In a review of research, inhibited career and achievement motivation in women is analyzed and a humanistic goal for both sexes is proposed. The author believes that women have not caught up with the opportunities available to them to contribute to society through their careers. They do not contribute as much as men do to the humanities, arts, and sciences, and they do not contribute commensurate with their talents and potential. Factors related to inhibited career and achievement motivation include reduction in academic self-confidence, fear of success, vicarious achievement motivation, home-career conflict, work discrimination, low risk-taking behavior, and sex-role orientation. The author is presently studying the potency of these factors to predict achievement and career motivation in various samples of women. Results might be useful in developing diagnostic measures to prescribe change strategies in cases where low motivation is identified. A humanistic goal of sex-free roles is proposed, based on bicultural school curriculum, career guidance in schools, and individual open-mindedness toward shared responsibilities. (AV)
What Inhibits Achievement and Career Motivation in Women?

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Running Title: Why Women Contribute Less to the Humanities, Arts and Sciences
Abstract

Women have not caught up with the opportunities available to them to contribute to society through their careers. Not only do women not contribute as much as men to the humanities, arts and sciences, they do not contribute commensurate with their talents and potential. It is assumed that women's lesser contribution through their careers is related to their motivation. Several factors related to inhibited career and achievement motivation in women are examined, based on evidence in the research literature. A related study in progress is described. A humanistic goal for both sexes is proposed, based on sex free roles.
What Inhibits Achievement and Career Motivation in Women?

It has long been known that women do not achieve or contribute as much as men in the fields of science, the humanities, and the arts (Astin, 1973; Maccoby and Jacklin, 1974; Rossi and Calderwood, 1973; Commission on the Status of Women, 1970) in spite of the fact that they represent over 40% of the professional labor force today (Blitz, 1974) and have represented at least 30% of the professionals since 1890. Fewer women proportionately rise to the top of their chosen profession, business or trade. Although women represented 40% of the professional and technical workers in 1974, they represented less than 20% of the managers and administrators that year (U.S. Women's Bureau, 1974) and a majority of these women were elementary school teachers.

Many attitudes are thought to hinder women from developing their full potential as persons. Attitudes of husbands, parents, teachers, counselors and employers, to name a few, may also hinder development. "A woman's place is in the home," "Babies need their mothers when they are young," "Women were not intended to compete in a man's world," "find a husband and he'll take care of you," and "A woman can experience success through her husband" are a few of the attitudes that may inhibit the full work-related development of many girls and women.

The dilemma confronted is that women found to be equally intelligent as men (Maccoby and Jacklin, 1974), do not contribute to society through their work in proportion to their participation. Why do women scientists, artists, writers, educators, and social scientists not contribute as much as men? What inhibits their achievement motivation and productivity? Two illustrations follow, suggesting part of an answer.
Paula is a woman who grew up focusing her energies and daydreams on preparing for a career. She invested little, if any time, in dreaming about the role of wife and mother, or in practicing for these roles. Paula met a man at graduate school preparing to enter the same career as herself, and she fell in love and married him. Implicit in her thinking was the belief that they would both continue their careers and that if a family came along, they would both share in the child rearing responsibilities equally. She had not bothered to check this assumption with her husband, and it turned out that he had no intention of giving time to child rearing -- that, in fact, his career was the single priority of his life. Paula's career went by the boards for a time, ten years to be exact, while she raised three children, did volunteer work in the community, and some part-time work related to her professional training. When she came to see me for counseling, Paula was carrying an accumulation of disappointment, frustration and anger born out of false expectations and belief in equality of the sexes (i.e., equal opportunity and equal responsibility).

Paula's case is a reversal of the counseling needs of many women. A majority of women are socialized in the home and school to expect to grow up to be wives and mothers (Tyler, 1964) and their problems develop out of lack of satisfaction in these roles (Friedan, 1963) at which point they begin to look for satisfaction in other roles, (i.e., working, volunteerism, etc.). Other women are faced with the necessity of work when their husbands die or abandon them. Ann, described next, is such a woman.
Ann is a bright woman who ranked in the top three percent in her high school physics class. However, she was not interested in pursuing a career commensurate with her scientific ability. Instead, she planned to marry and raise a family. She married before finishing college and settled down to the serious business of being the best mother and wife in her neighborhood. Her husband found a younger woman more attractive than Ann and left her at the age of 42. With the new divorce laws in some states, (Ann lives in California) a woman cannot expect to be supported indefinitely by her estranged husband, if she is at all able to work. Usually a reasonable time is allowed by the courts for a woman to obtain some training (two years is typical) before she is responsible for her own economic support. At this point in her life Ann arrived in my counseling office, confused and hurt. Her early promise in the natural sciences, held little appeal for Ann now and any training she could obtain in two years could only prepare her for a technician role in the sciences at best.

It can be seen in the case of both Paula and Ann, both high ability women, why their contribution to society through their careers was less than that for men of comparable ability. For both women their most productive years were spent raising a family rather than furthering their career competencies. It is unlikely that this situation will change much, until men (husbands and fathers) begin to share equally the responsibility for home and family with their wives.

A review of more than forty research studies published since 1970 (Farmer & Backer, 1975) on division of household and childrearing activities between husband and wife indicated that women still accept the major responsibility for these tasks. More men are beginning to share homemaking re-
sponsibilities for marketing, cooking, home repairs and child care (Hedges & Barnett, 1972) but the number of husbands sharing responsibility equally for these tasks is insignificant.

Does the Working Mother Hurt her Children?

A common belief among men and women alike is that the working woman by definition neglects her children, especially if she works when they are very young (Keivit, 1972; Darling, 1973). An even more pervasive belief among women and men of all cultures is that woman's primary responsibility is in the home (Darling, 1973; Mead, 1974). These two beliefs are related. The thinking goes as follows: If a woman's primary responsibility is to see that the new generation of children grow up strong and healthy, physically and psychologically, she can't do that and work outside the home eight hours a day.

There is some research supporting the relationship between working mothers and juvenile delinquency (White, 1972). However, the evidence is stronger for a causal relationship between rejecting, permissive mothers and delinquency (White, 1972).

Studies on the mother's attitude toward working and the effect of her attitude on her children indicate that mothers who feel anxious or unhappy about working tend to have angry, hostile children (Hoffman, 1963). In contrast, children of mothers who like their work are more outgoing and confident. Rappaport (1969) noted that an increasing emphasis on partnership in dual-career families had a positive effect on children's attitudes toward their mother's working. Cultural acceptance of the working mother can reduce guilt feelings of working women, and in turn reduce the negative effect on children (Rabin, 1965; Wallston, 1973)
In summary, whether or not the children of working women are affected negatively appears to depend on at least two factors. The first is the attitude of the mother (and of society) about women working. A more accepting attitude has been found to have a positive effect on children of working mothers (Wallston, 1973). The second factor is availability of adequate substitute care for young children. This factor is not approaching resolution in the U.S. or elsewhere and is one that should command the attention of government and community agencies (Darling, 1973).

With improved technology and automation, homemaking is no longer a full time activity for most women (Huber, 1973). This combined with the lower birth rate relieves many mothers to return to work earlier than previously, or to continue working while raising their families (U.S. Women's Bureau, 1974). Women can expect to have working lives of at least 25 years today if they interrupt their careers to raise a family, and 40 years (equivalent to a man's) if they raise a family without interrupting their careers (U.S. Women's Bureau, 1974).

The U.S. Women's Bureau (1974) recently published statistics indicating that 90% of all women work at sometime in their lives and over 60% of the women who work, do so because they have to (i.e., they are heads of households, or their husbands earn less than a minimum wage).
The growth of the feminist movement in the 1960's and its continuing expansion in the 1970's has led to a variety of interventionist strategies aimed at accelerating equal opportunity for all women (Farmer and Backer, 1975). Some of the strategies include: legislation; assertiveness training; consciousness raising; multiple role planning; women's studies program; and encouragement to women to enter and train in the non-traditional professions (i.e., engineering, physics, law and medicine). These interventionist strategies are typically provided in a 'shotgun' fashion rather than based on careful diagnosis of the factors contributing to women's unequal status, and the relation of this status to the narrower question of why women contribute less to society through their careers (Farmer and Backer, 1975).

A brief review of research on achievement motivation and career motivation in women follows closing with an identification of some of the factors suggested by the research inhibiting such motivation in women.

Achievement Motivation

Maccoby and Jacklin's (1974) review of 58 studies on achievement motivation in women reported a series of studies indicating that women have lower levels of academic self-confidence and are less competitive compared with men. They noted that this difference between the sexes in self-confidence does not appear in elementary or high school students, but appears first in college in a substantial number of studies. It might be speculated that this difference appears in college as women approach marriage and
career decisions and that marriage career conflict (Mathews and Tiedeman, 1964) may contribute to the lowered self-confidence and achievement motivation noted in college women by Drew and Patterson (1974).

Astin (1973) found that girls perform as well as boys in math, science and tests of spatial relationship up to about age 10, thereafter their performance becomes increasingly poorer. Astin has suggested that this effect is due, at least in part, to differential reinforcement on the part of parents and teachers.

The model of achievement motivation developed by Atkinson (1974) and McClelland (1971) identified the following factors as critical for high achievement motivation: an internal standard of excellence; independance, persistence, preference for tasks of intermediate difficulty, high academic performance and, clearly defined goals. Bardwick (1971) suggested that this is a male model of achievement motivation, based on her review of the evidence on achievement motivation when it was examined separately for boys and girls. Alper (1974) has called achievement motivation in women the "now-you-see-it-now-you-don't" phenomena, based on her more recent review and her own research for more than a decade on achievement motivation in college women. Maccoöy and Jacklin's (1974) conclusions that differences between the sexes do not become significant until women reach college, is not supported by Alper's review. However, rather than clear cut differences in the elementary and high school years in achievement motivation between the sexes, Alper points to the illusive quality of female achievement motivation. Bardwick (1971) refers to the differences as one of "ambivalence" for women, created by their pull toward both achievement and affiliation-with-the-opposite-sex, and their 'fear' that success in one rules out success in the other.
Maehr (1974) recently proposed that situational variables may play a critical role in achievement motivation as it manifests itself within different racial and cultural groups. Katz (1973) for example found that women have less 'fear of success' when responding to cues which presented women in socially sanctioned achievement situations (i.e., Anne, a medical student in a medical class that is half female) than when women were presented in non-traditional roles (i.e., Anne, the only female in her medical class). Providing a contextual change in the stimulus cue had a dramatic effect on these women's fear of success. Monohan, Kuhn, and Shaver (1974) found another contextual variable (coed vs. noncoed school setting) with a significant effect of the level of fear of success in high school girls.

Thelma Alper (1974) has been studying the relationship of sex role orientation to achievement motivation in women for more than a decade. She has found that women with traditional female orientations, attitudes and beliefs, score lower on achievement motivation measures than women with non-traditional female orientations. The Wellesley Role Orientation Scale (WROS) has been developed by Alper for her research, and its predictive ability has stood up over a series of replicated studies. Entwistle and Greenberger (1972) found that high IQ girls generally held more liberal views than average and low IQ girls, and that high IQ girls from blue collar homes were the most liberal about women's roles.
Career Motivation in Women

There are developmental and situational differences in the vocational choice process for girls compared with boys. Following the Terman and Miles classic study Tyler (1964) studied the development of sex differences in play and school. Tyler suggested that whereas girls appear to be precocious in social development, they tend to lag behind boys in career development, especially at the college level. Similarly, other researchers (Campbell, 1974; Harmon, 1974) have suggested that women's vocational interests may crystallize somewhat later than men's and be organized in a different way. Strong's (1955) earlier studies support the view that men and women in the same professions have significantly different career interests.

Strong (1955) has always encouraged the use of the women's form of his Vocational Interest Blank (SVIB-W) for use with women in career counseling unless they score below 30 standard score points on the Femininity/Masculinity scale (50 points being the mean). The widespread use of only the men's form of the SVIB with women is not supported by its author or by developmental research on the nature of women's career interests (Harmon, 1974; Tyler, 1964).

The current 1974 revision of the Strong-Campbell Interest Inventory (SCII) replaces the Strong Vocational Interest Blanks for men and women, has one form for both sexes, and represents a promising new way to measure career motivation in women.
Ginzberg (1966) documented another important difference in the career choice process for women. He noted that girls cannot realistically plan on a career until they know what kind of man they will marry (provided that they plan to marry). Their financial status and freedom to continue their education will be partially determined by their husband's careers and their attitudes toward educated and working women. In addition, the number of children that a woman plans for or has, will affect the pattern of her career life. She may elect an interrupted career pattern or a parallel track system as suggested by Super (1957). Ginzberg postulated that this greater uncertainty in planning is probably the major difference between the sexes in their career development.

An interesting finding by Astin (1973) studying over 5,000 women five years out of high school, was that girls who have high career motivation and pursue graduate level professional study often show an exceptional aptitude for mathematics early in their education. In fact, mathematics aptitude was found to be the best predictor of career motivation for this sample of women.

In other research Astin (1969) found that women doctorates (N=1547) were as highly motivated to work as men and that over ninety percent of the women graduating with Ph.D.'s in 1957 were still in the labor force eight years later. Such findings suggest that women who seek graduate level degrees are not intellectual dilettantes, but serious professionals.

Women may still choose a stable homemaking career; however. At the present time, about 50% of all women choose not to work (U.S. Department of Labor, 1974). Early exposure to multiple role planning early in their education for those girls and women who will choose not to work, may contribute to their freedom to choose freely, having been informed of all the options.
Achievement-Motivation and 'Fear of Success' for Women

Horner (1968) has researched avoidance of achievement in women which she calls 'fear of success', for more than a decade and documented the changing strength of this 'fear' when competitive factors are changed. For most women, Horner found that they had less fear of success when competing against themselves, than when they were competing with other students. The opposite was true for most males. Tomlinson-Keasey (1974) found that married women students with children had significantly lower 'fear of success' than unmarried coeds. We might infer that these women had less fear of academic success, having found a husband who accepted their academic aspiration. The married women were also a more select group and highly motivated to return to study.

Katz (1973) adapted Horner's research on achievement motivation in women by providing additional prompting cues to her subjects. Katz required two groups of subjects to respond to the same cues with the following addition (undergraduates in a small Western college):

1. All Anne's classmates in medical school are men. "After first term finals, Anne finds herself at the top of her class" (quotes indicate Horner's cues).

2. Half of Anne's classmates in medical school are women. After first term finals, Anne finds herself at the top of her class.

Respondants to the second condition, both men and women, had significantly less measured fear of success themes than those in the first condition. Katz concluded that the second cue provided the necessary social sanction for women to be comfortable with Anne's success in medical school.
Lipman-Blumen (1972) has proposed an operational definition of the lower aspiration level of women in her description of a vicarious achievement 'ethic' or value whereby many women choose indirect achievement satisfaction, conditioned from birth to experience pleasure through the successes of important other male persons in their lives (Father, brother, boyfriend, husband, boss) rather than directly through their own successes. An example might be a girl who said she didn't want to be the President, (or Director, etc.) just work with him. The vicarious achievement motive suits well the woman who wants to avoid primary responsibility on the job, but at the same time benefit from the successes of the boss through reflected glory. Another example is the woman who views her primary responsibility as that of home and family, wants to work, but does not want to bring her work home with her on weekends.

Lipman-Blumen (1972) found only 12% of a sample of married college females (N=643) free of the vicarious achievement motive. Twelve percent of this group were pursuing a Ph.D. whereas none of those measuring high on vicarious achievement motivation were pursuing Ph.D.'s. Bettelheim (1962) has suggested that education is an enhancement for boys, whereas for girls it is a form of insurance in case they don't make it in marriage. Therefore he assumed, women who enter 'direct achievement' occupations such as law or medicine experience a loss in femininity. Similarly, men who enter 'vicarious achievement roles' such as nurse, elementary school teacher or librarian, experience a loss of masculinity.

Harmon (1972) found it harder to predict the stability of career choice for college coeds compared to men. She found that women who aspired to high level careers in their freshman year often changed their choices to less demanding careers by the time they were college seniors. Harmon hypothesized that lack of reinforcement in the environment for their high aspirations in-
directly reinforced lower career aspiration level for these women. In support of Harman's finding, Hawley (1972) found that college women were influenced to raise or lower their aspiration level, depending on whether or not the attitudes of men toward working women were positive or negative.

Tomilson - Keasey's (1974) findings that married (older) coeds had higher levels of achievement motivation compared to unmarried coeds (as well as lower 'fear of success') scores, also lends support to this thesis. Research on the contribution of marriage plans to achievement motivation is being conducted by Drew and Patterson (1974) currently, under contract to H.E.W.: N.I.E. in Washington D. C.

Work Discrimination

That women have been discriminated against in the labor force has been conclusively documented in the past few years (U.S. Women's Bureau, 1974; Sweet, 1974). Discrimination takes a variety of forms from practices at the point of obtaining training (Astin, 1971) to practices in hiring, promoting, and providing on the job training, and salary increases (Fuchs, 1974; Parrish, 1974; Blitz, 1974). Attitudes of employers, (Stimson, 1973; Taylor, 1973) employees, (Crowley, Levitin and Quinn, 1973) and women themselves toward women working (Hawley, 1971; Medvine and Colens, 1974) indicate widespread belief in 'myths' about women which are not verified by the facts of their behavior (U.S. Women's Bureau, 1974). Eleven of these myths with the related facts have been gathered together by the Women's Bureau (1974). These myths form the basis for a measure of work discrimination attitudes developed by Janice Birk at the University of Maryland (Birk, Cooper, and Tanney, 1973).
The relation of work discrimination to career motivation in women has not been clearly demonstrated. In the research of Farmer and Bohn (1970) for example, career motivation was increased for a group of employed women, when they were given role set (Sarbin, 1954) instructions to reduce attitudes about work discrimination. However, the role set also included instructions to reduce home-career conflict and fear of success (Horner, 1973), leaving the evidence on the effect of work discrimination inconclusive. In continuing research on career and achievement motivation in women, the author is currently examining the relationship of seven factors to such motivation, to try and tease out the contribution of each.

Achievement and career motivation in girls differs from that of boys as a result of as yet several poorly defined factors. Some of these factors have been identified in the research literature. (a) Reduction in academic self-confidence for girls in college (Tomlinson-Keasey, 1974); (b) Fear of success in college and high school women, found in varying degrees depending on the perceived social sanction given to women's careers (Horner, 1973; Katz, 1973; Monahan et al., 1974); (c) Vicarious achievement motivation found to contribute to women's contentment with traditional career roles such as secretary, elementary school teacher and nurse (Lipman-Blumen, 1972); (d) Home-career conflict found in both college women and working women to inhibit career motivation (Morgan, 1962; Farmer & Bohn, 1970); (e) Work discrimination beliefs have been found to inhibit career motivation (Birk et al., 1973); (f) Studies of academic motivation have found risk taking behavior lower in girls than in boys (see review by Maccoby & Jacklin, 1974); and (g) A seventh factor, sex role orientation, was also found to affect achievement motivation (Alper, 1974; Entwisle, 1972).
Previous studies have typically looked at the effect of one of these variables, and have not controlled for the possible effect of the others on motivation. Other research has examined the effect of these variables on academic motivation, still other research the effect on career motivation, rather than both.

The author's present study is examining the potency of the above seven variables to predict (a) achievement motivation and (b) career motivation in samples of high school, college undergraduates, and women returning to higher education after an absence of at least five years.

At least two benefits of this line of research should be:

1. The research, should at the very least, shed more light on the causes of lower achievement or career motivation in women and the related lower interest in preparing for and entering the professions. A more differentiated picture of achievement motivation in women as compared to men should emerge.

2. This research will lead to the development of a measure capable of identifying why a particular high ability girl or woman is low in achievement or career motivation and would permit early diagnosis of inhibiting attitudes. This diagnostic measure would enable counselors and teachers to prescribe change strategies more precisely than is now possible and reduce the likelihood that the wrong treatment would be given (i.e., that a highly assertive girl be given assertiveness training etc.).

Sex Free Roles: A Humanistic Goal

A number of writers recently have suggested that we should begin to teach our children more flexible attitudes toward sex roles, attitudes making it
comfortable for boys to cook and take care of children, for example, and for
girls to wield a hacksaw or drive a tractor. Psychological androgyny is the term several
these writers have used to describe this goal (Bardwick, 1974; Bem, 1974;
Calderone, 1972; Lewis, 1973; Maccoby, 1974; Mead, 1974; Saario, 1973).
"Andros" means man in Greek and "gyne" means woman, so "androgynous" liter-
ally means man-woman or "both male and female in one," according to Webster.
This word is used now to refer to "sex-free" roles, not bisexuality, as
in the past. Thus, we have Maccoby (1974) speaking of increasing sex-free-
 ego-space; Lee and Gropper (1974) speaking of a bi-cultural curriculum in the
schools; and Calderone (1972) speaking of reciprocal sex roles replacing
complementary ones:

The attitude that we are human beings first and then male and fe-
male, and that the things that we do and enjoy are not what dis-
tinguish the sexes, should begin to permeate not only the attitudes
with which we bring up our children but their toys and their child-
ren's literature. (p. 279)

Bardwick (1974) warns against trusting legislation alone to bring about the
necessary changes to make equality for the sexes in work and the economy of
reality. She suggests instead a long-range view which has goals for both
sexes. A shortrange view is one which would have women achieve all that men
have achieved and to inherit their disenchantment with success. The long
view, on the other hand, emphasizes multiple options for both men and women,
rather than stereotyped roles for either sex.

Kagan (1972) and Kohlberg (1966) found that highly sex-typed indivi-
duals invested a lot of psychological energy in maintaining their sex-typed
image. In contrast, the more androgynous individual can shift roles with the
changing situation's demands without threat. The androgynous person is com-
fortable being assertive, self-confident, independent, dependent, nurturant
and tender, when appropriate.
A bi-cultural curriculum for the schools is proposed by Lee and Gropper (1974), to promote the development of sex-free people. Basically, they suggest that boys and girls should have equal access to educational and cultural experiences, resources and training. Their proposal is less expensive than changing all the textbooks, although that may be desirable as well. Lee and Gropper illustrate how a classroom teacher might facilitate biculturalism in the classroom with the following incident:

The boy takes some playdough in a pot to the stove. He announces that he is cooking. The mother (another pupil) says 'Daddies don't cook.' The 'dog' (another pupil) says the same thing. The boy moves back from the stove -- he says in a quiet voice, 'My poppy cooks...' He stands off at a distance looking at the stove. He looks uncertain about what to do next. The teacher was watching the interaction, and she tells the two girls that daddies sometimes do cook. The boy immediately returns to the stove and starts to cook. (p. 403)

The notion of "androgyny" may be termed the philosophy toward which forward-thinking counselors can strive for both men and women.

Career guidance for the seventies should have as its primary goal preparing young persons both women and men, for survival in the world of the future, not the present and certainly not the past. The coping skills needed for survival in the world of tomorrow will require more critical thinking and imagination than ever before. As super-technology and automation take over more and more of the routine jobs, the role of men and women in the world of work will become increasingly similar, focused on brain power and problem solving. Critical skills for a future oriented career guidance curriculum should thus include teachings persons how to: predict future events, make critical judgments and decisions, make 'tentative career choices,' cope with novel environments, plan for multiple roles, and adjust to changing career opportunities.
References


