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Effects of Gender and Counter-stereotypical Major on Overall Impression and Ratings of Stereotypical Traits

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Running head: COUNTER-STEREOTYPICAL MAJOR

Effects of gender and counter-stereotypical major on overall impression and ratings of stereotypical traits Heather M. Thornton

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Abstract

The purpose of the present study was to examine the effects of gender and academic major type (i.e. gender stereotypical, non-stereotypical, and neutral) on assessment of a target person in order to determine how people perceive those who violate gender norms. Participants rated the person on three dependent variables assessing general impression of the target. They also completed ratings of the extent to which twelve adjectives best described each target person (e.g., sensitive, competitive, aggressive). It is predicted that targets with non-stereotypical majors will receive lower ratings for overall impression, physical attractiveness, and desire to meet. It is also predicted that targets with non-stereotypical majors will be rated higher on the non-stereotypical traits than those with stereotypical majors. The dependent variables listed above were analyzed using a Repeated Measures Analysis of Variance, the independent variables used were major type, and participant sex. Effects of counter-stereotypical academic major on overall impression and ratings of stereotypical traits

The purpose of this study is to examine whether people infer attractiveness and personality traits from information about academic major and whether a gender counterstereotypical occupation affects the overall impression and perceived attractiveness of a hypothetical person. Relatively little research has been conducted on the judgement of others based on academic major. In particular, I am interested in whether gender trait ratings are influenced by the gender typicality of one's academic major.

Theoretical Account for the Use of Stereotypes

People constantly engage in the process of gathering information and forming impressions of those around them. With the amount of information that people are bombarded with on a daily basis, they often look for mental "shortcuts" that allow them to process large amounts of information with reduced cognitive effort. One such shortcut is stereotyping (Macrae, Milne, & Bodenhausen, 1994). A stereotype is defined as "a cognitive structure containing the perceiver's knowledge and beliefs about a social group and its members" (Hamilton, Sherman, & Ruvolo 1990, p. 36). Often stereotypes are not used on a conscious level. Due to the abundant stereotypic information that people are exposed to throughout their lives, a person's membership in a certain group can become unconsciously linked to the stereotypic information associated with that group (Devine, 1989).

For each person one encounters, there are generally two types of information available to them: stereotypic information about the person's group membership, and individuating information that applies specifically to the person (Hamilton, Sherman, & Ruvolo, 1990). People are more likely to base their judgments on the stereotypic information if the specific individuating information about the person is ambiguous, consistent with the stereotype, or uninformative (Fiske, Neuberg, Beattie, & Milberg, 1987). When a target's major is stereotypical for his or her sex, trait judgments will be more likely to be based on gender stereotypes. When the target's major is not stereotypically consistent with their sex, trait judgments will not be based on the targets gender. In this case, targets will be rated less like their in-group, and more like their outgroup.

Broadly, a schema is "a cognitive structure, a network of associations that organizes and guides an individual's perceptions" (Bem, 1981, p.355). Gender schemas, which are developed during childhood, specifically describe a cognitive framework that organizes and guides an individual's perceptions about gender. The development of gender schemata enables people to interpret information in terms of gender (Brannon, 1999), and compartmentalize information by gender, thus allowing for the use of gender stereotypes.

Gender stereotypes are defined as "the sum of socially designated behaviors that differentiate between men and women" (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1978, p. 60). Positive masculine traits (i.e., ambitious, competitive) are said to make up a cluster around competence. Positive feminine traits (i.e., sensitive, gentle) are said to make up a cluster around warmth-expressiveness. Masculine characteristics are valued more highly than feminine characteristics in Western society (Broverman et al., 1978). Beyond trait association, feminine and masculine sex-roles are also associated with other things such as physical attributes and occupations (Jackson, Esses & Burris, 2001). Information can also be inferred about people through use of implicit personality theories. Implicit personality theories can be conceived of as a set of traits that make up a cognitive schema representing distinct personality types. Implicit personality theories rely on "expectations about a person's standing on some unknown trait (e.g., shyness) are derived from beliefs about the correlations of that trait with known traits (e.g., outgoingness, aloofness)," (Anderson & Sedikides, 1991, p. 203). For example, upon learning that a person is a college student, one might assume that the person is poor, young, and hard working. Of course, not all college students fit this description, but these are traits often associated with being a college student. Stereotypes are a type of implicit personality theory, wherein a person's race, gender, or other basis for group membership is seen as a central trait leading to inferences about other traits. In this study, both academic major type and gender are used as central traits to derive information about what personality traits are implied by combinations of the two group memberships.

When the two group memberships are inconsistent (i.e., a female in a stereotypically masculine major), people are no longer able to rely on implicit personality theories or simple stereotypes to make judgments about people. This inconsistency could have negative effects on peoples' impression of those with the group membership inconsistency. There are several reasons that this might be the case. Taylor (1981, as cited in Aronson, Wilson, & Akert, 1999), suggests that people are "cognitive misers", so limited in their ability to think and make inferences, that they take mental shortcuts whenever possible. When a person we encounter has inconsistent group memberships, this miserly process is short-circuited. Perceivers may resent this increase in their

cognitive load, and have a more negative attitude toward those who violate group norms as a result.

Another reason that inconsistent group membership could have a negative effect on judgments is that those who have inconsistent group memberships may be seen as untypical of both groups and be labeled as a deviant. This classification could also lead to negative impressions of that person. The consequence of this may not be so simple, however. If a person is not considered part of the in-group, he or she is by default part of the out-group. If there are positive traits associated with the out-group, this classification could lead to a positive assessment of the "deviant". For example, a female in a masculine major may no longer be part of the feminine in-group, but she may be assigned masculine (out-group) positive traits.

Practical Implications

Consequences for those who violate gender norms are present for both genders. Controversy exists over which gender faces more unpleasant consequences. Yoder and Schleicher (1996) found that women in gender incongruent occupations were rated as less likeable and less attractive, less positive overall and their femininity was questioned. Men in their study who had counter-stereotypical occupations were rated as being more feminine, but were described with positive feminine adjectives, not negative ones. No mention was made of masculine ratings.

In contrast, McCreary (1994) asserts that the male role is of higher status than the female role. Therefore, a female enacting a male role is altering her behavior in a higher status direction, and is regarded more positively than a male behaving in a stereotypically feminine manner, which is of a lower status, and is viewed more negatively. He also noted that cross-gender behavior in males may be indicative homosexuality.

Homosexuality is often viewed by society (especially in the case of male homosexuals) as negative and desirable to avoid. Having a counter-stereotypical occupation may be beneficial for females in a work environment, since they are attributed with more masculine traits associated with competence, but it may be detrimental interpersonally in that females who display masculine characteristics are expected to experience higher social costs (Yoder & Schleicher, 1996).

When men and women are repeatedly observed enacting stereotyped roles, the observer is likely to assess that these roles are typical for these genders and that traits associated with these roles are characteristic of men and women (Gerber, 1988). The unequal distribution of men and women into occupations is indicative of and serves to perpetuate stereotypes about the gender appropriateness of jobs (Yoder & Schleicher, 1996). Gender stereotypes can influence one's choice of major, and ultimately one's career. Females are still perceived as being less capable than males in traditionally masculine majors. It is also assumed that females with feminine characteristics enter traditionally feminine majors (Beyer, 1996). This suggests that females who enter stereotypically masculine majors may lack feminine characteristics. Beyer (1996) proposes that factors such as these may dissuade females from entering in to traditionally masculine majors.

Brief overview of present study

The present study intends to clarify further the consequences of behaving in a counter-stereotypical manner. It also hopes to clarify when gender stereotypes are used and when other information is relied upon. Participants will read six short descriptions of targets (three male, three female; one of each in a feminine, neutral and masculine major). The participants will rate the targets on how much they want to meet the target,

how attractive the target is, overall impression of the target, and the extent to which three feminine positive traits, three feminine negative traits, three masculine positive traits, and three masculine negative traits best describe each target person. The ratings will be on a 7-point Likert scale (1 = not at all, 7 = very much).

Hypothesis

Targets who have gender inconsistent majors will be seen as less typical of their group than those targets with gender consistent majors. Therefore the gender inconsistent targets should be rated as having higher opposite gender characteristics and lower gender consistent characteristics than targets with majors consistent with their gender. Participants will rate targets with gender inconsistent majors more negatively overall, and have less desire to meet them. Since attractiveness and interest in one's appearance are often thought of as traits associated with femininity, participants will rate the male target with the inconsistent major as being more attractive than the male with the consistent major. The female target with the inconsistent major will be rated as less attractive than the female target with the consistent major.

Methods

Participants

A total of 97 (53 female, 44 male) participants voluntarily took part in the present study. The ages of the participants ranged from 18 to 50. Since the trait assessments were of targets in their early 20's, data of participants over 25 (n=4) were excluded. The majority (81.3%) of the participants were Caucasian. Participants were all Western Washington University undergraduates enrolled in a psychology class, 73.1% of the participants were enrolled in Introductory Psychology. Participants earned course credit for a Psychology course assignment for their participation.

Measures

The online survey consisted of four screens. The first screen was the standard informed consent form. The second screen included a demographic survey asking standard background information such as age, gender, race, etc., followed by the study material. The measure consisted of six brief descriptions describing a single individual (the target). Two descriptions (one male target, one female target in each pair) featured the targets as having a gender stereotypical major, two descriptions featured the targets in a gender-neutral major, and two descriptions featured the targets in a gender nonstereotypical major. The occupations were chosen based on a pilot study in which 15 undergraduate psychology students rated a list of academic majors on a scale of 1 (very feminine) to 7 (very masculine). The two majors with the highest mean ratings (Mathematics, M = 5.84; and Engineering M = 5.95) were chosen as the masculine majors. The two majors with the lowest mean ratings (English, $\underline{M} = 2.79$; and Communication, M = 2.79) were chosen as the feminine majors. Two majors with ratings near the mean of the masculine and feminine majors (History, M = 4.42; and Journalism, M = 3.68) were chosen as the neutral majors.

The descriptions also contained information about the target's eye color (either blue or brown), and their age group (all were identified as "early 20's"). This information was intended to mask the true focus of the experiment from the participants. Questions assessing (using a 7-point scale) (1) desire to meet the target, (2) the perceived physical attractiveness and (3) overall impression of the target follow each description. The participants are instructed to rate the target on 12 gender-stereotypical traits (male negative: dominating, aggressive, boastful; male positive: competitive, protective of mate, confident; female negative: timid, emotionally unstable, passive; female positive: nurturing, sensitive to feelings of others, affectionate).

Also included was a space for the participants to describe what they thought the experiment was measuring. The third page contained a debriefing statement and contact information. The fourth page was a page that the participants could print and submit in order to earn credit for participation.

Procedures

Participants were given a web URL and invited to participate in an on-line study. They were instructed to sign up to visit the web site on their own and complete the study by a specified date. The site began with the consent form, where participants were asked to read the form and then press an "I consent" button, and were then taken to the next page. Participants were informed that they would be reading descriptions and giving feedback about their initial impressions of the targets. Participants were instructed to read the survey in order, and answer honestly and to the best of their ability. Race or ethnicity of the target was not mentioned at any time. There was a button on each page of the site, which directly linked the participant to the printable page for credit if they wished to discontinue the experiment at any time.

Results

All data were initially analyzed using a 2x3 Repeated Measures ANOVA on each separate target rating. The independent variables were the target's major (whether it was feminine, masculine or neutral), and the participant's sex. Data for female targets and male targets were analyzed separately. Preliminary analyses revealed that the majors identified as "neutral" in the pilot study were in fact strongly associated with masculine or feminine characteristics in the present study. To clarify effect of counter-stereotypical major, the neutral majors were not included in the final analyses, making the ANOVA a 2x2. The dependent variables analyzed separately were: perceived physical attractiveness of target, desire to meet the target, and overall impression of the target. The participants' ratings of how much the traits affectionate, sensitive and nurturing, described the target were combined and analyzed as a feminine positive trait composite. The participants' ratings of how much the traits timid, passive, and emotionally unstable described the target were combined and analyzed as a feminine negative trait composite. The participants' ratings of how much the traits competitive, confident, and protective of mate, described the target were combined and analyzed as a masculine positive trait composite. The participants' ratings of how much the traits competitive, sonstful, and dominating, described the target were combined and analyzed as a masculine positive trait composite. The participants' ratings of how much the traits aggressive, boastful, and to mate, described the target were combined and analyzed as a masculine negative trait composite. The participants' ratings of how much the traits aggressive, boastful, and dominating, described the target were combined and analyzed as a masculine negative trait composite. When significance was found, main effects were examined to determine the nature of the effect.

Female targets

A significant main effect was found in the participants' rating of overall impression of the target as a function of the target's major ($\mathbf{F} = 11.029$, $\mathbf{p} = .001$, $\mathbf{MSE} =$.719, $\mathbf{n}^2 = .104$). Participants rated targets with feminine majors ($\mathbf{M} = 4.701$, $\mathbf{SD} = .091$) higher than targets with masculine majors ($\mathbf{M} = 4.295$, $\mathbf{SD} = .078$).

A significant main effect was found in how attractive the target was rated as a function of the target's major ($\underline{F} = 19.924$, $\underline{p} = .000$, $\underline{MSE} = .974$, $\underline{n}^2 = .175$). Participants rated targets in feminine majors ($\underline{M} = 4.432$, $\underline{SD} = .122$) as more attractive than targets in masculine majors ($\underline{M} = 3.795$, $\underline{SD} = .124$).

No significant main effect or interaction was found in how much the participant wanted to meet the target as a function of the target's major.

A significant main effect was found in ratings on the feminine positive trait composite as a function of the targets' majors (<u>F</u> = 73.627, <u>p</u> = .000, <u>MSE</u> = .578, <u>n</u>² = .437). Participants rated the target with the feminine major (<u>M</u> = 4.658, <u>SD</u> = .103) higher in this composite than the target with the masculine major (<u>M</u> = 3.717, <u>SD</u> = .092).

No significant main effect or interaction was found in ratings for the feminine negative composite as a function of target major.

A significant main effect was found in ratings for the masculine positive composite as a function of target's major ($\underline{F} = 5.346$, $\underline{p} = .023$, $\underline{MSE} = .369$, $\underline{n}^2 = .053$). Participants rated the target with the masculine major ($\underline{M} = 4.840$, $\underline{SD} = .087$) higher in this composite than the target with the feminine major ($\underline{M} = 4.637$, $\underline{SD} = .090$). A significant main effect was also found as a function of the participant's sex ($\underline{F} = 5.545$, \underline{p} = .021, $\underline{MSE} = 1.143$, $\underline{n}^2 = .055$). Female participants rated targets higher in general (\underline{M} = 4.920, $\underline{SD} = .104$) than male participants ($\underline{M} = 4.557$, $\underline{SD} = .114$).

A significant main effect was found in ratings for the masculine negative composite as a function of the target's major ($\mathbf{F} = 18.586$, $\mathbf{p} = .000$, $\underline{MSE} = .847$, $\underline{\mathbf{n}}^2 =$.164). Participants rated targets with a masculine major ($\underline{M} = 4.420$, $\underline{SD} = .100$) higher in this composite than targets with a feminine major ($\underline{M} = 3.847$, $\underline{SD} = .111$). A significant main effect was also found as a function of the participant's sex ($\mathbf{F} = 5.654$, $\mathbf{p} = .039$, $\underline{MSE} = 1.288$, $\underline{\mathbf{n}}^2 = .044$). Female participants rated targets higher in general ($\underline{M} = 4.305$, SD = .110) than male participants ($\underline{M} = 3.962$, $\underline{SD} = .121$).

Male targets

A significant main effect was found in the participants' rating of overall impression of the target as a function of the target's major ($\mathbf{F} = 6.101$, $\mathbf{p} = .015$, $\underline{MSE} = .678$, $\underline{n}^2 = .061$). Participants rated the target with the feminine major ($\underline{M} = 4.463$, $\underline{SD} = .113$) higher than the target with the masculine major ($\underline{M} = 4.169$, $\underline{SD} = .088$).

A significant main effect was found in how attractive the target was rated as a function of the target's major ($\mathbf{F} = 7.312$, $\mathbf{p} = .008$, $\mathbf{MSE} = .875$, $\mathbf{n}_{-}^2 = .071$). Participants rated the target in the feminine major ($\mathbf{M} = 4.217$, $\mathbf{SD} = .122$) as more attractive than the target in the masculine major ($\mathbf{M} = 3.557$, $\mathbf{SD} = .122$). A significant main effect was also found as a function of the participant's sex ($\mathbf{F} = 16.090$, $\mathbf{p} = .000$, $\mathbf{MSE} = 1.302$, $\mathbf{n}^2 = .145$). Female participants rated targets higher in general ($\mathbf{M} = 4.217$, $\mathbf{SD} = .111$) than male participants ($\mathbf{M} = 3.557$, $\mathbf{SD} = .122$).

A significant main effect was found in how much the participant wanted to meet the target as a function of the target's major ($\mathbf{F} = 10.352$, $\mathbf{p} = .002$, $\mathbf{MSE} = .918$, $\mathbf{n}^2 =$.098). Participants rated the target in the feminine major ($\mathbf{M} = 4.386$, $\mathbf{SD} = .126$) higher (indicating a greater desire to meet) than the target in the masculine major ($\mathbf{M} = 3.941$, $\mathbf{SD} = .139$).

A significant main effect was found in ratings on the feminine positive trait composite as a function of the targets' majors ($\underline{F} = 142.714$, $\underline{p} = .000$, $\underline{MSE} = .623$, $\underline{\eta}^2 =$.600). Participants rated the target with the feminine major ($\underline{M} = 4.901$, $\underline{SD} = .107$) higher in this composite than the target with the masculine major ($\underline{M} = 3.541$, $\underline{SD} = .094$).

No significant main effect or interaction was found in ratings for the feminine negative composite as a function of target major.

A significant main effect was found in ratings for the masculine positive composite as a function of target's major (<u>F</u> = 9.631, <u>p</u> = .003, <u>MSE</u> = .467, <u>n</u>² = .092). Participants rated the target with the masculine major (M = 4.510, SD = .103) higher in this composite than the target with the feminine major (M = 4.204, SD = .090).

A significant main effect was found in ratings for the masculine negative composite as a function of the target's major (<u>F</u> = 14.499, <u>p</u> = .000, <u>MSE</u> = .621, <u>n</u>² = .132). Participants rated the target with a masculine major (<u>M</u> = 3.692, <u>SD</u> = .113) higher in this composite than the target with a feminine major (<u>M</u> = 3.260, SD = .087).

Discussion

These results partially confirm the initial hypothesis. Consistent with the hypothesis, participants rated the female target with the stereotype inconsistent (masculine) major higher on both of the masculine composites, and scored significantly lower on the feminine positive composite than the female target with the stereotype consistent (feminine major). Participants rated the female target with the inconsistent major lower for both attractiveness and overall impression than the female target with the consistent major. These results are also consistent with previous research (Yoder & Schleicher, 1996) findings that the femininity of women in gender incongruent occupations is questioned, and they experience negative assessment and social costs.

Participants rated the male target with the stereotype inconsistent (feminine) major significantly higher on the feminine positive composite and significantly lower on both of the masculine composites than the male target with the stereotype consistent (masculine) major. These results were not affected by the sex of the participant. Participants did not rate male or female targets significantly different across majors on the feminine negative composite. This finding is also consistent with previous research by Yoder and Schleicher (1996) who found that males in stereotypically feminine occupations were attributed feminine traits, but that these traits were positive feminine traits. Participants also rated the male target with the inconsistent major as being more physically attractive than the male target with the stereotype consistent major.

Contrary to the hypothesis, participants rated the male target with the inconsistent major more positively overall, and indicated a higher desire to meet this target than the male target with the stereotype consistent major. This effect was found across participant sex. These results contradict the ideas put forth by McCreary (1994) that due to either a status lowering account or perceived association with homosexuality, males behaving counter-stereotypically would be rated more negatively. One possible explanation for these results is that above and beyond people's reactions to stereotype inconsistency. people may feel more positive about and desire to meet a target they just rated as more sensitive, nurturing, and affectionate than the target they just rated as more aggressive. competitive, boastful, etc. Overall impression and desire to meet a person assess the targets perceived social/relationship desirability, which is an area in which stereotypically feminine qualities are highly desirable. The desirability of feminine traits in this context may also explain why the participants rated the female target with the inconsistent major less positively overall, since participants had rated her higher on the masculine traits which may be less desirable in this context. Had this study addressed the participants assessment of the targets' competence, ability to succeed financially, or other factors assessing the cluster of competence, in which stereotypically masculine qualities are more desirable, the male target with the inconsistent major may have received lower ratings and the female target with the inconsistent major may have received higher ratings. Further research should address this in order to clarify whether inconsistent group membership leads to negative assessments for females and positive assessments for

males, or if inconsistent group membership simply leads to an assignment of traits associated with the out-group, which could be negative or positive based on the context.

A possible explanation for why the feminine negative composite failed to elicit any significant differences for either target sex is the nature of the traits that make up the composite. These traits were passive, timid and emotionally unstable. These traits imply a degree of negativity that may be less commonly used to describe people encountered during daily interactions, especially emotionally unstable and timid. Perhaps use of other feminine negative traits (e.g., indecisive, emotional) would yield different results.

Results of this study suggest that when people encounter someone with conflicting group memberships, a negative assessment of that person is not necessarily made based solely on the group inconsistency. It is unlikely that the increased cognition that a person must undertake in order to make inferences about a person with inconsistent group memberships leads the perceiver to form a negative impression of the target. In this study, the cognitive load does not actually seem to increase greatly at all—the perceiver still relies on group membership in order to form an impression. It does not appear that there was an attempt to integrate the two group memberships, the perceiver simply picked the group membership that has more relevance to the person's behavior, academic major in this case, and made judgments based on that. If more extensive individuating information existed that perceiver must process in order to make an assessment of the target, imposition of an increased cognitive load could lead to a more negative assessment. Subsequent research should examine this further.

Regardless of whether the more negative overall assessment of the female target with an counter-stereotypical major was due to inconsistent group memberships, or simply the assignment of counter-stereotypical traits, the target did incur a pattern of ratings that translate to real world costs based on her choice of major. She was rated lower on the feminine positive composite of traits, which are seen as desirable in social interaction and relationship dynamics. This was reflected in her lower overall ratings as well. In addition she was perceived as being less physically attractive than the female target with the stereotypical major. Townsend & Wasserman (1998) contend that physical attractiveness is one of the primary characteristics that men use to establish a pool of dateable females. Perception of diminished physical attractiveness based on a female's choice of a counter-stereotypical major could limit them romantically.

The negative social costs for females could be limiting in other ways as well. The commonly cited "Equal Pay" statistic asserts that women earn 75 cents for each dollar earned by men. USA Today (May 10, 2000) counters that the statistic does not show that women are getting paid less for the same job, but simply reflects the ratio of men's to women's average annual earnings. The article states that many factors account for this wage discrepancy, including type of occupation. The Washington Post (March 3, 1999) contends that "occupations that have been traditionally viewed as 'women's work', such as clerical workers, cashiers, and librarians, earn less than workers in predominantly male fields that have comparable levels of skill, education, responsibility, and so forth." This raises the question of why women are continuing to perform "women's work" despite evidence of lower pay. Apprehension about incurring social costs by behaving in a counter-stereotypical manner may play a role in this phenomenon.

No interactions between the sex of the participant and the major of the target were found. Males do not rate people with inconsistent groups any differently than females do regardless of the gender of the target. As previously discussed, one limitation of the present study was the lack of survey questions assessing the participants judgments of the targets in areas related to the stereotypically masculine cluster of traits around competence. Inclusion of this would have led to a more balanced examination of the effects of inconsistent group membership.

An interesting effect not related to the hypothesis, was that female participants rated female targets higher on both masculine positive and masculine negative composites than males rated the female targets regardless of major. There was no difference in how females and males rated male targets. I suspect that the females rated the female targets higher based on in-group familiarity. Females may recognize that females have many masculine traits as well, and rate them accordingly, whereas males may rely more on stereotypes to make their assessments.

References

Anderson, C., & Sedikides, C. (1991). Thinking about people: Contributions of a typological alternative to associationistic and dimensional models of person perception. <u>Journal of Personality & Social Psychology</u>, 60(2), 203-217.

Aronson, E., Wilson, T., & Akert, R. (1999). <u>Social Psychology</u> (3rd ed.). Addison-Wesley Educational Publishers, Inc.: New York

- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing.
 <u>Psychological Review, 88(4)</u>, 354-364
- Beyer, S. (1999). The accuracy of academic gender stereotypes. <u>Sex Roles</u>, 40(9/10), 787-813.
- Brannon, L. (1999). <u>Gender: Psychological Perspectives, Second Edition</u>. Allyn and Bacon: Boston, MA.
- Broverman, I., Vogel, S., Broverman, D., Clarkson, F., & Rosenkrantz, P.(1972). Sexrole stereotypes: A current appraisal. Journal of Social Issues, 28(2), 59-78.
- Devine, P. (1989). Stereotypes and Prejudice: Their automatic and controlled components. Journal of Personality and Social Psychology, 56(1), 5-18.
- Fiske, S., Neuberg, S., Beattie, A., & Milberg, S. (1987). Category-based and attributebased reactions to others: some informational conditions of stereotyping and individuating processes. Journal of Experimental Psychology, 23, 399-427.
- Gerber, G. (1988) Leadership roles and gender stereotype traits. <u>Sex Roles, 18(11/12)</u>, 649-668.
- Hamilton, D., Sherman, S., & Ruvolo, C. (1990). Stereotype-based expectancies: Effects on information processing and social behavior. <u>Journal of Social Issues</u>, 46(2), 35-60.

Hattiangadi, A. (2000, May 10). Facts bridge false pay gap. USA Today, p.27A.

- Jackson, L., Esses, V., & Burris, C. (2001). Contemporary sexism and discrimination: The importance of respect for men and women. <u>Personality & Social Psychology</u> Bulletin, 27(1), 48-61.
- Macrae, C., Milne, A., & Bodenhausen, G.(1994) Stereotypes as energy-saving devices: A peek inside the cognitive toolbox. <u>Journal of Personality & Social Psychology</u>, <u>66(1)</u>, 37-47.
- Mann, J. (1999, March 3). Waiting for the equal-pay ship to dock. <u>The Washington</u> <u>Post, C-15</u>.
- McCreary, D. (1994) The male role and avoiding femininity. <u>Sex Roles, 31(9/10), 517-531</u>.
- Townsend, J.M., & Wasserman, T. (1998) Sexual attractiveness: Sex differences in assessment and criteria. Evolution and Human Behavior, 19, 171-191.
- Yoder, J., & Schleicher, T. (1996). Undergraduates regard deviation from occupational stereotypes as costly for women. <u>Sex Roles, 34(3/4)</u>, 171-187.

Figure 1.



Male target (Mathematics and English majors)

Figure 2.



Female target (Communication and Engineering majors)





Male target (Mathematics and English)

Figure 4.



Female target (Communication and Engineering majors)

Figure 5.



Male target (Mathematics and English majors)

Figure 6.



Male target (Mathematics and English majors)





Female target (Communication and Engineering majors)





Male target (Mathematics and English majors)





Female target (Communication and Engineering majors)





Male target (Mathematics and English majors)

Figure 11.



Female target (Communication and Engineering majors)



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