

RURAL THIRD-GRADE CHILDREN'S SOCIAL AND PSYCHOLOGICAL
OCCUPATIONAL GENDER-TYPES: THE RELATIONSHIP OF MATERNAL
WORK PATTERNS AND ATTITUDES.

by

TRACY VAILLANCOURT

B.A., The University of British Columbia, 1993

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS
in
THE FACULTY OF EDUCATION

Early Childhood Education Programme

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

September 1996

© Tracy Vaillancourt, 1996

Abstract

The present study examined third grade students' ($N = 52$) social and psychological occupational gender stereotypes in relation to their mothers' work patterns and attitudes toward women in a rural context. The results indicated that rural children not only aspire to and expect to hold gender-traditional jobs (psychological dimension), but they also recognize that certain occupations are typically filled by women or men (social dimension). Specifically, males reported more traditional occupational gender stereotypes for both themselves (psychological dimension) and others (social dimension), and overall, children perceived more traditional occupational gender stereotypes for themselves (psychological dimension) than others (social dimension). The students' social and psychological occupational gender stereotypes were not found to be related to the traditionality of their mothers employment nor to the traditionality of their mothers attitudes concerning the roles of women. Implications for education and future research are discussed.

TABLE OF CONTENTS

Abstract	ii
Table of Contents	iii
List of Tables	v
Acknowledgment	vi
Chapter 1 Introduction	1
Chapter 2 Review of Related Literature	5
Theoretical Perspectives of Gender-Role Acquisition	5
Children's Occupational Gender-Types	13
The Psychological Dimension	14
The Social Dimension	21
The Psychological and Social Dimensions	23
Maternal Employment	30
Maternal Work Patterns	31
Maternal Attitudes Toward Women	37
The Socio-Demographic Setting	41
Overview of Present Study	46
Hypotheses	48
Chapter 3 Methodology	50
Community Profile	50
Sampling	51
Participants	52
Measures	53
Chapter 4 Results	57
Psychological Dimension	57
Social Dimension	59
Psychological and Social Dimensions	60
Maternal Work Patterns	62
Maternal Attitudes	62

Chapter 5	Discussion	63
	Overview	63
	Hypotheses	63
	Future Research Questions	66
	Implications for Education	68
	Limitations of the Current Study	70
References		72
Appendix A		85
Appendix B		86
Appendix C		87
Appendix D		90
Appendix E		92

List of Tables

Table 1. Children's Vocational Aspirations and Expectations . . .	57
Table 2. Specific Vocational Aspirations and Expectations of Boys . . .	58
Table 3. Specific Vocational Aspirations and Expectations of Girls . . .	59
Table 4. Means and Standard Deviations of Children's Occupational Gender-Types Across Dimensions and Sex	61

Acknowledgments

I would like to thank Dr. Ann Lukasevich, Dr. Hillel Goelman, and Dr. Shelley Hymel for all their help. I would especially like to acknowledge Dr. Goelman's and Dr. Hymel's input with respect to the methodology and results chapters.

This study could not have been conducted without the support of the Revelstoke School District and Revelstoke community, that is all participating schools, teachers, students, and mothers, and thus I thank these individuals very much.

Finally, I thank my family for their enormous emotional and financial support for this endeavor, with particular reference to my nine year old niece Darci who helped me tremendously with the wording of the questionnaires.

Chapter 1

INTRODUCTION

As the women's liberation movement rose to the forefront, so did the social scientists' inquiry into gender¹ socialization (Basow, 1986). One aspect of gender socialization that has received considerable attention is the gender differences in vocational interests and career preferences of girls and boys (Barak, Feldman, & Noy, 1991). Occupational gender-typing, the prescription of occupational roles based on what a particular culture believes to be desirable and appropriate for either females or males, is reflected in the choices made by primary school children (Bailey & Nihlen, 1990; Barak et al., 1991; Bigler & Liben, 1986; Blaske, 1984; Cordua, McGraw, & Drabman, 1979; Garrett, Erin, & Tremaine, 1977; Katz & Boswell, 1986; O'Keefe & Hyde, 1983; Riley, 1981; Rosenthal & Chapman, 1980; Stroeher, 1994; Tozzo & Golub, 1990). Unfortunately, children's articulated beliefs about the kinds of work appropriate to women and men paint a somewhat dichotomous world in which the incumbents of specific jobs are expected to be of only one gender— either female or male. This type of limited view has been shown to play an important role in the occurrence of bias in future career choices and personal decisions made by females and males as they plan their career choices (e.g., Cleveland & Landy, 1983; Heilman, 1983; Macan, Detjen, & Dickey, 1994).

¹ The terms gender and sex have produced considerable controversy in the literature. As such, several authors have argued that the term sex be used in reference to a person's biological maleness or femaleness, while the term gender be used in reference to a person's psychological features and social categories (e.g., Deaux, 1985; Unger, 1979, 1990). On the other hand, Maccoby (1988) has suggested that sex and gender should be used interchangeably because biological and social aspects of sex may interact with each other. In following Maccoby, both terms will be used interchangeably without any assumption that sex implies biological causes or that gender results from socialization (Golombok & Fivush, 1994).

Therefore, it has been argued that children's notions regarding gender and work substantially limit girls', as well as boys', future vocational training, occupational commitment, income, and status (e.g., Adams & Hicken 1984; Jessell & Beymer, 1992; Jussim, 1986).

Given the potential deleterious effects occupational stereotyping may have on children's future career development, a great deal of interest and research has been conducted in order to gain a better understanding of possible influences on children's perceptions and attitudes regarding gender roles. Many attempts have been made to link a plethora of individual, familial, and social factors with the occurrence of occupational gender-typing in primary school children. Nevertheless, the breadth and diversity of this research has made it difficult to draw clear conclusions as to why children continue to stereotype occupations along gender-traditional lines despite a substantial increase of women in the paid labour force (Statistics Canada, 1991a; 1991b), as well as the increased variability in today's role options. In addition, most of the research on children's occupational gender-typing has been conducted in urban regions which may or may not accurately represent current conditions of smaller geographical regions since rural regions tend to have a narrower range of occupations and more traditional representation of the incumbents (Statistics Canada, 1991c). As a result, children's opportunity for personal contact with people in various occupations is, typically, more limited in rural than urban areas. Furthermore, past research into children's occupational gender-typing in different socio-demographic settings is virtually nonexistent in North America, making research in this area especially warranted since it cannot be

assumed that data collected from urban regions reflect the current conditions found in rural regions. Therefore, the author of this thesis sought to clarify the obfuscated nature of why occupational gender-typing among children continues to be wide spread by understanding how certain variables interact and contribute to children's beliefs systems. Specifically, the present study investigated rural third-grade children's social² and psychological occupational gender-types in relation to their mothers' work patterns and attitudes toward women. Certainly, clarification of this area of research is warranted considering the growing body of literature declaring that children's *early* attitudes and beliefs affect subsequent vocational role decisions (e.g., Rollins & White, 1982).

In order to explore the aforementioned variables fully four research questions were generated for which testable hypotheses could be drawn. The four specific questions for which answers were sought in the present study are as follows:

1. Will rural children express traditional views on both the social and psychological gender-typing dimensions?
2. Will rural children's occupational gender-types along the psychological dimension be more traditional than along the social dimension?
3. Will rural children's occupational gender-types along the social and psychological dimensions be related to the traditionality of their mothers' occupation?

² The social dimension of children's occupational gender-types reflects occupational options seen as appropriate for all females, whereas the psychological dimension reflects those occupations that a child perceives as appropriate and desirable specifically for her/himself (Bailey & Nihlen, 1990).

4. Will a relationship be found with respect to maternal attitudes concerning the roles of women and their children's social and psychological occupational gender-types?

These are the questions that have motivated this investigation.

Chapter 2

REVIEW OF RELATED LITERATURE

To put the current study into context, the author will begin by reviewing the relevant theoretical and empirical background regarding the acquisition of sex-role behaviors and beliefs by addressing four prominent global psychological theories. Next, the author will address the literature pertaining to children social and psychological occupational gender-types, followed by the literature dealing with maternal employment patterns and attitudes in relation to their children's occupational gender-types, and concluding with the literature that has investigated the context (i.e., socio-demographic setting) in which children and their families are developing. Finally, the author will turn to some specific questions that have been left unanswered to this point.

Theoretical Perspectives

The complexity of gender-typing is such that no single theoretical framework has been universally accepted and thus, researchers from a broad variety of psychological traditions have advocated four major theoretical views regarding the acquisition of sex-role behaviors and beliefs with each of these views stressing different types of mechanisms.

The first psychological view is the simplest in that it focuses upon direct *reinforcement*. The overarching principles behind this theory are: (1) positive reinforcements that follow a response increase the likelihood of the response occurring again, whereas (2) negative, (or lack of) reinforcement is likely to decrease the response (Bandura & Walters, 1963). This theory would predict that a child

behaving in what adults consider a gender “appropriate” manner to be reinforced, and conversely, a child behaving “inappropriately” for his/her gender would be punished or ignored. The primary person(s) distributing the awards and punishments are the parents, who themselves hold definite ideas regarding what is appropriate and inappropriate behavior for boys and girls, and hence, provide their child with frequent, ongoing feedback (Katz, 1979). Lytton and Romney’s (1991) meta-analysis of 172 studies of parental differences in the treatment of their daughters and sons provides strong support for this theory. These authors found that parents do differentially reinforce their girls and boys for specific sex-typed activities and interests. For example, girls were reinforced for playing homemaker whereas boys were reinforced for playing police officer. Moreover, it has been consistently documented in the literature that boys are discouraged from engaging in what parents might consider to be “feminine-type” behavior or activities (Fagot, 1978; Langlois & Downs, 1980; Maccoby & Jacklin, 1974).

While many children are reinforced (by their parents) to behave in a gender “appropriate” manners, it is unlikely that this theory alone accounts for the wide range of gender-typed behaviors shown by girls and boys (Maccoby & Jacklin, 1974). Indeed, children acquire information from a variety of different sources (e.g., schools, media, peers, other adults) which is imparted and processed by children on many different cognitive levels. For example, according to the second psychological view, children acquire information regarding gender role behaviors through *modeling processes* and *observational learning*. This view holds that children acquire a consolidation of behaviors through years of observing their parents and imitating

behaviors of their same-sex parent (Bandura & Walters, 1963; Mischel, 1966).

According to this theory, a distinction is made between competence (i.e., what the child is capable of doing) and performance (i.e., what the child can do currently). It is assumed that the child has observed more information than she or he can perform and thus the complex set of interrelated behaviors viewed may not manifest behaviorally for some time. The idea that children acquired gender-typed behavior by imitation of their same-sex parent is now seen as being somewhat simplistic, and as a result, a modified version of this theory has been put forth by Perry and Bussey (1979). These authors submit that children learn which behaviors are appropriate to one's sex by observing the frequencies with which males and females engage in certain behaviors. Children then use these abstractions of gender-appropriate behavior as models for their own behavior. In other words, children imitate behaviors that they have seen performed by *many* same-sex models, not only the behaviors engaged in by their parents. These mimicked behaviors are then subject to positive or negative reinforcement by others (i.e., parents, peers etc.) depending on the "suitability" of the actions.

Support for Perry and Bussey's (1979) modified version of modeling comes from two experiments they conducted. In the first experiment, children observed four males and four female models choosing between pairs of items (e.g., a banana and an apple). When all the female models chose the same item and all the male models chose the other item, the children were more likely to prefer the item chosen by the same-sex models. On the other hand, when two female models and two male models chose the same items, the children were much less likely to prefer the

item chosen by the same-sex models. The children in this experiment learned which behaviors were appropriate to their respective gender by observing the differences in frequencies with which the male and female models performed certain behaviors.

In Perry and Bussey's (1979) second experiment, it was shown that children's imitation of an adult is strongly influenced by the degree to which the child believes that the adult is engaged in "typical", "appropriate" behavior (as measured by the number of same sex adults engaging in the behavior) for her/his gender. In other words, children are more likely to model their behavior after models whom they perceive to be good examples of their respective sex. Similar to Perry and Bussey's first experiment, children again viewed four female and four male models choosing between two items. However, in this experiment, three of the women and one of the men chose one item, while three of the men and one of the women chose the other. The children thus saw one man and one women behaving in a gender-inappropriate manner. When the children were asked to give their preference for the items, they were more likely to imitate a same-sex appropriate model whose behavior was typical of the other males or females in his/her group.

Therefore, it appears that children imitate behaviors associated with more "typical" same-sex models, and that children learn about gender-typed behaviors of both sexes through observation. Furthermore, children form concepts of masculinity and femininity not just concepts of what is appropriate for themselves (Golombok & Fivush, 1994; Huston, 1983).

The third psychological view is based upon Freud's (1927) psychoanalytical theory of *identification*. According to Freud, all children originally identify with their mothers. As the children mature to preschool age, their choice of identification model changes to that of their same-sex parent for boys, or remains the mother for girls. It is during this period that children adopt both the moral values and behavioral characteristics of their same-sex parent. The concept of identification is troublesome for most contemporary theorists who argue that identification and imitation are basically synonymous (Mischel, 1970). Imitation has been referred to as a child's tendency to imitate same-sex models more than opposite-sex individuals (Perry & Bussey, 1979). According to Katz (1979), however, the distinction between the two may lie in the type of bond the child has with the adult, in that identification requires a strong affective bond, whereas imitation can occur without such a relationship. An important aspect of Freud's theory of identification is the focus it places on the developmental aspects of gender-role acquisition, a point that has been advocated by theorists from a cognitive developmental perspective.

According to the fourth psychological position, the *cognitive-developmental* view (Kohlberg, 1966), the first step in gender-role development is the child's ability to correctly self-label her/his sex. This stage typically occurs at about two years of age and is termed gender identity. Children in this stage are able to correctly label themselves and others as either female or male. Nevertheless, this categorization is based on physical characteristics. Thus, a person with long hair and wearing a dress would be labeled female, whereas a person with short hair wearing a suit would be labeled male. Moreover, once self-labeling has occurred, children begin to

associate toys, activities, and other behaviors with either “girlness” or “boyiness”, and in doing so, self-reinforcing her/himself for behaving in a gender-appropriate manner. At around ages three to four years, children move into stage two, which is termed gender stability. During this stage, children understand that gender is stable across time. For example, a girl who has achieved gender stability would understand that she is presently a girl and will be a girl in the future as she was in the past. Children in this stage do not, however, understand that gender is stable across situations. Thus, if a male engages in female activities, such as playing with a doll, children in stage two believe that this boy may change into a female. At around age five, children enter stage three which is termed gender constancy. During this stage, children understand that gender is stable across time and situations, and thus gender is an underlying, unchanging aspect of identity. In sum, the cognitive prerequisite of gender identity is the child’s ability to correctly label gender, and the recognition that the category of gender does not change.

Also tied to the cognitive-developmental theory of gender-role acquisition is the *gender schema theory*, which describes and explains the developing content and organization of children’s gender understanding. A basic assumption of gender schema theory is that knowledge of gender is multidimensional in that it includes an understanding of behaviors, roles, traits, and occupations (Deaux & Lewis, 1984; Huston, 1983). For example, being female is associated with particular behaviors (sewing), roles (homemaker), traits (nurturance), and occupations (nurse), whereas being male is associated with different components of gender-related knowledge. Knowledge of gender is organized in such a way as to be able to infer or make a

prediction about a person based on one's knowledge of the gender-label and its components. However, each component of knowledge is independent in that one can have a great understanding about female-related behaviors without much knowledge of male-related behaviors. For example, gender schema theory postulates that as children acquire knowledge about each of the above mentioned components, they also begin to organize their knowledge in more complex manners. Knowledge is organized to facilitate both within and across component associations (Martin, 1993). Within-component associations link information within each category of knowledge, while across-component associations link behaviors from different categories of knowledge (Golombok & Fivush, 1994). For example, a within-component association would be the association between female-related behaviors such as "likes to play with dolls" and "likes to play house." Across-component associations would be a connection drawn from a female-related trait to a female-related occupation such as "likes to help others" to "being a nurse." In other words, having knowledge regarding one thing a person can do leads to inferences about other things, both within and across categories.

The developmental sequence of this theory is that preschool children rely almost exclusively on gender labels. If they are told someone is male or female, they will make predictions of behaviors and activities that are stereotypical to the respective gender of the individual, regardless of any other information is provided. For example, if a preschool child was told about a girl who likes to play with cars, the preschool child will also predict that she will also like to play with dolls. Conversely, if a preschooler was told about a person who likes to play with trains, the

preschooler would predict that the child is male (Martin, Wood, & Little, 1990). As children grow older, they begin to make more complex predictions. For example, if told about a girl who likes to play with cars, older children would predict that this child also enjoys playing with trucks and trains. Rather than solely relying on gender labels as seen with preschoolers, older children consider counter-stereotypical information when making their predictions.

Summary and Conclusions

In summary, there are four prominent psychological theories regarding gender-role acquisition. The first three viewpoints stress the role of the parent in the gender socialization of their child either due to the reinforcement they give, the pattern of behavior they demonstrate, or the type of relationship they form with their offspring (Katz, 1979). The fact that the majority of the aforementioned theories have not attempted to integrate socialization agents other than the parents presents a limitation in these theoretical approaches. Indeed, there has been a considerable amount of research amassed affirming that children are influenced by a number of other sources (see Katz & Boswell, 1986 for review). The cognitive-developmental view (Kohlberg, 1966), as well as the revised modeling and observational learning view (Perry & Bussey, 1979), however, tend to place greater emphasis on the child's own cognition and behaviors and thus allows for the possibility of other agents influencing the child's gender-role development.

Theoretical propositions regarding gender-role acquisition have sparked a number of attempts to measure these constructs and examine how meaningful they are in the experience of children's occupational biases. This research can be

divided into two broad categories: (1) children's occupational gender-types, and (2) antecedents of children's occupational gender-types. The former category includes children's knowledge of occupational stereotypes (social dimension) and children's personal role preference (psychological dimension), while the latter category delineates socializing agents such as the community context and the effects of maternal influence. The following three sections reviews the literature on these two categories, and in doing so, illuminate how this body of work relates to the three understudied social and familial variables to be investigated in this thesis, namely: (a) the distinction between the social and psychological dimension in children's occupational gender-typing; (b) the influence of maternal work patterns and beliefs on their children's occupational biases, and (c) the relative influence of children's socio-demographic context on their occupational stereotypes.

Children's Occupational Gender-Types

Children's occupational aspirations and expectations have been researched and documented extensively (e.g., Barak et al., 1991; Bigler & Liben, 1986; Blaske, 1984; Cordua, McGraw, & Drabman, 1979; Garrett, Erin, & Tremaine, 1977; Katz & Boswell, 1986; O'Keefe & Hyde, 1983; Riley, 1981; Rosenthal & Chapman, 1980; Stroeher, 1994; Tozzo & Golub, 1990). There is a general agreement in the literature that children stereotype occupations along gender traditional lines. Nevertheless, a distinction that is not consistently made in the literature is that children stereotype within two separate categories. The first category, referred to as the psychological dimension, reflects those occupations that a child perceives as appropriate and desirable specifically for her/himself (Bailey & Nihlen, 1990). In

other words, children respond according to what they believe to be appropriate for themselves. The second category, referred to as the social dimension, reflects occupational options seen as appropriate for all females and males (Bailey & Nihlen, 1990). In other words, children make a somewhat global characterization as to which gender could, or should perform certain occupations.

The trend in the literature has been to either isolate children's occupational stereotypes along the psychological dimension (e.g., Burlin, 1976; Kreidberg, Butcher, & White, 1978; Looft, 1971a, 1971b; Papalia & Tennent, 1975; Riley, 1981; Spare & Drahtmen, 1984), or the social dimension (e.g., Barnhart, 1983; Cordua et al, 1979; Garrett et al, 1977; Gettys & Cann, 1981; Harris & Satter, 1981; Rosenthal & Chapman, 1980; Scheresky, 1976; Shepard & Hess, 1975; Stericker & Kurdek, 1982), or to address the two stereotyping dimensions without even recognizing the distinction being made between the two forms of occupational stereotypes (e.g., Franken, 1983; Gegg & Dobson, 1980; Hagman & Gladding, 1983; Park, 1976; Schlossberg & Goodman, 1972; Shepelak, Ogden, & Toben-Bennett, 1984; Stoeher, 1994; Tremaine & Schau, 1979). These approaches have lead to confusion regarding possible changes in the expression of children's occupational gender-types. For instance, it is still not clear whether children's stereotyped beliefs are becoming less traditional over time, nor is it clear whether possible changes are occurring along both the social and psychological dimensions.

The Psychological Dimension

Research on the psychological dimension has typically measured responses to questions such as, "What do you want to be when you grow up?" (Bailey &

Nihlen, 1990). For example, in a much cited study, Looft (1971a) attempted to determine the early vocational aspirations for boys ($N=33$) and girls ($N=33$) by asking first- and second-grade urban children what they would like to be when they grew up and then what they “really thought” they would do when they grew up. The two questions were posed in order to prompt the children to perceive a difference between careers they wanted to pursue in adulthood versus careers they realistically expected to follow in adulthood.

With regard to the first question, Looft (1971a) predicted that boys would nominate a wider range of vocational aspirations than girls because boys have a wider range of opportunities available to them. This prediction was supported in that the 33 boys nominated a total of 18 different occupations as their first choice, whereas the 33 girls nominated only a total of 8 different occupations as their first choice. The most frequently proposed occupations for the boys were football player (9) and police officer (4), whereas the girls most frequently proposed either nurse (14) or teacher (11) as their first choice.

With respect to the second question, 23 boys and 14 girls changed their initial response. One explanation for the relatively low number of girls changing their initial response was that the girls nominated realistic professional aspirations in the beginning. The sex difference found with the second question suggests that the girls perceived a narrower range than the boys of vocational opportunities available to them, and that the type of careers available to them typically encompassed sex-typed occupations such as nursing and teaching.

In a similar study, Looft (1971b) asked 41 urban second-grade girls about their desired and realistic occupational goals. The girls were asked the following questions: "What would you like to be when you are an adult? What do you want to do?" and "Now, what do you think you really will be when you are an adult? What do you think you really will do?" (p.241). The first questions were asked in order to obtain the girls' desired occupational goals whereas the second questions were asked in order to elicit the girls' realistic occupational expectations. Again, only the first nomination to both sets of questions were recorded.

Similar to the girls in Looft's (1971a) earlier study, the girls in this study (1971b) nominated the occupation of nurse (15) and teacher (12) more frequently than any other occupation. To the second question, 12 of the girls gave the same answer; eight changed their response to housewife or mother; seven girls responded that they "did not know"; three changed to nurse; while the remaining subjects changed their answers to a variety of other responses such as "my regular self" (p.242). Once again, Looft (1971b) noted that the girls nominated a very narrow range of occupations. This phenomenon suggests that these girls learned early in life what society expected of them regarding vocational choices. Indeed, the most prevalent vocational nominations were nurse and teacher, occupations which are still to this date overwhelmingly and disproportionately held by women (Statistics Canada, 1991a).

Using the age-old question, "What do you want to be when you grow up?" and adding a new focus, "Now, what do you think you really will do?", Looft created a "script" that has spanned more than 20 years in the occupational gender-typing

literature. Indeed, Looft's studies have been replicated on many occasions (e.g., Adams & Hicken, 1984; Kriedberg, Butcher, & White, 1978; O'Keefe & Hyde, 1983; Papalia & Tennent, 1975; Trice, 1991). Unfortunately, however, the girls vocational nominations in all these studies have remained relatively narrow in comparison to their male counterparts. This trend has continued despite the changes in the roles of women and work over time.

Investigating children's vocational aspirations versus their expectations has also been measured by asking children what they wanted to be when they grew up and what the children would do when they grew up with the condition that they were the opposite sex. For example, Beuf's (1974) curiosity about whether or not children saw occupational roles as sex-specific, how early in life this occurs, and to what extent to children began to limit their life options based on a mental association between occupational role and sex lead her to interview 63 urban children (37 boys and 26 girls) between the ages of three and six. The children were asked about their vocational aspirations as themselves and as a member of the opposite sex.

The results of Beuf's (1974) study indicated that both boys and girls nominated future occupational aspirations along stereotypical lines. Over 70% of the boys and 73% of the girls chose stereotypical vocations for themselves. In response to the opposite sex condition, 65% of the boys and 73% of the girls selected occupations which were socially appropriate. What was interesting about the opposite sex condition was the reaction of the children to the question. For example, several girls indicated that the opposite sex occupation nomination was

their true career ambition, one which could never be realized given their female status. One little girl confided that what she really wanted to do when she grew up was to fly like a bird. This girl stated that she would never do this because she was not a boy. Another trend Beuf observed with respect to the opposite sex condition was that the majority of the girls had an answer to the question whereas the majority of the boys did not. Moreover, there was a great proportion of the boys who regarded the reverse question with suspicion.

In a similar study, Riley (1981) investigated the extent to which urban kindergarten children held sex-role stereotypes about occupations, and the extent to which boys and girls differed in the degree to which they stereotyped. The 540 kindergarten participants (274 females, and 266 males) were given two assignments. First, they were asked to draw a picture of what they would like to be when they grew up. Second, the children were asked to pretend they were of the opposite sex and then draw a picture of what they would like to be when they grew up.

Results of Riley's (1981) study suggested that children did have "extreme" gender-stereotypical occupational preferences. Girls in this study selected occupations that were 87% female in composition, and boys selected occupations that were 88% male. In the reversed, pretend condition, girls chose occupations that were 84% male in composition, and boys selected occupations that were 74% female. Moreover, boys did perceive a wider range of vocational options in the self condition, but not in the reverse condition. Similar to Beuf's (1974) study, the reactions to the pretend condition were interesting. The female participants were

not reluctant whatsoever to pretend they were boys, whereas the males were generally distressed by the request. Comments such as, "If I were a girl I would hate it," or "I don't want to be a girl," or "I could be nothing," were generated from the boys (Riley, 1981, p.248). In fact, their reaction was so strong that on several occasions the researcher had to explain to the boys that the procedure was just a game and that they were not going to become girls because they played the game.

Beuf (1974) and Riley (1981) both concluded that children were still learning about sex-typed role structures despite the amount of attention the women's movement had received. Furthermore, in addition to knowing their sex, young children were also aware of the social implications and limitations of that sexual definition.

In another study, a finding which suggested more gender-balanced views by children was reported by Spare and Dahmen (1984). In this study, equal proportions of urban males and females in first- or second-, and fourth- or fifth-grade children ($N=93$) were asked to nominate an occupation for themselves and one if they were a member of the opposite sex. *Both* the girls and the boys proposed a wider range of occupational choices for girls. For example, 68% of the girls proposed nontraditional occupations for themselves, and 91% of the girls nominated traditionally masculine occupations in the opposite sex condition. Conversely, 91% of the boys nominated male occupations for themselves, and 80% of the boys nominated traditional female occupations in the opposite condition. However, when sex was compared in the two different age groups, girls in both groups nominated significantly fewer sex-typed responses than the boys.

Distinct sex differences in occupational choices regarding nomination range and type along children's psychological dimension was also noted by Siegel (1973). In this study, 61 second-grade children were asked if they had thought about what they wanted to do when they grew up, what type of work their fathers' did, and what type of occupations they would most like and least want to do when they grew up. Ninety-seven percent of the children had thought about what kind of occupation they wanted to do when they grew up, and 88% of the boys and 76% of the girls knew what their fathers did vocationally. With regard to the subjects' occupational choices, boys nominated almost twice as many occupations than the girls. Moreover, 20 of the 29 girls selected either teacher or nurse as the occupation they would most like to do when they grew up. The boys on the other hand did not nominate any one category of profession per se, with the exception of police officer, which was chosen by seven of the 32 boys. Asking the children what they least wanted to do vocationally when they grew did not yield any startling discoveries.

The children in Siegel's (1973) study responded to questions regarding occupational choices in a very similar fashion to those in Looft's (1971a; 1971b) studies. Again, children appear to have endorsed societal expectations of sex-appropriate work by selecting the traditional cultural stereotypes, which in this cohort, limited girls expression of occupational choices.

In summary, judging from the studies reviewed above, children appear to be expressing traditional gender stereotypes with respect to their own lives. This trend seems to persist despite all the inroads women have made in the labour market.

The beliefs children hold about their own sex-roles may limit the expression of personal interests and skills.

The Social Dimension

While research on the psychological dimension is typically characterized by asking children what they want to be vocationally when they grow up, research on the social dimension of occupational gender-typing is characterized by measuring children's responses to questions like, "Who could, who should, or who would perform a specific job?" (Bailey & Nihlen, 1990). For example, Shepard and Hess (1975) investigated the attitudes of four different age groups toward sex-role divisions in adult occupations and activities. Kindergarten, eighth grade, college, and adult subjects ($N=263$) were presented with a list of 43 adult occupations and were asked to indicate whether the occupations should be performed by a male, female, or both.

Shepard and Hess (1975) predicted first that both kindergarten children and adults would respond in a traditional fashion. This was due to the fact that these children had little exposure to social debate regarding gender roles, and that the adults had grown up in a traditional atmosphere. Second, eighth graders were expected to be moderately liberal due to their new capability of questioning. Third, college students were expected to be the most liberal because of academic consideration and exposure to various life styles. In addition, Shepard and Hess predicted that at every age level females would express more liberal views than males because women's roles were less prestigious and valued. Therefore, these

females would have had more to gain from changing role conception toward the preferred male role.

Overall, Shepard and Hess's (1975) predictions were supported. Liberality, defined in terms of the number of "either" responses, increased from kindergarten through eighth grade to college and then decreased in the adult sample. Moreover, the females were significantly more liberal than the males in every group with the exception of kindergarten. With respect to the kindergarten children's "conservative" attitudes toward sex-role division in occupations, Shepard and Hess suggested that parents were conveying and/or modeling a traditional role division.

This positive change toward increased egalitarianism was not, however, noted by Scheresky (1976). Two hundred and seventy urban children aged six, eight, and ten were tested on their views of occupational roles. The children were asked to indicate whether a man or woman or both could do the jobs represented in black and white pictures portraying occupational settings. For example, for the occupation of nurse the children were presented with a photographic setting of a hospital room. The interviewer then said, "Here is a hospital room. Choose the nurse." (p.1208). The children responded by pointing to the silhouette of a man, woman, or both. The results of this study indicated that children were still traditional in their thinking, following closely society's expectations of occupational roles. This conclusion was replicated in similar studies conducted by Barnhart (1983), Garrett, Erin, and Tremaine (1977), Gettys and Cann (1981), Scheresky (1976), and Stericker and Kurdek (1982) . Given such findings, it is difficult to determine

whether children's occupational gender-types along the social dimension are indeed declining.

The Psychological and Social Dimension

As previously mentioned, studies in the area of children's occupational gender-types have either investigated the psychological or social dimension in isolation, or they have investigated the two dimensions without paying attention to the fact that two distinct forms of occupational gender-typing exist. For example, Evelo, Jessell, and Beymer (1991) tested children's vocational stereotypes by investigating the effects of job titles (JT) and job descriptions (JD). The consistency between children's liberality (defined as the number of "either" choices) and sex-typing of occupational preferences were also addressed (Evelo et al, 1991).

Thirty-nine schools classified as either "large" or "small" according to their size were randomly assigned to either the JT condition or the JD condition. The student sample consisted of 2,945 (1,601 females and 1,344 males) seventh- and eighth-grade students. Participation was restricted to students who responded in a liberal fashion (i.e., those responding predominately to the "either" choice) when presented with each of the 18 occupations. The students watched a video tape consisting of either the JT or JD condition. A male and female narrator explained on both tapes that they were seeking to hire persons to fill 18 positions in a fictional health care retirement facility. In the JT video, the narrators alternately read the title of each job and then asked the students to respond to who should be hired for the job. In the JD video, the narrators alternately presented the job title and then read the description of the job. Again students were asked to indicate who they thought

should be hired for the job (social dimension). Moreover, in both conditions the students were asked to indicate if they would be interested in the jobs presented for themselves (psychological dimension).

The results of Evelo et al.'s (1991) study revealed that a significant number of occupations considered to be traditional were given nontraditional responses by the seventh- and eighth- grade students. That is, overall, the students indicated that either women or men should be considered for positions in the fictitious health care retirement facility. With respect to sex differences, boys perceived fewer than half of the occupations as being more appropriate for one sex, whereas girls perceived approximately one-third of the occupations as being more appropriate for either men or women. This apparent decline in young adolescents' occupational sex-typing (social dimension) did not accompany the students' responses to what they themselves indicated they personally wanted to do vocationally in adulthood (psychological dimension). There were no differences found in the boys' attitudes toward or preference for occupations as a function of being exposed to either the job titles or description; however, girls exposed to job descriptions showed a greater coherence between occupational attitudes (social dimension) and preferences (psychological dimension) than girls exposed to the JT condition.

Despite the reported egalitarian attitudes toward occupations (social dimension) in this sample of students, Evelo et al. concluded that the students' attitudes were "not accompanied by a willingness to consider occupations for one's self (in a similar manner)" (p.150). These findings were also found by Jessell and Beymer (1992) who studied the effects of job title versus job descriptions on 1,601

female and 1,344 male seventh- and eighth-grade students. Once more, job titles elicited more sex-typed responses than did job descriptions (social dimension). Moreover, students responded more traditionally to questions regarding their own personal aspirations (psychological dimension) than to questions pertaining to others in general (social dimension).

A discrepancy in scores between the social and psychological dimension was also noted by Tibbetts (1975). Forty-two urban children (21 boys and 21 girls) in grades one, two, three, and four were tested on their sex-role attitudes. The children were asked to indicate whether a male, female, or both should perform each of 30 different roles and behaviors (i.e., be a lawyer, write; social dimension). In addition, the children were asked to indicate their choice of playmate by sex and to choose adult roles that appealed to them (psychological dimension). The results showed that children did indeed stereotype along gender traditional lines in that they indicated that certain jobs "should" be filled by women or men (social dimension) and preferred to play with same-sex playmates (psychological dimension). However, there was a surprising result with respect to the stereotypical masculine jobs of bus driver and doctor. Both boys and girls believed that males and females should do these jobs. Moreover, the occupation of bus driver was ranked second for the girls as a future career aspiration. Upon closer analysis, it was revealed that the majority of these children were bused to school by female drivers. Although this evidence is not conclusive, it does draw positive implications for counter traditional occupational modeling. Perhaps, if children were exposed to more nontraditional

models they would begin to think in more egalitarian ways regarding their own personal aspirations.

Once more, differences along the social and psychological gender stereotyping dimension were found by Tremaine and Schau (1979). Children's gender stereotypes were investigated by asking them to respond to fixed-choice questions as well as free-choice questions. One hundred and twenty urban children aged three to ten were asked who they thought would like selected jobs (men, women, or both; social dimension), and whether they themselves would like the jobs selected (psychological dimension). The jobs chosen by the authors were ones considered statistically and stereotypically female-dominated, male-dominated, or sex-balanced based on data obtained from previous research by Shepard and Hess (1975) and U.S. census data. Moreover, children were asked two free choice questions: (1) What job of all possible jobs would you like to have? and (2) What job would you want if you were a member of the opposite sex?

Clear patterns of sex differences emerged in both the attributed job preference questions (fixed-choice; social dimension) and the personal job preference questions (free-choice; psychological dimension). Boys responded to both types of questions (fixed and free) in accordance with traditional sex-role stereotypes. Girls were less limited than boys in job interests when asked about specific jobs. However, when asked to make an overall free choice, the girls' responses were similar to those reported by previous researchers (i.e., Looft, 1971a; 1971b; Papalia and Tennent, 1975), who reported that girls' responses were restricted in number and in nature.

Other studies addressing both the psychological and social dimension have reported similar results (e.g., Gregg & Dobson; 1980; Hageman & Gladding, 1983; Stroehrer, 1994; Teglasi, 1981). Most of these studies revealed that children's occupational gender-types along the social dimension were less traditional than their occupational gender-types along the psychological dimension. Ironically, however, the latter point has continuously been discounted in the discussion section of these studies. In fact, the majority of the aforementioned authors concluded repeatedly that children's occupational gender-types appear to be declining, ignoring the fact that the children's personal aspirations remained extremely sex-typed.

In one note-worthy exception to these claims, Bailey and Nihlen (1990) introduced urban children to nontraditional workers and then measured the children's stereotypes along both the psychological and social dimensions. Specifically, 219 children aged six to eleven were exposed to 20 nontraditional workers within their class. Prior to the visits, the children were measured on their level of traditionality, defined as the extent to which children's attitudes about adults' occupational choices agreed with adults' attitudes about the gender appropriateness of the occupation. The social stereotyping dimension was tested by the administration of the BAN Gender Stick Figure Test (Bailey & Nihlen, 1983), which asked children to categorize 30 occupations pictorially represent by stick figure drawing according to who they felt "could" perform the job (a woman, a man, or both). The psychological stereotyping dimension was measured by asking children to rank order their top three personal choices of 30 occupations they would like to be when they grow up.

The results of Bailey and Nihlen's (1990) study indicated that when students were introduced to nontraditional role models their attitudes became less sex-typed on the social dimension but not on the psychological dimension. The authors concluded that the psychological dimension appeared to be an internalized image of the social dimension, which reflected value, worth, and status integrated into self-concept. Indeed, changing attitudes on the social dimension may involve decoding and reorganizing information from one category to another, whereas changing attitudes on the psychological dimension may involve changing the image of self.

Summary and Conclusions

The failure of most researchers to distinguish between the social and psychological dimensions has resulted in a dissimilarity of conclusions regarding the degree of traditionality and stability of children's occupational gender-types. As has been demonstrated in the preceding review, the conclusions drawn are largely dependent upon which dimension one actually investigates. For example, in studies that have addressed both gender-typing dimensions, the children expressed more traditional views with regard to their own vocational aspirations and expectation (psychological dimension), than with regard to occupations they felt others "could" or "should" perform (social dimension; Evelo et al., 1991; Gregg & Dobson, 1980; Hageman & Glading, 1983; Stroeher, 1994; Telgasi, 1981; Tibbetts, 1975; Tremaine & Schau, 1979). Because the distinction between children's occupational stereotypes along the psychological and social dimensions has not been made consistently in the literature, there is a lack of clarity regarding potential changes in the expression of vocational preference and expectations by children. For example,

a regnant conclusion drawn by many researchers in this area is that children's stereotyped views regarding occupations are declining. This statement is, however, not necessarily supported by the data. Indeed, the majority of the studies reviewed indicated that the children predominately nominated gender-traditional jobs for themselves. Moreover, the girls consistently nominated a very narrow range of occupations for themselves in comparison to their male counterparts. Perhaps a more accurate conclusion would be that children's occupational gender-types along the social dimension appear to be diminishing while their stereotypes along the psychological dimension remain extremely sex-typed.

It can be argued that differences in children's occupational gender-types along the social and psychological dimension are simply a reflection of our current cultural paradox regarding society's gender-role beliefs (liberal) and actual occupations (traditional) or, vice-versa. There is evidence to suggest that adults behaviors are inconsistent with contemporary society's more egalitarian attitudes toward women and work (Benokraitis & Feagin, 1986). Certainly, there have been positive fundamental changes with respect to gender-role attitudes with more egalitarian views being articulated (Cherlin Walters, 1981; Thornton, Alwin, & Camburn, 1983; Thornton & Freedman, 1979). Nonetheless, this change may be the result of a trend to reject blatantly sexist language (McConahay, 1986; Swim, Aikin, Hall, & Hunter, 1995). Indeed, the gender work distribution patterns remain extremely traditional in that the majority of occupations in Canada are filled by either females or males (Statistics Canada, 1991b). It is possible that the differences seen between the psychological and social dimension (i.e., degree of traditionality)

can be attributed to the discrepancy between what is currently being said about women and work, or more accurately what is not being said, and what is actually witnessed. Perhaps the less blatantly expressed sexist attitudes of society are impacting children along the social dimension (i.e., what they believe others can do vocationally), whereas the actual base rate of men and women engaged in a particular occupation are impacting children along the psychological dimension (i.e., what they believe they themselves can do vocationally). One might assume that the social dimension of children's occupational gender-types mirror society's beliefs concerning sex-roles, while the psychological dimension of children's gender-types reflect the actual gender representation of Canadian workers as experienced by the children. Empirical evidence supporting this hypothesis has not yet been presented in the literature.

Maternal Employment

Recent research has begun to focus on finding ways to reduce children's gender stereotypical views of employment by investigating and understanding the determinants that may influence their perceptions of gender roles. One variable that has been investigated in association with children's occupational gender-types is paid maternal employment (e.g., Blaske, 1984; Huston-Stein & Higgins-Trenk, 1978; Lamb, 1985; Levy, 1989; Marantz & Mansfield, 1977; Richmond-Abbott, 1983; Selkow, 1984; Starrels, 1992; Trice, 1991; Willetts-Brown & Nock, 1994). Although maternal employment has been studied extensively from diverse perspectives, it is important to maintain an up-to-date account of how mothers may be influencing their

children's sex stereotypes regarding work in light of the rapid social changes regarding women and work.

Maternal Work Patterns

The roles of women in the paid labour force have changed substantially in recent years with the most dramatic change occurring among married women with young children (Che-Alford, Allan, & Butlin, 1994; Kemp, 1994). For instance, the labour force participation rate of mothers with young children has increased significantly from 52.4% in 1981 to 60.6% in 1986, and reached 68.4% in 1991 (Che-Alford et al., 1994; Statistics Canada, 1991a). With the increased participation of mothers in the paid labour force, social scientists have increasingly addressed the possible effects maternal employment may have on their offspring (Nieva & Gutek, 1981). A major finding which has emerged from this line of questioning has been that children of paid working mothers hold less traditional views regarding gender-roles and work than children whose mothers do not have paid employment outside the home (e.g., Blaske, 1984; Huston-Stein & Higgins-Trenk, 1978; Lamb, 1985; Levy, 1989; Marantz & Mansfield, 1977; Richmond-Abbott, 1983; Starrels, 1992; Willetts-Brown & Nock, 1994). These findings are, however, based primarily on dividing maternal employment into more global categories of employed versus not employed, without paying attention to the *type* of job in which the mothers were employed. For example, Miller (1975) investigated the effects maternal employment status on the daughters' sex role perception and interests and hypothesized that daughters of working mothers³ would have more stereotypical sex role perceptions

³ The terms working mothers and nonworking mothers are ones used by the authors of the studies cited. Although the use of these terms is not necessarily profeminine they have been used in this text

and interests than daughters of nonworking mothers "because of identification with less traditional roles modeled by the working mothers" (p.405). Seventeen kindergarten girls and their working mothers participated in this study along with 17 kindergarten girls and their nonworking mothers. The girls were questioned about their sex role perceptions, interests, and self-esteem. Specifically, the daughters' sex role concepts were measured by asking them whether they thought certain activities (such as teaching school or climbing a mountain) are more appropriate for women or for men. The daughters' interests were assessed by asking the girls to indicate their preference for doing certain activities, while their self-esteem was measured by asking each girl how good she was at doing certain activities.

The results of this study indicated that the daughters of the working mothers gave less stereotypical answers with respect to their perceptions of sex roles in general than their peers with mothers who were not employed outside the home. Moreover, the daughters' personal interests were also apparently affected by the models presented to them by their mothers. Daughters of working mothers indicated more often than the daughters of nonworking mothers that if they could be anyone it would be their mother.

Marantz and Mansfield (1977) also studied the impact of maternal work status (employed versus not employed) on their 5- to 11-year-old daughters' sex-role stereotypes. The authors hypothesized that daughters of working mothers would have fewer sex-role stereotypes than daughters of "homemakers". The results from Marantz and Mansfield's study supported their prediction in that the

only when specifically addressed as such in the literature. Ideally, mothers without paid employment should be referred to as *nonpaid* working mothers rather than nonworking mothers.

mothers' work status did influence their daughters' perceptions of sex-roles.

Specifically, daughters of working mothers expressed fewer sex-role stereotypes than the daughters of nonworking mothers. The results obtained from Marantz and Mansfield's (1977) and Miller's (1975) study suggests that a relationship exists between paid maternal employment and daughters' sex role perceptions and interests. Nevertheless, what is not known from this research is the effect of paid maternal employment on sons.

In a more recent study, the effects of maternal employment on sons and daughters were studied. In 1980, Seegmiller investigated the impact of paid maternal employment on sex-role differentiation of 204 preschool boys and 194 preschool girls. Much like Marantz and Mansfield, Seegmiller theorized that children of working mothers would be less likely to sex-role stereotype than children of nonworking mothers because working mothers serve as models who themselves were less stereotypical. Specifically, Seegmiller hypothesized that : "(a) children whose mothers worked outside the home would differentiate less between sex-roles than children with nonemployed mothers, and (b) since the mother is the primary model for her daughter, girls will be more affected than boys" (p.186).

Results of Seegmiller's (1980) study contradicted those of Miller (1975) and Marantz and Mansfield (1977). There were no differences in the sex-role differentiation of preschoolers according to maternal employment status, or sex of the participant. The conclusion Seegmiller drew from her results was that young children may not be as dependent on their parents for sex-role learning as most theorists have suggested.

There are possible alternative explanations that exist which may help explain Seegmiller's (1980) findings. For example, Seegmiller did not consider the *type* of employment in which the mothers participated. It may be that the mothers who were employed outside the home held traditional careers and that the traditionality of the type of maternal employment could have influenced their children's sex-role differentiation, especially if these mothers were engaged in gender stereotypical work. Seegmiller hypothesized that the girls would be more affected by maternal employment than the boys based on the fact that daughters role model after their mothers. If the mothers in this study were employed in traditional careers this could have emphasized or perpetuated the sex-role stereotypes of their daughters rather than reduce them. Indeed, despite the enormous social changes in the structure of women's lives during the 19th and 20th centuries, women's work tends to be undervalued in Canadian society, and in the world (Kemp, 1994). Further, despite the increased participation of women in the paid labour force, changes have not occurred with respect to the male-female inequalities of earning and prestige (Kemp, 1994). In fact, the roles mothers model to their children actually adhere to the traditional female stereotypes which may in turn serve as an excellent role model to help reinforce sex-type beliefs about women and work rather than alleviate them (Blaske, 1984). Support for this statement comes from several studies which will be reviewed chronologically.

In 1984, Selkow investigated the effects of maternal employment on 142 kindergarten and first-grade children's vocational aspirations. Selkow hypothesized that:

- (1) daughters of employed mothers would aspire to a greater number of occupations than daughters of nonemployed mothers,
- (2) daughters of mothers in nonsex-traditional fields would aspire to a greater number of occupations than daughters of mothers in sex-traditional fields,
- (3) daughters of employed mothers would choose less gender-typed occupations than daughters of mothers who were not employed,
- (4) daughters of mothers in nonsex-traditional fields would choose less gender-typed occupations than daughters of mothers in sex-traditional fields, and
- (5) the employment status and occupation of mothers would not affect their sons' aspirations, either in type or number.

Selkow's (1984) results indicated that both girls and boys chose a greater number of occupations and more masculine-oriented occupations when their mother were employed outside the home. Furthermore, both girls and boys tended to aspire toward less sex-traditional careers when their mothers were employed in nontraditional fields. Selkow's study supported the hypothesis that both maternal employment status (employed outside the home versus not) and type (traditional versus nontraditional) affected the vocational aspirations of their girls. The results also supported the notion that boys' vocational aspirations were affected by their mothers' participation in the paid work force and the traditionality of this participation. Selkow concluded that role modeling can explain why girls were affected by their mother's type and status of employment but suggest that for boys, this trend was related to parental values and life-styles more so than direct modeling. However, parental values and life-styles were not investigated in this

study and therefore it is impossible to say definitively if and how these factors may have interacted with the children's responses.

Barak, Feldman, and Noy (1991) conducted a similar study to that of Selkow's (1984) in that they investigated the traditionality of 113 urban preschool children's vocational interests as related to their parents' gender stereotypes and traditionality of occupation. Specifically, Barak et al. hypothesized that children with less traditional vocational interests would have: (a) parents with more egalitarian attitudes regarding the roles and rights of men and women, (b) mothers who were employed in the paid labour market, and (c) parents whose jobs were less gender-traditional.

The results of this study indicated that the traditionality of the mother's occupation did, in fact, influence the traditionality of her own child's interests irrespective of the child's sex. Children of mothers who were engaged in occupations not traditionally associated with women tended to express fewer gender-typed vocational interests. As well, the parental attitudes concerning gender roles did not correlate with the traditionality of the children's vocational interests. In other words, parents' socializing practices were more significant than their attitudes or personality characteristics in influencing their children's behaviour or attitudes. No relationship was found between parental gender stereotyping beliefs and their children's stereotyping vocational interests.

Trice (1991) again reported on a relationship between the traditionality of maternal employment and their children's career interests. Ninety-seven fifth-grade students (46 girls and 51 boys) and 153 eighth-grade students (72 girls and 81

boys) were surveyed about their future career aspirations. Information on the subjects' parents' occupations were also obtained by asking the children what their parents did vocationally and then comparing this information with school records. Results of Trice's study showed that girls were more likely to aspire to their mothers' careers in both age groups and that boys aspired to their mothers careers at a higher rate than their fathers' careers when mothers' careers were of equal or higher status than fathers' careers.

Summary and Conclusions

The results obtained from the aforementioned studies suggest that paid maternal employment is related to children's occupational gender-types, with less traditional views being expressed by children with mothers working outside the home. Moreover, upon closer analysis, it has also been revealed that a strong relationship exists between children's occupational stereotypes and the type of job in which mothers are employed. Specifically, the literature reviewed above suggests that children with mothers employed in nontraditional jobs express less traditional gender-types than their peers with mothers who are either not employed outside the home or who are employed outside the home in traditional jobs.

Maternal Work Attitudes

Although much is known about the relationship between maternal employment and children's occupational biases, less is know about the possible relationship between maternal gender-role attitudes and children's occupational gender- types. In addition, the little research that has been conducted in this area is inconclusive because the results of some studies indicate that a relationship

between mothers' and children's sex-role attitudes exists (e.g., Katz & Boswell, 1986; Rollins & White, 1982), while others suggest there is no such relationship (e.g., Barak et al., 1991). For example, Rollins and White (1982) investigated the relationship between mothers' and daughters' gender-role attitudes and self-concepts in three types of family environments: one where the mother was a full-time homemaker (traditional), one where the mother was employed because of economic necessity (dual-work), and another where the mother was employed for personal and professional fulfillment (dual-career).

Twenty-five mother-daughter (aged 10 to 14) dyads from each type of family environment participated in this study. All participants filled out questionnaires from the short version of the Attitudes toward Women Scale (Spence, Helmreich, & Stapp, 1973); ten selected items from the Sex-Role Orientation Scale (Brogan & Kutner, 1976); a short questionnaire for the daughters regarding their future role choices; the Tennessee Self-Concept Scale (Fitts, 1965); and a modified version of the Personal History Inventory (Hopkins, 1977). The dependent variables addressed were the mothers' and daughters' attitudes toward marriage, children, careers, and self-concept, while the independent variable was the career choice of the mothers (traditional, dual-work, or dual-career).

The results of this study pointed to a significant relationship between mothers' and daughters' attitudes regarding marriage, children, and careers. With respect to careers in particular, differences were found between the three groups of mothers with dual-career mothers expressing less-traditional attitudes regarding the roles of women than "homemaker" mothers. Furthermore, these differences were also

echoed by the daughters, who shared similar attitudes to those of their mothers. For instance, the dual-career dyads reported consistently stronger nontraditional attitudes than the dual-work and traditional dyads. Moreover, the daughters of dual-career mothers also expressed the least traditional views of all the groups regarding marriage and children.

Katz and Boswell (1986) also found a relationship between parents' and children's attitudes regarding work. These authors examined the correlates of 538 kindergarten and third-grade children's gender-role preferences in five domains (toy preference, activity preference, tolerance for nontraditionality in children, tolerance for nontraditionality in parents, and future occupational aspirations). In addition, information was obtained about three significant socializing agents (parents, peers, and the media). The results of this study suggested that children's perceptions of parents' attitudes were the most significant predictor in explaining gender-linked attitudes and beliefs. In other words, parents' perceived attitudes or personality characteristics did influence their children's behavior and attitudes regarding current gender preferences and future expectations (e.g., job aspiration). For example, parents' attitudes toward women as measured with the short version of the Attitudes toward Women Scale (AWS; Spence et al., 1973) were positively correlated to their children's future vocation aspiration with respect to the degree of traditionality.

Contrary to Rollins and White (1982) and Katz and Boswell (1986), Barak et al. (1991) found that parental attitudes concerning gender roles did not correlate with the traditionality of children's vocational interests. This contradictory result was obtained despite the fact that parents' gender stereotyping was measured with the

short version of the AWS (Spence et al., 1973), the same instrument used in Rollins and White's study. Barak et al. suggested that the lack of relationship between the parents' attitudes concerning gender stereotyping and their children's conceptions regarding work may be due to the fact that the parents did not express their attitudes concerning the rights and roles of women in their behavior or their communications with their children. Another possible explanation put forth by Barak et al. for the lack of relationship between parental attitudes and their children's stereotyping vocational interests is the potential "moderating effects of certain variables, such as attitudes of other significant attitudinal models (e.g., teachers), or the congruence level of father's versus mother's attitudes in a given family" (p.520).

Summary and Conclusions

The literature on maternal employment suggests a variable and complex relationship with children's perceptions of gender roles, namely that paid maternal employment status and type appears to have an effect on children's perceptions of gender roles. However, what is still unclear from this literature is the possible relationship between maternal attitudes regarding gender roles and their children's gender stereotypes. Likewise, it is still not clear whether mothers' vocational practices (paid maternal employment) are more significant than their attitudes (beliefs about the roles of women) in the socialization of their children's beliefs and perceptions regarding women and work. Finally, no data have been presented on the possible relationship between paid maternal employment and attitudes and children's social and psychological occupational gender-types. Although Barak et al. (1991) did investigate the traditionality of children's interests along the social

dimension as related to their parents' gender stereotypes and traditionality of occupations, they did not investigate this relationship with regard to the psychological dimension. As delineated in the first section of this chapter, children's occupational gender-types appear to be changing along the social dimension with less traditional views being expressed. However, these changes are not occurring along the psychological dimension, the dimension which relates directly to children's own lives.

The Socio-Demographic Setting

Considering the ongoing social changes in the area of gender-role labour division, it can be assumed that data collected from larger metropolitan regions may not accurately represent the current conditions of smaller geographical regions. Indeed, career variations in the distribution of women and men have been consistently reported in the literature (e.g., Goelman et al., 1993, in press; Kemp, 1994; Nieva & Gutek, 1981; Statistics Canada, 1991b), with rural regions tending to have a narrower range of occupations with a more traditional gender representation of the incumbents (Statistics Canada, 1991c). Further, although women participate in a more limited range of occupations than men across Canada, this pattern is particularly more salient in small rural communities (Reid, 1989; Statistics Canada, 1991c). As such, rural children may be growing up in subcultures different from urban children with equivalent class characteristics but with more traditional orientations (Minuchin, 1965).

Certainly, the opportunity for personal contact with people in various occupations is more limited in rural areas than urban areas. As such, several

researchers have stated that the best predictor of gender-typing an occupation is the actual labour force participation rates of men and women engaged specific occupations (e.g., Krefting, Berger & Wallace, 1978; Shinar, 1975). Nevertheless, despite strong statistical data which delineates rural and urban differences in the gender distribution of jobs (Statistics Canada, 1991c), research into children's social and psychological occupational gender-typing in different socio-demographics settings, is nonexistent in Canada. Furthermore, studies that have addressed the context in which individuals are developing are limited to the following three American studies.

The first study to address "urbanicity" as a potential influential agent in the expression of children's occupational gender-types was conducted by Scheresky (1978), who investigated the sex-typed views of children from rural, suburban, and central city locations in south-central Michigan. According to Scheresky, suburban "children were expected to be more open in their acceptance of occupational roles for men and women" because their environment "allow[ed] for a broader experience" than children from rural areas (p.410). Scheresky tested the social occupational gender-types of 15 rural, suburban and central city girls and boys aged six, eight, and ten years by having the children indicate whether a man, woman, or both could do the jobs depicted in 15 occupational settings (social dimension).

The results of Scheresky's study revealed no significant differences among children from rural, suburban, and central city schools in their acceptance of male and female occupational roles. Overall, the children from each group viewed occupations as the role of one sex or the other, and in the direction of the cultural

stereotypes. Scheresky proposed that the lack of difference in the children's occupational gender-typing according to geographical location may be attributed to sexism characterized in children's and adults' television programs. Or, perhaps there were no differences found in the children's occupational gender-typing according to location because the socio-political environment of the late 1970's may have been extremely traditional despite the inroads made by the women's movement. In other words, a blanket of traditional approaches to occupational stereotyping most likely covered North America during this time frame and thus reduced the possibility of finding differences according to location.

A second, and more recent study examining urbanicity was conducted by Trice (1991) who investigated children's psychological occupational gender-types in an attempt to replicate Looft's (1971b) findings. In addition to replicating Looft's study, Trice investigated the stability of children's career aspirations along with the differences between aspirations of rural and urban children. Four-hundred and twenty-two eight- and eleven-year-old children from rural and urban Virginia participated in this study. The rural school district utilized in this research consisted of a county with 19,000 people where the major employers were farming, wood industries, and semi-skilled manufacturing. Conversely, the urban school district used was a county adjacent to a major metropolitan area, with 180,000 residents. The primary occupations of this area were education, civil service, heavy industry, retailing, and the military.

With respect to rural and urban differences, Trice found that rural children's career aspirations were more traditional than that of urban children. As well, rural

children expressed more stable career plans that were more related to their parents' careers than urban children. Specifically, 81% of rural children expressed stable career aspirations, compared to 62% of urban children, and the. Further, rural children were more likely than urban children to select a parent's career; 55% and 38% respectively. As in Looft's (1971b) study, the children were asked to indicate their ideal vocational preference and their ideal vocational expectation. From Looft's protocol, Trice found that the children expressed relatively stable career plans and that "these plans [were] strongly related to the careers of their parents and other people in their community, particularly for 8-year-olds" (p.139). With respect to rural and urban differences, Trice found that. These findings, according to Trice, were due to the fact that the rural children were "exposed to fewer careers" in comparison to the urban counterparts who were "exposed to a wider range of careers" (p.139).

The third and most recent study to address urbanicity with respect to children's occupational stereotypes was conducted by Jessell and Beymer (1992) who studied the effects of job title versus job description, as well the personal vocational aspirations of 1,601 females and 1,344 male seventh- and eighth-grade students from a metropolitan and rural location. Although no significant differences in occupational gender-typing according to school location were reported, significant differences were observed between metropolitan and rural schools when school classification was combined with gender. Specifically, more traditional occupational gender-types were expressed by metropolitan school males than rural school males, and rural school females than urban school females. Jessell and Beymer suggest that for females these finding may have resulted from the fact that females from

schools located in rural and small town settings are exposed to fewer opportunities and role models than their female counterparts in suburban and urban settings. With respect to why metropolitan males expressed more sex-typed beliefs concerning occupations than rural males, the authors suggest that this finding may be attributed to the fact that males from metropolitan regions are exposed to a greater number of nontraditional occupational opportunities and role models than rural males. Jessell and Beymer's explanations seem plausible considering that differences in the distribution of women and men do exist in rural and urban communities, with more traditional job sex-segregation occurring in rural areas (Statistics Canada, 1991c).

Summary and Conclusions

Researchers have recently called for studies that attend to the context in which individuals are developing (Dornbush, Petersen, & Hetherington, 1991; Petersen, 1993). Taking into account the staggering lack of research conducted on rural children's social and psychological occupational gender-types, investigation into this area is especially warranted. Research in this area is important considering the probability that children have been growing up in different subcultures according, in part, to the gender employment distribution patterns of their community. In view of this point, a "blanket" approach to testing children's occupational gender-types is irresponsible inasmuch as it neglects the possibility that not all children are privy to the same vocational role models. Furthermore, it cannot be assumed that data collected from urban regions reflects the current conditions of rural areas. Unfortunately, the trend in the literature has been to study of urban children's

occupational stereotypes and report the finding as a representation of Canadian and American children at large. Needless to say, rural children have been ignored in the occupational gender-typing literature.

Overview of Present Study

Past research has suggested that children stereotype occupations along gender traditional lines. Nevertheless, a distinction that has not been consistently made in the literature is that children stereotype occupation within two separate categories—the psychological and the social. Because a distinction between children's occupational gender-types along these two dimensions has not always been made, an inconsistent pattern of results has been reported regarding the stability and degree of traditionality of children's vocational biases. However, as noted in the preceding literature review, children's occupational gender-types do appear to differ with respect to which dimension is studied. Specifically, it appears that children predominately nominate gender-traditional careers for themselves (psychological dimension) while expressing less traditional views concerning the occupational roles of others (social dimension). Studies explicitly addressing both dimensions simultaneously are few, but those that have been conducted suggest that children express more traditional occupational gender-types with regard to the psychological dimension than the social dimension. Moreover, previous studies have not explicitly compared these two dimensions. Accordingly, the current study was undertaken in order to determine whether differences in children's social and psychological occupational gender-types do indeed exist .

Another question examined was the possible relationship between maternal employment patterns and maternal attitudes toward women and work and their children's social and psychological gender-types. The literature shows that children with mothers working in the paid labour force expressed less traditional views concerning gender roles and that children's less traditional occupational stereotypes are more prevalent when the mothers were employed in nontraditional jobs. This latter point has, however, received little attention in the research despite the ever increasing participation of mothers in the paid labour force. Further, the possible relationship between maternal employment (i.e., status and type) and children's occupational gender-types has not been studied in the context of their dyads' socio-demographic setting. This is important considering that: (a) male-female inequalities regarding earning and prestige persist, and (b) that this sex-segregation of occupations appears to be more salient in rural communities (Statistics Canada, 1991b; 1991c), where the degree of opportunity for employment in a variety of occupations is substantially reduced. Given these conditions, it is likely that the vocational roles in which rural women participate are consistent with traditional female stereotypes, which in turn may help to perpetuate children's stereotypical views regarding women and work rather than reduce them. Studies addressing these issues, however, are nonexistent and thus another question examined in the current study was the possible relationship between maternal work patterns and their children's occupational gender-types in a rural context. Further, the current study sought to address whether a relationship existed between rural mothers' gender role attitudes and their children's occupational gender-types.

Indeed, much research has been conducted on children's occupational gender-typing. However, despite all the attention this topic has received, several critical areas remain unstudied and constitute the focus of the present research. Specifically, the present study has generated data on third-grade children's social and psychological occupational gender-typing dimensions in relation to their mother's gender-role attitudes and occupational patterns in a rural context.

Hypotheses

Based on the literature reviewed above, the following hypotheses regarding children's occupational gender-types were formulated:

- First, it is hypothesized that, overall, rural children will express traditional views on both the social and psychological gender-typing dimensions.
- Second, it is further hypothesized that rural children's occupational gender-types along the psychological dimension will be more traditional than along the social dimension.
- Third, it is hypothesized that rural children's occupational gender-types along the social and psychological dimensions will be related to the traditionality of their mother's occupation. Specifically, it is hypothesized that rural children with mothers employed in nontraditional occupations will express less traditional views concerning gender and work than children whose mother are either not employed in the paid labour market or who are employed in a traditional vocation. It is important to note, however, that the anticipated relationship between the traditionality of the type of maternal employment and children's social and psychological gender-types may be difficult to measure for it is

predicted by Statistics Canada data (1991c) that the majority of the rural mothers will be employed in female-traditional sectors.

- Fourth, it is hypothesized that no relationship will be found between maternal attitudes concerning the roles of rural women and their children's social and psychological gender-types based on previous findings of Barak et al. (1991).

Finally, no specific hypotheses are put forth with respect to sex and occupational gender-typing because research concerning this possible relationship has yielded different conclusions. For example, some research has indicated that girls, on average, express less traditional views than boys concerning gender roles (e.g., Garrett et al., 1977; O'Keefe & Hyde, 1983; Shepard & Hess, 1975; Stericker & Kurdek, 1982; Tremaine & Schau, 1979), while other research has found no such differences (e.g., Condura et al., 1979; Rosenthal & Chapman, 1980; Scheresky, 1976; Vondracek & Kirchner, 1974).

Chapter 3

METHODOLOGY

Community Profile

Data were collected from a small rural⁴ community (population estimated at 9,000) located within the Columbia Mountains in the interior of British Columbia. Due to its location this community is relatively isolated as compared to other communities in southern British Columbia. The closest metropolitan region is located 415 kilometers away. The economic base of this rural community is tied directly to its physical and geographical location and to the natural resources of its region. As such, the primary employers of this community include transportation, both rail and highway, forest resources and mining. In 1991, the incumbents of these primary employers were predominately men (92.54%) (Statistics Canada, 1991c). Conversely, in 1991, the main employers of women in this community were the service occupations (79.16% female) and clerical and related occupations (85.29% female). Specifically, Statistics Canada's (1991c) profile of this city indicates that this community is more traditional in the gender distribution of its paid workers as compared to other Canadian urban communities, and that there is a narrower range of occupations for women and men than that of larger metropolitan regions. Indeed, of the 40% of the women from this community who were, in 1991, employed in the paid labour force, only 4% of them were employed in counter-traditional jobs (Statistics Canada, 1991c). The average annual income of women

⁴ Statistics Canada (1991c) defines rural areas as those areas of Canada lying outside urban areas.

from this community according to the 1991 Taxfiler Data was \$10,500, while the average income for men was \$31,500 (Statistics Canada, 1991c).

Procedures

Sampling

In order to obtain a representative sample, 103 third-grade children and their mothers were recruited from four of the five different elementary schools located in one rural school district. The students were initially contacted (May, 1996) in their classroom and given a letter of information (Appendix A). Students who wanted to participate in the study were given a research package to bring home. This package included: (1) a letter of consent delineating the purpose and procedures of the study (Appendix B), (2) the Attitude toward Women Scale (AWS) (Appendix C), and (3) the Background Information Questionnaire (Appendix D). The students were asked to return the completed or incomplete packages to their respective schools within one calendar week of the initial recruitment contact. A completed package consisted of: (1) a signed consent form, (2) a completed AWS, and (3) a completed Background Information Questionnaire.

All students ($N = 30$ girls and 22 boys) who (a) had parental consent to participate, (b) agreed themselves to participate, (c) were present on the day of data collection, and (d) whose mother agreed to also participate, completed the Children's Occupational Gender-Typing Scale (Appendix E). This questionnaire was group administered to the students during class time. Students without parental consent did other school work during the testing session. In order to ensure clarity, the researcher read the questionnaire out loud to the group of participants while

using an overhead projector as a visual aid. The students responded to each item by circling their response on the sheet provided.

Participants

Children's Sample. Fifty-two, predominately white (94.2%; $N = 49$) third-grade students from a rural British Columbia city participated in this study ($N = 30$ girls and 22 boys). The children were selected from intact classes from four different elementary schools, representing a range of socio-economic backgrounds, within one school district. The average age of the participants was 8.4 years with a range of 8.0 to 9.0 years. Third-grade children were chosen for study based on research which suggests that by the age of seven, most children have developed the concept of gender constancy, that is the understanding of the unchangeability of gender (Kohlberg, 1966). Gender constancy is seen as a cognitive prerequisite of gender understanding, and hence an essential condition for gender role stereotyping to occur (Kohlberg, 1966).

Mothers' Sample. Fifty-two rural mothers of the children from the children's sample participated in this study. A background information questionnaire (Appendix D) given to the mothers yielded socio-demographic information on marital status, ethnic identity, immigration status, level of education and employment history (i.e., status and type of occupation). Specifically, with respect to marital status, 82.7% ($N = 43$) of the mothers were either married or living in common-law, while the remaining 17.3% ($N = 9$) were lone-parents. Further, the sample was predominately white (94.2%; $N = 49$) and the majority of the mothers (96.2%; $N = 50$) had lived in Canada for their entire lives. With respect to education level, the

mothers reported the following: (1) 11.5% ($N = 6$) had some high school education, (2) 25.0% ($N = 13$) reported having completed high school, (3) 21.2% ($N = 11$) of the mother took some post-secondary education without receiving a diploma, (4) 34.6% ($N = 18$) of the participants reported receiving a post-secondary certificate or diploma, while (5) 7.7% ($N = 4$) of the mothers reported receiving a university degree. Fifty-four percent ($N = 27$) of the mothers reported working full-time⁵ at their respective jobs, while 38% ($N = 19$) worked part-time, and 8.0% ($N = 4$) worked casually. Seventy-three percent ($N = 38$) of the mothers in this sample were employed in the paid labour market outside the home, while 26.9% ($N = 14$) worked in their homes without pay. Of the 73% of mothers employed outside the home, 84.2% ($N = 32$) held traditional⁶ female occupations, whereas 7.9% ($N = 3$) were employed in gender-neutral jobs, with the remaining 7.9 % ($N = 3$) were employed in counter-traditional jobs.

Measures

Children's Occupational Gender-Types. Children's personal vocational aspirations (psychological dimension), and their assignment of occupations to others (social dimension) were measured with the Children's Occupational Gender-Typing Scale (Appendix E). The psychological dimension of children's occupational gender-types was assessed with the use of Looft's (1971a; 1971b) protocol, with two open-ended questions to the children on the careers they aspired to in

⁵ The percentages reported with respect to employment status also includes the data on mothers who were not employed in the paid labour market. Nonpaid employed mothers were designated as working full-time.

⁶ Jobs are defined as traditional if Statistics Canada (1991) census data indicated that more than 60% of the incumbents are either female or male.

adulthood versus careers they realistically expected to follow in adulthood. The social dimension of children's occupational gender-types was measured by asking children who they thought should perform 20 different jobs, a woman, a man, or both. Further, children were asked who they usually saw performing 20 different jobs, a woman, a man, or both. This latter question was design to examine children's occupational gender-types in the context of the actual gender representation of the incumbents as reported by Statistics Canada (1991c).

Children's occupational gender-typing responses along the psychological dimension were scored as either traditional (1), gender neutral (2), or counter-traditional (3) based on the actual gender distribution of the incumbents of their community as reported by Statistics Canada (1991c). Thus, if one sex occupied 60% or more of the nominated occupation, then the occupation was classified as either traditional or counter-traditional based on the sex of the respondent, or if the nominated occupation was filled by less than 60% of one sex then the nomination was coded as gender-neutral. Hence, on the psychological dimension, each child received a score ranging from 1 to 3, with higher score indicating more nontraditional gender-typing.

Children's occupational gender-typing responses along the social dimension were again coded as traditional (1), gender-neutral (2), and counter-traditional (3), based on the actual gender representation of the incumbents of their community as reported by Statistics Canada (1991 c). Because there were 40 closed-ended questions along the social dimension, scores could range from 20 to 60, with a score of 20 representing a traditional score (i.e., only members of one sex were

appropriate to perform certain jobs), 40 representing a gender neutral score (i.e., both women or men “should” perform certain jobs), and 60 representing a counter-traditional score (i.e., only members of one sex were appropriate to perform certain jobs but in disagreement with the actual gender representation of the incumbents in that area). Hence, on the social dimension, each child received a score ranging from 20 to 60, with higher scores indicating more nontraditional gender-typing.

Demographic variables. A self report questionnaire (Appendix D) was used to obtain information on the mothers’ marital status, ethnic or cultural heritage, immigration status, and level of education. Data on mothers’ work patterns (i.e., type and status) were also obtained, as was information regarding the target children’s age and sex. With respect to the traditionality of maternal employment, mothers’ occupations were coded in the same manner as the children’s psychological dimension. That is, the mothers’ occupations were coded as either traditional (1), gender-neutral (2), or counter-traditional (3), based on the actual gender representation of the incumbents in their community as reported by Statistics Canada (1991c), with higher score reflecting less traditional occupations.

Maternal gender-role attitudes. The short version of the Attitude toward Women Scale (Spence, Helmreich, & Stapp; 1973)⁷, a still widely-used, reliable and valid measurement tool, was used to measure mothers’ attitudes regarding the roles of women (Appendix C). The AWS contains a list of 25 statements regarding the

⁷ It is important to note that for purposes of this study, item 15 was changed from “It is ridiculous for a woman to run a locomotive and for a man to darn socks” to “It is ridiculous for a woman to fly a plane and for a man to sew a dress”. This modification has been made because the main employer of the city investigated in this study is C.P. Rail and because the language employed in this item is out-dated, hence the question may not be fully understood by all the participants

rights and roles of women and the scores presumably reflect the degree to which an individual holds traditional or liberal views. Acceptable psychometric properties of the AWS have been reported (e.g., Beere, 1990; Smith & Bradley, 1980; Spence et al., 1973). The scores on the AWS range from 0 to 75 with a low score reflecting more gender traditional attitudes and a high score less gender-traditional views regarding the roles of women.

Chapter 4

RESULTS

Psychological Dimension

Descriptive data on children's occupational aspirations and expectations were first considered, with particular interest in variations as a function of sex of respondent. Overall frequencies of occupational aspirations and expectations for girls and boys are presented in Table 1. The majority of the children aspired to (67.3 %; $N = 35$) and expected to hold (63.5%; $N = 33$) gender traditional occupations when they grew up. Results of chi-square analyses examining sex differences in occupational aspirations and expectations revealed that males aspired to significantly more gender traditional vocational preferences for themselves than did females ($X^2 = 10.74$, $df = 2$, $p < .001$), and that males expected to hold more gender traditional occupations than did females ($X^2 = 17.20$, $df = 2$, $p < .001$).

Table 1
Children's Vocational Aspirations and Expectations

SEX	N	TRADITIONAL		GENDER NEUTRAL		COUNTER TRADITIONAL	
		ASP.	EXP.	ASP.	EXP.	ASP.	EXP.
FEMALES	30	12 40.0%	15 50.0%	6 20.0%	6 20.0%	12 40%	9 30.0%
MALES	22	21 95.5%	20 90.9%	1 4.5%	2 9.1%	—	—
TOTAL	52	33 63.5%	35 67.3%	7 13.5%	8 15.4%	12 23.1%	9 17.3%

The specific careers nominated are presented in Tables 2 and 3 for boys and girls, respectively. Unlike, Looft's findings (e.g., Looft, 1971a, 1971b) in which boys nominated significantly more occupations than girls, the boys in this study did not nominate a greater number of vocational choices than the girls under either question conditions.

Table 2
Specific Vocational Aspirations and Expectations of Boys (N=22)

OCCUPATION	SEX RATIO ⁸	ASPIRATION		EXPECTATION	
		N	%	N	%
AMBULANCE DRIVER	M	1	4.5	1	4.5
ARCHITECT	M	—	—	1	4.5
ARTIST	N	1	4.5	1	4.5
ASTRONAUT	M	1	4.5	1	4.5
AUTHOR	N	1	4.5	—	—
BC HYDRO WORKER	M	1	4.5	—	—
CARPENTER	M	1	4.5	1	4.5
COMPUTER PROGRAMMER	M	1	4.5	1	4.5
CONSTRUCTION WORKER	M	—	—	1	4.5
DENTIST	M	1	4.5	1	4.5
FIREFIGHTER	M	2	9.1	1	4.5
INVENTOR	M	1	4.5	—	—
MECHANIC	M	2	9.1	2	9.1
PALEONTOLOGIST	M	1	4.5	1	4.5
POLICE OFFICER	M	2	9.1	3	13.6
PRIME MINISTER	M	1	4.5	—	—
PROF. ATHLETE	M	4	18.2	3	13.6
SCIENTIST	M	1	4.5	1	4.5
STORE MANAGER	M	—	—	1	4.5
TRAIN DRIVER	M	—	—	1	4.5
WARDEN	M	1	4.5	1	4.5

⁸ M = Male dominated occupation (> 60% of incumbents are male)
F = Female dominated occupation (.60% of incumbents are female)
N = Gender neutral occupation (<60% of incumbents are either male or female)

Table 3
Specific Vocational Aspirations and Expectations of Girls (N=30)

OCCUPATION	SEX RATIO	ASPIRATION		EXPECTATION	
		N	%	N	%
ACTOR	M	1	3.3	1	3.3
ARTIST	N	4	13.3	4	13.3
AUTHOR	N	1	3.3	1	3.3
CARPENTER	M	—	—	1	3.3
CASHIER	F	3	10.0	1	3.3
COWGIRL	M	1	3.3	1	3.3
DOCTOR	M	1	3.3	0	—
HORSE TRAINER	M	1	3.3	1	3.3
INVENTOR	M	1	3.3	1	3.3
LIBRARIAN	F	1	3.3	1	3.3
LIFEGUARD	M	1	3.3	2	6.6
MECHANIC	M	1	3.3	—	—
MOTHER	F	—	—	2	6.6
NATURALIST	M	1	3.3	1	3.3
NURSE	F	1	3.3	2	6.6
POLICE OFFICER	M	1	3.3	—	—
PROF. ATHLETE	M	—	—	1	3.3
SCIENTIST	M	—	—	2	6.6
SERVER	F	2	6.6	—	—
SINGER	M	1	3.3	2	6.6
TEACHER	F	8	26.6	6	20.0

Social Dimension

As with the psychological dimension, descriptive data on children's social dimension were first considered, with particular interest in variations as a function of the respondents' sex. The overall mean score reflecting children's perceptions of "who should perform" certain occupations was 31.73 ($SD = 4.2$) with a range of 25.0 to 40.0. As noted previously, a score of 20 on this dimension indicates that only one sex "should" perform certain occupations, while a score of 40 indicates that children felt that both sexes should perform certain occupations. Thus, children's scores reflected relatively traditional perceptions regarding who should perform certain

occupations. The boys' mean score of 31.27 ($SD = 4.3$) was slightly more traditional than the girls' score of 32.07 ($SD = 4.2$), but a one-way analysis of variance indicated no significant sex differences, $F(1,49) = 1.04$, ns.

With respect to the question "who usually performs certain jobs", the mean score for the sample was 27.84 ($SD = 3.6$), with a range of 21 to 38, again suggesting relatively traditional occupational stereotypes overall. Results of a one-way analysis of variance, $F(1,49) = 1.56$, ns indicated no significant differences between boys' ($M=27.59$, $SD = 3.0$) and girls' ($M=28.03$, $SD = 3.9$) on this measure.

The Psychological and the Social Dimension.

In order to compare children's beliefs regarding occupations for self (psychological dimension) versus others (social dimension), a Sex (male, female) by Dimension (psychological, social) repeated measures analysis of variance was performed, with Sex of respondent as a between-subjects variable, and Dimension as a within-subjects variable. For this analysis, children's responses on the social dimension were divided by a constant of 20 in order to provide a range comparable to the responses on the psychological dimension. Following Katz and Boswell (1986), this 1 to 3 scale was treated as continuous variable. Results of this 2 X 2 analysis of variance indicated that children's occupational gender-types varied significantly as a function of Sex, $F(1,50) = 8.46$, $p < .01$, and gender-typing Dimensions, $F(1,50) = 15.68$, $p < .001$, although the interaction between the two variables was not significant. Specifically, as shown in Table 4, males reported more traditional occupational gender-types for both themselves and others than

females, and overall, children perceived more traditional occupations for themselves (psychological dimension) than for others (social dimension).

Table 4
Means and Standard Deviations of Children's Occupational Gender-Types Across Dimensions and Sex

SEX	N	PSYCHOLOGICAL DIMENSION		SOCIAL DIMENSION	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
FEMALES	30	1.80	0.89	2.07	0.74
MALES	22	1.09	0.29	1.86	0.77
TOTAL	52	1.50	0.78	1.98	0.75

Note. Range = 1 - 3 with 1 representing greatest level of traditionality.

Pearson product-moment correlations were computed for the children's social and psychological occupational gender-typing dimensions. Results of these analyses indicated that children's responses to distinct questions within each dimension were significantly correlated. Specifically, children's personal vocational aspirations were significantly related to their vocational expectations, $r(50) = .67$, $p < .001$. Similarly, children's beliefs about who "should" perform certain occupations was significantly related to their perceptions of who "usually" performs these occupations, $r(50) = .47$, $p < .001$. Thus children showed rather consistent responses within each dimension.

Of particular interest, however, was the degree to which children's responses along the social dimension were related to their responses along the psychological

dimension. Correlations between children's personal aspirations and expectations and their perceptions of who "should" and "usually" perform various occupations revealed only one significant relationship. Specifically, children's occupational aspirations were significantly, but modestly, correlated with their perceptions of who "usually" perform certain occupations, $r(50) = .26$, $p < .05$. The other three correlations were not significant.

Traditionality of Maternal Employment

Because most of the mothers (88.6%) participated in gender traditional occupations, comparisons could not be made between the children's social and psychological occupational gender-types and their mothers' type of occupation.

Maternal Attitudes Toward Women

The mean score for the mothers on the AWS was 64.6 ($SD = 6.2$) with a range of 45.0 to 75.0. Person product moment correlations were used to examine the relations between mothers' AWS scores and their children's social and psychological occupational gender-types. The results of these analyses indicated that the traditionality of mothers' attitudes as measured by the AWS was not significantly related to their children's occupational aspirations, $r(50) = .15$, ns, nor expectations, $r(50) = .07$, ns; psychological dimension). Similarly, maternal AWS scores were not significantly correlated with children's perceptions of who "should", $r(50) = -.04$, ns, nor "usually", $r(50) = .08$, ns) performs certain occupations (social dimension). Thus, maternal attitudes toward women as expressed by the AWS were not significantly related to children's social or psychological occupational gender-types.

Chapter 5

DISCUSSION

Overview

To summarize the present findings, rural children's occupational gender-types along the social and psychological dimensions were largely traditional in nature. Specifically, males reported more traditional occupational gender-types for both themselves (psychological dimension) and others (social dimension) than females, and overall, children perceived more traditional occupational gender-types for themselves than others. Furthermore, the degree of traditionality of the children's vocational biases were not found to be related to the traditionality of their mothers' attitudes concerning gender roles. The possible relationship between the traditionality of maternal employment and their children's social and psychological occupational gender-types could not be addressed as the majority ($N= 46$; 88.6%) of mothers were employed in female traditional jobs.

Hypotheses

Although no specific hypotheses were put forth with respect to sex and occupational gender-typing, significant findings regarding these variables were found. As reported in previous research, males held more traditional occupational gender-types along the social and psychological dimensions than females (e.g., Garrett et al., 1977; Jessell & Beymer, 1991; O'Keefe & Hyde, 1983; Shepard & Hess, 1975; Stericker & Kurdek, 1982; Tremaine & Schau, 1979). This finding is, however, not surprising considering that females have much more to gain from changing role conceptions than males in that the kinds work women participate in

tend to be "degraded and devalued" by society (Kemp, 1994; Shepard & Hess, 1979).

The first hypothesis predicting that rural children will express traditional views regarding gender and occupation along the social and psychological dimension was supported. The pattern revealed by the data indicated that rural children not only aspired to and expected to hold gender-traditional jobs (psychological dimension), but they also recognized that certain occupations are typically filled by women or men (social dimension). This finding is consistent with previous research that has shown that children continue to categorize occupations along gender-traditional lines despite the increased variability in vocational roles options (Gettys & Cann, 1981; Gregg & Dobson, 1980).

The second hypothesis, predicting that children's occupational gender-types along the psychological dimension will be more traditional than along the social dimension, was also supported. Although the children expressed traditional views along both gender-typing dimension, they expressed even more traditional views with regard to their own vocational aspirations and expectations, a finding that is consistent with previous research (Evelo et al., 1991; Gregg & Dobson, 1980; Hageman & Glading, 1983; Stroeher, 1994; Telgasi, 1981; Tibbetts, 1975; Tremaine & Schau, 1979). This finding highlights the importance of distinguishing children's occupational gender-types along two separate dimensions. The perceived suitability of current incumbents and the perceived suitability of jobs for oneself are both conceptually and empirically distinct (Macan et al., 1994). This point could be significant since a large body of researchers claim that children's occupational

gender-types are diminishing (e.g., Archer, 1984; Shepard & Hess, 1975). The current study suggests that these more "egalitarian" attitudes toward occupations may not be typically "accompanied by a willingness to consider occupations for oneself [in a similar manner]" (Evelo et al, 1991, p 150).

The third hypothesis predicting that children's occupational gender-types along the social and psychological dimensions will be related to the traditionality of their mother's occupation could not be addressed as the majority of the mothers (88.6%) were employed in female traditional jobs. The fact that a relationship between maternal work patterns and their children's occupational gender-types could not be addressed given the homogeneity of the sample along this variable, highlights the need to investigate individuals within the context in which they are developing. As Bronfenbrenner (1979) said, "what matters for behavior and development is the environment as it is *perceived*" (p.4). In other words, the context of where children and their mothers are developing is central to their perceptions of their world. Thus, considering that the gender distribution of workers in rural Canada differs from those in urban Canada, it is reasonable to infer that rural children are growing up in different subcultures than their urban counterparts, and as such, data collected from larger metropolitan regions cannot be assumed to represent the voice of all children.

The fourth hypothesis, predicting that no relationship will be found with respect to maternal attitudes concerning the roles of women and their children's social and psychological gender-types, was supported. This finding was anticipated based on previous research by Barak et al. (1991) who found that parental attitudes

concerning the gender roles as measured by the AWS did not correlate with the traditionality of their children's vocational interests. Barak et al. hypothesized that this result may be due to the fact that the parents did not express their attitudes concerning the rights and roles of women in their behavior or communication with their children. Indeed, there is evidence to suggest that adults' actual behaviors are inconsistent with what are assumed to contemporary society's more "egalitarian" attitudes toward women and work (Benokraitis & Feagin, 1986).

Future Research Questions

The current findings leave some unresolved issues that should be addressed in future research. For example, the finding that both boys and girls held traditional occupational gender-types along the social and psychological dimension poses several, as yet, unanswered questions. First, is this finding unique to a rural population or can it be generalized to all Canadian children? It would be illuminating to examine children's social and psychological occupational gender-types within different geographical contexts (i.e., direct rural versus urban comparisons). Indeed, researchers have recently called for the development of studies that attend to the context in which individuals are developing (Dornbush, Petersen, & Hetherington, 1991; Petersen, 1993). This point is further emphasized when one considers the probability that "...all knowledge and all ideas, although to different degrees, are 'bound to a location' within the social structure and the historical process" (Coser, 1968, p.430). At present, it is still unclear what factors contributed to the traditional views expressed by the rural children of this study. Further investigations of the

influences of gender-traditional work patterns within communities need to be conducted.

Second, it has been suggested that children whose mothers are employed outside the home expressed less traditional views concerning gender roles (Blaske, 1984; Selkow, 1984), especially when their mothers were employed in nontraditional jobs (Barak et al., 1991). The current study could not support previous findings in this area as there was not enough variability among the work patterns of rural mothers. Thus, questions remain regarding the relationship between maternal work patterns and their children's occupational gender-types with a more diversified sample.

Third, research is needed on the relationship of work patterns and attitudes toward women held by both mothers and fathers and their children's social and psychological occupational gender-types. No study to date has addressed all of these variables simultaneously. Understanding the relative influence of both mothers and fathers on their children's gender socialization is important in view of the social learning theory that espouses that both parents are important agents in the socialization of sex-role behavior of their children (Bandura & Walters, 1963; Mischel, 1966; Orlofsky, 1979).

Fourth, longitudinal research is needed in this area in order to determine whether children's early vocational biases persist with age. Although several researchers have argued that children's early attitudes and beliefs concerning gender and work may limit children's future vocational preferences and options (e.g., Adams & Hicken 1984; Eccles, 1987; 1993; Jessell & Beymer, 1992; Jussim, 1986;

Gottfredson, 1981), no studies to date have investigated children's occupational gender-types over time.

Implications for Education

Perhaps one of the most difficult tasks in the societal goal of achieving employment equity may be to encourage children to broaden their beliefs regarding gender and work. In British Columbia, the Ministry of Education's Curriculum Branch (1995) has sought to undertake this task to some extent with the implementation of their Personal Planning K to 7, an integrated resource package designed in part to prepare students for their vocational future. Specifically, the Career Development curriculum consists of three goals: (1) career awareness, (2) career exploration, and (3) career preparation. Although the intentions of this document are well meaning (i.e., preparing students for their future), the Career Development curriculum does not, however, show enough concern for social change. For example, the Ministry of Education's Curriculum Branch states that: "student must acquire a realistic and expanded sense of existing careers" and this can be accomplished by having students "take advantage of community resources" (p.5). A caveat to this statement, however, is that rural students, especially females, are "at risk" for lower educational and vocational attainment than their urban counterparts, in part due to the sex-segregation of the vocational roles which they are exposed in their communities (Clark-Lempers, Lempers, & Netusil, 1990; Cobb, McIntire, & Pratt, 1989; Ehly & Retish, 1990; Haller & Virkler, 1993; Hansen & McIntire, 1989). As such, encouraging students to "take advantage of their community resources" may not be the best approach to broadening students'

awareness of potential career paths. Furthermore, encouraging students at such a young age (grades K to 7) to acquire a “realistic” goal for future career aspirations is dangerous in that it invites student to begin limiting their life options. According to Goffredson’s developmental theory of occupational aspiration (1981), children begin to eliminate jobs perceived as inappropriate to their respective gender by ages 6 to 7. Perhaps, then, the goal of career development curriculum should be to encourage students to broaden their vocational aspirations rather than reduce them. Ideally, education should be one of society’s great equalizers in that persons of all genders, classes, races, religions, and nationalities can achieve their vocational aspiration(s). Unfortunately, the Career Development curriculum does not do enough to promote such goals in that it appears to be suggesting – implicitly or explicitly – that students narrow their vocational expectations at an early age while also seeking out role models from their community who are, ironically, in a majority of cases, exemplifying occupational sex-segregation (Statistics Canada, 1991b, 1991c).

Schools will have to play an integral part in the fulfillment of children’s career aspirations. Eccles (1987, 1994) suggests that this may be accomplished by: (a) changing the differential value society places on female and male jobs (i.e., making female and male jobs economically viable), and (b) broadening (not reducing) the range of educational and vocational options that females and males consider during their formative years.

Limitations of the Current Study

The current study suggests that there are significant differences between boys' and girls' vocational aspirations and expectations (psychological dimension) and their views regarding the suitability of jobs for others (social dimension). Furthermore, the results suggest that children's social and psychological occupational gender-types are not related to their mothers attitudes toward women, nor could a relationship be established with respect to the traditionality of their mothers' employment. There are a number of cautions to be heeded in interpreting these data.

First, the design of the study does not allow causal inferences to be made. It may well be that that sex and dimension differences found are the result of other variables which differentiates females and males or across gender-typing dimensions. For example, it is quite possible that the observed sex differences along gender-typing dimensions were attributed to differential treatment of children by parents, teachers, or peers based on the children's sex.

Second, considering that 103 students and their mothers were recruited for the present study and only 52 dyads agreed to participate poses a limitation to the study in that there may be an unassessed variable that systematically differentiates nonparticipating dyads from participating dyads. For example, one mother noted that she was declining to participate because she felt that discussing the roles of women in the third-grade was not an appropriate topic for this age level. Another mother said that she and her child would not be participating because she felt that administering the AWS to third-grade students was again age inappropriate.

Although the AWS was not administered to the third-grade students these examples of nonparticipation in the study may well be an indication that the consent form was not clear enough for all potential participants to comprehend. As such, it must be considered that this rural sample may not be a good representation of this rural population.

Third, considering the substantial body of literature affirming that children's occupational gender-types become less traditional with age (Garrett et al, 1977; O'Keefe & Hyde, 1983; Papalia & Tennent, 1975; Rosenthal & Chapman, 1980; Shepard & Hess, 1975; Stericker & Kurdek, 1982; Tremaine & Schau, 1979; Vondracek & Kirchner, 1974), these results may not be generalizable to children from other age groups.

Fourth, in view of Canadian census data which indicate that the gender-distribution patterns of workers in rural Canada are more traditional than in urban Canada, the present research findings may not be generalizable to children living in nonrural regions.

Despite these limitations, the current results do suggest that there are important differences between the social and psychological dimensions of children's occupational gender-types and that these differences are particularly more salient when the sex of the participant is considered. Further studies are needed to determine whether these results are replicable in a mixed age sample and across different socio-demographic contexts. Among the more interesting questions is what implications the occupational gender-typing dimension differences have for the elementary school classroom and career counseling curriculum.

References

Adams, G.R., & Hicken, M. (1984). Historical-cultural change in the expression of vocational preference and expectation by preschool and elementary school age children. Family Relations, 33, 301-307.

Archer, C.J. (1984). Children's attitudes toward sex-role division in adult occupational roles. Sex Roles, 10 (1/2), 1-10.

B.C. Ministry of Education Curriculum Branch. (1995). Personal Planning K to 7: Integrated Resource Package 1995. Victoria, BC: Author.

Bailey, B. A., & Nihlen, A. S. (1990). Effects of experience with nontraditional workers on psychological and social dimensions of occupational sex-role stereotyping by elementary school children. Psychological Reports, 66, 1273-1282.

Bandura, A., & Walters, R.H. (1963). Social learning and personality development. New York, NY: Holt, Rinehard, & Winston.

Barak, A., Feldman, S., & Noy, A. (1991). Traditionality of children's interests as related to their parents' gender stereotypes and traditionality of occupations. Sex Roles, 24(7/8), 511-523.

Barnhard, R.S. (1983). Children's sextyped views of traditional occupational roles. The School Counselor, 31, 167-170.

Barry, R.J. (1980). Stereotyping of sex role in preschoolers in relation to age, family structure, and parental sexism. Sex Roles, 6 (6), 795-806.

Basow, S. A. (1986). Gender stereotypes: Traditions and alternatives(2nd ed.). Monterey, CA: Brooks/Cole.

Baumrind, D. (1982). Are androgynous individuals more effective persons and parents?" Child Development, 53, 44-75.

Beere, C.A. (1990). Gender-roles: A handbook of tests and measures. San Francisco: Jossey Bass.

Benokraitis, N.V., & Feagin, J.R. (1986). Modern sexism. Englewood Cliffs, NJ: Prentice Hall.

Bigler, R. S., & Liben, L. S. (1990). The role of attitudes and interventions in gender-schematic processing. Child Development, 61, 1440-1452.

Blaske, D. M. (1984). Occupational sex-typing by kindergarten and fourth-grade children. Psychological Reports, 54, 795-801.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development. Developmental Psychology, 22, 723-742.

Burlin, F.D. (1976). Sex-role stereotyping: Occupational aspirations of female high school students. The School Counselor, 24, 102-108.

Campbell, J.D. (1965). Peer relations in childhood. In M.L. Hoffman & L.W. Hoffman (Eds.), Review of child development research (Vol.1). New York: Russell Sage Foundation.

Che-Alford, J., Allan, C., & Bultin, G. (1994). Families in Canada. Scarborough, ON: Prentice Hall Canada Inc., and Statistics Canada.

Cherlin, A., & Walters, P.B. (1981). Trends in the United States men's and women's sex-role attitudes: 1972 to 1978. American Sociological Review, 46, 453-460.

Chodorow, N., & Contratto, S. (1982). Acquisition and significance of sex-typing and sex-role identity. In M. L. Hoffman & L. M. Hoffman (Eds.), Review of Child Development (Vol. 1). New York: Russell Sage Foundation.

Clark-Lempers, D.S., Lempers, J.D., & Netusil, A.J. (1990). Family financial stress, parental support, and young adolescents' achievement and depressive symptoms. Journal of Early Adolescence, 10, 21-36.

Cleveland, J.N., & Landy, F.J. (1983). The effects of person and job stereotypes on two personnel decisions. Journal of Applied Psychology, 68, 609-619.

Cobb, R.A., McIntire, W.G., & Pratt, P.A. (1989). Vocational and educational aspirations of high school students: A problem for rural America. Journal of Research on Rural Education, 6(2), 11-16.

Colangelo, N., Rosenthal, D.M., & Dettmann, D.F. (1984). Maternal employment and job satisfaction and their relationship in children's perceptions and behaviors. Sex Roles, 10, (9/10), 698-702.

Cordua, G. D., McGraw, K. O., & Drabman, R. S. (1979). Doctor or nurse: Children's perceptions of sex typed occupations. Child Development, 59, 590-593.

Coser, L.A. (1968). Sociology of knowledge. In David L. Sills(Ed.), International Encyclopedia of the Social Sciences (pp.428-435). New York: Macmillan.

Cowan, G., & Hoffman, C.D. (1986). Gender stereotyping in young children: Evidence to support a concept-learning approach. Sex Roles, 14 (3/4), 211-224.

Deaux, K. (1985). Sex and gender. Annual Review of Psychology, 36, 49-81.

Deaux, K., & Lewis, L.L. (1984). Structure of gender stereotypes: Interrelationships among components and gender label. Journal of Personality and Social Psychology, 46, 991-1004.

Dornbusch, S.M., Petersen, A.C., & Hetherington, E.M. (1991). Projecting the future of research on adolescence. Journal of Research on Adolescence, 1, 7-17.

Eccles, J.S. (1987). Gender roles and women's achievement related decisions. Psychology of Women Quarterly, 11, 135-172.

Eccles, J.S. (1994). Understanding women's educational and occupational choices. Psychology of Women Quarterly, 18, 585-609.

Eccles, J.S., Jacobs, J.E., & Harold, R.D. (1990). Gender role stereotypes, expectancy effects, and parents' socializing of gender differences. Journal of Social Issues, 46 (2), 183-201.

Ehly, S., & Retish, P. (1990). Children at risk: A review of the literature. Iowa: FINE Foundation/The University of Iowa.

Evelo, L.S., Jessell, J.C., & Beymer, L. (1991). Sex-typing of occupational preferences and liberality. Journal of Career Development, 18 (2), 139-151.

Fagot, B.I. (1978). The influence of sex of child on parental reactions to toddler children. Child Development, 49, 459-465.

Fagot, B.I. (1985). Changes in thinking about early sex role development. Developmental Review, 5, 83-98.

Franken, M.W. (1983). Sex role expectations in children's vocational aspirations and perceptions. Psychology of Women Quarterly, 8, 59-68.

Freud, S. (1927). Some psychological consequences of the anatomical distinction between the sexes. International Journal of Psychoanalysis, 8, 133-142.

Garrett, C. S., Erin, P. L., & Tremaine, L. The development of gender stereotyping of adult occupations in elementary school children. Child Development, 48, 507-512.

Gettys, L.D., & Cann, A. (1981). Children's perceptions of occupational sex stereotypes. Sex Roles, 7 (3), 301-307.

Goelman, H., Pence, A.R., Lero, D.S., Brockman, L.M., Glick, N., & Berkowitz, J. (1993). Where are the children? An overview of child care arrangements in Canada. Canadian National Child Care Study. Ottawa: Health and Welfare Canada.

Goelman, H., Pence, A.R., Lero, D.S., Brockman, L.M., Glick, N., & Berkowitz, J. (in press). Where are the children? An overview of child care arrangements in Canada. Canadian National Child Care Study. Ottawa: Health and Welfare Canada.

Gold, D., & Andres, D. (1978). Developmental comparisons between ten-year-old children with employed and nonemployed mothers. Child Development, 49, 75-84.

Golombok, S., & Fivush, R. (1994). Gender development. New York, NY: Cambridge University Press.

Goodale, J.G., & Hall, D.T. (1976). Inheriting a career: The influence of sex, values, and parents. Journal of Vocational Behavior, 8, 19-30.

Gottfredson, L.S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. Journal of Counseling Psychology Monograph, 28 (6), 545-580.

Gregg, C.H., & Dobson, K. (1980). Occupational sex role stereotyping and occupational interests in children. Elementary School Guidance & Counseling, 15, 66-74.

Hageman, M.B., & Gladding, S.T. (1983). The art of career exploration: Occupational sex-role stereotyping among elementary school children. Elementary School Guidance & Counseling, 83/84, 280-287.

Haller, E.J., & Virkler, S.J. (1993). Another look at rural-nonrural differences in students' educational aspirations. Journal of Research in Rural Education, 9(3), 170-178.

Hansen, T.D., & McIntire, W.G. (1989). Family structure variables as predictors of educational and vocational aspirations of high school seniors. Journal of Research on Rural Education, 6, 39-50.

Harris, M.B., & Satter, B.J. (1981). Sex-role stereotypes of kindergarten children. The Journal of Genetic Psychology, 138, 46-61.

Heilman, M.E. (1983). Sex bias in work settings: The lack of fit model. Research in Organizational Behavior, 5, 269-298.

Hoffman, L.W. (1977). Changes in family roles, socialization, and sex differences. American Psychologist, 32, 644-657.

Jessell, J.C., & Beymer, L. (1992). The effects of job title vs. job description on occupational sex typing. Sex Roles, 27, (1/2), 73-83.

Jussim, L. (1986). Self-fulfilling prophecies: A theoretical and integrative review. Psychological Review, 93, 429-445.

Katz, P. A. (1979). The development of female identity. Sex Roles, 5(2), 155-178.

Katz, P. A., & Boswell, S. (1986). Flexibility and traditionality in children's gender roles. Genetic, Social, and General Psychology Monographs, 112, 105-147.

Kemp, A.A. (1994). Women's work: Degraded and devalued. Englewood Cliffs, NJ: Prentice-Hall.

Kiecolt, K.J., & Acock, A.C. (1988). The long-term effects of family structure on gender-role attitudes. Journal of the Marriage and the Family, 50, 709-717.

Klecka, C.O., & Hiller, D.V. (1977). Impact of mothers' life style on adolescent gender-role socialization. Sex Roles, 3 (3), 241-255.

Huston, A. (1983). Sex typing. In E.M. Hetherington (Ed.), Handbook of child psychology. Vol. 4: Socialization, personality, and social development. New York: Wiley.

Kohlberg, L. A. (1966). A cognitive developmental analysis of children's sex-role concepts and attitudes. In E. E. Maccoby (Ed.), The Development of Sex Differences (pp.82-173). Stanford: Stanford University Press.

Krefting, L.A., Berger, P.K., & Wallace, M.J. (1978). The contribution of sex distribution, job content, and occupational classification to job stereotyping: Two studies. Journal of Vocational Behavior, 13, 181-191.

Kriedberg, G., Butch, A.L., & White, K.M. (1978). Vocational role choice in second- and sixth-grade children. Sex Roles, 4 (2), 175-181.

Langlois, J.H., & Downs, A.C. (1980). Mothers, fathers and peers as socialization agents of sex-typed play behaviors in young children. Child Development, 51, 1237-1247.

Levy, G.D. (1989). Relations among aspects of children's social environment, gender schematization, gender role knowledge, and flexibility. Sex Roles, 21 (11/12), 803-823.

Looft, W.R. (1971a). Vocational aspirations of second-grade girls. Psychological Reports, 28, 241-242.

Looft, W.R. (1971b). Sex differences in the expression of vocational aspirations by elementary school children. Developmental Psychology, 5 (2), 366.

Lytton, H., & Romney, D.M. (1991). Parents' differential socialization of boys and girls: A meta-analysis. Psychological Bulletin, 109, 267-296.

Macan, T.H., Detjen, J.B., & Dickey, K.L. (1994). Measures of job perceptions: Gender and age of current incumbents, suitability, and job attributes. Sex Roles, 30 (1/2), 55-63.

Maccoby, E.E. (1988). Gender as a social construct. Developmental Psychology, 24, 755-765.

Maccoby, E.E., & Jacklin, C.N. (1974). The psychology of sex differences. Stanford, CA: Stanford University Press.

Marantz, S.A., & Mansfield, A.F. (1977). Maternal employment and the development of sex-role stereotyping in five- and eleven-year-old girls. Child Development, 48, 668-673.

Martin, C.L. (1983). Gender constancy: A methodological and theoretical analysis. Sex Roles, 9, 775-790.

Martin, C.L., Wood, C.H., & Little, J.K. (1990). The development of gender stereotype components. Child Development, 61, 1891-1904.

McConahay, J.B. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J.F. Dovidio & S.L. Gaertner (Eds.), Prejudice, discrimination, and racism (pp.91-125). Orlando, FL: Academic Press.

Miller, S.M. (1975). Effects of maternal employment on sex role perceptions, interests, and self-esteem in kindergarten girls. Developmental Psychology, 11 (3), 405-406.

Minuchin, P. (1965). Sex-role concepts and sex-typing in childhood as a function of school and home environments. Child Development, 36, 1033-1048.

Minuchin, P., & Shapiro, E. (1983). The school as a context for social development. In P. Mussen (Ed.), Handbook of child psychology, Fourth Edition (Vol. 4, pp.197-274). New York: Wiley

Mischel, W. (1966). A social learning view of sex differences. In E. E. Maccoby (Ed.), The Development of Sex Differences (pp.56-81). Stanford: Stanford University Press.

Mischel, W. (1970). Sex typing and socialization. In P. Mussen (ed.), Carmichael's manual of child psychology (Vol.2). New York: Wiley.

Nieva, V.F., & Gutek, B.A. (1981). Women and work: A psychological perspective. New York: Praeger Publishers.

O'Keefe, E. S. C., & Hyde, J. S. (1983). The development of occupational sex-role stereotypes: The effects of gender stability and age. Sex Roles, 9(4), 481-492.

Orlofsky, J.L. (1979). Parental antecedents of sex-role orientation in college men and women. Sex Roles, 5(4), 495-512.

Papalia, D.E., & Tennent, S.S. (1975). Vocational aspirations in preschoolers: A manifestation of early sex role stereotyping. Sex Roles, 1 (2), 197-199.

Park, B.J. (1976). Career development-How early? Elementary School Journal, 76, 486-474.

Perry, D.G., & Bussey, K. (1979). The social learning theory of sex differences: Imitation is alive a well. Journal of Personality and Social Psychology, 37 (10), 1699-1712.

Petersen, A.C. (1993). Creating adolescent: The role of context and process in developmental trajectories. Journal of Research on Adolescence, 3, 1-18.

Rebecca, M., Hefner, R., & Oleshansky, B. A. (1976). A model of sex role transcendence. Journal of Social Issues, 32, 197-206.

Reid, J.N. (1989). The rural economy and rural youth: Challenges for the future. Journal of Research in Rural Education, 6(2), 17-23.

Riley, P. J. (1991). The influence of gender on occupational aspirations of kindergarten children. Journal of Vocational Behavior, 19, 244-250.

Rollins, J., & White, P.N. (1982). The relationship between mothers' and daughters' sex-role attitudes and self-concepts in three types of family environment. Sex Roles, 8 (11), 1141-1155.

Rosenthal, D. A., & Chapman, D. C. (1980). Sex-role stereotypes: Children's perceptions of occupational competence. Psychological Reports, 46, 135-139.

Rossi, A. S. (1980). Life-span theories and women's lives. Signs: Journal of Women in Culture and Society, 6, 4-32.

Scheresky, R. (1976). The gender factor in six- to ten-year-old children's views of occupational roles. Psychological Reports, 38, 1207-1210.

Scheresky, R. (1978). Rural, suburban, and central city children: Sex-type roles in occupations. Psychological Reports, 43, 407-411.

Schlossberg, N.K., & Goodman, J. (1972). A woman's place: Children's sex stereotyping of occupations. Vocational Guidance Quarterly, 20, 266-270.

Seegmiller, B. R. (1980). Sex -role differentiation in preschoolers: Effects of maternal employment. The Journal of Psychology, 104, 185-189.

Selkow, P. (1984). Effects of maternal employment on kindergarten and first-grade children's vocational aspirations. Sex Roles, 11 (7/8), 677-690.

Shepard, W.O., & Hess, D.T. (1975). Attitudes in four age groups toward sex-role divisions in adult occupations and activities. Journal of Vocational Behavior, 6, 27-39.

Shepelak, N.J., Ogden, D., & Tobin-Bennett, D. (1984). The influence of gender labeling on the sex-typing of imaginary occupations. Sex Roles, 11, 983-995.

Shinar, E. (1975). Sexual stereotypes of occupations. Journal of Vocational Behavior, 6, 27-39.

Siegel, C.L.F. (1973). Sex differences in occupational choice of second graders. Journal of Vocational Behavior, 3, 15-19.

Slaby, R.G., & Quarforth, G.R. (1980). Effects of television on the developing child. In B.W. Camp (Ed.), Advances in behavioral pediatrics (Vol. 1). Greenwich, CT: JAI Press.

Smith, R.L., & Bradley, D.W. (1980). In defense of the Attitudes toward Woman Scale: An affirmation of validity and reliability. Psychological Reports, 47 (2), 511-522.

Smith, T.E. (1983). Parental influence: A review of the evidence of influence and theoretical model of the parental influence process. In A.C. Kerckhoff (Ed.), Research in sociology of education and socialization (Vol. 4), (pp.13-45). Greenwich, CT: JAI.

Spare, K.W., & Dahmen, L.A. (1984). Vocational sex-stereotyping in elementary school children. The Journal of Genetic Psychology, 144, 297-298.

Spence, J.T. (1982). Comments on Baumrind's "Are androgynous individuals more effective persons and parents?" Child Development, 53, 76-80.

Spence, J.T., Helmreich, R., & Stapp, J. (1973). Attitudes toward women scale. Bulletin of the Psychonomic Society, 2 (4), 219-220.

Starrels, M.E. (1992). Attitude similarity between mothers and children regarding maternal employment. Journal of Marriage and the Family, 54, 91-103.

Statistics Canada. (1991a). Labour force activity of women by presence of children. Ottawa: Industry, Science and Technology Canada, 1993. 1991 Census of Canada. Catalogue # 93-325.

Statistics Canada. (1991b). Occupation. Ottawa: Industry, Science and Technology Canada, 1993. 1991 Census of Canada. Catalogue # 93-327.

Statistics Canada. (1991c). Profile of urban and rural areas, Part A, Canada, provinces and territories. Ottawa: Industry, Science and Technology Canada, 1993. 1991 Census of Canada. Catalogue # 93-339.

Stephan, C.W., & Corder, J. (1985). The effects of dual-career families on adolescents' sex-role attitudes, work and family plans, and choices of important others. Journal of Marriage and the Family, 47, 921-929.

Stericker, A.B., & Kurdek, L.A. (1982). Dimensions and correlates of third through eighth graders' sex-role self-concepts. Sex Roles, 8 (8), 915-929.

Sternglanz, S.H., & Serbin, L.A. (1974). Sex-role stereotyping in children's television programs. Developmental Psychology, 10, 710-715.

Stroeher, S.K. (1994). Sixteen kindergartners' gender-related views of careers. The Elementary School Journal, 95 (1), 95-103.

Swim, J.K., Aikin, K.J., Hall, W.S., & Hunter, B.A. (1995). Sexism and racism: Old-fashioned and modern prejudices. Journal of Personality and Social Psychology, 68 (2), 199-214.

Teglasi, H. (1981). Children's choices of and value judgments about sex-types toys and occupations. Journal of Vocational Behavior, 18, 184-195.

Thornton, A., & Freedman, D. (1979). Changes in the sex-role attitudes of women, 1962-1977: Evidence from a panel study. American Sociological Review, 44, 832-842.

Tibbetts, S. (1975). Sex-role stereotyping in the lower grades: Part of the solution. Journal of Vocational Behavior, 6, 255-261.

Thornton, A., Alwin, D.F., & Camburn, D. (1983). Causes and consequences of sex-role attitudes and attitude change. American Sociological Review, 48, 211-227.

Tozzo, S.G., & Golub, S. (1990). Playing nurse and playing cop: Do they change children's perceptions of sex-role stereotypes? Journal of Research in Childhood Education, 4 (2), 123-129.

Tremaine, L.S., & Schau, C.G. (1979). Sex-role aspects in the development of children's vocational knowledge. Journal of Vocational Behavior, 14, 317-328.

Trice, A.D. (1991). Stability of children's career aspirations. The Journal of Genetic Psychology, 152 (1), 137-139.

Trice, A.D., & Knapp, L. (1992). Relationship of children's career aspirations to parents' occupations. The Journal of Genetic Psychology, 153 (3), 355-357.

Unger, R.K. (1979). Toward a redefinition of sex and gender. American Psychologist, 34, 1085-1094.

Unger, R.K. (1990). Imperfect reflections of reality: Psychology constructs gender. In R.T. Hare-Mustin & J. Marecek (Eds.), Making a difference: Psychology and the construction of gender (pp.102-149). New Haven, CT: Yale University Press.

Vondracek, S.I., & Kirchner, E.P. (1974). Vocational development in early childhood: An examination of young children's expression of vocational aspirations. Journal of Vocational Behavior, 5, 251-260.

Willetts-Bloom, M.C., & Nock, S.L. (1994). The influence of maternal employment on gender role attitudes of men and women. Sex Roles, 30 (5/6), 371-389.

Zuckerman, D.M. (1981). Family background, sex-role attitudes, and life goals of technical college and university students. Sex Roles, 7 (11), 1109-1126.

APPENDIX A

Dear Students,

You are invited to participate in a research project that we are conducting at _____ (name of school). This study is being organized by Tracy Vaillancourt and Dr. Hillel Goelman at the University of British Columbia. The purpose of the study is to get a better understanding of how students your age think about various jobs people do when they are adults. This is not a test and there are no right or wrong answers- just *your* answers. We need your help in order to better understand what students think about jobs women and men do.

If you decide to participate in this study you will first have to bring home a research package. You will then have to bring back the research package to school within 1 week. Only students with a **signed** consent form from home will be allowed to participate in this study. Once the research package has been return, you will be asked to fill out some questions about jobs during class time. This will take about 25 minutes to complete. Your name will **not** be kept with your answers so no one but the researchers will know who said what. This means what you answer will not be shown to your parents, teachers, or anybody else in the school. Students who do not choose to participate will be asked to either draw on the back of the question form or work on some of their regular school work while the others students are filling out the questionnaire for this study. You may choose not to be in this study now or at any time during the study. It is not a problem if you decide to stop at any time. If you do not want to be in this study, it will not affect your schoolwork in any way.

If you want to participate in this study you need to take a research package home and ask an adult to sign the "consent form" and tell us if it is okay with them for you to be in this study. Please do your best to return the research package to your teacher by_____.

We hope you participate!

Sincerely,

Hillel Goelman, Ph.D.
Professor
822-6502 (Vancouver)

Tracy Vaillancourt, B.A.
M.A. Candidate
822-6439 (Vancouver)
837-4262 (Revelstoke)

APPENDIX B

Children's Occupational Stereotypes

Tracy Vaillancourt
Faculty of Education, The University of British Columbia
822-6439 (Vancouver) or 837-4264 (Revelstoke)

Dr. Ann Lukasevich, Dr. Hillel Goelman, & Dr. Shelley Hymel
Faculty of Education, The University of British Columbia
822-6502 or 822-6022 (Vancouver)

Dear Parent or Guardian,

We are writing to request your permission for you and your child to participate in a research project that we are conducting at _____ (name of school). This study is being done as part of a masters thesis by Tracy Vaillancourt. The purpose of the study is to learn about children's perceptions regarding occupational roles in a rural (Revelstoke, BC) setting. Moreover, we are interested in how children's vocational perceptions relate to their mother's gender role beliefs and participation in the paid labour force.

The parent participant in this study should be the mother and she will be asked to answer some questions regarding her personal background, as well as her attitudes toward women. We are aware that children live in many different kinds of families including single parent families or in homes where they are cared for by a foster parent, grandparent, or other relative. If you have any question about who should complete the attached questionnaire forms please contact Tracy Vaillancourt at 822-6439 at UBC or Dr. Shelley Hymel at 822-6022 at UBC.

In addition, your child will be required to answer a series of questions on his/her perceptions of work done by men and women. This will be given to your son or daughter in their school classroom. Your participation as well as your child's participation in this study should take no more than 25 minutes to complete.

All the information you and your child provide is **strictly confidential** and will not be available to students' teachers, parents or other school personnel. Only a subject number will appear on the form you and your child complete.

You and/or your child are free to refuse to participate in this study or to withdraw from the study at any time. This study is independent from your child's school work and thus, refusal to participate will not affect your child's class standing in any way.

Again, if you have any questions about this research, or if you have any questions about this consent form or questions about any of the questionnaires please feel free to contact Tracy Vaillancourt or Dr. Shelley Hymel at any time during or after the study.

Your signature on this form indicates that you understand the information provided and agree to have yourself and your child participate in this study. A copy of this consent form is also provided for your records.

Parent's Name _____ Date _____
(please print)

Parent's Signature _____

Son or Daughter's Name _____
(please print)

APPENDIX C

Attitudes toward Women Scale (AWS) (Short Version)

Spence, Helmreich, & Stapp (1973)

Instructions

Section A The statements listed below describe attitudes toward the role of women in society that different people have. There are no right or wrong answers, only opinions. You are asked to express your feeling about each statement by indicating whether you (A) agree strongly, (B) agree mildly, (C) disagree mildly, or (D) disagree strongly. Please indicate your opinion by circling either A, B, C, or D on the answer sheet for each item.

1. Swearing and obscenity are more repulsive in the speech of a woman than a man.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

2. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

3. Both husband and wife should be allowed the same grounds for divorce.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

4. Telling dirty jokes should be mostly a masculine prerogative.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

5. Intoxication among women is worse than intoxication among men.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

6. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

7. It is insulting to women to have the "obey" clause remain in the marriage service.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

8. There should be a strict merit system in job appointment and promotion without regard to sex.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

9. A woman should be as free as a man to propose marriage.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

10. Women should worry less about their rights and more about becoming good wives and mothers.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

11. Women earning as much as their dates should bear equally the expense when they go out together.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

12. Women should assume their rightful place in business and all the professions along with men.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

13. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

14. Sons in a family should be given more encouragement to go to college than daughters.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

*15. It is ridiculous for a woman to fly a plane or for a man to sew a dress.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

16. In general, the father should have greater authority than the mother in the bringing up of children.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

17. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiancés.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

18. The husband should not be favored by law over the wife in the disposal of family property or income.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

19. Women should be concerned with their duties of childbearing and house tending, rather than with desires for professional and business careers.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

20. The intellectual leadership of a community should be largely in the hands of men.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

21. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

22. On the average, women should be regarded as less capable of contributing to economic production than are men.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

23. There are many jobs in which men should be given preference over women in being hired or promoted.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

24. Women should be given equal opportunity with men for apprenticeship in the various trades.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

25. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.

A. agree strongly B. agree mildly C. disagree mildly D. disagree strongly

* Modified from original version.

APPENDIX D

Background Information Questionnaire

Please note that all information you provide is strictly confidential. No names (only a subject number) will appear on this form and therefore it will not be possible to identify you in any published report or account of this research.

Mother Information

What is your marital status (please circle one)?

- 1 Now married or living in common-law
- 2 Single (never married)
- 3 Widowed
- 4 Separated or divorced

How do you describe yourself in terms of ethnic or cultural heritage (please circle one)?

- | | |
|----------------|---------------|
| 1 White | 5 Black |
| 2 Latin | 6 Filipino |
| 3 Asian | 7 East Indian |
| 4 First Nation | 8 Other |
-

How many years have you lived in Canada (please circle one)?

- | | |
|-----------------------|-----------------------|
| 1 less than 1 year | 5 21 through 30 years |
| 2 1 through 5 years | 6 more than 30 years |
| 3 6 through 10 years | 7 all my life |
| 4 11 through 20 years | |

What level of education have you completed (please circle one)?

- 0 No schooling
- 1 Primary education (grades kindergarten to 7)
- 2 Secondary Education (grades 8 to 12, *without* high school diploma)
- 3 Secondary Education (grades 8 to 12, *with* high school diploma)
- 4 Post-Secondary Education

- a. Took some post-secondary education (*without* certificate, diploma, or degree)
- b. Received a post-secondary certificate or diploma
- c. Received a university degree (B.Sc., B.A., etc.)
- d. Graduate School (Masters, Doctorate) or Professional Degree (Law, Medicine, etc.)

What is your *usual* occupation?

Are you currently working in this occupation (please circle one)?

Y Yes

N No

In your usual occupation, how many hours per week do you usually work?

How would you describe your employment (please circle one)?

1 casual

2 seasonal

3 part-time

4 full-time

Child Information

What is your child's gender (please circle correct one)?

M Male

F Female

What is your child's age and birth date?

_____ / _____ / _____
 age (in years) month date year

APPENDIX E

Children's Occupational Gender-Typing Scale

Instructions: "I am interested in knowing what you think about jobs people do when they are grown up. In order to do this I need to ask you some questions about jobs. This will take about 20 minutes of class time. **THIS IS NOT A TEST.** There are no right or wrong answers-just what you think. Your name will not be on your answer sheet so no one but myself will know whose answers they are. No one in your school, or city (not even your parents) will ever see your answers. If you do not want to answer these questions you can turn your paper over and draw on the back, or work on some of your regular school work. Also, you can stop answering the questions any time you want. I won't be upset."

Part A

Please answer the following 2 questions.

1. What do you want to be when you grow up?

2. Now, what do you really think you will be when you grow up?

Part B

In this next set of questions I'd like you tell me who you think **SHOULD** do certain jobs- a woman, a man, or both (a woman or a man). Remember there are no right or wrong answers, only opinions. Please tell me your opinion by circling on your answer sheet either (A) woman, (B) man, or (C) both a woman or a man.

1. Who should be a **secretary** ? A secretary is a person who writes letters, keeps records, etc. for another person, company, or club.

- A. a woman B. a man C. both- a woman or a man

2. Who should be a **mail carrier**? A mail carrier is a person who delivers the mail.

- A. a woman B. a man C. both- a woman or a man

3. Who should be a **server**? A server is a person who takes your order in a restaurant and then brings out your food when it is ready.

- A. a woman B. a man C. both- a woman or a man

4. Who should be a **mechanic**? A mechanic is a person who fixes machines such as cars.

- A. a woman B. a man C. both- a woman or a man

5. Who should be a **logger**? A logger is a person who cuts down trees and gets the logs out to the saw mills.

- A. a woman B. a man C. both- a woman or a man

6. Who should be a **dental hygienist**? A dental hygienist is a person who helps a dentist clean people's teeth.

- A. a woman B. a man C. both- a woman or a man

7. Who should be a **telephone operator**? A telephone operator is a person who helps people with their phone calls.

- A. a woman B. a man C. both- a woman or a man

8. Who should be a **primary school teacher**? A primary school teacher is a person who teaches young children.

- A. a woman B. a man C. both- a woman or a man

9. Who should be a **firefighter**? A firefighter is a person who puts out fires.

- A. a woman B. a man C. both- a woman or a man

10. Who should be a **nurse**? A nurse is a person who takes care of sick, injured or old people.

- A. a woman B. a man C. both- a woman or a man

11. Who should be a **lawyer**? A lawyer is a person who gives people advice about the law.

- A. a woman B. a man C. both- a woman or a man

12. Who should be a **truck driver**? A truck driver is a person who drives trucks.

- A. a woman B. a man C. both- a woman or a man

13. Who should be a **librarian**? A librarian is a person who is in charge of a library.

- A. a woman B. a man C. both- a woman or a man

14. Who should be **doctor**? A doctor is a person who treats sick people.

- A. a woman B. a man C. both- a woman or a man

15. Who should be a **police officer**? A police officer is a person who protects the community from crime and enforces the law.

- A. a woman B. a man C. both- a woman or a man

16. Who should be **hairdresser**? A hairdresser is a person who cuts people's hair.

- A. a woman B. a man C. both- a woman or a man

17. Who should be a **dentist**? A dentist is person who cares for people's teeth.

- A. a woman B. a man C. both- a woman or a man

18. Who should be an **airplane pilot**? An airplane pilot is a person who flies airplanes.

- A. a woman B. a man C. both- a woman or a man

19. Who should be a **cashier**? A cashier is a person who is in charge of money in a store.

A. a woman

B. a man

C. both- a woman or a man

20. Who should be a **psychologist**? A psychologist is a person who helps people with their problems.

A. a woman

B. a man

C. both- a woman or a man

Part C

In this next set of questions I'd like you to tell me who you think **USUALLY** does certain job- a woman, a man, or both (a woman or a man). Who do you usually see doing certain jobs. Again, there are no right or wrong answers, only opinions. Please answers the following questions by circling on your answer sheet either (A) a woman, (B) a man, or (C) both a woman or a man.

1. Who is usually a **nurse**? A nurse is a person who takes care of sick, injured or old people.

- A. a woman** **B. a man** **C. both- a woman or a man**

2. Who is usually a **psychologist**? A psychologist is a person who helps people with their problems.

- A. a woman** **B. a man** **C. both- a woman or a man**

3. Who is usually a **logger**? A logger is a person who cuts down trees and gets the logs out to the saw mills.

- A. a woman** **B. a man** **C. both- a woman or a man**

4. Who is usually a **telephone operator**? A telephone operator is a person who helps people with their phone calls.

- A. a woman** **B. a man** **C. both- a woman or a man**

5. Who is usually a **lawyer**? A lawyer is a person who gives people advice about the law.

- A. a woman** **B. a man** **C. both- a woman or a man**

6. Who is usually a **secretary**? A secretary is a person who writes letters, keeps records, etc. for another person, company, or club.

- A. a woman** **B. a man** **C. both- a woman or a man**

7. Who is usually a **truck driver**? A truck driver is a person who drives trucks.

- A. a woman** **B. a man** **C. both- a woman or a man**

8. Who is usually a **firefighter**? A firefighter is a person who puts out fires.

- A. a woman** **B. a man** **C. both- a woman or a man**

9. Who is usually a **mail carrier**? A mail carrier is a person who delivers the mail.

- A. a woman B. a man C. both- a woman or a man

10. Who is usually a **primary school teacher**? A primary school teacher is a person who teaches young children.

- A. a woman B. a man C. both- a woman or a man

11. Who is usually a **dental hygienist**? A dental hygienist is a person who helps a dentist clean people's teeth.

- A. a woman B. a man C. both- a woman or a man

12. Who is usually an **airplane pilot**? An airplane pilot is a person who flies airplanes.

- A. a woman B. a man C. both- a woman or a man

13. Who is usually a **police officer**? A police officer is a person who protects the community from crime and enforces the law.

- A. a woman B. a man C. both- a woman or a man

14. Who is usually a **cashier**? A cashier is a person who is in charge of money in a store.

- A. a woman B. a man C. both- a woman or a man

15. Who is usually a **doctor**? A doctor is a person who treats sick people.

- A. a woman B. a man C. both- a woman or a man

16. Who is usually a **librarian**? A librarian is a person who is in charge of a library.

- A. a woman B. a man C. both- a woman or a man

17. Who is usually a **dentist**? A dentist is person who cares for people's teeth.

- A. a woman B. a man C. both- a woman or a man

18. Who is usually a **mechanic**? A mechanic is a person who fixes machines such as cars.

- A. a woman B. a man C. both- a woman or a man

19. Who is usually a **server**? A server is a person who takes your order in a restaurant and then brings out your food when it is ready.

A. a woman

B. a man

C. both- a woman or a man

20. Who is usually a **hair dresser**? A hairdresser is a person who cuts people's hair.

A. a woman

B. a man

C. both- a woman or a man

Thank you for participating in this study!