07
Security of accommodation	.15	.07	.21
<u>Life Role Salience:</u>			
Occupational role	.63***	.37*	.80***
Parental role	.17	.28	.02
Marital role	.13	.11	.16
Home care role	-.06	-.30	-.01

^a ($F(13,17) = 2.83, p = .03$). ^b ($F(13,17) = 2.36, p = .05$).

^c ($F(13,17) = 2.00, p = .09$).

* $p < .10$, ** $p < .05$, *** $p < .01$.

Morphogenic Planning. Standardized beta coefficients and F-ratios for the regression model "Morphogenic planning" are reported in Table 6. The R^2 of .01 was not significant ($F(1, 29) = .38, p = .54$) when the sampling effect was entered by itself. Family and maternal characteristics and maternal life role salience were entered in the second step. The significant R^2 change of .62 in the second step ($F(13,17) = 2.36, p = .05$) indicated the goodness of fit of the "Maternal Social Role Attitude and Planning Model". The model explained 62% of the variance when sampling effect was controlled.

Occupational role salience, income, and size of community contributed significantly to explaining "Morphogenic Planning". As occupational role salience increased and income and size of community decreased "Morphogenic Planning" increased.

Morphostatic Planning. Standardized beta coefficients and F-ratios for the regression model "Morphostatic Planning" are reported in Table 6. The sampling effect was entered in step one as a control variable. The R^2 change of .06 ($F(1, 29) = 1.93, p = .18$) indicated that sampling effect explained 6% of the variance in this model when entered by itself. The balance of the variables were entered in the second step. The R^2 change of .55 ($F(13,17) = 2.00, p = .09$) achieved significance explaining 55% of the total variance when sampling effects were controlled.

Occupational role salience and income were significantly related to "Morphostatic Planning". As occupational role salience increased and income decreased "Morphostatic Planning" increased.

Summary. Support was found for the final hypothesis that tested the "Maternal Social Attitude and Planning Model" in three planning dimensions. Income and maternal occupational role salience contributed significantly to explaining planning generally. Community size only contributed significantly to explaining the "Morphogenic Planning" dimension.

Chapter V

Discussion

The purpose of this study was to examine the relationships between social demographics of First Nations mothers and their families and the social role attitudes (life role salience) of these mothers in association with their planning behavior. Eleven hypotheses were used to explore the relationships between the planning behaviors of First Nations women, their occupational, marital, parental, and home care role expectations, and sociodemographic characteristics of the mother and her family. The first five hypotheses were derived from planning literature based on samples drawn from the majority culture; the second five hypotheses, from social role literature that included some minority samples. The eleventh hypothesis was based on the "Maternal Social Role Attitude and Planning Model" developed for this study. The Model was derived from the Family Resource Management framework (Deacon & Firebaugh, 1989).

Social Role Expectations of First Nations Mothers

The pattern of social roles endorsed by this sample of First Nations mothers, as indicated by standardized scale means, was: parental role, home care role, occupational role, and marital role. The order of the roles in this pattern of salience suggests a primary social orientation to the parental role with marital role the least salient. This pattern partially reflects the role status of our sample of mothers (i.e., mothers, 100%; female head of nuclear household, 82.5%) with the last two reversed (i.e., employed, 37.5%; married, 55%). This primary orientation, indicated by the pattern of scale means, may reflect the early part of the family life cycle occupied by these mothers in which the demands of young or school age children are high while maternal and family resources are low. Mothers have been found resistant to sharing control of scarce financial resources with a spouse if they perceive the needs of their children to be compromised (Rand, Levinger, & Mellinger, 1981). This orientation seems to be consistent with a "self as other" orientation evoked by social expectations which may be gender specific, that is "for women" (Meyers-Levy, 1988) or group specific, that is "for families such as mine" (Triandis et al., 1988). First Nations mothers endorse a hierarchy of

life roles reflecting the traditional primacy of the parental role (White & Jacobs, 1992) in a home economy of scarce resources.

Since the scale was developed and normed in a non-native population (Amatea et al., 1986) it may be possible that, while these mothers tended to generally agree with the scales, individuals tended to disagree with items that did not reflect their expectations for role content. The pattern of reliabilities (alpha statistics) for these mothers was: marital role, .86; occupational role, .83; home care role, .75; parental role, .13. The lack of reliability of the parental role measure was the most obvious problem. This low score may reflect a lack of understanding of the items by this group. Several items were reverse scored which may have confused respondents, reflecting a reduced consistency of responses. The high mean for the parental role, and the low variability which is reflected in the low reliability more likely reflects the lack of variability in this sample of parents. The alpha statistic is based on assumptions of normal distribution which are not met in this purposive sample.

Since the Life Role Salience Scale (Amatea et al., 1986) was robust for three out of four role domain measures, a closer examination of the reliability of the scale seemed warranted. A closer look found the pattern of reliabilities (alpha statistics) was the mirror image of the pattern of means, yet reflected the pattern of standard deviations (i.e., from greatest to least standard deviation: marital role, .91; occupational role, .74; home care role, .60; parental role, .30). This pattern of relationships (i.e., reliabilities mirrored standard deviations rather than means) was identical to that of the academic women but differed from that of undergraduates and new parents (i.e., reliabilities mirrored means rather than standard deviations) reported in Amatea et al. (1986). In as much as these patterns of statistics for life role salience seemed to be systematic, they may be indicating a bias rather than merely a measurement error which is similar for these two samples. Academic women were engaged in and First Nations mothers were engaged in preparing for participation in occupational roles, that may be seen as non-normative for their reference group (i.e., "for women"), whereas students and parents were participating in behaviors normative for their reference groups. The statistical patterns suggest that academic women and First Nations mothers may have two

terms of reference. The first, representing a social norm, and the second, a personal norm. For the First Nations woman a distinction between social and personal norms may have cultural connotations which when associated with occupational role salience may be related to levels of bicultural functioning (Thomas & Alderfer, 1989). The scale may be capturing the difference First Nations women perceive between the socially normative expectations from the traditions of the larger society reflected in the scale and the personal role expectations based on personal involvement and norms from their own cultural tradition.

To account for such possible differences in social and personal expectations for life roles which could be reflected in scale outcomes it may be useful to look at some examples of the historical and contemporary interventions in the social lives of First Nations women. The social roles of First Nations mothers have been legally and linguistically redefined to reflect the sociocultural history of the larger society. Such redefinitions reflect expectations by the larger society for First Nations people to conform to non-native behavioral norms while discounting their own expectations for behavior arising from native culture and traditions. For example, linguistic and legislative changes may provide an altered point of reference for First Nations mothers without the sociocultural knowledge and experience in the context from which that point of reference originates. Group membership and resources of First Nations women and children (Joseph, 1990) were redefined in a manner which was found to reduce the power and authority of women in the household (Warner et al., 1986). Such reductions in social power and authority of First Nations women would be expected to reflect a reduction in personal resources and social expectations based on their development in their legal status under the Indian Act (Government of Canada, 1985). Expectations for marriage may be based on potential marital partners who are also potential providers (Jones, 1976). Under contemporary conditions such partners may be in short supply due to the lag in the occupational development of First Nations men in an economy that has changed from subsistence to wage labor and entrepreneurial and most recently to an information focus. Mothers may be unwilling to formalize unions with partners who are periodically absent or who, when present, jeopardize the welfare of children (Cruikshank, 1976).

Social authority has changed from local tribal law and customs of First Nations to non-native customs that are enforceable by law. For example, conflict may be underlying the ambiguity of the marital role created by the personal focus of the measure based on individualistic non-native norms for an individual with collectivist ideals (Triandis et al., 1988). Such dissonance may be present because the traditional focus of the marital role in First Nations has been the formal social contract between the families (Boelcher, 1988; Cole & Chaikin, 1990) and cultural standards of task performance to assure survival (Guemple, 1986) rather than the personal, intimate social relationships of modern private individuals.

The validity check of the life role salience scales revealed a positive association between the parental and marital roles and an inverse association between the parental and home care roles. The positive association suggests that parental and marital roles may be perceived by mothers to be complementary. The negative association suggests that parental and home care roles may be perceived by mothers to be competing. The relationships among these three family roles may reflect the changing net value (demand and resource potential) of the parental role as families shift from traditional to more modern socioeconomic orientations (Kagitcibasi, 1989). In traditional families, children are perceived as resources and a source of status for mothers, especially when occurring within marital unions. In contemporary families, children are perceived as demands competing for time and money with other symbols of adult status especially when both parents work. While caution is recommended in the use and interpretation of the parental role scale because of its low reliability, the central tendencies of the group indicated by these associations seem to be consistent even if intra-individual variations exist as reflected in the reliability statistic (α).

Planning Behavior of First Nations Mothers

The planning behavior of First Nations mothers seems to demonstrate characteristics in common with traditional planning by First Nations people and contemporary planning by majority women. First Nations mothers in this sample endorsed planning dimensions the same as (Beard & Firebaugh, 1978) or similar to (Beuhler & Hogan, 1986) those endorsed by non-native samples. Even in this small sample, the planning dimensions endorsed are reflective of

traditional planning behaviors in number, variety, and characteristics of planning outcomes. For example, morphostatic planning, because of its characteristic rigid structure, internal consistency, and resource regulation (Beard, 1975), seems to parallel planning behaviors in highly structured matrilineal and patrilineal family systems. In such systems, arranged marriages were used to elaborate kinship structure and contribute to system maintenance (Boelcher, 1988; Cole & Chaikin, 1990). Planning by adherence to rules, characterized by attempts to meet externally originating demands without the usual, required resources, seems to be consonant with planning behaviors that create "maps" of the activities needed to reach goals in which strategic partnerships may contribute to system maintenance (Brody, 1981). Morphogenic planning, characterized by flexible structural criteria, deviance enhancement, spacio-temporal integrity, and resource expansion (Beard, 1975), is consonant with planning behaviors of bilineal family systems such as the Chipewyan (Jarvenpa & Brumbach, 1988) and the Inuit (Guemple, 1986). In these bilineal family systems, considerable mobility and/or household reorganization occurs to secure resources which contribute to maintaining the family system, if not necessarily the social structure of relationships as defined by non-native society. First Nations mothers in this study chose planning behaviors that reflected characteristics of both modern and traditional system outcomes.

First Nations mothers in this sample seemed to use planning dimensions similar to those found in studies with non-native women. An endorsement of common or core planning behaviors is consistent with evidence (Szalay & Manday, 1983) that minority groups share core behaviors with the larger society. These core behaviors typically differ by minority groups, differentiating not only between the majority and minorities but also between minorities (Szalay & Manday, 1983). Such patterns suggest selective acculturation (Berry, 1990) that possibly provides the basis for minority group identity development, ethnogenesis (Roosens, 1989). Such development would entail a common repertoire of behavior while highlighting minority differences in the larger society. Minority differences could be indicative of further behavioral variety at the population level which if recognized at the family level may, according to Broderick and Smith (1979), reduce the risk of immobilization,

structural disintegration, or innovation through deviation in the family system. Common core patterns of behavior could then be expected to occur in socioeconomic domains with common value and result in a greater behavioral range in the population as a whole.

The apparent consonance between traditional and contemporary planning characteristics of First Nations people and a core of planning behaviors in common with non-natives may be related to enduring sociocultural orientations (i.e., social role attitudes, values, and personality attributes) of First Nations people in the face of change. Pottinger (1987) found evidence that core adaptations and change adaptations could be differentiated as aspects of cultural adaptation in indigenous African populations. McShane and Berry's (1988) review of adaptation in indigenous North American populations provides evidence of a similar pattern of a highly stable core adaptation in the face of change. Pottinger (1987) found that ideals and ambitions based on traditional subsistence patterns and material orientations (core adaptations) persisted to a depth of ten generations even with successful adaptation in a changing modern material culture. Compared to the larger society which consists of relatively recent immigrant populations, the persistence of such core adaptations in indigenous populations may reflect the lack of real change in their orientation to subsistence activities or traditional territories.

Sociocultural Expectations and Planning Behaviors

Sociocultural information that defines the cultural organization of the interrelationships among the family, societal systems, physical and biological systems is important input to planning (Deacon & Firebaugh, 1989). The cumulative knowledge of and experience with these interrelationships create sociocultural expectations that reflect their own social organization. A large part of the cultural knowledge and ordinary skills needed to find practical solutions in highly context dependent situations (Forester, 1989) are based on the sociocultural expectations of prescriptive norms that evoke "a sense of commitment and moral obligation" (Deacon & Firebaugh, 1989, p.33). The practical solutions First Nations mothers envision for families could then be expected to "depend upon the peculiarities of a specific context that define the given problem...responding to the demands of a situation with all its particularities" (Forester, 1989, p. 63). Under such conditions, knowledge of and experience

with the prescriptive norms of both cultures would then be expected to contribute to planning behaviors.

Hypotheses 1 - 10: Sociodemographics, Life Role Salience, and Planning

The first ten hypotheses tested relationships between sociodemographics, life role attitudes, and planning dimensions with a bivariate approach. Predicting specific planning behaviors of First Nations mothers from the variables identified in the literature was of limited value. Only one out of ten hypotheses was supported: occupational role salience was related to planning by adherence to rules. This general failure of the hypotheses should not be surprising because sociodemographic variables are known to lack predictive power for behaviors of acculturating individuals such as immigrants and First Nations people (Erickson, 1950; Trimble; 1988). The reconciliation of demands and resources by First Nations mothers and other minority mothers could be expected to differ from the majority mothers if minority mothers are oriented in a minority culture, acculturated in the majority culture, and currently functioning in a common socioeconomic context using the norms of both cultures.

Subsequent bivariate post hoc analyses revealed that universal resources (income), formal sociocultural knowledge and status (educational status), and socioeconomic orientation (occupational role salience) were associated with dimensions of planning and that, with the exception of the association between occupational role salience and planning by adherence to rules, were not previously found in the literature.

Educational status. Education was inversely associated with one planning dimension, planning by adherence to rules. Educational status was expected to be related to morphogenic planning because education is thought to reflect the development of human capacities that promote personal system flexibility (Deacon & Firebaugh, 1989). While the evidence suggests that these mothers may be personally flexible since they plan by sacrificing family goals and standards in the face of external demands (i.e., adherence to rules), their flexibility may not translate into family flexibility. Garrison and Winter (1986) and McCaskey (1974) suggest that planning behavior is contingent upon system rather than individual attributes. However, maternal education may contribute differently to planning depending upon the structure of the

family. For example, education may contribute to the morphogenic planning of recently single mothers (Beuhler & Hogan, 1986) or to the morphostatic planning of mothers of intact families (Beard, 1975). The educational status of mothers, in both single and intact First Nations families, may contribute to meeting majority cultural demands as well as First Nations expectations without the "common" or culturally appropriate resources. Mothers who lack education may be limited in their adaptation to planning by adherence to rules.

First Nations mothers who espouse a collectivist orientation (Triandis et al., 1988), in which personal and group goals may be merged, may find planning by adherence to rules adaptive if they lack educational status. Sacrificing personal and family goals to those of the group may be positively perceived by women who have had little personal interaction with non-native institutions. Merging personal and group goals in this sample of First Nations mothers, a majority of whom were students, may account for the use of this planning dimension. For such individuals, acculturation into sociocultural goals may be attained through practical and academic experience found in First Nations training programs.

Formal education is expected to promote personal development to meet situational demands in the larger sociocultural context. The use of planning by adherence to rules, in association with a lack of education, may reflect an absence of sociocultural resources because of a dearth of experience with formal non-native institutions. Personal development in the formal institutions of the receiving society has been found to be essential to the development of capacities and adaptive abilities for bicultural individuals. Thomas and Alderfer (1989) suggest that personal experience, in, for example, occupational settings, permits the minority person to develop biculturally. In occupational settings, minority persons develop their roles in task focused organizational activity, moving to more personal, less superficial standards for role behavior (i.e., social referencing and group norms).

Education may similarly provide acculturating individuals personal experience with the rules or prescriptive norms of the larger society (Deacon & Firebaugh, 1989) from which personal standards of social role behavior may be developed. The lack of formal education associated with planning by adherence to rules suggests the absence of a shared core of such

experience. Occupational and educational status are known to serve as indicators of the social resources of such shared experience. Such indicators signal common social standards and indicate social distance (Dion, 1985), producing social capital (Coleman, 1990) necessary for socioeconomic participation. First Nations mothers who lack educational development may also lack such social capital and by identifying bicultural planning contexts in "either/or" terms may be attempting to reconcile cross cultural demands and resources by substituting norms or social goals of non-native institutions as behavioral goals for their families.

Income. Income was inversely related to all three planning dimensions. The significant inverse relationship between income and planning behavior is surprising considering the lack of previous findings (Beuhler & Hogan, 1986, Garrison & Winter, 1986), although Beard (1975) reports income to be inversely related to planning. As income increases, the planning dimensions used reflect a family system increasingly able to meet externally originating demands with appropriate resources. The strong association between income and planning by adherence to rules suggests that increases in financial resources contribute to increased self regulation and self definition (morphostatic planning) or redefinition (morphogenic planning) of the family system. Of the three planning dimensions, income is most strongly and significantly related to planning by adherence to rules. Since the average income in this sample of households was very low, this relationship suggests, the lower the income the more likely these mothers plan by sacrificing family goals and standards and adopting externally originating goals and standards. The inverse relationship between income and planning may in part be explained by the nature of exchanges involved in socioeconomic transaction since Deacon and Firebaugh (1989) suggest that, in the absence of universal economic resources (e.g., income), particular social resources (e.g., planning behaviors) become important substitutes. Increased income may be a necessary but not a sufficient resource for the planning First Nation mothers.

The First Nations family functioning in a non-native social context may find that particular substitutes for income (e.g., social resources such as services, education, support, etc.) become increasingly available through social agencies to those who plan by adherence to

rules, since rules are usually the deciding criterion for program qualification, the currency of bureaucracy. The criteria of social agencies usually represent institutional standards of the larger culture that may be unfamiliar to First Nations mothers and for whom required compliance may even seem coercive. The cost of such perceived coercion, an aspect of the stress of bicultural functioning, may then lead to selective engagement with social and economic institutions by minority mothers and families (Cruikshank, 1976; Dill, 1988; Imamura, 1990; Jones, 1976; Thomas & Alderfer, 1989). Their behavior in turn may be perceived as dependence, resistance or learned helplessness by the larger society (Locke, 1992) when in fact the sociocultural links between cultures are absent. However, in the absence of income, planning by adherence to rules may become a social means to severely limited economic opportunities.

Occupational role salience. In the original test of relationships between role expectations and planning dimensions, occupational role salience was found to be associated with planning by adherence to rules. This single association may point to the sociocultural intersection of two cultures for First Nations mothers. While high occupational participation rates are not usual for First Nations women generally (Statistics Canada, 1990), almost 90% of the mothers in the sample were employed or preparing for employment. Since behavioral expectations for social roles are culturally defined (Rossi & Berk, 1985), these mothers are involved or have expectations for a social role which is non-normative for First Nations women and to an extent which is also unusual for non-native women. Since social life cycles differ between cultures in the rate and pace of social role development (Imamura, 1990), these First Nations mothers seem to be functioning biculturally in association with planning behavior in the one social role to which they have been acculturated as employees or in which they are currently developing as students.

Occupational role salience was important input into both planning by adherence to rules and morphostatic planning. While these planning dimensions both conserve family system organization, they differ based on the availability or appropriateness of resources. Family goals and standards are sacrificed when planning by adherence to rules because the appropriate

resources are lacking. Family goals and standards, as well as family structures are conserved when using morphostatic planning because with the appropriate resources the family exercises control over its social presentation.

First Nations mothers are participating and developing in roles which are non-normative and cross cultural. First Nations mothers may be using both planning dimensions in an attempt to balance the demands of traditional and modern or cross cultural expectations in their family systems to deal with the requirements for functioning in their bicultural occupational context. Balancing changing role repertoires that are different from those expected for one's age, gender, and ethnicity was associated with psychological distress in women (Menaghan, 1989) and with acculturative stress in indigenous North Americans (Berry, 1990). Whether employed or students, the occupational role salience of First Nations mothers was related to planning to maintain the family system either by controlling resources entering the family or by adhering to external standards for which the resources for adjustment were absent. These relationships serve as a classic illustration of the planning efforts of mothers to balance the requirements of personal, occupational, and educational system demands with financial and social resources in a bicultural context.

Hypothesis 11: The Maternal Social Role Attitude and Planning Model

These first ten hypotheses used the empirical findings from non-native populations in the context of the larger society to create measurement models of the planning behavior of First Nations mothers. The use of empirical findings from the larger society as the basis for the prediction of the behaviors of a minority group becomes little more than a mere accentuation of behavioral differences. To avoid this pitfall, the eleventh hypothesis tested a conceptual model in which the effects of family and maternal characteristics and maternal life role salience on planning behavior were controlled.

Compared to the bivariate models, the "Model" provided a good fit for all three planning dimensions even though the sample size was smaller (i.e., $n = 37 - 40$ for bivariates; $n = 31$ for regressions). The regression analyses extended the bivariate analyses by controlling the contributions of sociodemographics and social role attitudes. Controlling the variables in the

model altered some relationships. For example, educational status, which had been inversely associated with planning by adherence to rules in the bivariate test, no longer contributed significantly when other variables, notably income and occupational role salience, were included in the analyses. The regression identified community size as a significant contributor, with income and occupational role salience, for one dimension of planning - morphogenic planning. While the bivariate analysis indicated occupational role salience was related to morphostatic planning and planning by adherence to rules, the regression confirmed its association with all three planning dimensions. The bivariate analyses provided essential predictor variables. The regression model provided a more coherent and complete pattern of contributions to planning.

The "Model" was found to be useful for predicting the planning behavior of First Nations mothers. The independent variables operationalizing this model best accounted for planning by adherence to rules, then morphogenic planning, and morphostatic planning the least, based on the level of significance of the F statistic of their coefficients of determination. The same sample and independent variables were used to test all three planning dimensions to assure the stability of the standardized regression coefficients (Kerlinger, 1986) and hence the comparability of their contribution between dimensions, across planning models. Morphostatic planning was explained by the highest and morphogenic planning by the lowest contribution of occupational role salience. Morphostatic planning was explained by the highest and planning by adherence to rules the lowest contribution of income. Community size contributed only to explaining morphogenic planning.

The morphogenic planning model. As occupational role salience increased and income and community size decreased, the mothers tended to use morphogenic planning. In such planning mothers envision the adjustment of the family system to meet new demands because new resources, especially monetary resources, are expected to become available (Beard, 1975).

Living in smaller communities was for this sample associated with living on reserve since approximately half of these participants resided in "Villages" which were reserves as defined under the Indian Act (1985). Living in smaller communities, having a lower income,

and higher occupational role salience contributed similarly to explaining morphogenic planning. First Nations people are the majority in reserve communities in which new social and economic demands and resources are increasingly mediated by local band governments. Local government involvement may provide standards and goals intermediary between the First Nations family and the larger society to which mothers may orient their planning behavior. For example, band governments in remote locations may provide or subsidize public services appropriate for their membership which encourages socioeconomic interaction between villagers and the larger society. Mothers living in such communities may be more able to adopt new demands as family goals because they are the goals of the First Nations community and because they expect the availability of appropriate resources with which to adjust. Accepting new demands that originate external to the family may be an important aspect of living in smaller communities. For example, the smaller the community the less likely there is a buffer of professionals to assist the family. Under such conditions, adjustment to common goals may take place without mothers and families losing their social identity because they are not merely connected to the community through social roles but also through kinship. The adaptive persistence of First Nations systems may thus be possible as band governments negotiate new demands and resources with the larger society.

The planning by adherence to rules model. As income decreased and occupational role salience increased, mothers used planning by adherence to rules. Income and occupational role salience contributed almost equally to explaining planning by adherence to rules.

Increasing occupational role expectations and decreasing income associated with this planning dimension may reflect increases in the investment of "common resources" or social capital (Coleman, 1990) as financial resources decrease. Mothers seem to envision meeting the demands of the family system by engaging in occupational activity. Since the majority of the mothers in this study are either working or anticipating work, planning by adherence to rules may be reflecting the major way these mothers anticipate exchanging their personal resources for income to satisfy externally originating demands. This "Model" possibly best

indicates how the particular social resources of First Nations mothers and families are changed through the economy into the common resources which the larger society demands.

The morphostatic planning model. As income decreased and occupational role salience increased, mothers used morphostatic planning. Beard's (1975) definition suggests that the issue in morphostatic planning is resource availability for family boundary maintenance, in particular, financial resources (Beard & Firebaugh, 1978). For these First Nations mothers, the greater contribution of occupational role salience relative to income seems to suggest social resources may also be implicated.

The tendency to use morphostatic planning in association with occupational role salience was almost twice that associated with income. To maintain morphostatic planning systems First Nations mothers seem to be investing personal resources at twice the rate income is invested. The mothers that Jones (1976) interviewed were clearly investing heavily in their own occupational role expectations while also emotionally and sometimes financially supporting their husbands who had poor prospects in the wage labor economy. First Nations mothers who invest in morphostatic planning do so at great personal cost, reflecting the double burden of their bicultural functioning, a cultural parallel to the "double day".

The planning model. The "Model" revealed that the tendency for First Nations mothers to use planning increased significantly as income and community size (sociodemographics) decreased and occupational role salience (maternal life role salience) increased while the contribution of maternal characteristics was not significant. While family roles were not significant, their patterns in association with planning dimensions hint at a possible relationship between patterns of family role salience to the development of family systems. Such patterns may be due to changes in the social life cycle due to acculturation or may reflect stages in the family life cycle.

The patterns of life role salience contributing to planning, while not statistically significant in this small sample, may provide theoretical insight into the relationship between the social role attitudes of these First Nations mothers who are striving to balance work, family, and ethnicity (Dill, 1988; Imamura, 1990; Jones, 1976; McCubbin & McCubbin,

1989), income and community resources and their planning dimensions. As occupational, marital, and home care role salience increased, parental role salience decreased. This pattern of life role salience is consistent with Kagitcibasi's (1989) findings of a shifting role focus in evolving family forms as families change from traditional extended to modern nuclear forms. Shifts in role focus may indicate sociocultural changes in demands and resources (e.g., income, community size). With increasing modernization maternal economic contributions outside the family become increasingly important as does the companionship in the marital role, and the security of the home in urban living. At the same time the rewards of parenthood decrease and with it maternal salience of the role. As parental role salience decreased and occupational, marital, and home care role salience, community size, and income increased, mothers tended to go from using morphogenic to using morphostatic planning. Occupational, marital, and home care roles were associated with conserving structure with morphostatic planning. These roles provide the social resources (material and social status) that permit First Nations mothers and families to structurally define themselves in the larger society. An increasing parental role focus is associated with adjusting structures with morphogenic planning. Focus on the parental role, especially in small reserve communities where children are valued in a traditional manner, may provide economic and social resources for First Nations mothers with which they are increasingly able to define themselves. The bicultural orientation (pattern of life roles) of First Nations mothers seems to be linked to the planning behavior they use to reconcile demands and resources for their family. The three models of planning dimensions which tested the "Model" demonstrated that the planning behavior of First Nations mothers has a socioeconomic orientation taking place in a bicultural context to which public, financial, and maternal motivational resources (i.e., value of and commitment to) contribute significantly.

Limitations

Sample size and scale reliability were two limitations that arose in the data analysis. The small sample size ($N = 40$) precluded preferable analyses that would have provided a more effective and robust measure of the dependent variable, planning behavior. The control

variable created to reduce methodological differences may be contributing to either under or over estimation of the effects of predictor variables by reducing the stability of variables contributing to explaining planning. The parental role scale, while highly endorsed ($M = 4.45$), had little variation ($SD = .30$) which produced low scale reliability ($\alpha = .13$). Poor parental role scale reliability may have been precipitated by the purposive sampling strategy that effectively removed variability. The scale was entered with the other three planning scales because the reliability for "all life roles" was acceptable and parental role was expected to interact with the other roles in the multiple regressions rather than alone. Still it begs the question whether the parental role conceptualization was suitable for this population.

When a variety of theoretical perspectives are synthesized, terminology may become a barrier to clarity and brevity. Native and non-native perspectives are combined to permit an examination of some of the assumptions when these perspectives are synthesized by First Nations mothers and families. The bicultural perspective that serves as the context for the study at some level becomes synthesized and integrated for the woman who functions biculturally. The discussion of these syntheses integrates terminology and concepts from two research orientations (Coomer & Hultgren, 1989): the empirical-analytic which includes behavioral theory and systems theory and the interpretive which includes history, ethnography, and anthropology. In the behavioral orientation, the family resource management model provides the framework based in systems theory. The framework is substantively expressed by demographics and social role theory in two social contexts. Thus, the range of sociodemographic values reflects potential bicultural expectations and the maternal social role attitudes of First Nations mothers reflect their bicultural orientations in the family resource management framework. The paucity of empirical survey research about the planning behavior of First Nations people precluded the use of previously developed substantive concepts thus requiring a synthesis of loosely related concepts that might accommodate two cultural orientations.

The sample in this study was as a group not comparable to the First Nations women described in the census data because they were a subgroup (i.e., mothers with school age

children). This study used subjective definitions and indicators of First Nations orientations. Statistics Canada (1984, 1990) used social indicators as well as mother tongue and legal definitions. This study selected women with school age children whereas census data (Statistics Canada, 1984; 1990) includes women with children both younger and older than school age. Generalizations of the findings would not be recommended because the women in our sample may not be representative of mothers with preschool children.

Conclusions

First Nations mothers were found to use three dimensions of planning (planning by adherence to rules, morphogenic planning, and morphostatic planning). The social role attitudes of First Nations mothers, in order of salience, were found to be: parental role, home care role, occupational role, and marital role. Occupational role salience and income were the most important predictors of planning generally. Lower educational status predicted planning by adherence to rules specifically. The model revealed characteristics of the family and maternal systems and maternal social attitudes that contributed significantly to explaining the three dimensions of planning behavior in First Nations families. Planning by adherence to rules and morphostatic planning were explained by the social role attitude, occupational role salience, and income. Morphogenic planning was explained by income, living in a smaller community, and the social role attitude, occupational role salience. Maternal social role attitudes, specifically, salience of the occupational role, was shown to contribute positively to explaining the planning behavior of First Nations mothers.

The findings of this study have demonstrated the utility of "The Maternal Social Attitude and Planning Model" for investigating the planning behavior of a cultural minority such as First Nations mothers. The Model offers a framework in which theoretical criteria may be entered at various system levels that are critical for exploring the selective, domain specific organization of acculturation or adaptation. Intrapersonal, personal, family, institutional, and cross-cultural systems can be readily framed in this model. The "Maternal Social Attitude and Planning Model" included both objective and subjective measures to explore the bicultural perception of First Nations mothers. The subjective measures provided powerful indicators of

the role of attitudes as mediators in the vertical integration of the value-attitude-behavior hierarchy (Homer & Kahle, 1988) inherent in reconciling bicultural demands and resources. The Model reflects the efficacy of Trimble's (1988) suggestion that acculturative status may be best captured by multilevel models, yielding useful, readily interpretable results.

Implications

The limitations provide caveats cautioning the reader but are not meant to obscure the important findings in this first examination of the planning behaviors of First Nations mothers. The finding that First Nations mothers use planning behaviors significantly more as the economic means of the household (income) decrease and maternal socioeconomic motivation (occupational role salience) increases suggests the heart of planning may involve exchanges between material and social or motivational resources. Mothers seemed to be counterbalancing the dearth of resources with an investment of personal resources to meet family system demands. The more mothers invested in the occupational role, the more the family system used morphostatic planning associated with structural rigor and organizational stability. The less mothers invested, the more the family system used planning associated with adjustment. When mothers invested the least in the occupational role they lived in smaller communities where they may have access to cultural resources and kin and thus more able to adjust family structure and organization (morphogenic planning). When mothers were less invested in educational status, the family maintained their structure and organization but adjusted their standards and sequencing (planning by adherence to rules). This contribution of educational status to explaining planning by adherence to rules suggested that First Nations mothers may be using parallel sociocultural rules (i.e., native and non-native) which they may integrate as their educational status increases. Such a process seems to correspond with Thomas and Alderfer's (1989) concept of the development of "dual consciousness" in bicultural functioning. Planning by adherence to rules in a bicultural context suggests a search for new social resolutions or appropriate resources while maintaining the form of the family system. Once a resolution is identified the family system may move into another state of structure and organization and employ other planning dimensions.

It is perhaps noteworthy that the three planning dimensions identified occur in this group of mothers and may possibly represent a cycle of planning in First Nations families. As the contribution of maternal occupational role salience to planning increases, First Nations families are more likely to live in larger communities, have greater incomes, and mothers whose social role attitudes reflect the salience of a modern, pattern of social roles. Such a cycle of planning may be particularly applicable to those that move in and out of their home reserve communities which may be explained by the variations in contribution of public, financial, and personal maternal resources which has consequences for the structural stability and integrity of the planning system.

The interrelationships between maternal life role salience, income, and community size suggest a dynamic process between maternal perceptions, objective resources, maternal and family system structure and organization. This dynamic may indicate attempts by mothers to substitute personal cognitive and emotional resources for those formal and financial resources needed to meet the demands of non-native society. Mothers using morphostatic planning could be putting themselves and their families at risk, particularly if high occupational role expectations are actually provider role expectations for their marital partner who shares neither their prior socialization nor their current employment opportunities (Jones, 1976).

First Nations mothers personally invest more in planning as their network of relations decreases and their context of norms is increasingly bicultural, possibly resulting in a pattern of economic participation and social separation similar to that found by McCubbin and McCubbin (1989) for "other ethnic" families. For First Nations mothers such a transition may constitute a net loss of kinship relations and questionable legitimacy in the second cultural context and as the moral authority as female head of the household. Such profound loss may be that which Dill (1988) describes as "grief" in association with ethnic mothering, a result of the losses sustained when moving from traditional communities in which they constitute the majority to larger communities in which they are the minority. Maternal "grief" is possibly the price of bicultural functioning in which motivational resources significantly contribute to planning tendencies which promote family system stability and integrity.

Further research is needed to understand the bicultural adaptation of minority women such as First Nation mothers especially as it concerns management in the family (Atleo, M. R., 1990). Investigating the relationship between increased income and system structure and decreased planning may illuminate the transformation of resources and demands across cultural boundaries. The very high contribution of maternal occupational role salience associated with more structured family systems and the low contribution associated with morphogenic planning and small community living may provide insight into some of the differences in demands on First Nations mothers.

While this investigation in the family resource management framework indicated that First Nations mothers plan in a bicultural context, there are many questions left to be investigated in future research. Is the inverse relationship between income and planning related to exchange between classes of resources, family structure, maternal marital status, or the sociocultural nature of planning as a social product? The inverse relationship between educational status and planning by adherence to rules gives rise to two questions: What specific resources do mothers with lower educational status lack that constrain them to planning by adherence to rules? What resources do such mothers have that planning by adherence to rules is advantageous? The relationships between different weights of income and occupational role salience contributing to planning prompt the question: Why is a similar contribution of income related to different levels of occupational role salience depending on the size of the community in which families live? Is the relationship of community size to planning dimensions associated with cultural expectations or opportunities? What is the relationship of maternal roles to the roles of First Nations fathers? The identification of possible patterns of social roles related to planning, acculturation, and the evolution of diverse family forms may be a fruitful area of investigation with a larger, random or possibly multicultural sample. Despite the exploratory nature of this study it points forward to potentially important areas of investigation to more fully understand the planning behavior First Nations mothers and their families have demonstrated in this investigation.

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Appendix A

Letter to Potential Participating Agencies:

This letter is further to our telephone conversation (date) regarding the participation of the (agency/organization) in the study: **"Choices for Family Living by Mothers with School Aged Children."** This survey of First Nation mothers with school age children investigates the day to day choices mothers make which affect the behaviors of their families.

This study is the final assignment of my sponsored program of studies for a Master of Arts: Family Studies. The topic of this assignment is based on my personal witness of the difficult and challenging role of First Nations women with children from a perspective of the twenty-five years in which I have been a member of the First Nations community. The efforts of First Nations mothers have not been documented in the formal, public body of literature. I expect this survey to formally document some of the strategies First Nations women use to manage their families in the face of great social and economic odds.

The participation of the (agency/organization) with me in this study would be greatly appreciated. Your assistance would include arranging for women in your programs to gather at a time mutually convenient. At the meeting time the context of the study would be introduced and the questionnaire would be completed by the participants. Then there would be a ten to fifteen minute break. After the break, I would conduct a workshop on "Strategic Choices for First Nations Family Functioning: Health and Harmony." During the workshop the participants will be encouraged to share their ideas about the issues and their experiences in the situations suggested by the items on the questionnaire. The workshop will focus on the theoretical background of the questionnaire. The physical requirements would be a meeting room with tables and chairs that would be available for a two and a half hour period for one time only . It would be helpful to be able to schedule the meeting at the earliest possible time.

When the results of the analysis are known and the thesis is completed, I will send a copy to the (agency/organization). A copy will provide a record of the participation of your organization and may serve as a documentary resource for your files. Additionally, a summary of the thesis would be provided for distribution to participating women. The offers of a copy of the thesis and a summary report to participants are not a part of the thesis requirement. The offer is based on my personal belief that participants should have access to studies in which they have been surveyed. With access to such information, participants may more readily come to understand how the results of studies represents them and comprises a body of literature that provides the foundation for formal planning in areas such as

governmental policy, human services programming and educational curriculum. Misunderstanding by individuals about the research enterprise may be reduced if participants are given an opportunity to see the linkages between the outcomes of studies and the use of such outcomes.

My expectation for this study is to describe the manner in which First Nations mothers make choices in everyday family situations in their roles as wives, mothers, workers and homemakers. I welcome your participation with me in this effort to gain respect.

As discussed in our conversation, a meeting time (date) would be suitable for me and permit you enough time to review the materials.

In Sisterhood,

Marlene Atleo, B.H.E.

home phone, office phone, fax number

Enclosures: questionnaire, proposal summary.

Ethics Review Form

The University of British Columbia
Office of Research Services

B91-192

BEHAVIOURAL SCIENCES SCREENING COMMITTEE FOR RESEARCH
AND OTHER STUDIES INVOLVING HUMAN SUBJECTS

C E R T I F I C A T E o f A P P R O V A L

INVESTIGATOR: Johnson, P.J.
UBC DEPT: Family & Nutr Sci
INSTITUTION: UBC-Campus
TITLE: The effects of maternal social role
attitudes on the planning behavior of
Amerindian families
NUMBER: B91-192
CO-INVEST: Atleo, M.R.
APPROVED: JUL 15 1991

The protocol describing the above-named project has been reviewed by the Committee and the experimental procedures were found to be acceptable on ethical grounds for research involving human subjects.

Dr. R.D. Spratley
Director, Research Services
and Acting Chairman

THIS CERTIFICATE OF APPROVAL IS VALID FOR THREE YEARS
FROM THE ABOVE APPROVAL DATE PROVIDED THERE IS NO
CHANGE IN THE EXPERIMENTAL PROCEDURES

Appendix B

Questionnaire

Choices for Family Living by Mothers with School Aged Children.

Marlene Atleo, Investigator
School of Family and Nutritional Sciences,
University of British Columbia
(604) Telephone number

This survey is about choices mothers of school aged children make in organizing activities of their families. The first section asks questions about the setting in which mothers make their choices. The second section describes some personal priorities mothers might have about their roles. The third section is about how mothers choose to do those activities she believes are important for her family.

Choices are neither right nor wrong but an expression of the individual or family. To understand the effects of conditions upon family choices it is helpful to know the patterns of family choices.

Thank you for assisting me in this investigation of a vital area of study. Your participation is highly valued and much appreciated. If you have any questions about the procedure please feel free to ask. To assure your anonymity, the questionnaires will be numerically coded, entered as electronic data and then destroyed. Completing the survey means you are giving your consent to participate. This is a rule by which the UBC ethics committee looks after your interests. The survey will take about half an hour to complete. If at any time you feel that you do not want to proceed, you are free to stop and still participate in the workshop which follows. If you continue, please be sure to: *1) read every statement, 2) try to put your family and yourself into the situation and 3) circle the number below the words which best describes how much the statement is like you and your family.*

IT IS IMPORTANT THAT YOU ANSWER EVERY QUESTION

Section 1

Please answer by circling the letter unless otherwise indicated:

1. The number of people in the area where my family currently lives is:

- a) more than 500,000 people c) 30,000 - 99,999 e) village
b) 100,000 to 499,999 people d) less than 30,000 f) rural (few houses nearby)

2. I am a a) First Nations person b) not a First Nations person

3. My partner/husband is a a) First Nations person b) not a First Nations person

4. I am _____ years old. (Please indicate number of years)

5. I am currently a) single d) separated
b) married e) divorced
c) living with a partner f) widowed

6. I have completed: a) Elementary School e) Technical Program
b) Grade 9 f) Undergraduate Degree
c) Grade 12 g) Graduate Degree
d) Trade Program

7. My occupation is: (Please write the title of the occupation or job) _____

8. I am currently a) employed full time (more than 29 hours per week) d) not employed, not seeking work
b) employed part time (less than 29 hours per week) e) a student, not seeking work
c) seasonally employed (many hours during some part of the year and few or none at other parts of the year)

f) other - please explain

9. The home we live in now is a) owned by my family only d) rented by others we stay with
b) rented by my family only e) owned by us with others
c) owned by others we stay with f) rented by us with others

10. The people who live with me in my household are:

(Write the individual's age in years, their relationship to you (eg. son, friend), circle their sex.)

For example if 'Person 1' is your husband and he is 45 years old, you would write :

Person 1 _____ M / F		Person 6 _____ M / F	
Person 1 _____ M / F	Person 2 _____ M / F	Person 7 _____ M / F	Person 8 _____ M / F
Person 3 _____ M / F	Person 4 _____ M / F	Person 9 _____ M / F	Person 10 _____ M / F
Person 5 _____ M / F	Other (please explain) _____		

11. Current (gross) annual family income from all sources is

(wages, family allowance, welfare, unemployment insurance, pensions)

- a) under - 5,000 d) 15,000 - 19,999 g) 30,000 - 34,999
b) 5,000 - 9,999 e) 20,000 - 24,999 h) 35,000 - 39,999
c) 10,000 - 14,999 f) 25,000 - 29,999 i) 40,000 - and over

Section 2

Circle the number that best describes your response to the statement.

The numbers represent the following:

- | | |
|------------------------------|-------------------|
| 1) DISAGREE | 4) SOMEWHAT AGREE |
| 2) SOMEWHAT DISAGREE | 5) AGREE |
| 3) NEITHER AGREE OR DISAGREE | |

	Disagree	Neither	Agree	
1. Having work/a career that is interesting and exciting to me is my most important life goal.	1	2	3	4 5
2. I expect my job/career to give me more real satisfaction than anything else I do.	1	2	3	4 5
3. Building a name and reputation for myself through work/a career is not one of my life goals.	1	2	3	4 5
4. It is important to me that I have a job/career in which I can achieve something of importance.	1	2	3	4 5
5. It is important to me to feel successful in my work/career.	1	2	3	4 5
6. I want to work, but I do not want to have a demanding career.	1	2	3	4 5
7. I expect to make as many sacrifices as are necessary in order to advance in my work/career.	1	2	3	4 5
8. I value being involved in a career and expect to devote the time and effort needed to develop it.	1	2	3	4 5
9. I expect to devote a significant amount of my time to building my career and developing the skills necessary to advance in my career.	1	2	3	4 5
10. I expect to devote whatever time and energy it takes to move up in my job/career field.	1	2	3	4 5
11. Although parenthood requires many sacrifices, the love and enjoyment of children of one's own are worth it all.	1	2	3	4 5
12. If I chose not to have children, I would regret it.	1	2	3	4 5
13. It is important to me to feel I am (will be) an effective parent.	1	2	3	4 5
14. The whole idea of having children and raising them is not attractive to me.	1	2	3	4 5

	Disagree		Neither		Agree
15. My life would be empty if I never had children.	1	2	3	4	5
16. It is important to me to have some time for myself and my own development rather than have children and be responsible for their care.	1	2	3	4	5
17. I expect to devote a significant amount of my time and energy to the rearing of children of my own.	1	2	3	4	5
18. I expect to be very involved in the day-to-day matters of rearing children of my own.	1	2	3	4	5
19. Becoming involved in the day-to-day matters of rearing children involves costs in other areas of my life which I am unwilling to make.	1	2	3	4	5
20. I do not expect to be very involved in child rearing.	1	2	3	4	5
21. My life would seem empty if I never married.	1	2	3	4	5
22. Having a successful marriage is the most important thing in life to me.	1	2	3	4	5
23. I expect marriage to give me more real personal satisfaction than anything else in which I am involved.	1	2	3	4	5
24. Being married to a person I love is more important to me than anything else.	1	2	3	4	5
25. I expect the major satisfactions in my life to come from my marriage relationship.	1	2	3	4	5
26. I expect to commit whatever time is necessary to making my marriage partner feel loved, supported, and cared for.	1	2	3	4	5
27. Devoting a significant amount of my time to being with or doing things with a marriage partner is not something I expect to do.	1	2	3	4	5
28. I expect to put a lot of time and effort into building and maintaining a marital relationship.	1	2	3	4	5
29. Really involving myself in a marriage relationship involves costs in other areas of my life which I am unwilling to accept.	1	2	3	4	5
30. I expect to work hard to build a good marriage relationship even if it means limiting my opportunities to pursue other personal goals.	1	2	3	4	5

	Disagree		Neither		Agree
31. It is important to me to have a home of which I can be proud.	1	2	3	4	5
32. Having a comfortable and attractive home is of great importance to me.	1	2	3	4	5
33. To have a well - run home is one of my life goals.	1	2	3	4	5
34. Having a nice home is something to which I am very committed.	1	2	3	4	5
35. I want a place to live, but I do not really care how it looks.	1	2	3	4	5
36. I expect to leave most of the day-to-day details of running a home to someone else.	1	2	3	4	5
37. I expect to devote the necessary time and attention to having a neat and attractive home.	1	2	3	4	5
38. I expect to be very much involved in caring for a home and making it attractive.	1	2	3	4	5
39. I expect to assume the responsibility for seeing that my home is well kept and well run.	1	2	3	4	5
40. Devoting a significant amount of my time to managing and caring for a home is not something I expect to do.	1	2	3	4	5

Section 3

Which choices, described in the statements, would you and your family make? Circle the number that best describes what your family does.

The numbers will be shown like this:

1) Not like 2) 3) Somewhat 4) 5) Exactly like
and mean the following:

- 1) NOT LIKE MEANS *THIS IS NEVER OR NOT AT ALL WHAT YOUR FAMILY DOES.*
- 2) SLIGHTLY LIKE MEANS *THIS IS SELDOM OR SLIGHTLY LIKE WHAT YOUR FAMILY DOES.*
- 3) SOMEWHAT LIKE MEANS *THIS IS SOMETIMES OR SOMEWHAT LIKE WHAT YOUR FAMILY DOES.*
- 4) A LOT LIKE MEANS *THIS IS USUALLY OR A LOT LIKE WHAT YOUR FAMILY DOES.*
- 5) EXACTLY LIKE MEANS *THIS IS ALWAYS OR EXACTLY LIKE WHAT YOUR FAMILY DOES.*

IT IS IMPORTANT THAT YOU CIRCLE YOUR CHOICE FOR EVERY STATEMENT

	Not like		Somewhat		Exactly like
1. Plans for spending our income tax refund are made before the exact amount of the refund is known.	1	2	3	4	5
2. Money is the primary consideration in selection of housing for the family.	1	2	3	4	5

	Not like	Somewhat	Exactly like		
3. Money for food and time for preparation are carefully checked before fancy or expensive foods are planned for a meal with guests.	1	2	3	4	5
4. Good routines the children learn at home will be helpful to them later in life.	1	2	3	4	5
5. Housing repair and upkeep is done on a regular basis to avoid major repairs.	1	2	3	4	5
6. With the increase in cost of living, we use means other than money to get some of the things we used to buy.	1	2	3	4	5
7. The person in the family responsible for how money is spent decides whether or not family members can have what they ask for.	1	2	3	4	5
8. We accomplish more goals if we check the means available for getting them before deciding what we want.	1	2	3	4	5
9. It is okay if our food, housing and clothing costs are different from the average for families of the same income.	1	2	3	4	5
10. The family tithes to the church.	1	2	3	4	5
11. Individual family members decide how much they should give to church and charity.	1	2	3	4	5
12. When plans are being made to purchase a car, prices of various features and models are obtained before deciding which features and models are desired.	1	2	3	4	5
13. "Borrowing" from a fund set aside for food, taxes, etc. to buy things not in the budget is avoided.	1	2	3	4	5
14. When money is scarce and time and skills are limited, it is difficult to think of ways to accomplish new goals.	1	2	3	4	5
15. Plans are made for buying something only after it is obvious that the time and money are available.	1	2	3	4	5
16. Plans are often made to do or buy something for which the time and money are not yet available since a way to increase resources can usually be found.	1	2	3	4	5
17. There is a set time and day for doing most household chores which we try to avoid changing.	1	2	3	4	5

	Not like	Somewhat	Exactly like		
18. When plans are being made to purchase a car, desirable features are determined before prices are checked.	1	2	3	4	5
19. Wants beyond what we can afford are either changed to something that costs less or delayed until we can afford them.	1	2	3	4	5
20. The family wants things we cannot afford.	1	2	3	4	5
21. If a family member lost \$10, he/she would do without something that is important to him/her but not to the rest of the family.	1	2	3	4	5
22. If the refrigerator breaks and no other money is readily available, the savings for a vacation would be used for the refrigerator instead.	1	2	3	4	5
23. A special effort is made, if necessary, to fit special foods into the food budget and the time available for company meals.	1	2	3	4	5
24. Guests would be invited for meals more often if there were not time, money, and/or space limitations.	1	2	3	4	5
25. Since inflation has become so rampant, it has been necessary to depend more on non-money resources to maintain our level of living.	1	2	3	4	5
26. If a family member lost \$10, we would adjust plans so that no family member would have to suffer much.	1	2	3	4	5
27. Decisions about whether we can spend money for some item not in the budget are made.	1	2	3	4	5
28. We frequently "borrow" money from a fund set aside for food, taxes, etc. to buy things not in the budget.	1	2	3	4	5
29. The way the outside of our home looks does not depend on what the neighbors think.	1	2	3	4	5
30. Plans for spending the income tax refund are made after the exact amount of the refund is known.	1	2	3	4	5
31. If children want something the parents approve of but cannot afford, we find a way to get it.	1	2	3	4	5
32. Adjusting to the rapid rise in cost of living is possible only if we get a pay increase.	1	2	3	4	5
33. The money lost to the family if a family member should die is the main factor in deciding the	1	2	3	4	5
33. The money lost to the family if a family member should die is the main factor in deciding the amount of life insurance to buy.	1	2	3	4	5

	Not like	Somewhat	Exactly like		
34. When wants cost more money than is available, wants are reduced to make things balance.	1	2	3	4	5
35. When wants cost more money than is available, attempts are made to increase income or to use something besides money to get them.	1	2	3	4	5
36. The household routine can be easily changed to fit around unexpected opportunities and emergencies.	1	2	3	4	5
37. We often must settle for less than we expect because of emergencies, inflation and the like.	1	2	3	4	5
38. We try to keep the outside of our home looking like our neighbors expect it to look.	1	2	3	4	5
39. We try to keep spending for food, housing, clothing, etc. close to the average for families in our income group.	1	2	3	4	5
40. Parents evaluate all purchases grade school children want to make before letting them have the money.	1	2	3	4	5
41. House repair and upkeep is delayed as long as possible because of time or money costs.	1	2	3	4	5
42. If the refrigerator breaks and the vacation fund is the only readily available money, some way would be found to pay for both vacation and refrigerator.	1	2	3	4	5
43. We find time and money for guest meals as often as we want to entertain.	1	2	3	4	5
44. Once a good money plan (budget) is established, an effort is made to carry it out without being tempted by additional wants.	1	2	3	4	5
45. Plans for use of money are frequently changed to take care of new goals.	1	2	3	4	5
46. There are other means of accomplishing goals when time and money are limited.	1	2	3	4	5
47. If the children want something that the parents approve of but cannot afford, they are encouraged to choose other goals to teach them to live at a level they can afford.	1	2	3	4	5
48. Wants beyond what we seem to be able to afford are often obtained through a special effort to think up ways to get them.	1	2	3	4	5

	Not like	Somewhat	Exactly like	
49. Most really important wants can be worked into plans.	1	2	3	4 5
50. There seems to be no way to have all the things we used to get with inflation as rampant as it is.	1	2	3	4 5
51. The children are learning to be creative in reaching goals that at first seem impossible.	1	2	3	4 5
52. Planning for spending money is shared by family members.	1	2	3	4 5
53. I generally choose brands of products that are "tried and true" rather than unfamiliar brands.	1	2	3	4 5
54. I always find some good reason for refusing to collect money door-to-door.	1	2	3	4 5
55. If I have a plan, I feel free to change it to take care of new demands.	1	2	3	4 5
56. If I were a mother of pre-schoolers, I would make time for working part-time and taking refresher courses in case I should return to work full-time in the future.	1	2	3	4 5
57. I usually agree to requests that require commitment of time.	1	2	3	4 5
58. Whenever the children do jobs around the house, I redo them if they do not meet my expectations.	1	2	3	4 5
59. If I want a particular item that I cannot find in the stores, I come home empty-handed.	1	2	3	4 5
60. If I get up 15 minutes late one day, family members are likely to be late to school or work.	1	2	3	4 5
61. If I were a mother of pre-schoolers, considering returning to work in the future, there would be no extra time for part-time work or refresher courses.	1	2	3	4 5
62. When I have too much to do in one day or week, I delay or delete some task.	1	2	3	4 5
63. I am in community or church groups requiring continual altering of plans to meet the requests of these groups.	1	2	3	4 5
64. If my schedule is disrupted, it is fairly easy to make a new one.	1	2	3	4 5
65. Having my plans interrupted is very disturbing.	1	2	3	4 5

	Not like		Somewhat		Exactly like
66. When I buy something new, a strong consideration is how it fits in with what I already have.	1	2	3	4	5
67. I tend to avoid becoming active in community or church groups that might make unexpected demands.	1	2	3	4	5
68. I am willing to collect money door-to-door for a worthy cause.	1	2	3	4	5
69. I know the daily schedules of each other family member.	1	2	3	4	5
70. I frequently buy new brands of products.	1	2	3	4	5
71. I do not let presently owned items restrict my choice of color, style, etc. of new things I buy.	1	2	3	4	5
72. If I cannot find a particular item I want in the stores, I can usually find a good substitute.	1	2	3	4	5
73. If I have a plan, it keeps me from taking on new demands that might conflict with present goals.	1	2	3	4	5
74. If I get up 15 minutes late one day, routines can be adjusted so that family members will not be late to school and work.	1	2	3	4	5
75. I need to know schedules of other family members only when they affect my schedule.	1	2	3	4	5
76. I think of my family as:	1) Staying the same. 2) Changing 3) Never knowing what will happen next.				

Please feel free to make any comments in this space regarding the questions, the way the questions were asked or other questions they raised for you.

Appendix C

Table 1

Descriptions of Morphogenic and Morphostatic System Components of Planning

No. of Items	Morphostatic and Morphogenic Components of Planning ^a	Mean	<i>S D</i>	ALPHA N = 40
<u>Morphostatic Components:</u>				
9	Boundaries Relatively Closed	3.65	.59	.35
11	Inflexible Standards & Sequencing	3.50	.64	.61
5	High Commitment to Current Organization	3.18	.71	.45
11	Low Adjustment to New Demands	3.41	.70	.69
<u>Morphogenic Components:</u>				
13	Relatively Open Boundaries	3.02	.62	.70
12	Flexible Standards & Sequencing	3.03	.42	-.36
3	Low Commitment to Current Organization	3.71	.89	.54
10	High Adjustment to New Demands	3.08	.65	.63

^a Adapted from Beard (1975).

Appendix D

Table 1

Correlations of Planning Dimension Items by Three Planning Dimensions: Questionnaire
Items Identified by Dimension, Component, and Number

Dimension, Components, and Number of Items	Morphostatic Planning (alpha = .84)	Morpho static Planning	Planning by Adherence to Rules	Morpho genic Planning
XD02	Money is the primary consideration in housing selection.	.71**	.44*	.38*
XD03	Resources are checked before guests are invited.	.69**	.35	.16
XB07	A person decides whether members can have.	.66**	.34	.23
XA08	Higher odds of meeting expectations if based on available means.	.70**	.26	.37
XD12	Prices obtained before deciding which is desired.	.40	-.01	.22
XB13	We do not borrow from our budget to meet changing expectations.	.64**	.21	.20
XA15	Buying plans are made when time and money are obviously available.	.43	.19	.09
YA16	New expectations are encouraged since resources can increase.	.36	.43	.64**
XB17	We avoid changing time/day of household chores.	.56**	.26	.06
XA19	Expectations are changed or delayed until affordable.	.63**	.44*	.36
XD21	Individual member would do without for loss of money.	.24	.04	-.07
YA28	We borrow from our budget to meet changing expectations.	.07	.20	.08
XA30	Our expectations are based on currently available money.	.14	-.07	-.01
XA34	Expectations are reduced when money is not available.	.60**	.42*	.40
XD37	We settle for less because of unexpected events.	.58**	.56**	.17
XB40	Parents evaluate purchases before letting children have money.	.51**	.73**	.36
XC44	We carry out a budget without being tempted by additional wants.	.68**	.25	.34
XD47	We teach children to live at a level they can afford.	.33	.39	.24
XD50	There seems to be no way to have all the things we used to.	.53**	.55**	.23
XB66	New purchase consideration is how it fits with what I have.	.37	.15	.23
	Planning by Adherence to Rules (alpha = .72)			
YB09	It is okay if our costs (food, house) are quite different from the average for families of the same income.	.23	.55**	.14
YB29	Homes outside does not depend on what the neighbors think.	.30	.45*	.25

Dimensions, Components, and Number of Items	Planning by Adherence to Rules (cont'd)	Morpho static Planning	Planning by Adherence to Rules	Morpho genic Planning
XC32	Only a pay increase can help us adjust to price increases.	.56**	.56**	.23
XB38	Homes outside looks like neighbors expect it .	.15	.41*	.27
XB39	We try to keep spend the way families who earn what we do.	.31	.79**	.37
XB40	Parents evaluate purchases before letting children have money.	.51**	.73**	.36
XD50	There seems to be no way to have all the things we used to.	.53**	.55**	.23
XD62	I delay or delete some task to reduce short term time pressure.	.33	.61**	.57**
	Morphogenic Planning (alpha = .76)			
YB11	Charitable contributions are individual family members decisions.	.21	.09	.29
YA16	New expectations are encouraged since resources can increase.	.36	.44*	.64**
YD18	Desirable features, then price determine car purchase plans.	.15	.18	.37
YD26	The financial loss of one family member is shared by all.	.29	.28	.54**
YA31	We find a way to meet children's reasonable expectations.	.17	.13	.20
YD33	The financial loss is the factor in life insurance purchase.	.13	.08	.55**
YD35	Income increase or other resources help meet wants.	.14	.26	.51**
YB36	Household routine can be changed to fit the unexpected.	.33	.37	.35
YD42	Some way can be found to pay for both.	.04	.12	.58**
YA43	We find time and money for guests as often as we want.	.24	.23	.62**
YB45	New goals require changed money use plans.	.24	.38	.61**
YD46	Other resources meet goals when time and money are limited.	.43*	.35	.51**
YA48	Special efforts get us wants beyond what we can afford.	.26	.27	.59**
YA49	Most really important wants can be worked into plans.	.20	.32	.34
XD50	There seems to be no way to have all the things we used to.	.53**	.55**	.23
YA51	Children creatively reach goals which seem impossible.	.49*	.53**	.36
YB53	We use tried and true rather than unfamiliar brands.	-.10	-.17	.14
YC64	A disrupted schedule is fairly easy to remedy.	.19	.47*	.57

Note: Planning Dimensions: X = Morphostatic, Y = Morphogenic. Family System Components: A = Boundary, B = Standards and Sequences, C = Organizational Commitment, D = Adjustment to Demands.

* $p < .10$, ** $p < .05$.