## MEN'S ATTITUDES TOWARD WOMEN:THE EFFECT OF

## WOMEN'S DATING INITIATION AND INTELLIGENCE

## by

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# Submitted in Partial Fulfillment of the Requirements of the University Undergraduate Fellows Program 

1982-1983

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April 1983

## ABSTRACT

Men's Attitudes toward Women: The Effects of Women's Dating Initiation and Intelligence. (April, 1983) Teresa Jo Scardino, B.S., Texas A\&M University Advisor: Dr. Charlene Muehlenhard

This study investigated men's attitudes toward intelligent vs. unintelligent women and women who do vs. do not initiate dates. Subjects were 209 male introductory psychology students. Each viewed one of four videotapes showing a male-female conversation. In a $2 \times 2$ be-tween-subjects design, the female model was portrayed as being either intelligent or unintelligent, and she either did or did not ask the male for a date at the end of the conversation. The men rated the female model on 53 bipolar adjectives. These ratings were factor analyzed in order to reduce the number of dependent variables. Two different factor analysis techniques were used. A series of two-way analyses of variance was conducted on the factor scores to assess the impact of the woman's intelligence and dating-initiation on men's attitudes toward women.

Main effects were found in which the intelligent model was rated as more intelligent, less sexually active, more assertive, less likely to form serious relationships, and less truthful than the unintelligent woman. The model who asked for a date was rated as more sexually active, more flexible, and more assertive than the woman who did not
ask for a date. Several interactions were also found. These results were discussed as related to the relevant literature.

This study also investigated how men's ratings were affected by several subject variables: traditional vs. untraditional attitudes toward women, achievement motivation, grade point ratio, and ability to initiate dates and conversations with unfamiliar women. A series of three-way analyses of variance was conducted to investigate the effects of intelligence, dating initiation, and each subject variable on men's impressions of the female model. The most noteable finding was that significant results were few in number and theoretically uninterpretable.

Implications for women were discussed.

## ACKNOWLEDGEMENTS

I would like to first acknowledge and give extra-special thanks to my advisor Dr. Charlene Muehlenhard. She has literally worked side-byside with me in every aspect of this research endeavor: She has unselfishly devoted overwhelming and unlimited amounts of time, knowledge, enthusiasm, and support. I can truly say that because of her conscientious and dedicated efforts in helping me, I have learned more than I ever expected to, and this invaluable working experience with her will repeatedly serve me in my future educational pursuits.

I would also like to extend my appreciation to Phil Spector of Texas A\&M's Statistics Institute for solving the mysteries of data analyzation and interpretation that we encountered. Without his expertise and interest for this project, we would not have been able to complete analyzing the data.

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## INTRODUCTION AND LITERATURE REVIEW

Attitudes Toward Assertive Women
This decade has been one of major changes for women. One consequence of changes in traditional sex roles is that women now have fewer standards to help them decide whether, or how, to initiate dates. Research indicates that women do in fact have greater trouble with initiating social interactions than do men. One the Adult SelfExpression Scale, men reported being more assertive in initiating conversations with the opposite sex than did women (Hollandsworth \& Wall, 1979). Using a behavioral role-play test, Lipton and Nelson (1980) found that women were better at passive than active initiation--i.e., women were better at responding to a male confederate's attempts to initiate conversations than they were at actively initiating conversations themselves.

Women also have more difficulty than men with dating initiation. Klaus, Hersen, and Bellack's (1977) Survey of college students established that women have significantly more trouble making contact with prospective dates than do men. Men have reported being more likely than women to ask for dates, and women have reported being more likely than men to turn down requests for dates (Gambrill \& Richey, 1975). Perhaps women could benefit from taking a more active role in dating initiation: Women co ld gain more control over their lives if they could ask men out themselves instead of merely turning down unwanted invitations while

The Journal of Consulting and Clinical has been used as a pattern for format and style.
waiting to be asked out by someone they wanted to date.
Research suggests that men would react positively to dating initiation by women. One study found that when men were presented with situations in which they were asked out by a woman they liked and wanted to date, almost all the men--96\%--said they would accept her invitation and would feel glad she had asked (Muehlenhard \& McFall, 1981). These authors concluded that as long as a woman does not mind facing rejection in case the man does not like her, she has little to lose by asking him out.

There could, however, be other consequences of a woman's initiating dates besides whether the man accepts the invitation or not. Aronson (1980) found that women who defy the rigid feminine stereotype by initiating dates risk losing friendships and risk suffering from prejudiced feelings in others. Another possible consequence is that female initiated relationships may typically not last beyond two to three dates (Kelley, Pilchowicz \& Byrne, 1981). Kelley et al. suggested that "male liberation and acceptance of female assertiveness may be restricted to verbal espousal of these ideas plus a time willingness to act accordingly" (1981, p. 196). This conclusion may be unwarranted, however, because of a methodological flaw: The researchers did not compare the duration of female-initiated relationships with that of male-initiated relationships; therefore it is not known if male-initiated relationships typically last beyond two to three dates either. Another study similarly found, however, that "when females adopted nontraditional sex-role behaviors, at least for the most significant relationship, the length of the relationship was nine months shorter than for those adhering to
conventional sex-role stereotypic behaviors" (Jason, Reichler, Rucker, 1981, p. 185). Another consequence of women's dating initiation is that when the woman rather than the man initiates the date, men think that it is more likely that she expects sex, and, worst of all, there is a small but significant increase in how justifiable men regard the man's raping her (Muehlenhard, Friedman, \& Thomas, in press).

Fears of negative consequences probably influence women's behavior. It has been suggested that women often associate assertiveness with masculinity; these women might feel threatened and might avoid behaving assertively (Jakubowski \& Spector, 1973). Some women, then, may want to initiate dates with men, but they may be intimidated by their fears of how men would feel about them.

In conclusion, a woman's initiating might increase the probability of her getting a date, but it might also lead to other, more negative consequences. Among these consequences--and of interest in the present study--are the possible negative attitudes of men toward the woman who initiates the date.

Research concerning attitudes toward women who are assertive in areas other than dating initiation might be reluctant to this issue. Lao, Upchurch, Corwin, and Grossnickle (1975) found that when subjects were shown videotapes of moderately and highly assertive women and men, both females and males rated highly assertive women as less intelligent and less likeable than either moderately assertive women or highly or moderately assertive men. Kelly, Kern, Kirkley, Patterson, and Keane (1980) showed their subjects videotapes of assertive and unassertive women and men. They found that assertive women, when compared with
assertive men or unassertive women or men, were rated as being less friendly, less pleasant, less considerate, less open-minded, less goodnatured, less kind, less likeable, less thoughtful, and less warm. Similarly, Cowen and Koziej (1979) have suggested that the same assertive act will be more favorably evaluated if exhibited by a man rather than a woman. Woolfolk and Dever (1979), however, found no differences in subjects' responses to assertive males and females when they presented their subjects with written descriptions of situations involving assertion. Kern (1982), using videotaped stimulus material, also found no bias against assertive females. He attributed the inconsistencies in the results between this study and Kelley et al.'s (1980) study to "the use of different stimulus situations" (p. 496). Some of these inconsistences might be accounted for by the method of stimulus presentation: The gender of the assertive person is probably more salient in videotaped than in written stimulus material, and it is these experiments using videotaped stimulus material that have most consistently found assertive women to be evaluated more negatively than assertive men. This explanation cannot fully account for these inconsistencies, however, because Kern (1982) used videotapes, as did Lao et al. (1975) and Kelly et al. (1980) who got conflicting results from Kern's.

How persons evaluate assertive women might also depend on their traditional vs. nontraditional attitudes toward women and sex roles. It was found that traditional women viewed assertive female models negatively, whereas untraditional women viewed nonassertive female models negatively; however, consistent with his earlier finding, no
such differences were found between traditional and non-traditional men (Kern, Note 1). In regard to men's reactions to women's asking for dates, Muehlenhard and Miller (Note 2) found virtually no differences between traditional and non-traditional men, as measured by the attitudes toward women scale (AWS; Spence \& Helmreich, 1972), or between men from Texas A\&M University and men from the University of Wisconsin at Madison. Even the most traditional men said that, if they liked a woman, they would accept her invitation and feel pleased that she had asked.

Attitudes Toward Intelligent Women
Another factor which may influence attitudes toward women is the woman's intelligence. Horner (1972), in her research on the "fear of success" phenomenon, found that many women think success will be viewed as unfeminine. Stein and Bailey (1973) suggested that the most important area of achievement for women has been social skill rather than intellectual achievement. Abbott (1979) exhorted that the feminine image learned by adolescent females conflicts with achievement and intellectual competence values. Another study similarly suggested that the pressures to conform to more traditional roles became increasingly severe during a woman's junior and senior years in college or during involvement with a man; it is these pressures to be traditionally feminine that usually result in decreased intellectual performance (Weitzman, 1979).

It further seems that women are generally seen as less competent and intelligent than men. Deaux (1974) found that a successful male performance on some task was explained as resulting from the man's
skill; the same performance by a female, however, tended to be attributed to luck. Moreover, reported Deaux, "masculine accomplishments are viewed as better accomplishments and above average accomplishments are seen as more indicative of the man's intelligence than the woman's" (p. 84). This attitude toward women and intelligence extends into occupations, as researched by Touney (1974), who found that "ratings of occupational prestige and desirability decreased when subjects anticipated increased proportions of women in four out of five professions [architect, college professor, lawyer, physician, and scientist] and that the decrease did not differ for ratings by male and female subjects" (p. 86). This literature then, suggests that intelligent women might be viewed as undesirable and as intellectually inferior to males.

In conclusion, it appears that even with recent changes in sex roles, some of the stereotypic attitudes about assertive and intelligent women persist. The purpose of this study was to investigate men's impressions of women who do vs. do not initiate dates and who display high vs. low intelligence. In addition, this study investigated whether men's attitudes vary depending on the characteristics of the men. The effects of the following subject-variables were investigated: men's traditional vs. non-traditional attitudes toward women and sexroles (as measured by the Attittudes toward Women Scale); men's needs for competitiveness, mastery, and work (as measured by the Work Orientation and Family Questionnaire; Helmreich \& Spence, 1978); men's grade point ratios, and men's ability to initiate conversations and dates with unfamiliar women (as measured by the Survey of Heterosexual

Interactions; Twentyman, Boland, \& McFall, 1981; Twentyman and McFall, 1975).

Preliminary Analysis
In a pilot study, 100 males and females from introductory psychology classes were asked to describe the differences between women who do vs. do not initiate dates and between intelligent vs. unintelligent women. Two different questionnaires were used; 50 subjects completed each questionnaire. One questionnaire asked subjects to describe the differences between the two women, one of whom was intelligent and one of whom was unintelligent; and to describe the differences between two other women, one of whom initiated dates with men and one of whom waited for men to initiate dates (see Appendix A). The second questionnaire asked subjects to describe an intelligent woman, a woman who initiates dates, and a woman who does not initiate dates (see Appendix B). Pilot subjects' descriptions were then used to generate bipolar adjectives for the Impressions Questionnaire, the major dependent measure of this experiment. Other bipolar adjectives were taken from a past study (Kern, 1982).

Subjects
Subject were 240 male introductory psychology students. The mean age was 19.

Design
A $2 \times 2$ between subjects design was used. The two independent variables--whether or not the woman asked the man for a date and whether she demonstrated high or low intelligence--were completely crossed.

Materials
Stimulus materials were four videotapes of male-female conversations in which the woman exhibited either high or low intelligence and in which she either did or did not ask the man for a date. The same two undergraduates served as models for all four videotapes.

A primary concern was to make the videotapes as realistic as possible with respect to setting, topic of conversation, and acting. The setting was typical of college life: The man was sitting in a desk outside of a classroom highlighting his textbook when the woman approached with her books and sat in the adjacent desk. The topic of conversation focused on the class they were waiting for--biology. The woman's attire, make-up, and hairstyle were attractive, but neutral-i.e., she was not dressed like a stereotypic intellectual, either in a tailored suit or in a mismatched outfit suggesting that she did not care about her appearance; she was also not dressed like a stereotypic "empty-headed woman" in a tight, revealing sweater or blouse or with overdone make-up. Rather, both actors were dressed as typical college students in shirts and jeans.

Several types of cues were used to manipulate how intelligent the woman appeared (see scripts in Appendix C). In the intelligent condition, the woman said that she had made a 96 on her biology exam; in the unintelligent condition, she said she had made a 68 . When they discussed the chapter they had just read, the intelligent woman said she had found it interesting; the unintelligent woman said she had found it confusing. The intelligent woman contributed valid information to the conversation, whereas the unintelligent woman made statements of
questionable validity and asked simple-minded questions. The male's behavior was fairly consistent in both conditions, except that he responded to the intelligent woman as if her statements were believable, whereas he responded to the unintelligent woman's invalid statements by saying neutrally, "I've never heard that before." The intelligent woman spoke with confidence on the topic of conversation, whereas the unintelligent woman sounded more confused. To ascertain that the intelligent model was indeed perceived to be more intelligent than the unintelligent model, an informal manipulation check was done prior to the experiment. The scripts were presented to a group of graduate students and to another group of undergraduates. There was unanimous agreement that the model in the intelligent script seemed more intelligent than the model in the unintelligent script.

At the end of one of the high-intelligence videotapes and one of the low-intelligence videotapes, the woman asked the man for a date by saying, "I don't know if you're interested, maybe you're dating someone else or something. But there's a good movie at the campus theater. If you're not busy, would you like to go with me?" The line about not knowing whether he was dating anyone else was included to convey the idea that they had not dated previously. These two videotapes were cut immediately after she asked him out so that the subjects' attitudes would not be influenced by whether he accepted or rejected her invitation. The two videotapes for the non-initiation conditions were the same tapes as in the initiation conditions; however, these two tapes were cut immediately before the woman asked the man out. Other variables--such as who began the conversation, physical
attractiveness, facial expressions, dress, and enthusiasm--were held constant across the four conversations so that differences found between conversations could be attributed to the independent variables.

## Procedure

Subjects were run in groups ranging from 5 to 25 , with a mean of 17 per group. The men were first told to sit where the T.V. screen was clearly visible. Subjects were then asked to fill out and return consent forms (see Appendix D). Prior to viewing one of the four conversations, the men were asked to listen carefully and to keep any reactions they might have to themselves to avoid biasing the others. After viewing the videotape, subjects completed the Impressions Questionnaire (see Appendix E), in which they indicated their impressions of the woman using a series of bipolar adjectives (e.g., moral-immoral) which they rated on a 7 -point scale. Subjects also filled out (a) the Attitudes toward women scale (AWS; Spence \& Helmreich, 1972; see Appendix F), which measures subjects' traditional vs. non-traditional attitudes toward women and sex roles; (b) the Work and Family Orientation Questionnaire (WOFO; Helmreich \& Spence, 1978; see Appendix G), which measures subjects' work need, mastery need, and competitiveness need; (c) the Survey of Heterosexual Interactions (SHI; Twentyman et al., 1981; see Appendix H), which measures mens' ability to initiate interactions with unfamiliar women. Subjects were also asked to give their GPR's. All groups were informed that these questionnaires would be anonymous. Subjects were then instructed to answer all 156 questions and to carefully fill in the ovals on the computer-readable General Numeric Data Forms provided. They were told to answer each question
as closely as possible to their individual opinions, but not to spend too long on any single question, and not to ask any questions until after the experiment. Upon completion of the questionnaires, a debriefing session was held in which the experiment was explained and questions were answered. Each man received a debriefing form informing them of the rationale, purpose, and procedure of this experiment (see Appendix I). Finally, subjects were asked not to discuss the experiment with other potential subjects.

Data Handling
Data from several subjects' sheets had to be discarded because of incomplete answer sheets; data from 209 subjects were retained. The data were read from the General Data Numeric Data Forms onto a computer tape; they were then transferred from the tape to a WYLBUR System computer File by running a systems program (see Appendix J). Because the WYLBUR System's line capacity is only 133 characters, and because there were 180 characters of data per subject, a second program was run which created three lines of 60 characters each for every subject (see Appendix K). This allowed the experimenters to have access to all the data for subsequent analysis.

## RESULTS

On the Impressions Questionnaire, subjects had rated the female model on 53 different bipolar adjectives. If 53 separate analyses of variance would have been conducted, the experimenterwise error rate would have been seriously inflated. To reduce this problem, the Impressions Questionnaire ratings were factor analyzed in order to identify a smaller number of factors that could account for much of the variance in the ratings. A smaller number of analyses of variance could then be conducted using the female model's level of intelligence and dating initiation as the independent variables, and the subjects' factor scores as the dependent variables.

Two factor analyses were done. In the first analysis, subjects' ratings were analyzed using a principal components factor analysis with a varimax rotation (see Appendix $L$ for program). Table 1 presents the factors derived from this analysis, along with the name given to each factor, the percentage of variance accounted for by each factor, and the variables which loaded on each factor and their factor leadings. Only variables with loadings of .5000 or greater are included in this table.

As can be seen, the Intelligence factor accounted for more variance than any other factor. It was suggested that this was an artifact of the experimental manipulatin, which included scripts portraying an intelligent woman and an unintelligent woman (Spector, Note 3). This experimental manipulation influenced the correlation matrix from the 53 ratings, and it is this correlation matrix which is used as input by the factor analysis algorithm. Thus, while the obtained factor
Table 1: First Factor Analysis Factor Loadings of Items on the Impressions Questionnaire.
Factor I: Intelligent (13.70) ${ }^{\text {a }}$
33. Unintelligent/Intelligent
16. Uneducated/Educated ..... $-.803$(b)
39. Ambitious/Unambitious ..... 752
8. Serious/Carefree ..... 747
47. Superior/Inferior ..... 747
5. Irresponsible/Responsible ..... $-.704$
51. Like to work on a class project: very much/not at all ..... 638
31. Worldly/Naive ..... 609
11. Close-minded/Open-minded ..... $-.585$
35. Respected/Not Respected ..... $-.560$
Factor II: Likeability (5.41) ${ }^{\text {a }}$
42. Unkind/Kind .....  747
28. Kind/Unkind ..... 729
23. Unpleasant/Pleasant ..... 673
24. Inconsiderate/Considerate ..... $-.635$
32. Likeable/Unlikeable .....  634
10. Inoffensive/Offensive ..... 634
46. Cold/Warm ..... -. 573
19. Good/Bad Sense of Humor ..... 565
4. Does/Does not Make Friends Easily .....  564
36. Thoughtless/Thoughtful ..... -. 549
20. Good Wife/Bad Wife ..... 546
13. Selfish/Unselfish ..... $-.505$
40. Unfair/Fair ..... -. 504
Factor III: Sexual Activity (2.71) ${ }^{\text {a }}$
21. Promiscuous/Not Promiscuous ..... 781
7. Sexually Inactive/Sexually Active ..... -. 643
27. Flirtatious/Not Flirtatious ..... 621
Factor IV: Datability (2.21) ${ }^{\text {a }}$
37. Physically Unattractive/Physically Attractive ..... 786
53. Like to Date: Very Much/Not at all ..... -. 682
52. Like to get to know better at a party:
Very Much/Not at all ..... -. 593
38. Has few boyfriends/Has many boyfriends .....  507
Factor V: Truthfulness (1.64) ${ }^{\text {a }}$
12. Truthful/Untruthful .....  667
18. Dishonest/Honest ..... -. 653
Table 1 (continued)
Factor VI: Interestingness (1.44) ${ }^{\text {a }}$
44. Uninteresting/Interesting ..... -. 702
41. Interesting/Uninteresting .....  634
Factor VII: Flexibility (1.37) ${ }^{\text {a }}$
25. Flexible/Unflexible ..... 716
22. Agreeable/Disagreeable ..... 689
Factor VIII: Tactfulness (1.34) ${ }^{\text {a }}$
6. Tactful/Not Tactful .....  650
Factor IX: Extroverted (1.26) ${ }^{\text {a }}$
15. Extroverted/Introverted ..... 809
Factor $X$ : Religiousness (1.21) ${ }^{\text {a }}$
2. Not Religious/Religious .....  806
Factor XI: Casual Relationship (1.16) ${ }^{\text {a }}$
29. Dates Seriously/Dates casually ..... 742
Factor XII: Feminism (1.08) ${ }^{\text {a }}$
49. Feminist/Antifeminist ..... 825
${ }^{2}$ Variance explained by each factor
${ }^{\mathrm{b}}$ Factor loadings for each item
Note.--the above loadings were derived using the Sorted Rotated factorloadings. Only items with loadings of .5 or greater are presented.
structure reflected the most salient factors that subjects had taken into account in the present experiment, it probably would not reflect the most salient factors that subjects would have taken into account had different variables been manipulated, and--even more important--it probably does not reflect which factors men typically take into account when they form impressions of women. Thus, to eliminate the undue influence of the experimental manipulation--i.e., to derive a factor structure which reflects the way men more typically regard women--a second principal components factor analysis with varimax rotation was performed. In this second analysis, the subjects' ratings were transformed so that the means of all 53 ratings were set to zero within each treatment group (see Appendix M for program). The factor analysis was done using the correlation matrix from these transformed ratings as input. The results of the second factor analysis are presented in Table 2. Here, the likeability factor accounted for more of the variance than any other factor; the intelligence factor emerged as the third most important factor.

A series of two-factor analyses of variance was conducted to investigate the effects of intelligence and dating initiation on the subjects' factor scores from both factor analyses. Results significant at the .05 level will be discussed; however, because a fairly large number of analyses--22--were done, results which do not reach significance at a more stringent alpha level should be interpreted with caution. For analyses which reached significance, mean factor scores are presented in Tables 3 and 4.

A highly significant main effect due to the intelligence condition
Table 2: Second Factor Analysis Factor Loadings of Items on the Impres- sions Questionnaire
Factor I: Likeability (7.99) ${ }^{\text {a }}$
42. Unkind/Kind ..... $-.7455^{b}$
24. Inconsiderate/Considerate ..... -. 6826
13. Selfish/Unselfish ..... -. 6462
23. Unpleasant/Pleasant ..... -. 6358
46. Cold/Warm ..... -. 6285
32. Likeable/Unlikeable ..... 6270
22. Agreeable/Disagreeable ..... 6192
10. Inoffensive/Offensive ..... 6137
40. Unfair/Fair ..... 5716
25. Flexible/Inflexible ..... 5713
36. Thoughtless/Thoughtful ..... -. 5405
17. Friendly/Unfriendly ..... 5153
19. Good/Bad Sense of Humor ..... 5043
Factor II: Sexual Activity (2.60) ${ }^{\text {a }}$
21. Promiscuous/Not Promiscuous ..... 7344
27. Flirtatious/Not Flirtatious ..... 6276
7. Sexually Inactive/Active ..... -. 5438
14. Aggressive/Unaggressive ..... 5223
Factor III: Intelligence (2.52) ${ }^{\text {a }}$
33. Unintelligent/Intelligent ..... 6752
16. Uneducated/Educated ..... 6499
8. Serious/Carefree .....  5274
47. Superior/Inferior ..... $-.5152$
Factor IV: Datability (3.15) ${ }^{\text {a }}$
37. Physically Unattractive/Attractive ..... $-.7317$
53. Like to Date: Very Much/Not at All ..... 7272
52. Like to Get to Know at a Party: Very Much/Not at all ..... 6299
9. Feminine/Unfeminine .....  5257
Factor V: Flightiness (2.0) ${ }^{\text {a }}$

1. Not Flighty/Flighty ..... 7139
Factor VI: Casual Relationship (2.54)
2. Interesting/Uninteresting ..... 6371
3. Dates Seriously/Casually ..... 5492
4. Uninteresting/Interesting ..... -. 5456
5. Capable/Incapable of Forming Permanent Relationships ..... 5086
Table 2 (continued)
Factor VII: Truthfulness (2.27) ${ }^{\text {a }}$
6. Truthful/Untruthful ..... 6222
7. Has Many/Few Girlfriends ..... 5193
8. Dishonest/Honest ..... $-.5123$
Factor VIII: Responsibility (1.92) ${ }^{\text {a }}$
9. Irresponsible/Responsible ..... 6556
10. Inappropriate/Appropriate ..... 5819
Factor IX: Assertiveness (1.95) ${ }^{\text {a }}$
11. Assertive/Unassertive ..... 5429
12. Extroverted/Introverted ..... 5114
Factor X : Religiousness (1.86) ${ }^{\text {a }}$
13. Not Religious/Religious ..... 6722
${ }^{\text {V Variance }}$ explained by each factor.
${ }^{\mathrm{b}}$ Factor loadings for each item
Note--The above laodings were derived using the Varimax rotation method.$\overline{0 n l y}$ items with loadings of .5 or greater are presented.

Table 3: Cell Means of Second Factor Analysis Factor Scores for Impressions Questionnaire

|  | $\begin{gathered} \text { Intelligent/ } \\ \text { asks } \end{gathered}$ | Intelligent/ <br> Doesn't ask | Unintelligent/ asks | Unintelligent/ Doesn't ask |
| :---: | :---: | :---: | :---: | :---: |
| Factor 2 | 2.42 | 2.56 | 1.44 | 1.92 |
| Factor 3 | 2.96 | 2.85 | -0.13 | -0.29 |
| Factor 5 | 6.27 | 6.33 | 6.80 | 6.82 |
| Factor 6 | 5.24 | 3.93 | 4.55 | 4.30 |
| Factor 7 | 1.27 | 1.60 | 1.23 | 1.03 |
| Factor 8 | 5.25 | 5.20 | 3.77 | 4.04 |
| Factor 9 | 2.40 | 2.20 | 2.66 | 3.42 |

Table 4: Cell Means of First Factor Analysis Factor Scores for Impressions Questionnaire

|  | Intelligent/ <br> asks | Intelligent/ <br> Doesn't ask | Unintelligent/ <br> asks | Unintelligent/ <br> Doesn't ask |
| :--- | :---: | :---: | :---: | :---: |
| Factor 1 | -0.83 | -0.84 | 0.72 | 0.97 |
| Factor 2 | -0.23 | 0.23 | 0.12 | -0.12 |
| Factor 3 | 0.19 | 0.23 | -0.15 | 0.09 |
| Factor 7 | -0.03 | 0.11 | 0.99 | 1.11 |
| Factor 11 | 0.32 | -0.37 | 0.27 | -0.20 |

was found using Intelligence factor scores from both factor analyses; for scores from the first factor analsis, $\underline{F}(1,205)=520.19, \underline{p}=.0000$; for scores from the second factor analysis, $\underline{F}(1,205)=496.89$, $\underline{p}=.0000$. As expected, the intelligent female model was rated higher on the Intelligence factor than was the unintelligent model. This finding serves as a manipulation check, indicating that the scripts were successful in conveying high vs. low levels of intelligence.

The Sexual Activity factor also emerged in both factor analyses. Analyses of variance revealed significant main effects for both intelligence and dating initiation. The unintelligent model was rated as more sexually active than the intelligent model; for factor scores derived from the first factor analysis, $\underline{F}(1,205)=10.07, \underline{p}=.0017$; for factor scores derived from the second factor analysis, $\underline{F}(1,205)=33.59, \underline{p}=$ .0000. The model was also rated as more sexually active when she asked the man for a date than when she did not; for factor scores from the first analysis, $\underline{F}(1,205)=5.82, \underline{p}=.0167$; for factor scores from the second analysis, $\underline{F}(1,205)=5.05, \underline{p}=.0257$. Factor scores from the first, but not the second, factor analysis revealed a significant intelligence $X$ dating initiation interaction in which the unintelligent model who asked for a date was rated as most sexually active, and the models in the other three conditions were rated similarly to each other, $\underline{F}(1,205)=4.56, \underline{p}=.0340$. Thus, the intelligent model who asked for a date was rated similarly to intelligent and unintelligent models who did not ask.

The Likeability factor emerged in both factor analyses. No main effects were found. An interaction emerged for the factor scores from
the first, but not the second, factor analysis: The model rated as most likeable was the intelligent model who asked the man out; the model rated as least likeable was the intelligent model who did not ask; $\underline{F}(1,205)=6.55, \underline{p}=.0112$. Likeability ratings for the unintelligent models were intermediate and were slightly higher when she did not ask than when she did.

The Casual Relationship factor emerged in both factor analyses. A main effect was found for dating initiation: Subjects rate the model who asked for a date as a more casual dater than the model who did not ask; for factor scores from the first factor analysis, $\underline{F}(1,205)=18.87$; $\underline{p}=.0000$; for factor scores from the second factor analysis, $\underline{F}(1,205)=$ 5.82; $\underline{p}=.0167$. The factor scores from the second, but not the first, factor analysis showed a significant main effect for intelligence; the intelligent model was rated as dating more casually than the unintelligent model, $\underline{F}(1,205)=5.82, \underline{p}=.0167$.

Several significant results were found for factors which emerged in only one of the factor analyses. The Flexibility factor emerged only in the first factor analysis. A main effect was found for dating initiation; the model was rated as more flexible when she asked for a date than when she did not, $\underline{F}(1,205)=4.59, \underline{p}=.0333$. There was also a significant interaction in which the unintelligent model who asked was rated as most flexible, while the unintelligent model who did not ask was rated as least flexible, $\underline{F}(1,205)=7.58, \underline{p}=.0064$.

The Assertiveness factor emerged only in the second factor analysis. The intelligent model was rated as more assertive than the unintelligent model, $\underline{F}(1,205)=28.25, \underline{p}=.0000$. The model who asked for a date
was rated as more assertive than the model who did not ask, $\underset{\sim}{(1,205)}=$ 3.93, $\underline{p}=.0486$. There was a significant interaction in which the unintelligent model who did not ask was seen as least assertive; the other three models were rated similarly to each other, $\underline{F}(1,205)=11.80$, $\underline{p}=.0007$.

The Responsibility and Truthfulness factors also emerged only in the second factor analysis. The intelligent model was rated as more responsible than the unintelligent model, $\underline{F}(1,205)=88.33, \underline{p}=.0000$. The intelligent model was also rated as less truthful than the unintelligent model, $\underline{F}(1,205)=13.31, \underline{p}=.0003$.

In addition to the two-factor analyses of variance, a series of three-factor analyses of variance was done to determine whether subjects' characteristics influenced their attitudes toward intelligent vs. unintelligent women who do vs. do not initiate dates. The followign subject variables were analyzed: traditional vs. untraditional attitudes toward women and sex roles, as measured by the AWS; grade point ratios; need for achievement (which was broken down into need for work, mastery, and competition), as measured by the WOFO; and ability to initiate dates and conversations with unfamiliar women, as measured by the SHI. Thus, 132 three-factor analyses of variance were done [6 subject variables $X$ (12 sets of factor scores from the first factor analysis +10 sets of factor scores from the second factor analysis)]. Because of the extraordinarilylarge number of analyses conducted, the alpha level was set at . O1. Even with alpha set this low, the experimentwise error rate for Type I errors would be quite large. Thus, the most notable result from this series of analyses was the
small number of significant effects found.
Factors from the first factor analysis were involved in four significant findings: Subjects who were nontraditional on the Attitudes toward Women Scale saw the female model as more interesting than the subjects who were more traditional, $\underline{F}(1,197)=11.39, \underline{p}=.0009$. Lowcompetitive subjects saw the female model as more sexually active than did the high-competitive subjects, $\underline{F}(1,201)=11.76$, $\underline{p}=.0007$. Subjects with a high mastery need thought the female model was more tactful than the subjects with a low mastery need, $\underline{F}(1,2012)=7.39$, $\underline{p}=.0071$. One last significant interaction was between intelligence, date-initiation, and GPR. For the Datability factor, there was a three-way interaction among intelligence, date initiation, and GPR, $\underline{F}(1,200)=8.73, \underline{p}=.0035$. The highest ratings were obtained for the unintelligent model who did not ask when rated by low-GPR subjects, for the unintelligent model who asked when rated by high-GPR subjects, and for the intelligent model who asked when rated by low-GPR subjects. The lowest ratings were obtained for the unintelligent model who asked when rated by low-GPR subjects and for the intelligent model who asked when rated by high-GPR subjects.

Factors from the second factor analysis were involved in two significant findings: Low-competitive subjects saw the female model as more sexually active than did high competitive subjects, $\underline{F}(1,201)=$ $7,55, \underline{p}=.0065$. This is consistent with analyses based on the first factor analysis. Work need and dating initiation interacted significantly for the Casual Relationship factor, $\underline{F}(1,201)=9.10, \underline{p}=.0029$. The model was rated as dating most casually when she asked for a date
and when she was rated by low-work subjects; she was rated as dating most seriously when she did not ask and when she was rated by low work subjects. Ratings of the high-work subjects were intermediate.

In summary, the analyses involving the subject variables resulted in very few significant findings, especially considering the large number of comparisons made. The results that did reach significance were unexpected and uninterpretable theoretically. Thus it was concluded that the subjects' attitudes toward women, grade point ratios, need achievement, and ability to initiate had virtually no impact on their impressions of intelligent vs. unintelligent women who do vs. do not initiate dates.

## DISCUSSION

The two factor analyses yielded two somewhat different factor structures. The factors which were most important with respect to percentage of variance accounted for--such as Likeability, Intelligence, and Sexual Activity--emerged in both analyses. However, the order of importance for these factors was not the same. As expected, the Intelligence Factor was the most important factor in the first factor analysis (which used the subjects' untransformed ratings), but Intelligence was only the third most important factor in the second factor analysis (which used transformed ratings so that the mean within each treatment group was zero). Thus, manipulating intelligence as an independent variable increased its importance in the first factor analysis. In the second factor analysis, the Likeability factor emerged as most important; Likeability was second most importat in the first factor analysis. There were also factors--such as Flightiness, Truthfulness, Flexibility, Responsibility, and Assertiveness--which emerged in only one of the two factor analyses. When analyses of variance were done using the factors which emerged in both analyses, the results were usually congruent--but not always. For the Likeability, Sexual Activity, and Casual Relationship factors, there was either a main effect or an interaction found using the results of one, but not the other, factor analysis.

It would be interesting to look at the factor analysis results if this study were manipulating different characteristics of the female model. Spector (Note 3) suggested that the factor structure identified when other variables were manipualted would probably be similar to the
factor structure identified in the present study by the second factor analysis using the transformed variables. If this were true, it would have important implications for interpreting other studies using a similar methodology (e.g., Kelly et al., 1980). In such studies, the subjects' ratings typically are not transformed before factor analyses are conducted. This could mean that the factor structures identified in these studies would be strongly influenced by the variables manipulated in the studies, and they would not describe what people typically take into account when they perceive others.

The two analyses of variance done on factor scores from both factor analyses found that the intelligent model was rated higher on the Intelligence factor than the unintelligent model. This serves as a manipulation check indicating that the scripts were successful in conveying high and low levels of intelligence.

The two analyses of variance for the Sexual Activity factor scores were consistent with respect to main effects but not with respect to the interaction. The unintelligent woman was seen as more sexually active than the intelligent woman. This can perhaps be explained in terms of stereotyping in which "empty headed" unintelligent women are seen as more promiscuous than "prim and proper". intelligent women.

The female model was regarded as more sexually active when she asked for a date than when she did not. This is consistent with previous findings that men thought that a woman wanted sex more if she had initiated the date than if the man had initiated the date (Muehlenhard, Note 4; Muehlenhard et al., in press). Factor scores from the first factor analysis interacted such that the unintelligent
model who asked for a date was rated as much more sexually active than any of the other models.

These findings are important in light of the finding that there is a positive correlation between men's ratings of how much a woman expects sex and their ratings of how justifiable it would be to rape her (Muehlenhard et al., in press). These correlations were higher for men with traditional attitudes toward women on the AWS than for men with nontraditional attitudes. Thus, it would follow that men--especially traditional men--are likely to regard rape as more justifiable if a woman asks a man for a date or if she appears to be unintelligent. This latter finding casts an interesting light on the advice Andelin (1980) gives women in her book, Fascinating Womanhood. She encourages women to play down their intelligence in order to boost men's masculinity. Women interested in following such advice would very likely also be most interested in traditional men. Thus, by acting unintelligent these women could unintentionally be increasing the probability that traditional men will regard them as more promiscuous and more deserving of rape.

No main effects were found for the Likeability factor. An interaction was found when factor scores from the first, but not the second, factor analysis were used: The intelligent model who asked the man out was rated as most likeable; the intelligent model who did not ask the man out was rated as least likeable. The unintelligent models received intermediate ratings, with the model who did not ask rated as somewhat more likeable than the model who did ask. There are several possible explanations for this finding: Research on whether men prefer women
who are "hard to get" has revealed an interesting finding--namley that men like women who are hard for everyone else to get, but easy for themselves to get (Walster, Walster, Piliavin, \& Schmidt, 1973). This could be relevant to the present study. Since intelligent women were rated as less sexually active than unintelligent women, it is likely that men saw the intelligent model as being hard to get. In the condition where she asked the man out, however, she also became "easy" for the male mdoel to get, which is what Walster et al.'s male subjects like most in women.

Shanteau and Nagy (1979) conducted a study which used different variables, but which might also be relevant here. When they presented women with pairs of men's photographs and asked the women whom they would like to date, the women chose the moderately physically attractive man rather than the very attractive or very unattractive men. Their results could best be explained by the following formula: A man's overall attractiveness was aproduct of his physical attractiveness multiplied by the probability that he would be interested in a date. The subjects had assumed that there was a low probability that highly attractive men would be interested in dating them. When Shanteau and Nagy told the subjects to assume that it would be a "sure thing" that the attractive men would be interested in dating them, the subjects: ratings changed, and thesemen were chosen most. Perhaps a similar phenomenon occurred in this study: Perhaps the unintelligent model was seen as less likeable but a sure thing. (since she was rated as more sexually active and promiscuous), whereas the intelligent model was seen as likeable but unapproachable (since she was rated as less
sexually active and promiscuous). When the intelligent model asked the man out, however, she was seen as more of a "sure thing" and thus was rated as more attractive overall.

A third possible explanation for this interaction is that the men thought it would be flattering to be asked out by an intelligent woman, whereas it would be unflattering to be asked out by an unintelligent woman. In evaluating the possible explanations for this interaction, however, it should be remembered that it was significant only when the factor scores from the first factor analysis were used.

Another discrepancy between the two factor analyses is that factor scores from the second, but not the first, factor analysis showed a main effect due to intelligence for the Casual Relationship factor. The intelligent model was seen as less capable of forming a permanent relationship. This finding can best be understood in light of several pilot subjects' descriptions of the intelligent woman as "independent," "more career than marriage oriented," "diligent and careful with her time," and "more studious than social." It would seem that subjects' impression of the intelligent woman is that she is not as concerned with permanent relationships or an active social life as she is about college and her career.

For both factor analyses, the woman who asked for a date was thought to have more casual, less permanent relationshps than the woman who did not ask. This is consistent with the study which found that female-initiated relationships lasted only two to three dates (Kelley, et al., 1981). This is also consistent with the study which found that relationships conforming with traditional sex-role
stereotypes lasted nine months longer than nontraditional relationships (Jason, Reichler, \& Rucker, 1981). These results are relevant to the present study since dating initiation can be considered a nontraditional sex-role behavior for women, and since being involved in shorter relationships can be considered to reflect a tendency to be involved in casual rather than serious relationships.

Pilot subjects' descriptions of intelligent women illustrate the ratings of the intelligent female model. Higher ratings on the Responsibility and Assertiveness factors for the intelligent female model correspond to pilot subjects' positive descriptions of an intelligent woman as a "responsible, outgoing person who probably has very high goals--she achieves these goals and realizes her potential"; she "strives for success and through hard work, often attains her desired goals"; she is "outgoing," "well-motivated," and "confident in her abilities."

The unintelligent model who did not ask for a date was seen as the least assertive. Descriptions of an unintelligent woman and a woman who does not initiate dates as someone who is "passive" and who "will just end up married" conform to this rating.

Overall, then, the intelligent woman was viewed very positively with the exception of one factor--Truthfulness. The intelligent woman was seen as less truthful than the unintelligent woman. This might be explained by the career-orientation idea. Pilot subjects repeatedly used "ambitious" and "knows how to get what she wants" to describe the intelligent woman. It may be that subjects associated dishonesty with attaining desired goals. It may also be that subjects felt the
unintelligent woman was not intelligent enough to be dishonest. The unintelligent woman who asked for a date was rated highest on the flexibility factor.

The models who asked for dates were rated higher on the Flexibility factor than the models who did not ask; the unintelligent model who asked was rated as most flexible of all. It seems, therefore, that although the models who initiated dates were viewed as assertive they were not necessarily viewed negatively. Why is it that the literature reports that assertive persons--especially assertive women--are viewed negatively, but this result was not found in this study?

One reason may be that asking for dates is not the same type of assertion as was studied by researchers such as Kelly (1980) and Kern (1982). Lazarus (1973) suggested that assertiveness can be defined in four different ways: (a) saying no; (b) asking for favors and making requests; (c) expressing positive and negative feelings; and (d) initiating, continuing, and terminating conversations. The literature discussed has dealt with the first three types of assertion, while the present study dealt more with the fourth type of assertion. Men may view social initiation as desirable in women, even though they regard negative assertion as undesirable.

The three-way analyses of variance, which included men's attitudes toward women, need for achievement, ability to initiate, and GPR, provided suprisingly few significant findings. Men's traditionality (as measured by the AWS) was expected to have some effect on their impressions of women who initiate dates. Specifically, it was expected that the men with more traditional attitudes toward women would rate
the model who asked for a date as less moral, more promiscuous, and less likeable. The absence of any main effect due to traditionality is consistent with the findings of Muehlenhard and Miller (Note 2); they found that if a man were asked out by a woman he liked, he would accept her invitation and be pleased she had asked regardless of his liberal or conservative attitudes toward women.

Men's need for achievement (as measured by WOFO) was one of the subject variables that showed a few significant interactions. These interactions, however, were of little consequence and uninterpretable.

Men's ability to initiate with unfamiliar women had no significant effects on their impressions of intelligent or unintelligent women or women who do or do not initiate dates. It was thought that men who have trouble with initiation might be pleased if a woman initiated. This hypothesis was not supported.

Finally, men's GPRs did not produce the expected effects. It was expected that men with high GPR's would be more attracted to the intelligent model than to the unintelligent model. Social psychology has consistently found that Americans tend to meet and date those similar to themselves in most characteristics including intelligence (Walster \& Berscheid, 1978). This study did not correspond to these findings.

Because the few significant findings from the three-way analyses of variance on the subject variables were unexpected and uninterpretable theoretically, it is highly probable that these results would not be replicable.

## CONCLUSION

Studies such as this can provide reassurance for women concerned with the stigma attached to initiating dates or being perceived as intelligent. The intelligent model was rated as more likeable, responsible, and assertive, and as less sexually active and flighty than was the unintelligent model. This suggests that intelligent women are not viewed as negatively as the stereotype suggests. The model who asked for a date was rated as more flexible than the model who did not ask. The intelligent woman was seen as more likeable when she asked for a date than when she did not. On the other hand, the unintelligent woman was seen as more sexually active when she asked for a date than when she did not. Although these results might not be viewed as entirely positive, they are nevertheless more positive than many women would expect.

If women are aware of men's actual impressions, they may feel more comfortable with their intelligence and their desire to initiate dates with interesting men. If women do not feel pressured to conform to traditional sex-roles, and if men do not expect or want to do so, then they may be more able to engage in open, intelligent, and stimulating communication. Without being inhibited by sex-role restrictions, women and men may be able to improve the quality of their relationships.

## Appendix A

Pilot Study Questionnaire \#1

## Pilot Study Questionnaire \#1

Sex Date $\qquad$
This pilot study is designed to assess your impressions of particular types of women. Please be as specific as you can in your descriptions so that your impressions can be used in the formation of a questionnaire. Try to describe each situation independently of the others.

1. Joan is an intelligent woman who makes good grades and who is expected to have a successful career when she graduates from college. Describe what you think Joan is like.
2. Sue is a woman who always waits for men to initiate dates with her; even if she is interested in someone, she will wait to be asked out. Describe what you think Sue is like.
3. Mary is an unintelligent woman who does not make very good grades. She hasn't really thought about a future career that she would like to pursue after graduation. Describe what you think Mary is like.
4. Ann is a woman who frequently initiates dates with men whom she is interested in dating. Describe what you think Ann is like.

## Appendix B

Pilot Study Questionnaire \#2
Sex _ Date

This pilot study is designed to assess your impressions of particular types of women. Please be as specific as you can in your descriptions so that your impressions can be used in the formation of a questionnaire. Try to describe each situation independently.

1. Describe the differences between Joan who is considered to be very intelligent and Mary who is considered to be unintelligent.
2. Describe the differences between Ann who initiates dates with men whom she is interested in dating and Sue who waits for men to initiate dates with her.

## Appendix C

Scripts for Intelligent vs. Unintelligent and Date Initiating vs. Non-Initiating Video Tapes

John is sitting outside of class reading his biology book - he has a highlighter in his hand. Pam walks up to him.

Pam: Hi John. How're you doing?
John: Oh, hi. Fine. How's it going with you?
Pam: Oh, just fine. (she sits down next to him) Are you ready for today's biology lab?

John: Yeah. Did you see that the exam grades were posted?
Pam: Yeah, I saw them yesterday afternoon.
John: How did you do?
Pam: I made a 96. How about you?
John: I got an A also.
Pam: That's great! (she looks at his book) are you reading the chapter on genetics?

John: Yeah. I'm almost finished. Have you read it yet?
Pam: Yes. I thought it was really interesting.
John: Me too. I liked the part about sex-linked traits, like hemophilia. Isn't it ironic that even though hemophilia usually shows up in males, the trait is carried on the $X$ chromosome and passed on by the mother?

Pam: I know. That struck me too. (Pauses-thinks) Of course that would only be the case for genes that are both recessive and carried on the X-chromosome, which is usually the case. But, if they were dominant and carried on the $X$-chromosome, the females would be more likely to manifest the trait than men would.

John: And if they were carried on the $Y$-Chromosome, then only males could manifest them.

Pam: Right. But of the sex-linked genes we know of, about 70 are linked to the $Y$-chromosome.

John: (Laughing) It doesn't seem fair. Males get stuck with all these negative sex-linked traits, like hemophilia.

Pam: Yeah, but you know what I read? Men, on the average have better spatial skills than women. (John nods). Well there's a theory that spatial ability is sex-linked; that it is related to a recessive gene that males inherit from their mothers. A mother, then, could
Fass the gene down to her son without expressing the trait herself.
John: (thinking, seeing the light) so a girl wouldn't expless the trait unless she had two recessive genes for spatial ability.
Pam: Exactly!
john: (slowly thinking) But sex cifferences in spatial ability could also be due to socialization - you know like male boys having more erectir sets and things like that tran girls.
Pam: Yeah, there are frotably a lot of factors that combine to produce spatial adility. (Looks at her watcn) Oh, it's almost 2:00. We'd better get to the lab. (they gather their books and stand)
jotin: One nore class. It sure has been a long week. I'm glad it's finally Friday.
Fam: : iee too.

soreone eist or soriething. But, ithere's a ond rovie at the carpus theater.
If you're not busy, would like to go with re?

```
Unintelligent 1 & 2
john is sitting outside of class reading his biology book - with a hi-
liter in his hand. Pam ap;roaches.
Pam: Hi John. How're you doing?
John: Oh hi. Fine. How.'s it going?
Fam: Or iust fine. (sits dowr riext to him) are you ready for today's
    Diolooy lab?
Uohn: Yeah, did you see that the exam groces v.ere posted?
Pam: Yeah, I saw them jesterday afternoon?
John: liow'd you do?
Fam: I made a 72. How about you?
john: I got an A.
Fam: That's Ereat! (she looks at his book) are vou reacing the che:ter
    on gerezics?
isrn: EEh. I'm almost finished. Fiave you read it yet?
?am: Yech. i theught it was really corifusing.
John: Did you understand the part about sex-linked traits. Line tecophilia?
        (she kinds of nods) Isn't it ironic that even though rerorhilia shows
        up mostly in males, the trait is carried on the X chrom: 'so ea and
        passed by the mother?
Fam: l don't get it. If it shows up in males, wouidr.'t the father pass it?
        How could the mother pass soriething she didn't rave?
ichn: The rocther doesn't have to rave hemophilia, she uniy has to be a
        Carrier of the hemophiliac trait.
Fam: I still don't understand.
John: Sell, women have tivo }X\mathrm{ sh::omosomes and rien riave ene }X\mathrm{ and ore y-
        right?
Pam: um-hum
Jonn: W'ell, hemophilia is a recessive trait, so to be a carrier, a woman
        only has the trait on one of her two chro:mosomes and the other,
        dotirant X chromosome masks the recessive trait. So roughilia
        dosen't show up. l'en, though. don't have the exara x chrouesome
        to r.ask it, so herophilia does show up.
```


## Consent Form

1. Procedure. You will be asked to view a short videotape of a male-female conversation. You will then be asked to fill out anonymous questionnaires. We will then discuss the experiment. The whole procedure will take about one hour.
2. Purpose. The purpose of this experiment is to find out more about men's impressions of women.
3. Confidentiality. The questionnaires will be anonymous and thus totally confidential.
4. Risk or Discomfort. It is not expected that watching the videotape or filling out the questionnaires will cause any risk or discomfort.
5. Your right to participate or discontinue. It is your choice to participate or not. You are free to discontinue at any time without penalty and without losing the experimental credit you have earned to that point.
6. Answering your questions. After the experiment, you will be given a handout explaining the experiment. We will discuss it, and you can ask questions. If you have any additional questions, you can ask Teresa Scardino, 696-6023, or Cr. Charlene Muehlenhard, 845-2508.
7. A copy of this form. You are entitled to a copy of this form. If you want one, ask the experimenter.

I have read the above information. My signature below indicates that I am willing to participate.

Name (please print): $\qquad$
Signature: $\qquad$
Date: $\qquad$
Experimenter's Signature: $\qquad$
Date: $\qquad$

## Appendix E

Impressions Questionnaire

This questionnaire is to measure your impressions of the woman you just saw on the videotape. Indicate where you think the woman would fall along each scale. Write the number in the appropriate space and darken the appropriate oval. For example, for the first item if you think the woman 47 was very flightly, write a "7" in space 1, and darken the oval with a "7" in it. Do not write on this questionnaire.

11.
12.

| very |
| :--- |
| clased-minded |


| very |
| :--- |
| truthful |

13. 
14. 
15. 
16. 
17. 
18. 

| 1 | 2 | 3 |
| :---: | :---: | :---: |

flirtatious
28.

| 1 2 3 |  |
| :--- | :--- | :--- | :--- |
| very | 4 |

29. 

| 1 | 2 |
| :--- | :--- |
| dates |  |
| seriousiy |  |

30. 

1
very
ind

2
innocent
31.
1
very
wordly
32.

| 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- |
| very |  |  |  |

33. 

1
very
unintelligent
34.
has many
girlfriends


| 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- |
| very |  |  |  |
| unconsiderate |  |  |  |

$\underset{\text { very }}{1} 2$
flexible
1
very
unsympatheticunsympathetic

3




## Appendix F

## Attitudes Toward Women Questionnaire

## ATTITUDES TOWARD WOMEN

The statements listed below describe attitudes toward the role of women in society which different people have. There are no right or wrong answers, only opinions. You are asked to express your feelings 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 marking the column as the answer sheet which corresponds to the alternative which best describes your personal attitudes. Please respond te every item.
(A) agree strongly
(B) agree mildly
(C) disagree mildly
(D) disagree strongly

1. Women have an obligation to be faithful to their husbands.
2. Swearing and obscenity is more repusive in the speech of a woman than a man.
3. The satisfaction of her husband's sexual desires is a fundamental obligation of every wife.
4. Divorced men should help support their children but should not be required to pay alimony if their wives are capable of working.
5. Under ordinary circumstances, men should be expected to pay all the expenses while they're out on a date.
6. Women should take increasing responsibility for leadership in solving the intellectual and secial problems of the day.
7. It is all right for wives to have an occasional, causal, extramarital affair.
8. Special attentions like standing up for a woman whe comes into a room or giving her a set on a crowded bus are outmoded and should be discontinued.
9. Vocational and professional schools should admit the best qualified students, independent of sex.
10. Both husband and wife should be allowed the same grounds for divorce.
!?. Telling dirty jeles should be mostiy a masculine prernçative,
11. Husbands and wives should be equal partners in planning the family budget.
12. Men should continue to show courtesies to women such as holding open the door or helping them on with their coats.
13. Women should claim alimony not as persons incapable of self-support but only when there are children to provide for or when the burden of starting life anew after the divorce is obviously heavier for the wife.
14. Intoxication among women is worse than intoxication among men.
15. The initiative in dating should come from the man.
16. Under modern economic conditions with women being active outside the home, men should share the household tasks such 8 washing dishes and doing the laundry.
17. It is insulting to women to have the "obey" clause remain in the marriage service.
18. There should be a strict merit system in job appointment and promotion without regard to sex.
19. A woman should be as free as a man to propose marriage.
20. Parential authority and responsibility for discipline of the children should be equally divided between husband and wife.
21. Women should worry less about their rights and more about becoming good wives and mothers.
22. Women earning as much as their dates should bear equally the expense when they go out together.
23. Women should assume their rightful place in business and all the professions along with men.
24. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.
25. Sons in a family should be given more encouragement to go to college than daughters.
26. It is ridiculous for a woman to run a locometive and for a man to darn socks.
27. It is childish for a woman to assert herself by retaining her maiden name after marriage.
28. Society should regard this services rendered by the women workers as valuable as those of men.
29. It is oniy fair that male workers should receive more pay than women ever for identical work.
30. In general, the father should have greater authority than the mother in the bringing up of children.
31. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiances.
32. Women should demand money for household and personal expenses as a right rather than as a gift.
33. The husband should not be favored by law over the wife in the disposal of family property or income.
34. Wifely submission is an outworn virtue.
35. There are some professions and types of businesses that are more suitable for men than women.
36. Women should be concerned with their duties of childrearing and housetending, rather than with desires for professional and business careers.
37. The intellectual leadership of a community should be largely in the hands of men.
38. A wife should make every effort to minimize irritation and inconvenience to the male head of the family.
39. There should no greater barrier to an unmarried woman having sex with a casual acquaintance than having dinner with him.
40. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set by men.
41. Women should take the passive role in courtship.
42. On the average, women should be regarded as less capable of contribution to economic production than are men.
43. The intellectual equality of woman with man is perfectly obvious.
44. Women should have full control of their persons and give or withhold sex intimacy as they choose.
45. The husband has in general no obligation to inform his wife of his financial plans.
46. There are many jobs in which man should be given preference over women in being hired or promoted.
47. Women with children should not work outside the home if they don't have to financially.
48. Women should be given equal opportunity with men for apprenticeship in the various trades.
49. The relative amounts of time and energy to be devoted to household duties on the one hand and to a career on the other should be determined by personal desires and interests rather than by sex.
50. As head of the household, the husband should have more responsibility for the family's financial plans than his wife.
51. If both husband and wife agree that sexual fidelity isn't important, there's no reason why both shouldn't have extramarital affairs if they want to.
52. The husband should be regarded as the legal respresentative of the family group in all matters of the law.
53. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.
54. Most women need and want the kind of protection and support that men have traditionally given them.

Appendix G
Work and Family Orientation Questionnaire

The following statements descirbe reactions to conditions of work and challenging situations. For each item, indicate how much you agree or disagree with the statement as it refers to yourself, by writing in the appropriate number ( $1,2,3,4$, or 5 ) and darkening the oval.

Use the following scale:

| 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: |
| Strongly <br> agree | Slightiy <br> agree | Neither agree <br> nor disagree | Slightly <br> disagree | Strongly <br> disagree |

88. I would rather work in a situation where group effort is stressed and more important rather than one in which my individual effort is stressed.
89. I more often attempt difficult tasks that I am not sure I can do than easier tasks I believe I can do.
90. It is very important for me to do my work as well as I can even if it isn't popular with my co-workers.
91. I would rather do something at which I feel confident and relaxed than something which is challenging and difficult.
92. I would rather learn fun games that most people know than a difficult thought game.
93. If I am not good at something I would rather keep struggling to master it than move on to something I may be good at.
94. I really enjoy working in situations involving skill and competition.
95. When a group I belong to plans an activity, I would rather organize it myself than have someone else organize it and just help out.
96. Once I undertake a task, I dislike goofing up and not doing the best I can.
97. I think more of the future than of the present and past.
98. I hate losing more than I like winning.
99. I worry because my success may cause others to dislike me.
100. It is important to me to perform better than others on a task.
101. I feel that wining is very important in both work and games.

Appendix H
Survey of Heterosexual Interactions

## SRL Cuestionajze

is would apprectate your proviune the foliowin? infomstion for a sirve se are corductird eoneerning colleqe soctal behavior. All inforsation bitis be ktp: confidential.

Natas $\qquad$ Phone Nurber $\qquad$
Year in Collepe $\qquad$ Age $\qquad$

This questionaire is ocnecrned with the social hehavior of coliege maies. It
 as "datine behuvicr". The ferm "date" here is uscd to mean atiy behavior the which some soctal activity mas mottcipated in and piamed with a romber of the
 movies, a fouthall pane, a party, a coke-date, or even juct getenc wiether with some ferfends.

1. How many "Cates" have you had in the last four wects? Please be asset. $\qquad$
 $\qquad$
2. Yow many different gifle have you 'dated' buring the jast year? $\qquad$



artiujuste in
lese than en cierans ricuat os nocial behawior
particivate ta an averave ar.onte of soctal bebevior
participate to
come than art averase arount of so La: Lehavior

Please circle the appropriate number in the following aituations. Try to reapond as if you were actually in that situation.

1. You want to call a girl up for a date. This is the first time you are calling her up as you only know her slightly. When you get ready to make the call, your roomate comes into the room, sits down on his bed, and begine reading a magarine. In this situation you would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| be unable to | be able to call | be able to call |
| :--- | :--- | :--- |
| call in every | in some cases | in every case |
| case | $h$ |  |

2. You are at a dance. You see a very attractive girl whom you do not know. She is standing alone and you would like to dance with her. You would

3. Tou are at a party and yous gee two girls talking. You do not know these girls but you would like to know one of them better. In this situation you would

4. You are at wax whore there is also daceing. Tuu wee a couple of girls sitting in a boolh. Owe? wins you do not know, is talking with a fellow who is standing by the booth. These two go over to dance leaving the other girl sitting alone. You have seen this girl around, but do not really know ber. You rould like to go over and taik to her (but you wouldn t iike to dance). In this situation you would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

be unable to
to over and
talk to her

| be able to go | be able to go |
| :--- | :--- |
| over and taik | over and talk to |
| to her in some | her in every case |

5. On a work break at your job you see a girl who also works there and is about your age. You would 11 ke to talk to her, but you do not know her. You would

| 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |

6. You are on a crowded bus, a girl you know only silghtly is aitting in front of you. You would like to talk to her but you notice that the fellow sitting next to her is watching you. You would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| be unable to | be able to talk | be able to talk |
| :--- | :--- | :--- |
| talk to her | to her in some | to ber in every case |
| in every case | cases | case |

7. Tou are at a dance. You see an attractive girl whom you do not know, standing in a group of four girls. You would like to dance. In this situation you would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| be unable to | be able to | be able to |
| :--- | :--- | :--- |
| ask in every | ask in some | ask in every |
| case | cases | case |

8. You are at a drugstore counter eating lunch. A girl whom you do not know sits down beside you. You would like to talk to her. After her meal comes she asks you to pass the sugar. In this situation you would pass the sugar
but be unable to initiate a comversation with her
and in some cases ba able to finftiate
a conversation
and be able to indtiate a conversation
9. A friend of yours is going out with his girlfriend this week-end. He wants you to come along and gives you the name and phone number of a girl he says would be a good date. You are not dofng anything this week-end. In this situation you would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| be unable to | be able to | be able to |
| :--- | :--- | :--- |
| call in every | her in some | call in every |
| case | cases | case |

10. You are at the library. You decide to take a break, and as you walk down the hall you see a gi.rl whom you know only casually. She is sitting at a table and appears to be studying. You decide that you would like to ask her to get a coke with you. In this situation you would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

be uneble to
ask her in
be able to as
be able to ask every case

## her in some cases

 her in every case11. You want to call a girl up for a date. You find this girl attractive but you do not know her. You would

| 1 | 2 | 3 | 4 | 5 | 6 | $\therefore 7$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| be unable to | be able to | be able to |
| :--- | :--- | :--- |
| caili in every | call in some | call in every |
| case | cases | case |

12. You are taking a class at the university. After one of your classes you see a girl whom you know. You would like to talk to her, however, she is walking with a couple of other girls you do not know. You would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| be unable to | be able to talk | be able to talk |
| :--- | :--- | :--- |
| talk to her | to ber in some | to her in every |
| in every case | cases | case |

13. You have been working on a committee for the past year. There is a banquet at which you are assigned a particular seat. On one side of you there is a girl you do not know, on the other is a guy you do $\therefore$ not know. In this situation you

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

```
be unable to
inftiate a con- versattion with the girl and talk ouly with the guy
```

be able to initiate a conversation with the girl in some cases buz calk mostly to the guy
be able to
initiate a conversation in every case and be able to telk equally as freely with the girl as with the guy
14. You are in the lobby of a large apartment complex walting for a friead. As you are waiting for him to come down, a girl whom you know well walks by with another girl whom you have never seen before. The girl you know says hello and begias to talk to you. Suddenly she remenbers that she left something in her room. Just before she leaves you she tells you the other girl's name. In this situation you would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

find it very difficult to in itiate and continue a conversation with the other girl
find it only slightly difficult
find it easy to initiate and continue a conversation
15. You are at a party at a filiend's apartment. You sea a girl who has come alone. You don't know her, but you would like to talk to her. In this situation you would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| be unable to | be able to go | be able to go |
| :--- | :--- | :--- |
| go over and | over and taik to | over and talk |
| talk to her | hea in some cases | to her in every case |

16. You are walking to your mallbox in the large apartment bullding where you live. Then you get there you notice that two girls are putting theix names on the mallbox of the vacant apartment beneath yours. In this situation gou would

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

be unable to
te able to go
over and initiate
a conversation in
be able to go
go over and
initiate a conversation
some cases
over and initiate
a conversation in every case
17. You are at a record store and see a girl that you once were introduced to. That was several months ago and now you have forgotten her name. You would like to talk to her. In this situation you would

12
3
4
5
6
7
be unable to start a conversation with her in every case
be able to start a conversation with ker in some cases
be able to
start a conversation with her in every case
18. You are at the student union or local cafeteria where friends your age eat lunch. You have gotten your meal and are now looking for a place to sit down. Unfortunately, there are no empty tables. At one table, hovever, there is a girl sitting elone. In this situation you would
12
wait until another place was empty and then sit down
3.45
ask the girl if you could sit at the table but not say anything more to her
$6 \quad 7$
ask the girl if you could sit at the table and then inftiate a conversation
19. A couple of weeks ago you had a first-date with a gixl you now see walking on the street towards you. For some reason you haven't seen each other aince then. You would like to talk to her but aren't sure of: what she thinks of you. In this situation you would

| $\because$ | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

walk by without saying anything
raik up to
her and say something in
some cases
walk up to
her and say something in every case
20. Genersily, in most social situations imvolving firls whom $I$ do not know, I would

|  | 2 | 4 | 6 |
| :--- | :--- | :--- | :--- |

## Appendix I

Research Participants Debriefing Form

Debriefing Form
Men's Attitudes toward Women: The Effects of Women's Dating Initiation and Intelligence

This decade has been one of major changes for women. One consequence of changes in traditional sex ideas is that women now have fewer standards to help them decide whether, or how, to initiate dates. Recent research has indicated that men's reactions to being asked out depended not on their general attitudes toward women's initiating dates, but instead depended on how much they liked the particular woman. There may be other consequences of a woman's initiating a date, however: One study found that when a woman initiates a date, men think that it is more likely that she expects sex and that it is more justifiable to rape her.

Other research concerning attitudes toward assertive women has found assertive women to be perceived as less friendly, less pleasant, less considerate, less open-minded, less good-natured, less kind, less likeable, less thoughtful, and less warm than either unassertive women or men, or assertive men. These negative attitudes toward assertive women may be related to traditionality.

Another factor which may influence attitudes toward women is intelligence. The "fear of success" phenomenon suggests that many women think success will be viewed as unfeminine. These negative perceptions may be perptuated by books which espouse that women should not compete with men in any "masculine" endeavor. In conclusion, it appears that even with recent changes in traditional sex roles, certain attitudes about assertive and intelligent women persist. The purpose of this study is to investigate men's impressions of women who do vs. do not initiate dates and who display high zs. low intelligence.

This experiment is using 400 men who will view one of four videotapes showing a male and female in a conversation in which the woman exhibits either high or low intelligence and in which the woman exhibits either high or low intelligence. The men will then indicate their impressions of the woman by completing a questionnaire containing a series of bipolar adjectives (e.g., moral-immoral). Subjects will also fill out (a) the Attitudes toward Women Scale which measures traditional vs. untraditional attitudes toward women and sex-ideas; (b) a questionnaire which measures need for achievement; (c) the Survey of Heterosexual Interactions which measures men's ability to initiate interactions with unfamilar women. They will also be asked to give their GPR's.

The results of the present study could be useful in furthering our understanding of men's attitudes toward women and of the variables that

1 influence these attitudes. These results could aiso help women make more informed decisions about initiating dates. If this study does find negative stereotypes about assertive or intelligent women, it is hoped that exposing such attitudes might catalyze a re-evaluation of these stereotypes.

Questions about this research can be directed to Teresa Scardino or Dr. Charlene Muehlenhard (845-2508).

## Appendix J

Program to Copy Wylbur File from Tape

```
    To copy a sequential file from a standard-label tape to a WYLBUR data
set, you need to first run TAPEVTOC using the following JCL to determine
the necessary information to get the file off the tape and back on disk.
```

---------- jó card---------------
-----any opiional JES3 control cards----
// EXEC PGM=TAPEVTOC,PARM=1,REGION=128K
//PRTOUT DD SYSOUT=A
//TAPEIN DD VOL=SER=xxxxxx,UNIT=yyyyy,DISP=OLD
//*END

The $x x x x x x$ is the serial number of the tape you wish to copy your file from, and yyyyy is the type of drive requested (TAPE9 or TO800). Once you get the printout from TAPEVTOC you will have the necessary information to return your file to a disk. When looking at the printout, if the BLKSIZE is 6233 or 6160 you can get 3 blocks of the tape on one track of a 3350 disk; and if the BLKSIZE is 6400 or 6447 you can get 2 blocks of the tape on one track of a 3350 disk. Once you have determined the number of tracks you need, then collect a dummy line in your active file and save it using the followina command:

SAVE filename LRECL zzz SPACE nnn
where $z z z$ is the record length and nnn is the number of tracks needed. If the BLKSIZE of the tape was 6233 or 6447 you cannot include the LRECL on the save. Once this is done the following JCL will copy the file from the tape:
--------jó card-----------
-----any optional JES3 control cards.-.. // EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=A
//SYSIN DD DIIMMY
//SYSUT2 DD DSN=wrL.id.usr, newfilename, DISP=OLD
//SYSUT1 DD VOL=SER=zzzzzz,DISP=(1) D:KFFP).
// UNIT=(yyষyy, , DEFER), LABEL=( $n$, ft, , |N), BSN=tape filename
//
SYSUT2 will point to your WYLBUR file and SYSUTl will point to your tape file. On SYSUTI, zzzzzz is the serial number for your tape, yyyyy is TAPE9 or TO800, $n$ is the file number you want to copy, and "tape filename" is the name of the file on the tape.

## Appendix K

Program to Break Long Lines into 3 Lines of 60
Program to Break Long Lines into 3 lines of 60
// EXEC SAS
//OLD DD DSN=USR.S656.TS.TSDATA,DISP=OLD
//NEW DD DSN=USR.S656.TS.NEWTSDAT,DISP=OLD
//SYSIN DD
DATA NULL ; LENGTH CARD 1 CARD 2 CARD 3 \$ 60;
INFITE OLD
INPUT @ 7 (CARD 1-CARD 3) (\$ CHAR 60);
FILE NEWS ;
PUT CARD 1 \$ CHAR 60. N 61-63 @ 64'1'
\#2 CARD 2 \$ CHAR 60. N 61-63 @ 64'2' ;
\#3 CARD 3 \$ CHAR 60. N_ 61-63 @ 64'3' ;
SAVE NEWTSDAT LRECL=80 SPACE=3

## Appendix L

Program for First Factor Analysis
/PROBLEM TITLE='FACTOR ANALYSIS'
/INPUT CODE = TSDATA
UNIT $=8$
/VARIABLE USE=1 TO 53
/PRINT CASE=0. FSCORE=13. NO CORRELATION
/SAVE CONTENT=DATA. UNIT=9. NEW. CODE=TSFACTOR /END

## Appendix M

Program for Second Factor Analysis

```
1 PROC CONVERT BMDP=BMDP OUT=NEW;
2
NOTE: BMDP FILE CODE=TSDATA CONTENT=DATA
NOTE: LABEL=' MARCH 21. 1983 17:25:25
NOTE: THE PROCEDURE CONVERT USED O.17 SECONDS AND 512K.
            PROC STANDARD MEAN=O OUT=STAND;
            BY GROUP NOTSORTED;
            VAR I1-I53;
NOTE: DATA SET WORK.STAND HAS 2O9 OBSERVATIONS AND 156 VARIABLES. 22 OBS/TRK
NOTE: THE PROCEDURE STANDARD USED 0.40 SECONDS AND 98K.
    PROC FACTOR METHOD=PRIN NFACT = 10
        ROTATE=VARIMAX NOSIMPLE NOCORR SCORE
        OUT=FACT:
    VAR I 1-I53;
NOTE: DATA SET WORK.FACT HAS 77 OBSERVATIONS AND 55 VARIABLES. 42 OBS/TRK
NOTE: THE PROCEDURE FACTOR USED 2.12 SECONDS AND 236K AND PRINTED PAGES 1 TO 9
9 PROC SCORE DATA=NEW SCORE=FACT
10 OUT=SASFILE.TS:
```

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