CALIFORNIA STATE UNIVERSITY, NORTH RIDGE

OCCUPATION, COMPETENCE, AND ROLE OVERLOAD AS EVALUATION DETERMINANTS OF SUCCESSFUL WOMEN

A thesis submitted in partial satisfaction of the requirements for the degree of Master of Arts in Psychology, Social Psychology

by

Linda Susan Vaughn

June, 1979
The Thesis of Linda Susan Vaughn is approved:

Linda Fidel, Ph.D.

[Signature]

Jerry [Signature], Ph.D.

Michele A. Wittig, Ph.D. Chairperson

California State University, Northridge
ACKNOWLEDGMENTS

I would like to express my appreciation to a number of people who offered invaluable service to the execution of this thesis. First, a heartfelt thanks is extended to Ms. Nan Willis who assisted in both the running of subjects and in the analyses of the projective data. Her dedication to this study was matched only by my own and working with her made this thesis not only possible but more enjoyable as well.

Second, many thanks are extended to Ms. Cecilia F. Cox whose fine talents as an actress helped insure script credibility. Next, I would like to thank Dr. Barbara Tabachnick who offered insightful comments about the methodological and statistical procedures of this design, read an earlier version of the results section of this thesis, and who along with Dr. Linda S. Fidell was one of the finest statistics professors I have ever had.

To Gary A. Jones, many warm thanks are extended for his assistance above and beyond the call of duty with the more intricate aspects of SPSS manova. In addition, a very special thank you is offered to Charles F. Hofacker who wrote a special computer program to statistically analyze the Attitudes toward Women Scale, who assisted with the BMD programs, and who helped me reduce the mountain of data inherent in a manova design this size. His unwavering emotional support for my personal and professional growth is a source of joy that lets me know just how lucky I am.

To the members of my thesis committee, I wish to first thank
Dr. Linda S. Fidell whose expert instruction in the multivariate statistics class enabled me to learn the statistics and then immediately apply them to this design. She has been an excellent statistics professor and an extremely valuable committee member.

Many thanks are extended to Dr. Jerry I. Shaw who enabled me to do a more effective experiment by providing frank criticism about the thesis when it was in the proposal stages. Working with a social psychologist of his caliber lets me know just how unfortunate for me it was that he was on sabbatical the year I took the core courses in social psychology.

Finally, to my chairperson, mentor, advisor, and friend a very special heartfelt thanks is offered to Dr. Michele A. Wittig. It is hard to know what to say of someone who has so strongly influenced my professional, personal, and political development. Perhaps all that can be said is that while I know there will be other advisors and other mentors who will influence my development, I doubt that their influence will ever have quite the impact on me again that my relationship with professor Wittig has had. It has been quite an experience that I will always warmly remember.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>111</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vii</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Nontraditional areas of success</td>
<td>3</td>
</tr>
<tr>
<td>Role overload</td>
<td>8</td>
</tr>
<tr>
<td>Attitudes</td>
<td>9</td>
</tr>
<tr>
<td>The present study</td>
<td>14</td>
</tr>
<tr>
<td>METHOD</td>
<td>18</td>
</tr>
<tr>
<td>Subjects</td>
<td>18</td>
</tr>
<tr>
<td>Apparatus and assessment measures</td>
<td>18</td>
</tr>
<tr>
<td>Experimental conditions</td>
<td>18</td>
</tr>
<tr>
<td>Procedure</td>
<td>20</td>
</tr>
<tr>
<td>RESULTS</td>
<td>22</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>36</td>
</tr>
<tr>
<td>Sex of subject</td>
<td>36</td>
</tr>
<tr>
<td>Traditional vs. nontraditional occupation</td>
<td>37</td>
</tr>
<tr>
<td>Role overload and competence</td>
<td>39</td>
</tr>
<tr>
<td>Occupation by sex of subject interaction</td>
<td>40</td>
</tr>
<tr>
<td>Occupation by competence by overload interaction</td>
<td>41</td>
</tr>
<tr>
<td>Occupation by competence by sex interaction</td>
<td>43</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>45</td>
</tr>
<tr>
<td>APPENDICES</td>
<td></td>
</tr>
<tr>
<td>A. Instructions to subjects</td>
<td>48</td>
</tr>
<tr>
<td>B. TAT type questionnaire</td>
<td>50</td>
</tr>
<tr>
<td>C. Evaluation Questionnaire</td>
<td>52</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>D. Attitudes toward women scale</td>
<td>57</td>
</tr>
<tr>
<td>E. Scripts</td>
<td>61</td>
</tr>
<tr>
<td>F. Assessment of independent variable salience</td>
<td>65</td>
</tr>
<tr>
<td>G. Pilot questionnaire assessing job prestige</td>
<td>69</td>
</tr>
<tr>
<td>H. Assessment of sex-typed occupations</td>
<td>72</td>
</tr>
<tr>
<td>I. Subjects' evaluation of the experiment</td>
<td>75</td>
</tr>
<tr>
<td>J. Explanation of experiment</td>
<td>77</td>
</tr>
</tbody>
</table>
ABSTRACT

OCCUPATION, COMPETENCE, AND ROLE OVERLOAD AS EVALUATION DETERMINANTS OF SUCCESSFUL WOMEN

by

Linda Susan Vaughn

Master of Arts in Psychology

In order to determine what variables contribute or detract from the interpersonal attraction of a successful career woman, 60 male and 60 female introductory psychology students from California State University, Northridge viewed one of eight different videotapes of a female stimulus person discussing aspects of her career and homelife. Two levels of occupation (traditional vs. nontraditional), two levels of competence (high vs. low), and two levels of role overload (high vs. low) were factorially varied for each videotape.

This manipulation served four purposes. First, it assessed whether men respond more negatively than women to a female stimulus person in a nontraditional occupation (as was suggested by one group of investigators) or whether there is no longer a sex of subject difference in response to such a cue (as was suggested by another group of investigators). Second, the study assessed whether the sex of subject diff-
erence reported by the aforementioned investigators was the result of subjects' attitudes toward women or instead a function of their sex. This information was determined by using the Attitude toward Women Scale as a covariate and thereby equalizing attitudes between the sexes. Third, this study empirically and conceptually separated the effects of role overload from competence, which previous studies had confounded. Finally, in accord with past research in interpersonal attraction, this study corroborated the finding that the competent stimulus person would be more positively evaluated than the incompetent stimulus person.

A multivariate analysis of covariance was performed upon the data. Results indicated that all main effects--competence, role overload, occupation, and sex of subject--were significant. Also significant was a sex of subject by occupation interaction and two three-way interactions. These results were discussed in the context of how they increase our understanding of college students' perceptions of successful career women.
OCCUPATION, COMPETENCE, AND ROLE OVERLOAD AS EVALUATION DETERMINANTS OF SUCCESSFUL WOMEN

Linda Susan Vaughn
California State University, Northridge

INTRODUCTION

Women have achieved in valuable areas which have few monetary rewards, such as homemaking and childrearing. However, achievement as it is traditionally defined is not common for women beyond the school years. Fewer than 10% of all eminent people cited biographical dictionaries are women (Hyde & Rosenberg, 1976). Likewise, women are not well represented in the professions; only 3% of American lawyers and 7% of American physicians are female (Hyde & Rosenberg, 1976).

Reasons as to why females achieve less than males beyond the school years have been proffered by several investigators. Horner (1972) hypothesized that females expect achievement to yield such negative consequences as social rejection and/or feelings of being unfeminine. To test this hypothesis, she asked female subjects to construct a short story in response to the projective cue, "After first term finals, Anne finds herself at the top of her medical school class." Analysis of the stories revealed that 65% of the female subjects told stories exhibiting fear of success imagery. Conversely, when male subjects were asked to respond to the John form of the stimulus, less than 10% of them told fear of success stories. Horner (1972) concluded that most women have
a motive to avoid success and that this motive was a latent and stable personality disposition which was acquired early in life.

In Horner's (1972) study, females responded only to the Anne form of the stimulus and males only to the John form of the stimulus. This commonly used projective technique is generally employed to encourage the subject to identify with the stimulus person and thereby reveal his or her own motives regarding success. However, Horner's (1972) use of this projective technique did not adequately indicate if subjects' negative responses were due to the sex of the subject or due to the sex of the cue. Monahan, Kuhn, and Shaver (1974) posited that if both males and females were exposed to the Anne cue, it would be easier to discern the motivational basis of the subjects' responses. They hypothesized that if negative reactions to the successful stimulus person were exhibited only by females then Horner's (1972) conclusions that women have a motive to avoid success would be tenable. However, if negative responses were exhibited by both sexes to the Anne cue, then Horner's (1972) conclusions would be rejected. Instead it would be assumed that women's achievements are in some way stereotypically regarded negatively by both sexes. To test these hypotheses, Monahan et al. (1974) presented male and female subjects with both the Anne and John form of the stimulus used by Horner (1972). Analyses of subjects' responses indicated that males exhibited a significantly higher proportion of negative responses to the Anne cue and females' responses approached significance ($p=.07$) in the same direction. As hypothesized, subjects responded in a stereotypic fashion: they viewed the successful female stimulus person as being unattractive, immoral, deviant, and experienc-
ing a myriad of internal and external conflicts for her deviance.
Monahan et al. (1974) concluded that both their results and Horner's (1972) results could be accounted for in terms of both sexes' belief in conventional sex role stereotypes which regard female achievement negatively. Because this interpretation has received widespread support (Bremer & Wittig, in press; Jellison, Jackson-White, Bruder, & Martyna, 1975; Lockheed, 1975; Robbins & Robbins, 1973; Tressemner, 1976, 1977), a change in the term appears justified. Rather than "fear of success" which connotes an intrapsychic basis, the term "expectation of negative consequences" (ENC) will be used throughout this paper.

Nontraditional areas of success. In addition to sex role stereotypes contributing to successful women being evaluated negatively by subjects and perhaps contributing to females' underrepresentation in the professions, a number of investigators have shown that it is not the success per se that elicits a negative response in the subjects, but instead it is the nontraditional or atypical aspect of the success. Such nontraditional success has been labeled "gender inappropriate" (Cherry & Deaux, 1978) and "deviant" (Bremer & Wittig, in press; Lockheed, 1975) by other investigators. Because these terms are value laden, the term "nontraditional" will be used to describe achievement in areas in which women are not well represented.

Cherry and Deaux (1978) reported that such nontraditional areas of success would be regarded negatively by both sexes regardless of whether the success was experienced by a male or a female. To test these hypotheses, Cherry and Deaux (1978) asked subjects to write a short story in response to the following themes:
"After first term finals, Anne (John) finds herself (himself) at the top of her (his) nursing (medical) school class."

Analyses of the stories told indicated that for the medical school cue, both sexes expressed ENC responses most frequently to the Anne form of the stimulus ("After first term finals, Anne finds herself at the top of her medical class"). Conversely, for the nursing school cue, both sexes evinced the highest frequency of ENC responses to the John form of the stimulus ("After first term finals, John finds himself at the top of his nursing school class"). For these two cues, the content of the stories told was highly similar. Both Anne's and John's success resulted in being teased and rejected by peers, having their respective femininity and masculinity questioned, and having their social lives suffer adverse consequences of the success. Few ENC responses were exhibited to the cue concerning Anne's success in nursing school. Similarly, for the cue concerning John's success in medical school few negative responses were exhibited. However, the few that were exhibited focused mainly on questioning the value of John's traditional success.

The Cherry and Deaux (1978) results are in keeping with the Monahan et al. (1974) report. The tendency for both sexes to exhibit ENC reactions to nontraditional activities suggests that such reactions are not specific to women, as was suggested by Horner (1972). Rather, both sexes exhibit negative reactions toward nontraditional activities and expect individuals who engage in such activities to suffer adverse consequences for their participation.

Janda, O'Grady, and Capps (1978) further tested how areas of
success which are perceived to be nontraditional can influence subjects' reactions toward a stimulus person. They assessed subjects' reactions to stimulus persons engaged in two sex linked occupations and one sex neutral occupation. It was hypothesized that females would respond negatively to a woman who experienced success in an occupation which was dominated by males and that males would respond negatively to a man who experienced success in an occupation that was dominated by females. To test these hypotheses they presented females with the following three feminine stimulus cues and males with the following three masculine stimulus cues:

1) "After completing her (his) year of hospital training, Betty (Dave) is selected as the top nursing student."

2) "After first term finals, Anne (John) finds that she (he) is the top child psychology graduate student."

3) "After senior year finals, Susan (Bill) finds that she (he) is in the top 10% of her (his) engineering class."

In a second part of the experiment the subjects responded exclusively to the male stimulus cues. The results for part one and part two of the study were generally the same. There was a main effect of sex with males more frequently than females expressing ENC to all of the cues. Further, a sex of subject by sex of occupational cue interaction was found with males exhibiting a progressively higher frequency of ENC as the occupations moved from engineer, to child psychologist, to nurse. Conversely, female subjects' negative responses decreased across occupations in the same order.

Although on the surface the results of the Janda et al. (1978) study seem straightforward, they do not really clarify the effects of nontraditional achievement upon subjects' reactions to a successful
stimulus person. Both male and female subjects indicated that they perceived the status of nurse to be significantly lower than the status of either child psychologist or engineer. Thus this study confounds status with perceived nontraditional behavior and the interpretation of these results is difficult.

A study by Gross, Ross, and Wittig (1975) is free of the confounds present in the work of Janda et al. (1978). Gross et al. (1975) equated the stereotypically masculine occupations of accountant and electrician with the stereotypically feminine occupations of dietitian and secretary. A pilot study indicated that these occupations were of equally moderate prestige and were of the sex-type designated. To investigate the attitudes of college males toward these male and female occupations, they asked male subjects to respond to the following four cues:

1) "Joan (John) learns she (he) is considered the most up and coming young accountant (electrician) around."

2) "Joan (John) learns she (he) is considered the most up and coming young dietitian (secretary) around."

The cues were counterbalanced so that subjects received two "correct" sex (traditional achievement) and two "cross" sex (nontraditional achievement) job situations. Results indicated that males in "masculine" jobs were viewed more positively than females in "feminine" jobs. Further, post hoc analyses of some of the stories written in response to the cues indicated that when a woman was depicted as occupying a nontraditional job, the woman was described as experiencing unfortunate consequences for her success. Conversely, the same subjects who told such stories wrote stories of complete success for males in non-
traditional jobs. Gross et al. (1975) concluded that women may be absent from the professions because they are evaluated as inferior in the first place. Moreover, when they do succeed, their behavior may be considered aberrant and therefore regarded negatively.

Lockheed (1975) partially corroborated the Gross et al. (1975) report. Like Gross et al., she assessed subjects' reactions to a successful woman in a nontraditional area of endeavor. However, unlike Gross et al. (1975) she directly minimized individual subject differences in response to the appropriateness of the female stimulus person's success by stating the percentage of women participating in this area. She did this by presenting college aged male and female subjects with one of the following cues:

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

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

The first cue was designed to assess subjects' reactions to a successful woman in a nontraditional area of endeavor; such nontraditional success being exemplified by the fact that all of Anne's classmates were men. The purpose of the second cue was the same as the first except that success was depicted as being normative since half of Anne's classmates were women. Analyses of the subjects' responses indicated that when half of Anne's classmates were women and Anne's success was considered normative, there was no sex of subject difference in response to the cue. However, when success was depicted as occurring in an area in which few females participated, twice as many
males and females evinced ENC responses to the cue.

Lockheed's (1975) results suggest that the attitudes of women are more favorable than those of men toward successful women. However, while men respond more negatively than women, their reactions are tempered by the percentage of other females participating in the area in which the success occurs. Thus, in keeping with the studies mentioned earlier, the success of the woman is not the issue as much as is the atypical nature of her actions. Females underrepresentation in the professions may perhaps be explained in part by the hostile reactions of men to such nontraditional achievement.

Role overload. Some of the subjects in the Monahan et al. (1974) and Lockheed (1975) studies described the stimulus person as experiencing a great deal of role conflict when success was achieved in a nontraditional area. Successful stimulus persons were pictured as experiencing a variety of internal and external conflicts for their deviance. Hall (1972) described such role conflict as the result of conflicts arising from multiple roles rather than from conflicting expectations within a particular role. Further, the conflicts between roles are more often a function of role overload and time conflicts, than a function of role incompatibility. Bremer and Wittig (in press) showed how cues directly indicating role overload influenced subjects' responses toward a successful female. They constructed four cues: traditional vs. nontraditional achievement and presence vs. absence of role overload. For the nontraditional cue, the female stimulus person had just returned to engineering school where she was at the top of her all male class. The traditional cue was identical to
the nontraditional cue, except that the woman returned to nursing school where she was at the top of her all female class. For the role overload cue, the female stimulus person was happily married, had three young children, was an elder in the church, active in the PTA, and assisted her husband's business as a bookkeeper. The woman in the no overload cue was simply happily married. When subjects' reactions to these cues were assessed, the results showed that subjects evinced more ENC to cues indicating nontraditional achievement and to cues indicating overload. Further, when both nontraditional achievement and overload were presented in the same cue, an additive effect was observed with subjects exhibiting the highest frequency of ENC responses to this cue. However, unlike the reports of Lockheed (1975) and Monahan et al. (1974) who found that male subjects evinced more ENC to female success in a nontraditional area than did female subjects, Bremer and Wittig (in press) reported no such sex of subject difference. The Bremer and Wittig subjects ranged in age from 30 yrs. to 60 yrs. and it may be that these results do not generalize to older subjects.

Attitudes. Subjects' sex role attitudes accompany nontraditional achievement and role overload as a factor which contributes to successful women being evaluated negatively by subjects. Alper (1974) hypothesized that female subjects who were liberal or nontraditional in their attitudes toward the roles each sex assumes would respond more favorably to an achieving woman than would females who were more conservative or traditional in their attitudes. To test this hypothesis she constructed the Wellesley Role-Orientation Scale (WROS); a 24
item paper and pencil self rating scale consisting of three 7-item subscales and three filler items. The three areas tapped by the subscales included (a) traits college women generally regard as "feminine" rather than "masculine", (b) role activities they find acceptable for themselves as women, and (c) career and/or career oriented activities they consider more appropriate for men than for women. Women who scored high on the WROS (upper one third of the WROS distribution) were classified as traditionally oriented females. Women who scored low on the WROS (lower one third of the WROS distribution) were classified as nontraditionally oriented females. In a series of studies conducted by her and her students, Alper (1974) reported that nontraditionally oriented WROS scorers told significantly more success stories in response to several different picture stimuli depicting stereotypically masculine and feminine success than did traditionally oriented WROS scorers.

O'Leary and Hammack (1975) partially corroborated the Alper (1974) report. They found that subjects' responses toward a successful female were partially a function of the subjects' role orientation (traditional vs. nontraditional) and the context within which the success was presented. They arrived at their results by presenting high school females with the following four cues depicting competitive success:

1) "After midterm exams, Anne finds herself at the top of her medical school class."

2) "Susan finds that she will be graduating first in her nursing school class."

3) "Margaret has been elected president of the garden club in the
city in which she resides."

4) "Jill has been awarded a one-exhibitor showing of her impressionistic paintings at a local art gallery."

Results indicated that in accord with Alper's (1974) findings, traditionally oriented subjects expressed significantly more ENC responses across achievement cues than did nontraditionally oriented subjects. Within group analyses of subjects' responses to each cue indicated that traditionally oriented females exhibited the highest proportion of ENC responses to the social-domestic and artistic cues (stimulus c and d respectively). Conversely, nontraditionally oriented subjects exhibited the highest proportion of ENC responses to the traditionally masculine and traditionally feminine competitive success cues (stimulus a and b respectively). These last two findings were puzzling to O'Leary and Hammack (1975) because the work of Alper (1974) would have indicated that nontraditionally oriented subjects would not exhibit ENC responses to the masculine and feminine competitive success cues while traditionally oriented subjects would exhibit such responses.

The O'Leary and Hammack (1975) report showed that the relationship between gender role orientation and achievement was not as clear cut as was originally postulated by Alper (1974). The work of Tresemer (1976, 1977) further calls into question the validity of Alper's WROS. In a thorough review of the literature in this area, he collected the data of many studies and analyzed the results by using a chi square test of association. His results indicated subjects' responses toward a successful woman showed no relationship to their gender role orientation.
Depner and O'Leary (1976) have posited that there may still be a relationship between gender role orientation and subjects' responses toward a successful woman, but the relationship may be attenuated by the crudeness of the measure used. Supporting this hypothesis is the work of Spence, Helmreich, and Stapp (1975). They showed that subjects' responses toward a successful woman differed as a function of the subjects' attitudes toward women and the assessment measures used to determine the subjects' reactions to the stimulus cue (e.g. TAT vs. questionnaire procedures). They demonstrated this finding by first presenting subjects with the Attitudes toward Women Scale (Spence & Helmreich, 1972); a 55-item scale which asks subjects to respond on a four point rating scale of Agree Strongly, Agree Mildly, Disagree Mildly, and Disagree Strongly. The items describe the roles, rights, and privileges of women in such areas as vocational and educational pursuits, dating and courtship, sexual behavior, and marital roles. Further, unlike Alper's (1974) WROS which is administered only to women, this measure is administered to both sexes. They then presented subjects with a female stimulus person on videotape who was either competent or incompetent. The competent stimulus person had an A- average in her college course work, planned to get her Ph.D., was in charge of a tutorial program in mathematics and science for disadvantaged high school students, and had taught Red Cross lifesaving. The incompetent stimulus person had a C- average, was hoping to get a technicians job after graduation, and had only thought about or had dropped out of extra-curricular activities. The stimulus person was then further classified as having either masculine or feminine interests and
hobbies. The masculine stimulus person was a physics major, interested in sports cars and their maintenance, and enjoyed skiing, tennis, and reading history and biography. The stimulus person with feminine interests was an interior and fashion design major who enjoyed bridge, gourmet cooking, art, and the college glee club. Then, depending upon the experimental condition, subjects were asked to evaluate the stimulus person by either answering a questionnaire or by responding to a series of TAT type questions and then answering the questionnaire. Results indicated that when subjects' reactions were assessed using just the questionnaire procedures that both sexes exhibited the most favorable responses to the competent female with masculine interests. When subjects were first asked to respond to TAT type questions about the stimulus person and then answer the questionnaire the responses to the questionnaire changed. In this condition, only women with liberal attitudes about women's rights (as assessed by the Attitudes toward Women Scale) exhibited a positive attitude toward the competent female with masculine interests. Females with conservative attitudes toward women's rights and both liberal and conservative males evaluated the competent woman with feminine interests the most favorably. The authors concluded that those subjects who first responded to the TAT questions and then answered the questionnaire may have responded differently than those subjects who simply answered the questionnaire because attending to the TAT cues gave the subjects greater time to formulate their impressions about the stimulus person before answering the questionnaire.

The data from the projective condition of Spence et al. (1975)
supports the Alper (1974) and O'Leary and Hammack (1975) report that subjects' attitudes about women (i.e. their sex role orientation) influenced their reactions toward a successful woman. It further corroborates the reaction against achievement in nontraditional areas of success that was reported by Cherry and Deaux (1978), Gross et al. (1975), and Janda et al. (1978). Like the Bremer and Wittig (in press) report, the Spence et al. (1975) study does not support the results of studies which found that men respond more negatively than women to deviant female success (Janda et al., 1978; Lockheed, 1975; Monahan et al., 1974). It may be that in these studies which reported a sex difference, subjects' reactions were not really a function of sex, but instead a function of attitudes with which sex may have been partially confounded.

**The present study.** The results of the research reviewed above suggests that there are some unresolved issues present in the literature. The first issue involves the independent assessment of competence and role overload. The Spence et al. (1975) study attempted to assess the former while the Bremer and Wittig (in press) study was designed to measure the latter. These dimensions seem to be confounded in both studies. For example, it is not clear why subjects in the Bremer and Wittig (in press) report reacted negatively to role overload while the subjects in the Spence et al. (1975) report did not exhibit such negative reactions. Although Spence et al. (1975) did not label their competent stimulus person's activities as role overload, it would seem that having an A- average in college course work, being president of the campus ecology club, in charge of a tutorial
program for disadvantaged high school students, and being proficient in skiing, tennis, and sports car maintenance would qualify one as experiencing role overload. Similarly, although Bremer and Wittig (in press) did not label their role overload stimulus person as being competent, it would seem that being a mother to three young children, an elder in the church, active in the PTA, assisting one's husband as a bookkeeper for his business, and being at the top of one's nursing school class implies a certain amount of competence in handling one's affairs. One purpose of the present study was to separate these two variables and independently assess their effects upon subjects' reactions to a female stimulus person (SP).

In order to do so, it was important to conceptually distinguish between the two variables. Competence was defined as handling one's affairs proficiently while overload was defined as having too many obligations and too little time to fulfill each one.

A second problem present in the literature is the lack of standardization in scoring ENC. Only one group of investigators cited in this review employed any kind of standardized scoring procedure for the ENC measure (Bremer & Wittig, in press). Prior to the availability of the Horner, Tresemer, Berens, and Watson (1973) scoring manual, investigators were forced to rely on their own judgments as to what constituted ENC imagery (Tresemer, 1977). Following Bremer and Wittig (in press) the present study standardized the ENC scoring procedure by using the manual prepared by Horner et al. (1973) and the one prepared by Peplau (1973) which closely follows Horner et al. (1973).

A third problem present in the literature is the common practice
among investigators of generalizing subjects' ENC responses to other interpersonal attraction variables. Subjects who expressed high ENC responses toward the SP were said to evaluate her negatively on an entire array of interpersonal traits. For example, the SP who was expected to suffer negative consequences was also perceived to be unlikable, unattractive, immoral, etc. (Gross et al., 1975; Lockheed, 1975; Monahan et al., 1974). Rather than attempt to discern subjects' personal feelings about the SP, other than whether or not they expect her to experience negative consequences, the present study used the Spence et al. (1975) Evaluation Questionnaire which directly asks subjects for ratings of the SP's likability, intelligence, adjustment, etc.

Further following Spence et al. (1975) the SP was videotaped rather than the common practice of describing the SP in a written cue. This procedure was employed to approximate a more life-like situation and to assess the generalizability of studies using written cues. Moreover, this study differed from other studies in that it assessed subjects reactions toward an SP employed in one of the professions, rather than the common practice of having subjects evaluate a successful woman on the basis of her school achievements and extra-curricular activities.

In addition to ameliorating the aforementioned problems by the methods already discussed, the purpose of the present study was fourfold. First, to assess whether men respond more negatively than women to a female stimulus person in a nontraditional occupation (as was suggested by Janda et al., 1978; Lockheed, 1975; Monahan et al., 1974).
or whether there is no longer a sex of subject difference in response to such a cue (as was suggested by Bremer and Wittig, in press).

Second, the study assessed if the sex difference reported by the aforementioned investigators was the result of subjects attitudes toward women or instead a function of the sex of the subject. This information was determined by using the Spence, Helmreich, and Stapp (1973) short form of the Attitudes toward Women scale (AWS) as a covariate and thereby equalizing attitudes between the sexes. If no sex of subject difference was found then it could be assumed that subjects' reactions were more a function of their attitudes than their sex. Third, the study assessed whether the Bremer and Wittig (in press) main effect of role overload was actually due to subjects responding to competence. If the Bremer and Wittig (in press) subjects did respond negatively to role overload (and not instead to competence), then it was expected that subjects in the present study would also respond more negatively to a female stimulus person experiencing role overload than to one not experiencing role overload. Fourth, the results were expected to further substantiate the Spence et al. (1975) report that the competent SP would be evaluated more positively than the incompetent SP.
METHOD

Subjects

The subjects were 80 male and 80 female introductory psychology students from California State University, Northridge. Subjects were participating in the experiment to fulfill a course requirement.

Apparatus and Assessment Measures

A reel to reel videotape recorder and video camera was used to videotape the SP. Also used was a subject instruction sheet (Appendix A) and a TAT type questionnaire (Appendix B) asking the following:

1) What is happening? What kind of person is this?
2) What has led up to the situation? That is, what has happened in the past?
3) What is being thought? What does the person want?
4) What will happen? What will be the future of person over the years?

Finally, the Spence et al. (1975) Evaluation Questionnaire (Appendix C) was used as well as the short form of the AWS (Appendix D).

Experimental Conditions

Each of the eight videotapes was purportedly an interview with a woman who agreed to discuss some aspects of her career and home life. The SP was in her early 30's, moderately attractive in physical appearance, and had a nondescript style of hair and dress. She was videotaped while seated at a table, behind which was seated the non-visible person to whom she was speaking. The same SP was used in all eight conditions.
The two levels of occupation (traditional vs. nontraditional), two levels of competence (high vs. low), and two levels of role overload (high vs. low) were factorially varied for each script (Appendix E). The salience of each independent variable was assessed by a pilot study (Appendix F). The woman in the traditional occupation received her B.A. from NYU in home economics with special emphasis in foods and nutrition. To further emphasize her traditional background, her graduating class was depicted as being composed entirely of women. She was presently employed for the Betty Crocker division of General Foods where her duties were to evaluate new recipes for cakes and frostings.

The nontraditional woman received her B.A. from NYU in industrial design with special emphasis in drafting. Her nontraditional background was emphasized by the fact that she was the only woman in her graduating class. She was presently employed for the Southern California Edison gas company where her duties were to evaluate designs for energy saving equipment which could be installed underground. A pilot study determined that these two jobs were equally prestigious and sex typed in the direction indicated (Appendix G & H).

The competent woman described herself as enjoying her job and being pretty good at it. She had just been awarded by her company for outstanding service and was given a two week paid vacation to Honolulu. The incompetent woman did not feel capable of performing the duties required of her job and felt her boss' expectation of her was too high. She was currently on probation at her job and this was her fourth job this year. She was prepared to seek unemployment compensation if she was fired.
In addition to her full time career, the woman experiencing role overload attended her local junior college three nights a week, helped her husband's business two nights a week, and was an active member of her church and the ecology organization Greenpeace. Because her week days were so busy, she spent the better part of the week-end catching up on house cleaning, marketing, and other domestic chores.

The woman not experiencing role overload stressed the amount of free time she seemed to have. When she got home from work she enjoyed reading, playing cards, or simply watching T.V. with her husband.

Procedure

At the beginning of the semester, the AWS was administered to several introductory psychology classes. Students were asked to indicate their birthdate and mother's maiden name at the top of the scale. Later in the semester, a random sample of volunteers selected from the classes which filled out the AWS were used as subjects in the study. The subjects were randomly assigned to eight groups of 10 subjects each. Each subject viewed one videotaped SP discussing her career and home life in one of the eight conditions. Subjects were run individually by the experimenter or her assistant.

After subjects viewed the SP they were given five minutes to answer the four TAT questions. Next, the subjects were administered the Evaluation Questionnaire and given as much time as necessary to answer each item. Finally, subjects were given an open-ended questionnaire on which they were asked to describe what they thought the experiment was about, what its purpose was, and what, if anything, they found confusing or ambiguous about the study (Appendix I). The pur-
pose of the study was then explained (Appendix J), all questions were answered, and subjects were thanked for their cooperation.
RESULTS

A 2 x 2 x 2 x 2 (traditional vs. nontraditional, competence vs. incompetence, overload vs. no overload, and sex of subject) multivariate analysis of covariance was performed on the 18 dependent variables listed in Table one. The AWS served as the covariate. High scores on the AWS indicated liberal attitudes toward women and low scores indicated conservative attitudes toward women. The first 17 dependent variables were taken from the Spence et al. (1975) Evaluation Questionnaire. The 18th dependent variable was assessed by the scoring procedure outlined by Peplau (1973) and Horner, Watson, and Berens (1973). The intercorrelations of the 18 dependent variables and the covariate are also shown in Table one.

Practical limitations of the multivariate analysis of covariance technique were assessed by tests for homogeneity of regression and outliers. A nonsignificant result for the homogeneity of regression was obtained, approximate F (18, 125)=1.22, p > .05; thus indicating that the regression coefficients for the covariate were similar at different levels of each of the independent variables. In addition, no outlying cases were found.

Using Wilks' multivariate test of significance, all main effects, one two-way interaction, and two three-way interactions were found to be significant. To assess the importance of the dependent variables for each significant main effect and interaction, the Roy-Bargmann stepdown procedure was used. This procedure requires a rank ordering of the dependent variables from most to least important. Since none of
Table 1

Intercorrelations among the dependent variables.

<table>
<thead>
<tr>
<th></th>
<th>AWS</th>
<th>Intelligence</th>
<th>Appearance</th>
<th>Poise</th>
<th>General likability</th>
<th>Neatness</th>
<th>Tact</th>
<th>Maladjustment</th>
<th>Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>-.07</td>
<td>.30***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poise</td>
<td>-.04</td>
<td>.37***</td>
<td>.24***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General likability</td>
<td>-.05</td>
<td>.39***</td>
<td>.29***</td>
<td>.47***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neatness</td>
<td>.00</td>
<td>.36***</td>
<td>.27***</td>
<td>.46***</td>
<td>.63***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tact</td>
<td>.00</td>
<td>.33***</td>
<td>.24***</td>
<td>.45***</td>
<td>.51***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maladjustment</td>
<td>-.04</td>
<td>-.43***</td>
<td>-.16*</td>
<td>-.57***</td>
<td>-.52</td>
<td>-.55</td>
<td>-.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggression</td>
<td>-.08</td>
<td>.39***</td>
<td>.18**</td>
<td>.40***</td>
<td>.36***</td>
<td>.39***</td>
<td>.36***</td>
<td>-.52***</td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>-.05</td>
<td>.45***</td>
<td>.17*</td>
<td>.51***</td>
<td>.41***</td>
<td>.31***</td>
<td>.29***</td>
<td>-.53***</td>
<td>.63***</td>
</tr>
<tr>
<td>Dislike as coworker</td>
<td>.06</td>
<td>-.40***</td>
<td>-.23**</td>
<td>-.47**</td>
<td>-.66***</td>
<td>-.62***</td>
<td>-.45***</td>
<td>.70***</td>
<td>-.33***</td>
</tr>
<tr>
<td>Warmth</td>
<td>.03</td>
<td>.22**</td>
<td>.18**</td>
<td>.52***</td>
<td></td>
<td>.42***</td>
<td>.41***</td>
<td>-.52***</td>
<td>.22***</td>
</tr>
<tr>
<td>Dislike as friend</td>
<td>.02</td>
<td>-.48***</td>
<td>-.20**</td>
<td>-.46**</td>
<td>-.67***</td>
<td>-.58***</td>
<td>-.44***</td>
<td>.62***</td>
<td>-.43***</td>
</tr>
<tr>
<td>Withstand pressure</td>
<td>-.02</td>
<td>.49***</td>
<td>.10**</td>
<td>.63***</td>
<td>.55***</td>
<td>.56***</td>
<td>.51***</td>
<td>-.72</td>
<td>.67***</td>
</tr>
<tr>
<td>Dominance</td>
<td>-.06</td>
<td>.39***</td>
<td>.19**</td>
<td>.55***</td>
<td>.34***</td>
<td>.35***</td>
<td>.37***</td>
<td>-.56***</td>
<td>.76***</td>
</tr>
<tr>
<td>Femininity</td>
<td>.01</td>
<td>.10</td>
<td>.33***</td>
<td>.06</td>
<td>.30***</td>
<td>.30***</td>
<td>.17*</td>
<td>-.14**</td>
<td>.05*</td>
</tr>
<tr>
<td>Like as an employee</td>
<td>-.07</td>
<td>.45***</td>
<td>.30***</td>
<td>.56***</td>
<td>.65***</td>
<td>.66***</td>
<td>.52***</td>
<td>-.73***</td>
<td>.58***</td>
</tr>
<tr>
<td>Marital success</td>
<td>.03</td>
<td>.21***</td>
<td>.19**</td>
<td>.42***</td>
<td>.42***</td>
<td>.37***</td>
<td>.34***</td>
<td>-.56***</td>
<td>.27***</td>
</tr>
<tr>
<td>ENC</td>
<td>-.60***</td>
<td>-.04</td>
<td>.40***</td>
<td>-.19**</td>
<td>-.48***</td>
<td>-.61***</td>
<td>-.49***</td>
<td>-.34***</td>
<td>.60***</td>
</tr>
</tbody>
</table>

* p < .05  
** p < .01  
*** p < .001
Table 1 (con.)

<table>
<thead>
<tr>
<th></th>
<th>Independence</th>
<th>Dislike as coworker</th>
<th>Warmth</th>
<th>Dislike as friend</th>
<th>Withstand pressure</th>
<th>Dominance</th>
<th>Femininity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dislike as coworker</td>
<td>-.36***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warmth</td>
<td>.25***</td>
<td>-.65***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dislike as friend</td>
<td>-.43***</td>
<td>.74***</td>
<td>-.64***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withstand pressure</td>
<td>.57***</td>
<td>-.65</td>
<td>.48***</td>
<td>-.63***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominance</td>
<td>.71***</td>
<td>-.32***</td>
<td>.25***</td>
<td>-.40***</td>
<td>.66***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Femininity</td>
<td>-.01</td>
<td>-.26***</td>
<td>.26***</td>
<td>-.18**</td>
<td>.13*</td>
<td>-.00</td>
<td></td>
</tr>
<tr>
<td>Like as an employee</td>
<td>.51***</td>
<td>-.68***</td>
<td>.57***</td>
<td>-.67***</td>
<td>.79***</td>
<td>.58***</td>
<td>.24***</td>
</tr>
<tr>
<td>Marital success</td>
<td>.14***</td>
<td>-.49***</td>
<td>.47***</td>
<td>-.44***</td>
<td>.49***</td>
<td>.29***</td>
<td>-.27***</td>
</tr>
<tr>
<td>ENC</td>
<td>-.41***</td>
<td>-.36***</td>
<td>.53***</td>
<td>-.40***</td>
<td>.48***</td>
<td>-.62***</td>
<td>-.36***</td>
</tr>
</tbody>
</table>

Like as an employee  Marital success

<table>
<thead>
<tr>
<th></th>
<th>Like as an employee</th>
<th>Marital success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital success</td>
<td>.59***</td>
<td></td>
</tr>
<tr>
<td>ENC</td>
<td></td>
<td>-.61***</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01  
***p < .001
the items in the Spence et al. (1975) Evaluation Questionnaire or Horner's (1972) fear of success measure was considered more important than any other, this ranking was based on the size of the correlation between the dependent and canonical variables. (The canonical variable is a linear combination of the dependent variables which maximally weights each dependent variable to reveal group differences. Correlating the canonical and dependent variable provides a measure of which variables are most strongly contributing to the multivariate significance; Tabachnick & Fidell, in preparation). Using these correlations as a rank ordering guide, the Roy-Bargmann stepdown procedure was performed. The highest ranking dependent variable was tested as a univariate analysis of variance. Then, each successive dependent variable was tested with the higher priority dependent variables serving as covariates. In this manner, it was possible to determine whether each new dependent variable significantly added to the combination of dependent variables already tested. A cut off of $p < .01$ was used as the criterion of inclusion for those dependent variables contributing to the multivariate significance.

In testing the sex of subject independent variable, it was found that male and female subjects evaluated the SPs differently from one another, approximate $F (18, 126)=1.80, p < .05$. These results reflect a moderate strength of association between the sex of subject and the combined dependent variables, $\eta^2 = .21$. Males found the SPs more poised (adjusted mean 3.77) than did females (adjusted mean 3.29); stepdown $F (1, 148)=8.95, p < .01, \eta^2 = .06$. Conversely, females perceived the SP to be more able to withstand pressure (adjusted mean 3.39) than did
males (adjusted mean 3.28); stepdown $F(1, 131)=6.00, p \leq .01, \eta^2=.03$. (The adjusted mean reflects the mean for each variable after the variance accounted for by attitudes toward women has been removed.)

Traditional and nontraditional SPs were perceived as being significantly different, approximate $F(18, 126)=3.39; p \leq .001$. These results reflect a moderate strength of association between occupation (traditional vs. nontraditional) and the combined dependent variables, $\eta^2=.34$. Subjects perceived the nontraditional woman to be more intelligent (adjusted mean 4.82) than the traditional woman (adjusted mean 4.02); stepdown $F(1, 143)=42.20, p \leq .001, \eta^2=.30$.

The SP experiencing role overload was perceived as being significantly different from her no role overload counterpart, approximate $F(18, 126)=2.03, p \leq .01, \eta^2=.22$. Subjects perceived the role overload SP to be more independent (adjusted mean 4.35) than her no role overload counterpart (adjusted mean 3.60); stepdown $F(1, 143)=14.51, p \leq .001, \eta^2=.10$. Moreover, the SP experiencing role overload was considered a more desirable friend (adjusted mean 3.35) than her no role overload counterpart (adjusted mean 3.26); stepdown $F(1, 131)=9.74, p \leq .001, \eta^2=.07$.

The competent and incompetent SP were perceived as being significantly different, approximate $F(18, 126)=34.10, p \leq .001$. These results reflect a strong association between perceived competence (high and low) and the combined dependent variables, $\eta^2=.83$. The competent SP was perceived as more desirable as an employee, better able to withstand pressure, and more desirable as a friend than the incompetent SP. Subjects expressed more ENC for the incompetent SP.
than the competent SP and also perceived the incompetent SP to be
more maladjusted than her competent counterpart. The adjusted means,
stepdown Fs, and values of \( \eta^2 \) for each of these variables is shown in
Table two. A summary of the results for all main effects is also shown
in Table two.

A two-way interaction (traditional vs. nontraditional occupation
by sex of subject) was found, approximate \( F(18, 126)=2.97, p < .001 \). 
These results reflect a moderate strength of association between the
interacting variables and the combined dependent variables, \( \eta^2 = .30 \).
Male subjects evinced a higher level of ENC responses for the nontradi-
tional SP (adjusted mean 6.07) than for the traditional SP (adjusted
mean 5.27). Conversely, females exhibited more ENC for the traditional
woman (adjusted mean 7.08) than the nontraditional woman (adjusted
mean 4.83), stepdown \( F(1, 143)=15.75, p < .001, \eta^2 = .11 \). The second
dependent variable to contribute to the interaction was the variable
assessing how much the subjects would dislike the SP as a friend; step-
down \( F(1, 142)=13.32, p < .001, \eta^2 = .09 \). Male subjects disliked the
traditional SP (adjusted mean 3.36) more than the nontraditional SP
(adjusted mean 2.82). Conversely, females found the nontraditional SP
more unlikable (adjusted mean 3.68) than the traditional SP (adjusted
mean 3.35). Graphic presentation of the two-way interaction is shown
in Figure one.

A three-way interaction (traditional vs. nontraditional occupation
by competence vs. incompetence by overload vs. no overload) was found,
approximate \( F(18, 126)=2.18, p < .01 \). These results reflect a mod-
erate strength of association between the interacting independent vari-
Table 2

Means, adjusted means, stepdown Fs, and eta squared for each dependent variable that significantly contributed to the main effects of sex of subject, occupation, overload, and competence. a

<table>
<thead>
<tr>
<th>Variable</th>
<th>Female</th>
<th>Male</th>
<th>Stepdown F</th>
<th>df</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poise</td>
<td>(3.36) 3.29</td>
<td>(3.70) 3.77</td>
<td>8.95**</td>
<td>1,143</td>
<td>.06</td>
</tr>
<tr>
<td>Withstand pressure</td>
<td>(3.39) 3.39</td>
<td>(3.28) 3.28</td>
<td>6.00**</td>
<td>1,131</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>Nontraditional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligence</td>
<td>(4.02) 4.02</td>
<td>(4.82) 4.82</td>
<td>42.20***</td>
<td>1,143</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>Overload</td>
<td>No Overload</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>(4.35) 4.35</td>
<td>(3.60) 3.60</td>
<td>14.41***</td>
<td>1,143</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>Competence</td>
<td>Incompetence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Like as a friend</td>
<td>(3.35) 3.35</td>
<td>(3.26) 3.26</td>
<td>9.74</td>
<td>1,131</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Like as an employee</td>
<td>(5.36) 5.36</td>
<td>(2.20) 2.20</td>
<td>339.89**</td>
<td>1,143</td>
</tr>
<tr>
<td></td>
<td>Withstand pressure</td>
<td>(4.59) 4.59</td>
<td>(2.07) 2.07</td>
<td>42.95**</td>
<td>1,142</td>
</tr>
<tr>
<td></td>
<td>Maladjustment</td>
<td></td>
<td>(2.32) 2.31</td>
<td>(2.07) 2.07</td>
<td>7.44**</td>
</tr>
<tr>
<td></td>
<td>ENG</td>
<td></td>
<td>(3.07) 3.08</td>
<td>(8.55) 8.54</td>
<td>12.07***</td>
</tr>
<tr>
<td></td>
<td>Like as a friend</td>
<td></td>
<td>(2.66) 2.66</td>
<td>(3.95) 3.95</td>
<td>5.89**</td>
</tr>
</tbody>
</table>

** p < .01  
*** p < .001

aNumbers in parentheses reflect the means for each dependent variable when the covariate, AWS, was not included in the analyses. The adjusted means reflect inclusion of AWS.
Fig. 1. Adjusted mean values for the dependent variables which significantly contributed to the occupation by sex interaction.
ables and the combined dependent variables, $\eta^2 = .24$. The variables which significantly contributed to the three-way interaction were perceived level of intelligence of the SP and ENC. The stepdown $F$s, values for $\eta^2$, means, and adjusted means for each of the dependent variables can be seen in Table three. By referring to the graphic presentation of the three-way interaction shown in Figure two, it can be seen that the competent nontraditional SP who was not experiencing role overload was considered the most intelligent of all the SPs. Perceived as least intelligent was the incompetent traditional SP experiencing role overload. For the dependent variable ENC, the incompetent SP was perceived as most likely to experience negative consequences regardless of whether her occupation was traditional or nontraditional and regardless of whether or not she was experiencing role overload. The SP perceived as least likely to experience negative consequences was the competent nontraditional woman who was not experiencing role overload.

A second three-way interaction (traditional vs. nontraditional occupation by competence vs. incompetence by sex of subject) was obtained, approximate $F(18, 126) = 2.93$, $p < .001$. These results reflect a moderate strength of association between the interacting independent variables and the combined dependent variables, $\eta^2 = .29$. The variables which significantly contributed to this interaction were ENC and desirability as a coworker. The stepdown $F$s, values for $\eta^2$, means, and adjusted mean values for each dependent variable can be seen by referring again to Table three. The graphic presentation of the three-way interaction shown in Figure three indicates that female
Table 3
Means, adjusted means, stepdown Fs, and eta squared for each dependent variable that significantly contributed to the two triple interactions.

Occupation by Competence by Overload

<table>
<thead>
<tr>
<th></th>
<th>Traditional</th>
<th>Nontraditional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overload</td>
<td>No Overload</td>
</tr>
<tr>
<td>DV--Intelligence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>(4.86) 4.80</td>
<td>(4.15) 4.15</td>
</tr>
<tr>
<td>Incompetence</td>
<td>(3.35) 3.34</td>
<td>(3.80) 3.79</td>
</tr>
<tr>
<td>DV--ENC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>(2.50) 2.50</td>
<td>(4.90) 4.90</td>
</tr>
<tr>
<td>Incompetence</td>
<td>(0.65) 0.65</td>
<td>(0.65) 0.65</td>
</tr>
</tbody>
</table>

Occupation by Competence by Sex

<table>
<thead>
<tr>
<th></th>
<th>Traditional</th>
<th>Nontraditional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Females</td>
<td>Males</td>
</tr>
<tr>
<td>DV--ENC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>(3.20) 3.19</td>
<td>(4.20) 4.22</td>
</tr>
<tr>
<td>Incompetence</td>
<td>(11.00) 10.98</td>
<td>(6.30) 6.31</td>
</tr>
<tr>
<td>DV--Dislike as coworker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>(2.25) 2.26</td>
<td>(4.20) 4.22</td>
</tr>
<tr>
<td>Incompetence</td>
<td>(4.40) 4.41</td>
<td>(4.80) 4.79</td>
</tr>
</tbody>
</table>

**p < .01
***p < .001

bNumbers in parentheses reflect the means for each dependent variable when the covariate, AWS, was not included in the analyses. The adjusted means reflect inclusion of AWS.
Fig. 2. Adjusted mean values for the dependent variables which contributed to the occupation by competence by overload interaction.
subjects perceived the incompetent traditional SP to be most likely to experience negative consequences and the competent nontraditional SP to be least likely to experience negative consequences. For male subjects, the incompetent nontraditional SP was perceived as most likely to experience negative consequences while the competent nontraditional SP was perceived as least likely to experience negative consequences. For the dependent variable "dislike as a coworker," male and female subjects found the incompetent traditional SP to be the least desirable as a coworker. The competent traditional SP was considered the most desirable coworker by females while males preferred the competent nontraditional SP. No other significant interactions were obtained. A summary of these results assessed using Pillais', Hotellings', and Wilks' multivariate tests of significance is shown in Table four.
Fig. 3. Adjusted mean values for the dependent variables which contributed to the occupation by competence by sex interaction.
<table>
<thead>
<tr>
<th>Occupation by Sex</th>
<th>Test Name</th>
<th>Value</th>
<th>df</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td>Pillais</td>
<td>.33939</td>
<td>1,8,62</td>
<td>.00001</td>
</tr>
<tr>
<td></td>
<td>Hotellings</td>
<td>.51375</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wilks</td>
<td>.66061</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Pillais</td>
<td>.20612</td>
<td>1,8,62</td>
<td>.02978</td>
</tr>
<tr>
<td></td>
<td>Hotellings</td>
<td>.25964</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wilks</td>
<td>.79388</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overload</td>
<td>Pillais</td>
<td>.22557</td>
<td>1,8,62</td>
<td>.01195</td>
</tr>
<tr>
<td></td>
<td>Hotellings</td>
<td>.29127</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wilks</td>
<td>.77443</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>Pillais</td>
<td>.82958</td>
<td>1,8,62</td>
<td>.00001</td>
</tr>
<tr>
<td></td>
<td>Hotellings</td>
<td>4.86803</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wilks</td>
<td>.17042</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation by Competence</td>
<td>Pillais</td>
<td>.00691</td>
<td>1,8,62</td>
<td>.00691</td>
</tr>
<tr>
<td></td>
<td>Hotellings</td>
<td>.30963</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wilks</td>
<td>.76357</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation by Competence by Overload</td>
<td>Pillais</td>
<td>.29484</td>
<td>1,8,62</td>
<td>.00023</td>
</tr>
<tr>
<td></td>
<td>Hotellings</td>
<td>.41811</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wilks</td>
<td>.70516</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DISCUSSION

These data increase our understanding about subjects' reactions to successful career women. Previous work suggesting that subjects would negatively evaluate achieving women in nontraditional endeavors (Cherry & Deaux, 1978; Monahan et al., 1974) who were experiencing role overload (Bremer & Wittig, in press), was not corroborated.

**Sex of Subject.** For only two of the 18 dependent variables was there a sex of subject difference. The fact that this sex difference occurred indicates that even after sex differences due to attitudes toward women have been removed (by using the AWS as a covariate), sex differences in evaluating career women still exist. Males more than females admired the SP's poise while females admired the SP's ability to withstand pressure more than males did. These findings may be the result of sex differences in identifying with the SPs. The fact that female subjects were the same sex as the SP suggests that identification may have mediated this result, since physical similarity facilitates identification (Hyde & Rosenberg, 1976). Females more than males may have identified with the difficulties involved in maintaining a meaningful career and fulfilling homelife. They therefore may have admired the SP's ability to withstand the pressure of juggling these two important aspects of her life. Conversely, not identifying with the SP to a very strong degree, males may have evaluated the SP on a more superficial level and simply admired her poise. Future work might test this identification hypothesis by including dependent variables which tap the perceived similarity between the SP and the subjects. Items such as perceived similarity of political views, relig-
ion, psychological similarity, etc. might be employed as dependent variables to test this idea.

In accordance with the work of Tresemer (1977) who has thoroughly reviewed the "fear of success" literature there was no difference between the sexes in their ENC responses to the cues. In addition, these results support the findings of Bremer and Wittig (in press) and Monahan et al. (1974) who also failed to find a sex difference in subjects' responses.

**Traditional vs. Nontraditional Occupation.** The only dependent variable that distinguished the traditional and nontraditional SP was perceived level of intelligence. Both sexes perceived the SP in the nontraditional occupation to be more intelligent than the SP in the traditional occupation, even though both SPs were equated for educational attainment, status of educational institution, and status of profession. Both occupations had been pretested and the nontraditional occupation (draftsman) was found to be sex-typed masculine and the traditional occupation (home economist) sex-typed feminine. Thus these results suggest that when a woman is employed in a profession that is believed to be predominantly occupied by women, that woman is seen to be less intelligent than a woman employed in a profession in which women are believed to be not well represented. These findings supplement the results of Spence et al. (1975) who found that women with "masculine" interests were more highly esteemed than women with "feminine" interests.

That subjects did not express a greater amount of ENC toward the nontraditional woman was contrary to the reports of Bremer and Wittig
Although these investigators used ambiguous written stimulus cues, (e.g. After first term finals, Anne finds herself at the top of her medical school class) and the present study used explicit videotaped cues, the work of Spence et al. (1975) indicated that both sets of cues should have elicited the same type of ENC imagery. This failure to replicate may be due to any, some, or all of the following three factors. First, since Spence et al. (1975) did not directly measure ENC imagery, their claim that video and written cues evoke the same type of imagery may not have been valid. Therefore the results obtained from written cues may not generalize to video cues. Second, failure to replicate the Cherry and Deaux (1978) and the Monahan et al. (1974) finding may be explained by Tresemer's (1977) thorough review which stated that since Horner's (1972) study, "fear of success" imagery has declined over the years for college aged subjects. Since Cherry and Deaux (1978) first presented their results at the Midwestern Psychological Association in 1975 and Monahan et al. (1974) submitted their results for publication in 1972, the time lag between then and now may have sufficiently invalidated their results for present day subjects. Finally, failure to replicate the Bremer and Wittig (in press) report may be because they used subjects varying in age from 30-60yrs. and the present study used college freshman. It may be that negative evaluations of nontraditional achievement is a function of the age of the subjects tested. This hypothesis is corroborated by Tresemer (1977) who cites research indicating that "fear of success" imagery increases with age. Further work in this area
should use videotaped as well as written cues and both college and middle aged subjects to ascertain whether this failure to replicate was the result of age of the participants, the decline of "fear of success" imagery over the years, or the lack of generalizability of written cues to videotaped cues.

Role Overload and Competence. By unconfounding the effects of competence and role overload, their separate effects were clarified. While empirically both role overload and competence are similar with respect to the degree of liking as a friend they produce, they are each related to different dependent variables. For example, role overload is distinguished from no overload by the degree of independence it connotes. Independence is not, however, a factor that differentiates the two levels of competence (high vs. low) from one another. Instead, high competence is distinguished from low competence by the following dependent variables: likability as a friend and employee, ability to withstand pressure, maladjustment, and ENC.

The Bremer and Wittig (in press) report, that subjects evinced the most ENC for the woman experiencing role overload, was not confirmed. Contrary to their report, the subjects in the present study did not express differential ENC for the role overload as compared to the no role overload SPs. Additionally, the subjects found the SPs experiencing role overload to be more desirable as a friend and to be more independent than her no role overload counterpart. Since Bremer and Wittig (in press) used subjects varying in age from 30 to 60 yrs., it may be inappropriate to generalize their results to the present study. Recalling Tresemer's (1977) report that "fear of success"
imagery increases with age, this disparity in results suggests that negative evaluations of role overload may be a function of the age of the subjects tested. Thus different results should be expected as a function of the age of the subjects.

As is typical of the findings in most interpersonal attraction research, and in the work of Spence et al. (1975) in particular, the competent woman evoked more positive evaluations from the subjects than did the incompetent woman. As compared to her incompetent counterpart, the competent SP was perceived as being more likable as a friend and employee, able to withstand pressure, well adjusted, and unlikely to suffer adverse consequences. It was interesting to note that the ENC variable increased considerably in response to the incompetent cue. Since the competent woman was a high achiever, these results suggest that achievement, or competence, no longer evokes the hostile and punitive reactions in subjects that was reported by Lockheed (1975) and Monahan et al. (1974). Instead, these reactions seem to be reserved for the incompetent woman.

Occupation by Sex of Subject interaction. The reports of Monahan et al. (1974) and Lockheed (1975) that males exhibited more ENC than females when the SP's success was in a nontraditional area was not replicated in this study. Contrary to their reports, in the present study it was males, not females, who expressed relatively constant levels of ENC for both the traditional and nontraditional SPs. Females showed the most variability of responses. In a rank ordering of the four relevant means of this two way interaction, females evidenced the most ENC for the traditional woman and the least ENC
for the nontraditional woman. This finding suggests that women in traditionally feminine occupations and endeavors are devalued more by females of college age than by males of college age.

Reasons for this failure to replicate the work of Monahan et al. (1974) and Lockheed (1975) may have been the result of differences in scoring procedures and the decline in ENC imagery discussed earlier. The present study used the scoring procedure of Horner et al. (1973) while the aforementioned studies did not. This difference in scoring procedures coupled with the decline in ENC imagery over the last 10 years may have contributed to this failure to replicate.

The fact that males preferred the friendship of the nontraditional SP over the traditional SP supports the work of Spence et al. (1975) who found that women with masculine interests were preferred over women with feminine interests. The Spence et al. (1975) finding that masculine, or nontraditional, areas of endeavor were considered socially desirable by both male and female subjects was partially supported. However, the results of the present study temper that finding somewhat by indicating that males more than females perceive nontraditional involvement for women to be socially desirable.

**Occupation by Competence by Overload interaction.** Two of the 18 dependent variables significantly contributed to this interaction. For the dependent variable intelligence, both traditional and nontraditional women who were competent were perceived as more intelligent than their incompetent counterparts regardless of their level of overload. Further examination of the interaction revealed that the competent nontraditional woman was perceived as more intelligent than the
competent traditional woman across levels of overload. These results are in keeping with the results discussed earlier indicating a strong effect of intelligence produced by the independent variables of competence and nontraditional occupation. For the nontraditional woman absence of role overload facilitated perceived intelligence. Conversely, for the traditional woman, the presence of role overload connoted intelligence. These results may be explained by the fact that since the woman in the traditional occupation was not considered that intelligent in the first place, when she took on several activities outside of her job her intelligence ratings may have increased. Conversely, the nontraditional woman may have been perceived as already being over extended by virtue of her involvement in a "man's world." To take on more activities when she was already over extended may have decreased her intelligence ratings in the subjects' eyes.

For the dependent variable ENC, the incompetent SP was expected to suffer more adverse consequences regardless of her occupation and regardless of whether or not she was experiencing role overload. These results are in keeping with the results discussed earlier indicating that incompetence evokes high ENC reactions. For the nontraditional competent woman, presence of role overload evoked the most ENC responses. Conversely, for the competent traditional woman, the absence of role overload evoked the most ENC responses. These results corroborate the Bremer and Wittig (in press) report which indicated that subjects evinced high ENC for nontraditional women experiencing role overload. These results can be explained in the same manner in which effect of intelligence was explained for this
interaction. The competent traditional woman experiencing role overload was perceived as more intelligent and therefore least likely to suffer adverse consequences when she was involved in several activities. Conversely, subjects may have perceived the competent nontraditional woman to be already overextended by virtue of her nontraditional job. To take on more activities may have predisposed her to negative consequences in the eyes of the subjects.

**Occupation by Competence by Sex interaction.** Two of the 18 dependent variables significantly contributed to this interaction. For the dependent variable ENC, males and females expressed high levels of ENC for the incompetent woman regardless of whether she was employed in a traditional or nontraditional occupation. Both sexes expressed the least ENC for the nontraditional competent woman. Since main effects analysis of the independent variable occupation indicated that subjects perceived the nontraditional woman to be more intelligent than the traditional woman and since competence was perceived as evoking much less ENC than incompetence, the variables nontraditional occupation and competence when working together seemed to greatly inhibit the ENC response.

For the dependent variable, "dislike as a coworker," both sexes indicated the greatest liking for the competent SP and the least liking for the incompetent SP regardless of her occupation. Males preferred the competent _nontraditional_ woman as a coworker while females preferred the competent _traditional_ woman. Since the nontraditional SP was perceived as being more intelligent than her traditional counterpart, it may be that males more than females prefer an intelli-
gent coworker. Females on the other hand may have compared themselves to the SPs and decided they did not want the intelligence of the non-traditional SP to overshadow their own. Thus they preferred the traditional woman for a coworker.

In summary, the present study offers encouraging data indicating that both sexes positively regarded competent achieving career women. Moreover, competent women involved in several role activities, and thus experiencing role overload, were more highly esteemed than their incompetent no role overload counterparts. It now remains to be seen if these positive evaluations are an indication that women will be entering the professions and achieving eminence in areas where they have heretofore not been well represented.
REFERENCES


Bremer, T., & Wittig, M. Fear of success: a personality trait or a response to occupational deviance and role overload? Sex Roles, in press.


O'Leary, V., & Hammack, B. Sex-role orientation and achievement context as determinants of the motive to avoid success. *Sex Roles*, 1975, 1, 225-233.


Spence, J., & Helmreich, R. The attitudes toward women scale: an objective instrument to measure attitudes toward the rights and roles of women in contemporary society. *JSAS Catalog of Selected Documents in Psychology*, 1972, 2, 66.

APPENDIX A

INSTRUCTIONS TO SUBJECTS
Impression Formation Study

This is a study in what is called "impression formation": the factors that enter into the judgements a person makes about what another person is like. In this particular investigation, we are concerned about the impressions that are formed from quite limited information about another person.

What you will be seeing shortly on videotape is a portion of an interview that was conducted for this study with a woman who agreed to discuss some aspects of her career and home life. After you see the videotape, you will be asked to answer four very general questions about the person. You will be asked to be highly speculative about her, in fact, to make up a kind of story about the person. There will be a time limit (1 minute per question) so please answer as quickly as possible. Following these questions, you will be given as much time as necessary to respond to another series of questions about the person --this time in the form of a multiple choice questionnaire. There are no "correct" or "true" answers. What we are interested in finding out is how the person strikes you - your guesses and impressions. Please indicate your birthdate at the top of each sheet of paper.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.
APPENDIX B

TAT TYPE QUESTIONNAIRE
1. What is happening? What kind of person is this?

2. What has led up to the person's ideas and aspirations? That is, what has happened in the past?

3. What is being thought? What does the person really want?

4. What will happen? What will be the future of the person over the years?
APPENDIX C

EVALUATION QUESTIONNAIRE
Observer's Evaluation of Interview
Video Observation

1. The person struck me as being.....in intelligence.
   
   _ very much above average
   _ above average
   _ slightly above average
   _ slightly below average
   _ below average
   _ very much below average

2. The physical appearance of the person is:

   _ very much above average
   _ above average
   _ somewhat below average
   _ below average
   _ very much below average

3. In the interview the person was:

   _ very poised
   _ poised
   _ slightly poised
   _ slightly ill at ease
   _ ill at ease
   _ very ill at ease

4. I found the person:

   _ very likable
   _ likable
   _ slightly likable
   _ slightly unlikable
   _ unlikable
   _ very unlikable

5. In personal habits the person is probably:

   _ very neat
   _ neat
   _ somewhat neat
   _ somewhat sloppy
   _ sloppy
   _ very sloppy
6. I would guess the person to be:

- very tactful
- tactful
- somewhat tactful
- somewhat untactful
- untactful
- very untactful

7. I believe the person is:

- extremely maladjusted
- maladjusted
- slightly maladjusted
- well adjusted to a slight degree
- well adjusted
- extremely well adjusted

8. The person is probably:

- very aggressive
- aggressive
- somewhat aggressive
- somewhat unaggressive
- unaggressive
- very unaggressive

9. I would judge the person to be:

- very independent
- independent
- slightly dependent
- dependent
- very dependent

10. If I had the same job as this person I feel I would ...... working with this person.

- very much dislike
- dislike
- slightly dislike
- slightly like
- like
- very much like
11. I would judge the person to be...towards others.

- very warm
- warm
- somewhat warm
- somewhat cold
- cold
- very cold

12. This is the kind of person I would ..... as a friend.

- very much dislike
- dislike
- slightly dislike
- slightly like
- like
- very much like

13. In ability to stand up under pressure, I judge the person to be:

- very much above average
- above average
- slightly above average
- slightly below average
- below average
- very much below average

15. Check on answer for the next question in the appropriate column.
I reacted to the person as a ..... individual.

- very feminine
- feminine
- slightly feminine
- slightly unfeminine
- unfeminine
- very unfeminine

16. As an employer, I would..... to have this person as an employee.

- very much like
- like
- slightly like
- slightly dislike
- dislike
- very much dislike
17. This person's marriage is probably:

___ very successful
___ successful
___ somewhat successful
___ somewhat unsuccessful
___ unsuccessful
___ very unsuccessful
APPENDIX D

ATTITUDES TOWARD WOMEN SCALE
The following is part one of a two part study. In order to receive experimental credit for part one, you must be present at part two. The survey (part one) and the experiment itself (part two) is worth a combined total of four experimental credits. Should you decide to participate in this study by first filling out the survey and then participating in the experiment, please indicate the following information on the answer sheet provided:

Your birthdate
Your mother's maiden name
Your sex

Please do not write on the survey itself. You will remain anonymous. This information is necessary only to in some way code your participation in this survey with your participation in the experiment itself. Your participation is optional. Sign-up sheets for part two will be posted in about two weeks. The experimenter's name (Vaughn) as well as the experimenter's advisor (Wittig) will be posted on the sign-up sheets.

Thank you!
The statements listed below describe attitudes toward the role of women in society that different people have. There are no right or wrong answers, only opinions. You are asked to express your feeling about each statement by indicating whether you (A) agree strongly, (B) agree mildly, (C) disagree mildly, or (D) disagree strongly. Please indicate your opinion by blackening either A, B, C, or D on the answer sheet for each item. Please indicate your birthdate at the top of your answer sheet—not your name.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

14. Sons in a family should be given more encouragement to go to coll-
A=agree strongly  B=agree mildly
C=disagree mildly  D=disagree strongly

ege than daughters.

15. It is ridiculous for a woman to run a locomotive and for a man to
darn socks.

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

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

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

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

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

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

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

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

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

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

SCRIPTS
Traditional

Let's see. Where should I start? Well, I received my B.A. degree from NYU in 1967 in home economics with special emphasis in foods and nutrition. The foods and nutrition option was fairly large at that time and was composed entirely of women, as you might expect....After graduation I worked as a home economist in New York city. Five years ago I moved to Los Angeles where I got a job for the Betty Crocker division of General Foods. My duties for General Foods are evaluating new recipes for cakes and frostings.

Nontraditional

Let's see. Where should I start? Well, I received my B.A. degree from NYU in 1967 in industrial design with special emphasis in drafting. The drafting option was fairly large at that time and I was the only woman in my graduating class.... which was somewhat strange at times! After graduation I worked as a draftsman in New York city. Five years ago I moved to Los Angeles where I got a job as a draftsman for Southern California Edison. My duties for the gas company are drafting new designs for energy saving equipment which can be installed underground.

Competence (1)

I enjoy my job and I guess I am pretty good at it. At a company dinner of all the Western regional offices I was commended for outstanding service to the firm. My reward was a two-week paid vacation to Honolulu, which of course I loved....Keep going?

Incompetence (1)

I enjoy my job, but I don't always feel like doing all the duties I
guess I should. It seems like my boss expects too much from me. He says the job is not that hard and that everyone else is able to do it. I don't know....I just don't feel capable. I've been called on the carpet a couple of times for my goof-ups....I'm on probation at this job ....This is my fourth job this year. Well....if they fire me I can always get unemployment....On to more positive things.

Role Overload
I find I have a very busy schedule. I'm married....happily married for 12 years. Three nights of the week I take night courses at the junior college. The other two nights of the week I help my husband with his business. I am also an elder in the church and an active member of Greenpeace--the ecology organization. By the time the week-end rolls around I would like to relax but that is the time I spend catching up on the house cleaning, ironing, laundry, and grocery shopping. I guess I am pretty busy.

No Role Overload
I'm married....happily married for 12 years. I find that when I get home from work I have lots of free time. In this free time I enjoy reading, watching T.V. with my husband....playing cards....or just relaxing. I guess I just have a lot of free time.

Competence (2)
In order to plan my day efficiently, I make a list of everything I need and want to get done. I find that if I do this everything seems to get accomplished.

Incompetence (2)
In order to plan my day I try to make a list of everything I need and
want to get done. Somehow, I can't ever seem to get organized. I never seem to accomplish as much as I should.
APPENDIX F

PILOT QUESTIONNAIRE ASSESSING THE SALIENCE
OF THE INDEPENDENT VARIABLES
Impression Formation Study

This is a study in what is called "impression formation": the factors that enter into the judgements a person makes about what another person is like. In this particular investigation, we are concerned about the impressions that are formed from quite limited information about another person.

What you will be seeing shortly on videotape is a portion of an interview that was conducted for this study with a woman who agreed to discuss some aspects of her career and home life. After you see the videotape, you will be asked some questions about the person. You will then be asked to recall in as much detail as possible everything the woman has said.
What was this woman's occupation? 

How "typical" or common is it for a man or a woman to hold this job?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>for a man</td>
<td>most typical</td>
<td>somewhat</td>
<td>typical for a man</td>
<td>neutral</td>
<td>for a woman</td>
</tr>
<tr>
<td></td>
<td>somewhat more</td>
<td>typical for a woman</td>
<td>neutral</td>
<td>somewhat more</td>
<td>most typical</td>
</tr>
</tbody>
</table>

Sometimes if a woman holds a job it is considered more prestigious than if a man holds the same job. The reverse of this fact is also true.

How prestigious for a woman is a job as a home economist?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>for a man</td>
<td>low in prestige</td>
<td>somewhat low prestige</td>
<td>neutral in prestige</td>
<td>somewhat high prestige</td>
<td>high in prestige</td>
</tr>
</tbody>
</table>

How prestigious for a woman is a job as a draftsman?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>for a man</td>
<td>low in prestige</td>
<td>somewhat low prestige</td>
<td>neutral in prestige</td>
<td>somewhat high prestige</td>
<td>high in prestige</td>
</tr>
</tbody>
</table>

How competent or incompetent does this woman seem to be, overall?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>for a man</td>
<td>competent</td>
<td>somewhat competent</td>
<td>somewhat incompetent</td>
<td>incompetent</td>
</tr>
</tbody>
</table>
Role overload often occurs because a person has multiple roles (wife, employee, etc.) which overlap, creating pressures upon the person. How much role overload is this woman experiencing?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a great deal more than the average person</td>
<td>somewhat more than the average person</td>
<td>no more than the average person</td>
<td>less than the average person</td>
<td>none</td>
</tr>
</tbody>
</table>

Does this woman seem to be experiencing any conflict between her roles of wife and career woman? If so how much?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a great deal more than the average person</td>
<td>somewhat more than the average person</td>
<td>no more than the average person</td>
<td>less than the average person</td>
<td>none</td>
</tr>
</tbody>
</table>

Please describe, in as much detail as possible, everything you remember that the woman said about herself.
APPENDIX G

PILOT QUESTIONNAIRE ASSESSING

JOB PRESTIGE
Sometimes if a woman holds a job it is considered more prestigious than if a man holds the same job. The reverse of this fact is also true. On a 5-point rating scale, please indicate how prestigious the job is for a woman and then how prestigious it is for a man.

1=low in prestige  
2=somewhat low in prestige  
3=neutral in prestige  
4=somewhat high in prestige  
5=high in prestige

<table>
<thead>
<tr>
<th>Job</th>
<th>For Female</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>For Male</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountant</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial artist</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietician in a hospital</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dentist</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draftsman</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economist</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school teacher</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fashion designer</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home economist</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1 = low in prestige  
2 = somewhat low in prestige  
3 = neutral in prestige  
4 = somewhat high in prestige  
5 = high in prestige

<table>
<thead>
<tr>
<th>Occupation</th>
<th>(for female)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>(for male)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior Decorator</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Mining Engineer</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Optometrist</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Pediatrician</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Surveyor</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Veterinarian</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX H

PILOT QUESTIONNAIRE ASSESSING
SEX-TYPE OF VARIOUS OCCUPATIONS
Below is a list of occupations. On a 5-point rating scale, please indicate how "masculine" or "feminine" you perceive this job to be.

1=masculine  2=somewhat masculine  
3=neutral  4=somewhat feminine  5=feminine

<table>
<thead>
<tr>
<th>Occupation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>accountant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>architect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>commercial artist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dietician in a hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dentist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>draftsman</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>economist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>elementary school teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fashion designer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>home economist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interior designer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mining engineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>optometrist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pediatrician</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1=masculine  2=somewhat masculine
3=neutral    4=somewhat feminine  5=feminine

<table>
<thead>
<tr>
<th>Profession</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>registered nurse</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>surveyor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>veterinarian</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX I

SUBJECTS' EVALUATION

OF THE EXPERIMENT
Please describe in your own words what you think the experiment is about and its purpose.

Please describe any confusing or ambiguous aspects of this study.
APPENDIX J

EXPLANATION OF EXPERIMENT
Debriefing

The present study was designed to assess college students' reactions to women employed in the professions. There were certain things about this woman that we wanted to assess your reaction to; like how busy you perceived her to be, how qualified for her position she was, and what you thought of her occupation. We also wanted to see if males would respond differently to the woman than would females. Some research suggests that the sexes do differ in their responses and other research claims they do not. Our study is testing to see which claim seems to be true. Do you have any questions about the experiment? Did any aspect of this experiment seem confusing or ambiguous? Thank you for participating.