DOCUMENT RESUME

ED 155 568   CG 012 689

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TITLE   Sex Role Values: A Neglected Factor in Career
                  Decision Making Theory.
SPONS AGENCY   National Inst. of Education (DHEW), Washington,
                  D.C.
PUB DATE   Aug 77
NOTE   42p.; Paper presented at the Annual Convention of the
                  American Psychological Association (San Francisco,
                  California, August 26-30, 1977)

EDRS PRICE   MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS   *Career Choice; *Decision Making; Marriage;
                  Occupations; Research Projects; Secondary Education;
                  *Sex Role; Sex Stereotypes; *Student Attitudes;
                  *Values

ABSTRACT
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three areas: sex roles, values, and career decision making. The first
section is a background statement, briefly reviewing relevant
literature to document values in relation to career decision making.
The second section examines definitions of values and how values are
related to sex roles, both expectations and behaviors. The third
section presents preliminary findings of a pilot study which examined
the responses of high school students to sets of value terms in the
areas of marriage, parenthood, and occupations. Preliminary evidence
from the study indicates that many of the values or needs related to
marriage, parenthood and occupations may be evaluated similarly by
males and females. However, clear sex differences exist in the
preferred work patterns: males tended to rate full-time career higher
than females did. The last section summarizes the implications of the
present work on values related to sex roles. (Author)

Sex Role Values:

A Neglected Factor in Career Decision Making Theory[1]

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Although it seems obvious that marriage and family plans influence a woman's career decision making process, these considerations have not been explicitly analyzed in contemporary theories of career decision making. This paper is concerned with the relationship of three areas: sex roles, values, and career decision making. The first section is a background statement, briefly reviewing relevant literature to document values in relation to career decision making. The second section examines definitions of values and how values are related to sex roles, both expectations and behaviors. The third section presents preliminary findings of a pilot study, examining the responses of eleventh grade students to sets of value terms in the areas of marriage, parenthood, and occupations. The last section summarizes the implications for career decision making theory of the present work on values related to sex roles. It may be useful to first provide an illustration of why sex role-related values are critical to career decision making.

The statistics on women in the work force are well known. We know that 9 out of 10 females will work at some time in their lives, that about

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three-fifths of all women workers are married and living with their husbands, that the number of working mothers has increased since 1950, and that the number of married women with young children in the work force has steadily increased. We also know the extent of occupational segregation by sex: women account for 72% of the teachers and 64% of all health workers, 78% of all clerical workers, but only 25% of the category called managers and administrators.) We also know about discrimination in earnings, since women's median earnings are less than three-fifths those of men. A differential remains even after adjusting for education, work experience, and occupation or industrial group. (Women Workers Today, 1976)

These are the statistics, but what about the individual reality? An article appeared in the New York Times of January 7, 1977, entitled "Singles in the Suburbs: Safety vs. Loneliness." Parts of the interview dealt with a particular 27 year old woman and her thoughts about work:

> I grew up thinking you get married, ... So, for a long time ...
> I sort of held my life in suspension, as if the real thing
> hadn't begun yet. I didn't buy silverware — hopechest stuff —
> because I figured, that's the sort of thing people give you when
> you get married.
>
> Then one day about two years ago it hit me like a ton
> of bricks: while I was waiting around, life was passing.
> I won't wait any more for someone else to give me things. If
> I want silverware, or furniture, or flowers, I'll buy them
> for myself.
>
> I wasn't really committing myself to the idea of a career,
> either, because I kept thinking "this is temporary."
>
> (The woman had worked as a dental technician and then
> decided to go back to school to study nursing.)
>
> I was a very good dental technician. ... And I had a very
> good job that offered me excellent pay and with a tremendous
> amount of security. But at some point those things just weren't
> working any more. I may be working 40 more years, so it had
> better be work I like to do. (The interview continues and at
> a later point the woman says:)

I can't define myself in terms of another person, ... so
I've established my own personality more firmly ... (at a
dinner party where somebody remarked, "Don't worry, you'll
find someone some day," I told her, "I want you to know,
my sole aim in life is not to get married.") I haven't set
a time limit; and if I'm not married by the time I'm 30, I don't
intend to go jump off a bridge. And if the time comes that I
want a child, and I'm still not married, then I'll have one on
my own.

More recently, the National Assessment of Educational Progress
(NAEP, 1977,) has reported the results of a content analysis of a writing
sample of 17 year old students. Students were asked to take a position
pro or con and defend it, for the statement, "A woman's place is in the
home." Only about half the youngsters think all women should be free to
pursue careers outside the home. Another 20% would let women out of the
house only under certain conditions, such as childlessness. The rest,
about a third, would chain women to the home. Perhaps we should view
these data more optimistically, and state positively that one-half think
a woman should be able to choose whether to be a homemaker, career woman,
or both. These data may be biased, since they are based on an essay
question and not a general attitude survey.

The Times interview and NAEP data both illustrate aspects of the
relationship between sex roles and work. We are generally aware of the
discrepancy between attitudes about women working and the statistics
on women in the labor force. However, there are more subtle effects
of these attitudes toward women working, as illustrated by the single
woman's comments about the difficulty and lag in making a career commit-
ment. There is a growing literature concerned with defining and assessing
the level of career commitment for women, relative to marriage and children.

Our concern here is also with the manner in which these aspects of
sex roles impinge on women's planning and choices for work and careers.

In interviews of a pilot sample of 98 eleventh grade students in
an urban high school, both boys and girls were asked the question of
how many children they would like to have and whether having a family
would make a difference in their attitudes or plans for work. Male
responses give little indication of any influence of a family, except
to encourage more steadiness and responsibility in attitudes toward
work. For females, there are responses such as, "Well, I'll have to
decide whether to work full time or part time, be home on time to make
the dinner, to get the kids settled down in the afternoon, to run a family.
It's harder when you work."

Underlying the statistics reported in studies of women and work
are the expectations and behaviors related to the sex roles of women in
our culture. The most serious ommission in conceptualizing a theory
of career choice is the consideration of the effects of sex role social-
ization for women and the values held by both men and women on aspects
of sex roles that influence career decision making. Primary choices
within a women's world include decisions about marriage and children;
closely related choices are those for responsibilities in home maintenance.
These are left unexamined in career theory. It has been argued by
Psathas (1968) that aspects of the woman's sex role have direct impli-
cations for the types of occupation a woman enters and hence, a woman's
career decisions. These important aspects of sex roles, such as
intentions, attitudes, and values related to marriage, children, and
home-career responsibilities, need to be explicitly stated and examined

for their relative importance in vocational and career decisions made by women and men.

In order to examine the effects of sex-role related values on the career decision making process, the domain to be studied must be identified. Occupational values (in contrast to sex-role related values) have been examined. For example, the System of Interactive Guidance and Information (SIGI), developed after an extensive research effort by Martin Katz and his colleagues (1966, 1973), includes a set of occupational values that are used in helping students define what is important to them in an occupation. There is no similar set of terms or definitions that have been identified for students in clarifying values related to sex roles. The research reported in section 3 of this paper is the beginning of such an effort. The following section provides the background to the present research.

1. Background

There are several areas of research related to the examination of sex role values in occupational choice. These areas are the ample data of sex differences in occupational entry, the evidence that sex role stereotyping of occupations develops at early ages, along with gender identity, and the evidence that women's careers are relatively unpredictable. Research in the area of sex roles is also relevant, as is work in the areas of socio-cultural and economic status and occupational choice.

Sex differences in occupational choice. Women work in all occupational categories, but they are concentrated in fewer occupational

categories than men (U.S. Working Women, 1975). Women constitute 53%
of the civilian noninstitutional population 16 years old and over, but
more women are employed part time (64%),[1]and women constitute only a
third (31%) of all persons employed in professional-technical and nonfarm
managerial administrative occupations. Women are predominant (68%) in
the persons employed in clerical-sales occupations.

These employment patterns begin with early occupational choices
expressed by boys and girls. Looft (1971) demonstrated that six to eight
year old children gave different responses according to their sex when
asked what they wanted to be when they grew up. There was a striking
variability in the boy's responses and near unanimity for girls (75% of
the girls' responses were in two categories -- teacher and nurse).
A total of eighteen occupational categories were given by boys and only
eight by girls. Iglitzin (1972) reported two studies of sex stereotyping
with fifth grade school children in 1971-1972. As early as the fifth
grade, boys provide a description of what it might be like on a typical
day on a job, but girls emphasize details of family life rather than career
activities:

Schlossberg and Goodman (1972) asked elementary school children to
respond to a set of drawings representing work settings (6 of feminine
occupations and 6 masculine). Children were asked, "Could a man work
here?" "Could a woman work here?" Children were more ready to exclude
women from men's jobs than men from women's. A study by Entwisle and
Greenburger (1972) examined ninth graders' attitudes towards women's

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[1]An informal observation on use of the SIGI system by Martin Katz and
his colleague Lila Norris is that women students want to locate part-time
occupations or jobs, although these are not included in SIGI.

work roles. Specific attitudes included whether women should work, what kinds of jobs women should hold, and whether women are intellectually curious. Middle class boys of high I.Q were least liberal; boys were consistently more conservative than girls.

These studies, then, indicate early sex differences in occupational choice — primarily in the direction of sex role stereotyping of occupations. These findings are consistent with a larger series of studies in sex-typed interests and activity preferences summarized by Maccoby and Jacklin (1974, p. 280-283).

The influences of sex role stereotypes are maintained in many ways. Sex role stereotyping has been found in several areas of education, particularly in early reading texts, achievement tests, and school policies with regards to sports and special subjects (Saario, Jacklin, & Tittle, 1973). Kaley, for example, reported on the attitudes of professional men and women toward married professional woman's dual role. While married professional women had positive attitudes toward the professional woman's dual role, negative attitudes were held by women employed as case workers and by married professional men (Kaley, 1971). Gray-Sheilberg, Villareal, and Stone (1972) found a double standard in the resolution of career conflicts within a marriage for a sample of male and female college students, and male and female non-college adults.

The studies cited above have documented sex related differences in occupations and sex role expectations. However, they have not investigated how sex role expectations and behaviors interact with and/or are more directly expressed in the career decision-making process.

Predicting women's career choices. Two studies, by Astin and Myint (1971) and Harmon (1970), are of particular interest because they are longitudinal. Astin and Myint (1971) followed.up 5,387 women (tested in 1960 in the Project TALENT study) five years after high school. Measures of abilities, interests, personality and background were used.

Discriminant analyses showed that scholastic aptitudes, especially in mathematics, and high educational aspirations (college/advanced degree plans) were the best pre-college/predictors of a career orientation (sciences, social services, professions, and teaching groups). Interests and personality measures were not good predictors. A second discriminant analysis revealed that BA degree, college and graduate school attendance were important predictors separating natural sciences, social service/social sciences, and teaching from office work and housewife. Having an AA degree carried a large negative weight, and the variable married and children also had negative weights. A third discriminant analysis indicated that the most effective predictors in separating the career groups and non career (office work and housewife groups) were completing college and college attendance, and selected aptitude variables. Again, expressed interests and personality measures were not predictive.

Harmon (1970) followed up 169 women 10 to 14 years after college entrance (all had high scores on the social worker scale of the SVIB-W). Women were asked what their "usual career" was, and were categorized as career committed and non committed on this basis. The two groups did not differ on high school rank. The career committed group attended college longer, worked more years after leaving college, married later in life,

had fewer children, more children at later ages, and more were unmarried.

Klemmack and Edwards (1973) also studied college women who indicated that the occupation that they would most realistically pursue was a feminine occupation and concluded that marriage and family plans serve a critical mediational function.

The findings of Astin and Myint, Harmon, and Klemmack and Edwards are consistent with the hypothesis that a woman's career commitment is related to her sex role and life style choices. Decisions about marriage, children and homemaking responsibilities appear to be predictors of career commitment. In contrast to these findings for women, Strong and Campbell (1966) report on a number of follow-up studies for males which indicate that expressed interests are a major predictor of career choice. Women's career choices are more often made on the basis of sex, not individual interests, as is the case for men.

Almquist's study (1974) followed a class of college women over four years. Women choosing occupations with more males employed did not differ from women entering occupations predominantly female in either sociability experiences or in relationships with parents. Almquist might have found differences between the two groups if career decisions were related to importance of marriage and family plans.

While many of the studies summarized above provide evidence that aspects of the sex role are important determinants of women's occupational choices and career patterns, they do not provide evidence or findings that are directly applicable to educational programs of career decision-making. These studies provide evidence of the choices women have made (primarily college women) and give support to the influence of sex roles,

however, these questions need to be directly examined. Questions regarding marriage, homemaking, and child rearing, need explicit consideration in career decision-making.

Sex role research. The status of research on sex roles was recently reviewed by Lipman-Blumen (1975), in an article suggesting directions for future research in this area. She distinguished among several major areas of study in the area of sex roles: socialization, role conflict, identification, role models and caste systems; effects of culture on sex roles; and research on the family. Much of the past research has made assumptions about the "status quo" of appropriate sex roles as found for women and men in American culture, and this framework has shaped the research. For example, not until recently was there research clearly labeled as examining sex role stereotypes (e.g., Broverman et al's work, 1970, 1972).[1]

In the psychological measurement field, 1972 saw a series of papers devoted to questioning the usefulness of traditional measures of masculinity and femininity (Diamond, 1972; also Constantinople, 1973). There are now fifteen instruments held in the Test Collection at Educational Testing Service (1975) under the classification, "Measures pertaining to the Role and Attitudes of Women." Some of these measures include attitudes toward women and occupational roles. Most of these measures, however, are limited in one of two ways: 1) they assess only the role of women; or 2) they examine the "masculinity-femininity" (now expanded to androgny) area. None of these measures is designed, as is the work of Katz on occupational values and is the present study, to elicit the values individuals hold

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[1] Mednick and Weissman (1975) provide a brief summary of this area in the first chapter of the Annual Review of Psychology devoted to the "Psychology of women."

on specific constructs related to sex roles in the non-occupational
marriage and parenthood areas.

Socio-cultural and economic status and occupational choice. Gump
and Rivers (1975) reviewed research findings for black women in terms
of status, occupational choice, and sex role attitudes. This review of
minority group research focused on black women, since information about
other minority groups was not as readily available, according to the
authors. They noted that where comparative studies were made, sex was
also not examined as a variable. Despite evidence that black women tended
to have higher employment rates and higher levels of education than black
men, black women still earned less than all other groups and showed lower
rates of career preference for the field of homemaker (which Gump and
Rivers interpre   an indication of accepting levels of responsibility
rather than necessarily lack of preference). The proportion of black
women who wished to find full-time employment while maintaining the
traditional roles of wife and mother was rough   twice that of the white
women desiring this option. The difference between black and white women
appeared primarily in the pattern of employment. "White women want and
expect to absent themselves from the labor market while they have children..."
(p. 130). Despite these findings, Gump (1972) found that black women
were more likely than white women to endorse the view that a woman's
identity is derived primarily from marriage and that a mother with
children should remain in the home. However, this finding may reflect
the difference between desires and realistic expectations (as in Klemmack
and Edwards findings for traditional female occupations).

Picou and Campbell (1975) compiled a series of articles on career
behavior of special groups. Among the special groups examined are
American Indians, Asian Americans, and Mexican Americans, as well as
women. Status as a member of these socio-cultural groups appears to
influence career opportunities and choices.

Socio-economic differences in career choices have been examined also.
Campbell and Parsons (1972), for example, found that non-disadvantaged
junior high school students received higher scores on Crites' Vocational
Development Inventory than disadvantaged students, although the disadvan-
taged scored above the published grade level. A number of interactions
were also found; the occupations most frequently chosen by male disadvan-
taged students were in the technical areas in contrast to a most frequent
choice of service-related jobs by the other students. In a similar study
with elementary school students, Clark (1967) found that boys from the
middle class were more apt to prefer professions than lower class boys who
preferred "government" jobs.

The occupation of one's parents, especially of one's father, was
found to significantly affect the accuracy of "success" predictions
for certain courses of study in college (Lunneborg and Lunneborg, 1968).
Mulvey (1963) however, did not find that parental socio-economic status
related to career patterns of women. In general, these studies of socio-
cultural and economic differences do not give generalizable findings
relating the influence of sex roles on occupational choice. No studies
were identified where the male sex role (marriage, family, home maintenance)
was related to career decision-making.

Osipow (1973), in summarizing the research related to social class membership, noted that both social class membership and sex are important situational determinants of career development. These variables affect attitudes and the economic resources available to implement career plans. In a critique of the literature examining minority group status, Osipow stated that, in general, research on career development for these groups has confounded race, social class, ethnicity, educational levels, and economic variables.

With this research background in mind, we now examine more closely definitions of values and the important aspects of sex roles related to career decision making.

2. Values and Sex Roles

Values. Maslow (1954) defined values in relation to his hierarchy of needs: "The gratification of any such need is a 'value'" (p. 6). One reason for knowing the individual's values is to be aware of the influence of values on perception. Another reason for knowing values is that it is to know the individual's nature and to have more effortless choices and, "Many problems simply disappear — others are easily solvable by what is in conformity with one's own nature" (Maslow, 1971, p. 111). Maslow's well-known hierarchical theory of motivation (1954) included needs such as safety, security, love, self-esteem and self-actualization.

Margenau (1959), like Maslow, did not distinguish between value and need: "A value is the measure of satisfaction of a human want" (p. 38). He acknowledged that this brief definition did not convey the significance that attaches to the word value, noting that it left aside the ideas of

(instrumental value) or end-state (terminal value) of existence is
personally or socially preferable to an opposite or converse mode of
conduct or end-state of existence. A value system is an enduring organ-
ization of beliefs concerning preferable modes of conduct or end-states
of existence along a continuum of relative importance (p. 5). Values,
like beliefs, have cognitive, affective, and behavioral components. A
value has a behavioral component in the sense that it is an intervening
variable that leads to action when activated.

What are the functions of values and value systems for Rokeach?
"...values as standards that guide ongoing activities, and of value
systems as general plans employed to resolve conflicts and to make decisions.
Another way is to think of values as giving expression to human needs"
(p. 12).

Attitudes are distinguished from values since an attitude refers to
an organization of several beliefs around a single object or situation.
On the other hand, "A value ... refers to a single belief of a very
specific kind. It concerns a desirable mode of behavior or end-state
that has a transcendental quality to it, guiding actions, attitudes,
judgments, and comparisons across specific objects and situations and
beyond immediate goals to more ultimate goals" (p. 18). This latter,
expanded definition fits the type of values related to sex roles with
which we are concerned. The definition also fits the level of abstraction
at which the occupational values developed by Katz (1973) are located.
The occupational value terms are: High Income, Prestige, Independence,
Helping Others, Security, Leadership, Interest Fields, Leisure, and
Early Entry. These terms are at a level of abstraction which permits

them to be used to evaluate different occupations, but they are, in the main,
not as abstract as the instrumental and terminal goals described by Rokeach.
(There are some obvious overlaps, but Rokeach has included terminal values
such as national security, salvation, wisdom, a world at peace, and a world
of beauty, among others. These are at a different level and more removed from
everyday experience.)

In the model Katz (1966) proposed and later developed into SIGI (1973),
there are three systems of data in guidance for career decision making: a value
system, an information system, and a prediction system. Katz (1966) described
the function and importance of defining individual values. Questions the
individual needs to ask, in addition to What are my values? are, Where have my
values come from? And then the individual will be better prepared to ask,
Where are they taking me? Katz also discussed the influence of parents, church,
peers, socioeconomic status and other variables as influencing the development
of occupational values. Obviously, they also influence the norms and behaviors
of sex roles. These questions, when asked in the context of factors related to
sex roles, are key to developing a definition of sex equality in any model of career
decision making.

Sex roles. Lipman-Blumen and Tickamyer (1975) noted that women are
socialized to receive their total gratification through family roles, whereas
men can look to both occupation and family roles for fulfillment. Angrist (1974)
indicated that learning of the adult sex role is seen primarily as occupation-
directed for males and family-directed for females. Russo (1976) argued that,
"... Motherhood is chief among the prescriptions of sex-typing ... the major
goal of a woman's life is to raise well-adjusted children ... As long as this
situation exists for the vast majority of women in Western society and the world
in general, prohibitions may be eliminated and options widened, but change

will occur only insofar as women are first able to fill their mandate of motherhood" (p. 144).

Several writers have discussed sex roles and their relationships to women's occupational choices and careers. Among the definitions of sex and gender roles which have appeared in the literature are those of Lipman-Blumen and Tickamyer (1975). Gender roles are considered useful when viewed as mediating factors between gender identity (male or female) and sex role. It is via gender roles which develop out of gender identity, that males and females are funnelled into what is societally defined as sex-appropriate behavior. "The study of sex roles concerns roles within all structured settings, the norms and rules governing role performance in these settings, the correlates of role location and performance, the special situation of deviant roles and those who occupy them, and the mechanics of role change" (p. 303).

Bernard (1976) followed Sarbin's definition and distinguished two components in the concept of role: expectations or norms including beliefs and cognitions, and enactments or conduct. These are two key distinctions, much like the distinction that is made with values; that is, there is a normative, strongly pervasive, socially influenced and reinforced set of beliefs, and the reflection of these beliefs in actual conduct or behavior.

What factors or aspects of sex roles are critical in the definition of sex roles for women in relationship to occupational choice and career decision making? Two critical factors can be identified: marriage (and the role of wife) and motherhood (parenthood).

Bernard (1976) called women's place the lynch pin of the traditional female role. Data from a 1972 study of entering college women showed about one-fourth of them believed that the woman's place was in the home. This norm or belief persists despite actual evidence of increasing labor force participation by married women and women with children under six years of age. The discrepancy between the belief and the actuality could be viewed as a plus for women, a tolerance for deviations from an anachronistic norm. However, Bernard suggested that it also has dysfunctional consequences for women: "Life is organized and decisions are made as though the norm were actually a genuine and functional adjustment to a current situation" (p. 212).

Darley (1976) discussed the differences in achievement between males and females and provided an analysis of role behavior, particularly the ambiguity and lack of clarity of roles. She argued that it may not be only the kinds of behavior demanded by different sex roles that lead to differences in achievement, but also differences in the clarity and consistency with which these sex role demands are defined: "... The obligations and responsibilities of wifehood are not validly depicted in movies and popular magazines nor are they clear simply from observing the behavior of one's parents, especially when such observations are made from the perspective of a child." And on the role of mother, "... The explosion of books, articles, and television talk shows on the subject of motherhood suggest that the expectations for this role are almost without limit, stunningly unclear, and highly variable. Is a good mother permissive or firm or both? Is she a friend to her children or an advisor or both? ... Note that what is expected of a good father is also unclear, but the parent role is not generally taken to be as salient for

a man as it is for a woman" (p. 87, 89).

A major series of studies on sex, career, and family have been carried out in Britain. Fogarty, Rapoport, and Rapoport (1971) presented reports that included examination of the special problem of women's promotions to top jobs, experience in both Eastern and Western European countries, and studies of families and work careers. They suggested that currently highly qualified women experience the same complexities as men (e.g., fitting together personal, interpersonal and social influences in the choice and development of an occupational career) plus the additional set of complexities associated with child rearing.

A valuable analysis of the dilemas faced by "dual career families" is provided in case studies(Fogarty, Rapoport, and Rapoport, 1971). The dilemmas faced by these families include what they call dilemmas arising from sheer overload; dilemmas rising from the discrepancy between personal and social norms (for example, work after childbirth); dilemmas of identity — one cannot be a good woman and a working woman, because work is seen as masculine; social network dilemmas with family and inlaws; and role cycling dilemmas. This latter dilemma occurs in two ways — between the occupational roles of husband and wife and family roles, and between the occupational role of the husband and the occupational role of the wife. This framework for problems faced by families in which both partners are committed to work may be part of the analysis required to assist theorists and practitioners to understand the relationship between sex role values and career decision making for women. The goal in career decision theory is not to predict only occupational satisfaction, but more generally, satisfaction with work as it fits into a life pattern.

Other analyses that emphasize the importance of sex roles to career development are those that examine the stages of women's lives. For example, there are the life style patterns cited by Ginzberg (1966) and the British pattern reported in Fogarty, Rapoport, and Rapoport (1971). Bernard (1975) discussed stage theories of development and proposed that for women a more useful analysis may consist of examining developmental discontinuities -- that is, the sharp changes that occur at critical points in life. The discontinuities are: about age 8, when little girls are deflected toward <u>dependency</u> rather than independence; <u>marriage</u>, where the woman finds out that she will have to supply the dependency needs of her husband; at <u>motherhood</u>, where she has sole responsibility for the care of a dependent infant; and the two later stages, when the last child enters school, the stage of <u>middle-motherhood</u>, and finally, <u>late-motherhood</u>.

These or more refined analyses of stages and life patterns may be the start of a framework to assist clients, counselors, and theorists to focus more sharply on the substance of career decision making theory for both women and men. Pleck (1976) took a broader view of the relationship of work and other spheres of life for men. The full range of life's spheres need to be examined and men also have considerable gains to make in loosening and changing their roles. The spheres Pleck considered are relationships with women, relationships with other men, relationships with children, and involvements with work. For example, many men now see heterosexual relationships as the only legitimate source of emotional support which men need in their "daily struggle."

While we can identify the importance of marriage, parenthood, and to a lesser extent homemaking in women's lives, the problem is how to identify values so counselors and clients can focus on them in career decision making. Katz provided a model in the occupational values that he developed and integrated into SIGI. It seemed advantageous to develop a set of terms for marriage and parenthood and to also label them values. The label value would make clear that the concepts are philosophically funda- mental, can be examined, and that there can be alternate choices or behaviors to satisfy needs represented by the concepts, ways of inte- grating work, personal relationships, and family life to achieve the needs and desires one holds.

The pilot study on sex role values is part of a series of studies being funded by NIE within a program which is focused on career awareness. The basic framework for this program of research includes: 1) influencers, such as the family, school, mass media, and community groups or other institutions; 2) the individual's skills in self assessment and decision making; 3) the concept of career awareness, knowledge, values, preferences, self concepts; and the result, 4) making decisions in career-forming situations (Wise, Charner, and Randour, 1976).

As shown in Figure 1, this project is concerned with three areas: sex roles, values, and career decision making. For sex roles, the traditional normative areas for females are the marriage relationship, parenthood (motherhood) and child rearing, and homemaking. The tradition- ally male-focused areas are education and occupations. Bernard (1976) has emphasized that sex role norms or expectations are very stable despite the entry of married women and women with children into the work force.

Figure 1.

Sex roles, Values and Career Decision Making

Sex Roles		Values			Career Decision Making (Now)
Norms (expectations.) Behavior		Marriage	Parenthood	Occupational	1. Educational Plans
Traditionally Female	Marriage relationship	Companionship Parenthood Security	Joy Challenge Stability	High income Prestige Helping others	2. Occupations Considered
	Parenthood (motherhood) Childrearing				3. Level of Aspiration
					4. Level of Work/ Career Commitment
	Homemaking				

Plans (anticipated behaviors)

Work Pattern

Marriage (timing)

Children (number & timing)

Homemaking Responsibilities

Traditionally Male	Education		Criteria for Sex-Equality in Career Decision Making (Long Range)
	Occupation		1. More occupations explored.

Stable norms despite entry of married women and women with children into the work force (Bernard, 1976)

Now: How are these values and plans related to career decision making?

Long Range: Can intervention based on exploration of these values and plans affect sex-equality in career decision making?

2. More non-traditional occupations explored.

3. Fertility/education plans related to preferred occupations (Level of Commitment).

4. Articulation of occupational and homemaking responsibilities.

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Values, as part of the concept of career awareness, are examined in two ways. The first is to develop a series of concepts or terms analogous to the occupational values developed by Katz. These values are being developed in two areas, marriage and parenthood. This involves the translation of some needs into expressions particular to these areas of our lives -- areas fundamental to the definition of sex roles and heavily influential in the career decision_making process for women. The second area related to values is labelled here as plans or anticipated behaviors. These are situations in which values may be evidenced in choices or planning. The plans to be examined include those for the timing of marriage or a long term relationship, plans for the number and timing for children, and the allocation of homemaking responsibilities. In this first stage we will examine how the values are ordered and related to choices in the career decision making area. Also, are all the values rated both high and low by some students? We are also interested in how plans relate to some criteria in the career decision making area -- educational plans, occupations considered, level of aspiration in education and occupation, and level of career commitment.

For the long range we are concerned with whether interventions based on exploration of these values and plans affect sex equality in career decision making. Some criteria which are proposed for sex equality and career decision making include 1) more occupations explored, 2) more non traditional occupations explored, 3) fertility and education plans related to preferred occuaptions, perhaps a level of commitment variable as is being developed by Coombs[1], and 4) the articulation or interrelation of

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[1] Lolagene Coombs, Center for Population Studies, University of Michigan in personal communication, June, 1977. Coombs has under development work commitment scales, but these have not yet been used substantially with large samples.

occupational and homemaking responsibilities. These variables are listed as a tentative definition of criteria for sex equality in career decision making. That is, if the individual can consider more occupations, especially non-traditional occupations, and can relate planned fertility and homemaking responsibilities to work and career plans, there is an increased opportunity for sex equality in career decision making -- career decision making without regard to gender. It is in connection with this ultimate goal that we have tried to develop concepts related to marriage and parenthood that can be examined as beliefs or values, and for which clarification may assist in making known the "individual's true nature" or "true feelings." When these values are explored in conjunction with occupational values, career related decisions may be based on a more complete integration of work and other aspects of life.

We turn now to an examination of data on the marriage, parenthood and occupational values with a sample of 98 11th grade students in an urban high school.

2. Pilot Study

Sample Description. Participants in the study were selected to represent three ethnic groups (black, Hispanic and white), both sexes, and two economic levels (lower and middle). There were 16 students in each of six cells (sex x ethnic), with the exception of 18 white males, for a total of 98. All students were individually interviewed and paid three dollars for completing the interview. Table 1 shows the distribution of the sample across all three levels.

Table 1.　Pilot sample distribution by socio-economic level,
　　　　　Ethnic group and sex.

Ethnic Group		Lower	Middle	Total
White	Female	7	9	
	Male	11	7	
				(34)
Black	Female	8	8	
	Male	12	4	
				(32)
Hispanic	Female	10	6	
	Male	14	2	
				(32)
Total:		(62)	(36)	98

The majority of the students were 16 or 17 years old (80%) and in
the eleventh grade (15% were 15 or younger). About 80% of the students
were born in New York and 94% had spent most of their lives in New York.
Thirty percent of the students use Spanish in their homes; 58% were
monolingual. Approximately 35% of the parents had less than a high school
education, 39% of the fathers and 46% of the mothers were high school
graduates, and 26% of the fathers (18% mothers) had at least some further
education. Almost two-thirds (62%) of the students were Catholic.

An estimate of socio-economic level was obtained by coding father's
occupation (or in some cases mother's occupation) according to the classi-
fication scheme of Hamburger (1958). This seven category scale ranges
from one, professionals (high level), owners and managers of large businesses,
to seven, manual (heavy or migratory labor, not regular or stable), delivery
boys. In this sample, 3% were at 1, 3% at 2, 16% at 3, 16% at 4, 37% at 5,
20% at 6, and 4% at 7.

In order to contrast middle and lower socio-economic students in
the data analysis, the middle level was obtained by using students
with parental occupations at levels 1-4, and lower level categories
5-7. This resulted in 37% in the middle level and 63% in the lower level.

The educational aspirations of the majority of students (in response
to the question, How much education do you want to have?) are for at
least some college (84%), and 35% want professional training.

Marriage, Parenthood and Occupational Values. The origin of the
sets of value terms varied. The Occupational values were developed by
Martin Katz (1973) and adapted for the eleventh grade students in this
study by shortening the descriptions. The Marriage and Parenthood values
were developed through a variety of sources: a literature search including
the terms values and sex roles; readings in the areas of motherhood, marriage
and family; trial of preliminary terms with individual students and a
sample of 40 eleventh graders; revisions and re-tryout; and a trial of
Kelley's (1955) Role Construct Repertory Test (adapted version) to elicit
constructs used to describe similarities and differences between indi-
viduals who were husbands and wives or mothers and fathers (the technique
worked well with psychologists, but not with non-psychologists). The
marriage and parenthood terms will be revised, since the pilot study
indicated some descriptions had more than one concept in them to which
students responded. Students also had varying interpretations of one
Occupational value, Interest Field, taking this to mean having work which
was interesting to them, rather than to have a developed basic interest
area (art, science, and so on) to which they were career-committed.

Table 2 presents the means and standard deviations for rankings and ratings (0-8 scale) for the Marriage values, Parenthood values, and Occupational values for the 98 eleventh grade students. A particular concern was that each value elicit different responses across students. One criteria for each set of value terms is that one or two terms are not consistently ranked at the top or bottom, that there is a distribution of responses across the ranks for each term. The Marriage values met this latter criteria, with the exception of the value Having a Helpmate. No one ranked this value as one, although some (male) students ranked it two. One Parenthood value did not meet the criteria fully: Parenting did not receive any ranks of 10, the lowest rank. Two Occupational values did not receive any ranks of 10, the lowest rank possible -- Helping Others and Interest Field.

Some interpretation of the rankings and ratings can be made tentatively, although it should be emphasized that the purpose in developing and refining these sets of value terms is to facilitate occupational exploration in relationship to other spheres of adult life. The focus is on the individual's examination of needs or values in conjunction with career planning. With this caveat in mind, the trends in the data for the value sets are described here.

Marriage Values: Three values received both the highest rankings and ratings on a scale asking, How important is each of these values to you? 0 - not important at all, 2 - slightly important, 4 - moderately important, 6 - strongly important and 8 - greatly important. The three values were A Close Relationship, Emotional Support, and Companionship. These values reflect the interaction between the partners and the quality

Table 2. Means and standard deviations for rankings and ratings of Marriage, Parenthood and Occupational values - 98 eleventh grade students.

Marriage Values

	Rank		Rating	
	M	S.D.	M	S.D.
Close relationship	2.57	1.9	6.56	1.7
Emotional support	2.86	1.9	5.30	2.3
Companionship	3.06	1.9	5.68	1.9
Parenthood	5.01	2.0	4.66	2.2
Security	5.43	2.3	3.27	2.3
Natural role	6.37	1.8	2.31	1.9
Independence	6.48	2.1	2.43	2.0
Being a complete person	6.58	2.1	2.25	2.2
Having a helpmate	6.69	1.9	2.27	2.1

Parenthood Values

	Rank		Rating	
	M	S.D.	M	S.D.
Parenting	3.09	2.3	5.91	2.0
Friendship	3.74	2.4	5.56	2.1
Joy	4.32	2.4	5.78	1.9
Challenge	4.96	2.6	4.21	2.3
Responsibility	5.35	2.4	4.39	1.9
Leadership	5.43	2.5	4.24	2.1
Accomplishment	5.63	2.6	3.65	2.3
Stability	6.61	2.5	3.49	2.1
Future security	7.77	2.5	2.60	2.2
Natural role	8.17	2.1	2.04	1.6

Occupational Values

	Rank		Rating	
	M	S.D.	M	S.D.
Interest field	3.64	2.8	5.90	2.1
Helping others	3.88	2.5	5.60	2.0
Security	4.60	2.4	5.29	2.0
High income	4.92	2.7	4.80	2.2
Variety	4.93	2.7	4.69	2.1
Independence	5.50	2.3	4.22	1.9
Prestige	5.53	2.6	3.90	2.2
Leadership	6.35	2.5	3.50	2.0
Leisure	6.96	2.3	3.52	2.0
Early Entry	8.69	2.0	1.62	1.8

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of the relationship. Values ranked at the middle of the set were
Parenthood, Security, Natural Role and Independence (from parents).
Clearly lowest in rank order were the values Being a Complete Person
and Having a Helpmate, although even these values were ranked highly
by some students.

The sample was designed to represent both sexes, three ethnic
groups and two socio-economic levels. Group differences were examined by
a three-way ANOVA of the ratings (0-8) for each value. The results are
presented here only for significant main effects, but are considered
tentative, since there was informal evidence that there were different
concepts to which students responded in some descriptions.

For the marriage values, there was a trend toward a sex difference on
the value, A Close Relationship, with females rating this value slightly
higher (p = .10) than males (M = 6.81, S.D. 1.25 vs. M = 6.32, SD = 1.94).
Ethnic group differences occurred for three values:

Security	White-M = 3.21, SD = 2.40; Black-M = 4.09, SD = 2.26; Hispanic-M = 2.50, SD = 2.15; F = 3.99, p = .022.
Companionship	White-M = 5.79, SD = 1.63; Black-M = 5.03, SD = 1.98; Hispanic-M = 6.22, SD = 1.86; F = 3.68, p = .029.
Independence	White-M = 2.68, SD = 2.08; Black-M = 2.84, SD = 2.30; Hispanic-M = 1.69, SD = 1.53; F = 4.56, p = .036.

These data indicate that the Black group in this pilot sample tended to
rate Security slightly higher, that Hispanics gave the highest rating to
Companionship, and that Hispanics gave the lowest rating to Independence
(from parents).

Parenthood Values: Parenting, Friendship and Joy are the three most
highly ranked and rated values, although again it should be emphasized
that these three values also received the complete set of ranks, including
the lowest rank of 10. These values also seem to be concerned with the
quality of the interaction between the two individuals involved, here the
parent and child. The values ranked next highest were Challenge, Responsibility,
and Leadership. These values reflect more directly the satisfaction to the
adult, and are more centered on the parent. The remaining four values
were Accomplishment, Stability, Future Security and Natural Role. These
values appear related more to the opinions of others and to reflect social
pressures.

The three-way ANOVA's for the Parenthood values showed some significant
main effects. A sex main effect was observed for the value Joy, and a
trend for Future Security. Joy: Female-M = 6.21, SD = 1.82; Male-M = 5.36,
SD = 1.97; F = 5.27, p = .024. Females rated Joy higher than did males,
and the trend in Future Security was for males to rate this value slightly
higher (although both males and females gave it a low rating: Females-M =
2.17, SD = 2.12; Males-M = 3.04, SD = 2.29; F = 3.60, p = .061).

Ethnic main effects were observed for two values: Friendship and Future
Security. For Friendship, Hispanics as a group rated the value higher
than did blacks and whites (means of 6.25, 5.47 5.0, respectively,
F=4.26 and p = .017). For Future Security, all groups rated the value low,
but the white group gave it a lower rating than Hispanic and black groups
(means of 2.15, 2.31, and 2.41, respectively, F = 3.18, and p = .046).
Two values showed a socio-economic level main effect, Friendship and

Challenge. There was a tendency for students classed as middle SES to rate Friendship higher than those classified as lower SES (means of 5.97 and 5.32, respectively, F = 4.13, and p = .045. Middle SES level students also rated Challenge higher than lower SES students (means of 5.25 and 3.61, respectively, F = 10.68, p = .002).

Occupational Values: The two values ranked and rated most highly were Interest Field[1] and Helping Others. These seem to reflect a trend toward self-fulfillment that was noticeable with the marriage and parenthood values. Security and High Income were also highly rated. Variety, Independence, Prestige, and Leisure were ranked near the middle and lower end of the set. These values seem to be possible descriptors of quality of the job. Early Entry was consistently rated near the end of the set, and 70% of the students ranked it as 9 or 10. They say they do not intend to choose a career or work because they can get started right away.

Three-way ANOVAs for the Occupational values' ratings showed a trend for females to rate the value Helping Others higher than males (means of 5.94 and 5.30, respectively, F = 2.91, p = .09) and significant main effects for the value Interest Field for ethnic and socio-economic level groups. Middle level SES students rated this value somewhat higher than the lower group (means of 6.44 and 5.58, respectively, F = 6.52, p = .012). Ethnic groups means were 6.53 for the Hispanic group, 6.18 for the white group, and 4.97 for the black group.

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[1]Interest Field, as noted earlier, appeared to be interpreted as an interesting job or work, rather than commitment to an already defined basic interest area.

In summary, the data from the pilot study of the concepts for Marriage, Parenthood and Occupational values provide some evidence that eleventh grade students respond to the values and that there is diversity among this sample in their values, as demonstrated by the differences in ratings and rankings. While the analyses of variance of the main groups in the sample provide some tentative hints of group differences, these are not the main focus of the present study. It is interesting that there were few sex differences among the values. Clear sex differences were found in another set of questions that asked students to rate the importance of different patterns of work. Students were asked to rate the options: fulltime career, parttime career, fulltime job, parttime job, and not work. Sex differences were found for each choice, except not work. Males rated Fulltime career significantly more important (0-8 scale), mean of 7.0, SD = 1.56, than females, M = 6.17, SD = 2.32, F = 4.38, p = .039. Parttime career was rated higher by females, M = 6.17, SD = 1.64, than males, M = 5.24, SD = 1.56, F = 8.214, p = .005. Fulltime job was rated higher by males than females; M = 4.68 and 3.83, respectively, and parttime job was rated more highly by females than males (means of 3.67 and 2.96, respectively). Thus, the choices that directly reflect the differences in sex roles for women and men continue to show differences, despite this preliminary evidence that many of the values or needs related to marriage, parenthood and occupations may be evaluated similarly by the two sexes.

Implications for Career Decision Making Theory

> I was 40 years old, says a suburban housewife, before
> it dawned on me that I really had had no choice about
> becoming a mother. Not that I didn't know all about contra-
> ception but that it had never occurred to me that anything
> else was possible (Bernard, 1974, p. 24).

This quotation speaks directly to counselors and theorists in career

development and career decision making. It illustrates the change

needed in the variables included in the theories and the scope of life

decisions these theories need to accomodate.[1] Or more directly, the

irrelevance of present theories for women.

Osipow (1973, 1975) has reviewed theories of career development;

including approaches to the study of decision making. He acknowledged

the problems that theories of career development face with regard to

special groups, including women. And he was explicit about assumptions

made by career decision theorists and the limitations of current theories

for individuals of differing sex, social class, and minority status

(1975). Career development theory assumes that people possess an array

of choices about their careers. The satisfaction of interests is achieved

through vocational choice, and, once an individual identifies a field

he or she will move toward, the individual can reasonably assume training

is available and that it can be successfully completed. As Osipow

noted, this view exaggerates the role of personality variables as they

affect interests and choices. For example, Blau, Gustad, Jessor, Parnes,

and Wilcock (1956) discussed a model that included economic and social

determinants, as well as psychological variables, in occupational choice.

This earlier model was modified by Psathas (1968), to include the importance

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[1]In another context, Bernard (1976) has stated the imperative well:
"Change in sex-specialized norms and sex-typed behavior is not a take-it-or-
leave-it option. It is a fundamental imperative. The question is not
whether to do it but rather how to do it" (p. 22).

of sex role variables to account for the type of occupations and amount
of employment sought by women. More recently Krumboltz (1976) included
economic and social status variables in a social learning model of career
selection.

Osipow (1973) also reviewed briefly the then-developing models of
career decision making, which focused more on the individual's choice
behavior. These decision theory models, reviewed more extensively by
Jepson and Dilley (1974), encompass alternative actions and outcomes,
with the assignment of values (utilities) and probabilities to outcomes.

The implications of research on sex roles and the examination of sex
role values demonstrate that the "content" of career decision making
models must be expanded. The major life spheres -- marriage, parent-
hood, and work need to be integrated into the decision theory models.
As one implication for a specific model, we can examine Katz's use of
occupational values.[1] These values are rank ordered and rated, and also
tested and clarified further in simulated choice settings to help the
individual explore priorities among the values. The sets of values
for marriage and parenthood, with further work and revision, can be
considered jointly with the occupational values, perhaps in a hierarchical
model. Further exploration of these values can occur in the simulated
choice settings, where the values are set in conflict with each other
and the individual tries out specific choices for planning or integrating

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[1]As noted by Jepson and Dilley (1974), Katz does not use a formal
decision theory model. Aspects of the formal model -- assessing utilities
related to occupational values -- are included, however, and compared to
objective (salary) or subjectively derived (experts ratings on Security)
estimates of the occupation's placement on each occupational value dimension.
The modifications Katz has made appear to fit the needs of vocational explor-
ation more appropriately than would a formal decision theory model.

the three areas of work, marriage, and parenthood. Simulated conflict situations could check the weights of importance the individual attaches to the major areas, as well as within the areas, and further assist individuals to clarify values and explore career related decisions.

Osipow (1973) also suggested a fundamental shift in the paradigm for career decision making and counseling -- that predictions of job entry are not paramount. Behavior needs to be predicted, but these must be particular behaviors that are identified for career development theory (or career decision making). Some of the behaviors to be predicted are outcome variables such as the sex equality variables identified earlier. The use of computerized guidance systems such as SIGI, counseling groups, individual counseling, and other interventions should result in attainment of outcomes such as we have suggested. Cooper (1976) has used related outcomes in terms of increased exploration activities in a study comparing the effects of using the Non-Sexist Vocational Card Sort, and the Strong-Campbell Interest Inventory. Holland (1975) has summarized studies using exploratory criteria for the Self Directed Search. Added criteria are that these activities should function equally well for women and for men (although different activities may be required for the sexes). We expect to see individual women exploring more occupations, more non-traditional occupations, and evaluating their values and plans for marriage, parenthood, and homemaking. Fertility and educational plans can and should be related to preferred occupations, and the articulation of occupational and homemaking responsibilities should be examined. We view these criteria for sex equality in career decision making to be as important for men as for women. A recent review by Peter Filene (1977)

of two books dealing with women and work closed with this comment:

> Well, I tell myself, turnabout is fair play. Remember
> how many men have written wives out of their books. But there
> is more to be said. <u>How many men, I asked myself, have
> considered so deeply the place of work in their lives?</u>[1]
> Precious few. Perhaps the real turnabout will come when we
> men can write a companion volume to <u>Working it out</u>.

The most profound implication for career decision making theory

of sex roles and sex role-related values lies in the area Filene

has suggested. The integration of values and plans related to marriage,

parenthood, and work should permit the individual a deeper understanding

of her or his own values and the directions in which the values are

leading the individual, as Katz so aptly suggested. The ultimate result

may be sex equality in career decision making.

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[1]Italics added.

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