

Spring 2011

Effects of Writing on Gender Attitudes of Men and

Nicole Raelynn Hein
University of Colorado Boulder

Follow this and additional works at: https://scholar.colorado.edu/honr_theses

Recommended Citation

Hein, Nicole Raelynn, "Effects of Writing on Gender Attitudes of Men and" (2011). *Undergraduate Honors Theses*. 591.
https://scholar.colorado.edu/honr_theses/591

This Thesis is brought to you for free and open access by Honors Program at CU Scholar. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of CU Scholar. For more information, please contact cuscholaradmin@colorado.edu.

Effects of Writing on Gender Attitudes of Men and Women:

Do Women Have a Desire of Their Own in Today's Generation?

Nicole Raelynn Hein

April 12, 2011

University of Colorado, Boulder

Department of Psychology and Neuroscience

Committee Members: Diane Martichuski (Thesis Advisor) and Matthew C. Keller; Department of

Psychology and Neuroscience; Claudia VanGerven; General Honors

Running head: EFFECTS OF WRITING ON GENDER ATTITUDES OF MEN AND WOMEN

Abstract

The purpose of this study was to examine the effects of short-fiction on college-aged men and women's attitudes about gender roles. A total of 130 participants ranged from eighteen to 26 years of age, 56 of them male and 74 of them female. Subjects were randomly assigned to one of three reading conditions: consistent, inconsistent, or control; each condition contained content either consistent with, inconsistent with, or unrelated to traditional, Western- societal gender roles. Subjects' attitudes were measured via the Gender Attitude Inventory (GAI), produced by Ashmore, Del Boca, and Bilder (1995), the Personal Attributes Questionnaire (PAQ), created by Spence, Helmreich, and Stapp (1973), and the Bem Sex Role Inventory (BSRI), fashioned by Bem (1971). Results indicated a significant main effect for gender on eight out of eighteen analyses, where males displayed less support for non-traditional female gender roles and equality. Participants who read the inconsistent story demonstrated less support for traditional gender roles. There was a near significant interaction between gender and story condition on the GAI chivalry subscale; women who read the inconsistent story were more likely to support female independence (and not male chivalry) compared to the other groups. Interestingly, women who read the consistent story were more supportive of female sexual initiative than women who read the inconsistent story, and subjects who read the consistent story were more likely to support women as leaders compared to people who read the inconsistent story. Important implications of the study include the fact that dominant cultural scripts are reinforced by and reinforce the institution of heterosexuality and that women may have a desire of their own in the future if hegemonic societal institutions are changed by individual citizens.

Effects of Writing on Gender Attitudes of Men and Women:

Do Women Have a Desire of Their Own in Today's Generation?

Individuality is a multifaceted concept that can be defined in many different ways throughout the world. Western Society has been shown to idealize a patriarchal form of one-sided autonomy that allows people to think of the individual as a thinking subject (Fox-Keller, 1985, as cited by Benjamin, 1986). Jessica Benjamin (1986) discusses the Western ideal of self-sacrifice for the greater good and how it is intimately tied with the notion that one will personally transcend through social struggle. In a paradoxical manner, individual glory or honor brought about by self-sacrifice is far more important than maintaining personal connections with children and family. Men may easily be able to embody this ideal hero, having no responsibilities that directly tie them to domestics. The dilemma for women, however, is that these very personal responsibilities to children and family are the factors limiting them from detaching themselves to be able to individually transcend (Benjamin, 1986). In the same vein as the self-sacrifice ideal, psychoanalytic feminism has recognized the idea that the salient feature of male individuality is the negation of identification and dependency on the mother, and that autonomy is characterized by a complete separation of mother and son. Likewise, Sigmund Freud developed the notion that male individuality is defined by separateness brought about through paternal intervention by the father's phallus. Freud argued that a woman's lack of the phallus demotes her to a passive and envious position; passive because she does not have the skill to individuate (thus maintaining her identification with the mother and idealizing the father), envious because the tool to do this is the phallus itself (Benjamin, 1986). This passivity is what Freud recognized as a woman's autonomy; her desire, her individuality, is to acknowledge the phallus's power and envy it. The ideal patriarchal form of individuality is based on the premise that to be an autonomous individual, one must stand alone from his or her mother; and a person can either being a strong, manly subject or a passive, feminine object.

This dichotomous view of self and other has begun to be critiqued by psychoanalytic feminism. A feminist refutation to this idealized individuality is that autonomy is found through a balance between connection and separation with one's mother. One does not grow to become increasingly separate from his or her mother, but constantly negotiates being similar to the mother as well as being distinctly separate (Benjamin, 1986). Similar to the above theory and in contrast to Freudian thought, a second feminist view on individuality is that a girl develops her independence through identification with the mother rather than the passive love and phallic envy of the father. These theories are much more likely to support feminine individuality, separate from identification through men (Benjamin, 1986).

While both idealized, patriarchal individuality theories and feminist theories may have merit, each can be countered by the other. A commonality between the two theoretical perspectives is that in each theory, men are not denied their individuality. Whether emphasis is placed upon individuation or separation, or father or mother influences, the question of how a woman can achieve autonomy still remains. Do women gain individuality through staying behind and watching over the children and elders while men run free and conquer the world through self-sacrifice? Is a woman's domestic responsibility the only image of heroism? Is it true that women gain independence through identification with a mother figure? Maybe a woman's individuality arises through her acknowledgement of the power of the phallus and the envy that comes along with that recognition, as Freud suggests. Whichever way the question is negotiated, women's individuality seems to be constrained to other human beings' welfare. In the self-sacrifice ideal, women cannot be classified as individuals because they are tied to their family. Even if this connection is seen as a form of autonomy, a woman's life revolves around others. Similarly, in the psychoanalytic theories, a woman's individuality is based upon the premise that men are superior and women inferior. Even within the feminist arguments, women may develop their independence within the context of their relationship with their mother, rather than from within their selves. With this Western patriarchal ideal of individuality being so prominent, there is much need for research regarding

men and women's attitudes about gender roles and whether women can truly have their own desire.

Literature can be a means to discover such attitudes.

Previous research using literature to assess gender role attitudes focuses largely on the effects of the language of writing, such as the use of the "generic he" and its effects on memory recall (Crawford & English, 1984), or the effects of biased and unbiased generic language on male and female imagery bias (Hamilton, 1988). Other research address the ramifications of societal gender attitudes, such as the way in which traditional gender attitudes can predict rates of sexual and physical violence against women (York, 2010), or how college students' gender attitudes and beliefs affect their aspirations and fears for the future (Hildenbrand, 2008), but these studies did not use writing as a mechanism for affect.

Of the research that focuses on the language of writing, Hamilton (1988) showed that writing in biased, "generic he" language caused males to display more male-biased gendered imagery when compared to females. In this study, college students were asked to complete sentence fragments describing people in gender-neutral occupations or activities; students either used masculine (he or his) or unbiased (he/she or their) generics. Participants were additionally asked to describe any imagery of a person that may have arisen upon writing the completion of a sentence and to create a name for that person. Both males and females completed sentences using masculine generics in the masculine-generic language condition compared to the unbiased language condition, and male subjects used more male-biased language and imagery than female subjects overall (Hamilton, 1988). Both males and females also displayed male-bias in terms of imagery, giving their imagery male names two and a half times as often as female names. These results show that self-generated, male-biased language has a tendency to affect people's cognitions and attitudes.

In another experiment, Bem and Bem (1973) presented participants with twelve job advertisements that used either sex-biased language (catering to either a man or a woman), unbiased language (a form that did not seem to prefer one sex more than the other), or sex-reversed language (these ads were

meant to appeal specifically for the sex that usually is not recruited for the job). Results showed that sex-biased language in job advertisements caused females to be discouraged from applying for “male jobs” and more willing to apply to opposite-sex jobs that used sex-reversed, affirmative action type of language (jobs not typically framed for women), whereas males were more willing to apply to opposite-sex jobs that describe the job using sex-unbiased language. Interestingly, sex-biased advertisements made men less likely to apply for those jobs; when the sex-bias was removed, the percentage of men interested in applying for these jobs increased from 30 percent to 75 percent. Sex-reversed advertisements did not have any significant affect on men’s interests in applying for those jobs. These results demonstrate how advertisements (and possibly other forms of writing) that contain sex-bias discourage both males and females from applying for “opposite-sex” jobs. In a second, related experiment, participants were presented with a booklet of sixteen jobs from the Sunday edition of *The Pittsburg Press*, labeled as “male-interest jobs” and sixteen jobs labeled as “female-interest jobs”, either in alphabetical order or sex-segregated categories. Results showed that 81 percent of the female participants preferred male-interest jobs in the alphabetical condition, compared to a 46 percent preference for male-interest jobs presented in a sex-segregated listing (Bem & Bem, 1973). These results suggest that sex-segregated job advertisements are discouraging women from considering “male-interest” jobs, despite the fact that women display a preference for these “male-interest jobs” when no sex-segregated format is present. In both of these experiments, women’s sensitivity to the language of writing is apparent. While the available research demonstrates that the language of writing can affect people’s attitudes (whether the effect occurs through imagery or willingness to apply to a job), the more complex effects of gender role portrayals in writing on attitudes has not been investigated.

Different from previous studies, this investigation attempts to examine the effects of gender

role portrayals of women in short-fiction. The study found to be most similar to the current research is a qualitative study that observes the reactions of ten fourth-grade students to gender roles depicted in orally told folk tales (Mello, 1999). The results of this study showed that storytelling had a significant impact upon students' perceptions of their own gender roles. This study also found that heroes in traditional stories are valued for attributes such as aggression, strength, and warrior status, whereas heroines in folktales, legends, and myths were valued for qualities such as caring, intellectual abilities, and endurance. Boys appreciated these valued behaviors of heroes, yet girls had difficulty negotiating their idea of a warrior- woman with their socially acceptable gender roles as a caretaker or motherly figure, as depicted in the folktales (Mello, 1999). A key aspect to the storytelling study is that students responded to the stories by questioning the devaluation of feminized gender roles and struggled with the apparent unequal status assigned to heroes and heroines (Mello, 1999). It has been suggested that personality and ability differences stem from socially-constructed gender roles (Range & Jenkins, 2010). These culturally-shared expectations of men and women make blatant the appropriate qualities and behaviors for men and women, and are consistent with occupations traditionally held by men and women in society (Range & Jenkins, 2010). This study hopes to confront these culturally held beliefs and attitudes about gender. Through portraying women in literature in a different light than the socially traditional housekeeper, mother, or caretaker, this study aims to bring to light the impact of socially constructed gender roles on people's attitudes, and looks forward to possibly changing the heroic ideal from male-dominated to a more mixed-gender orientation, to blurring the definitions of a hero. Based upon previous research, three hypotheses were made: 1) Men display more sexist attitudes about gender roles when compared to women; 2) Participants who read a story with traditional gender roles assigned to men and women will produce attitudes consistent with these traditional gender roles; and 3) Participants who read a story with less traditional gender roles assigned to men and women will display attitudes less consistent with traditional gender role acceptance.

Method

Participants

One-hundred thirty-five subjects were recruited from the students enrolled in General Psychology (PSYC 1001) at the University of Colorado at Boulder during the spring 2011 semester. Participants signed up for the experiment via the SONA, psychology subject-pool system. Participants ranged from eighteen to 26 years of age, 56 of them male and 74 of them female. Age and gender were not exclusions in this study, but were asked in an effort to determine if these factors were correlated with gender attitudes and beliefs. There were no differences in age or gender across the three story conditions. No criteria had to be met in order to participate in this study. Subjects received research credits for their participation in this study.

Materials

This study involved three different short-fiction pieces that were read by participants. The “consistent” story depicts the man as men are traditionally portrayed in Western literature, as a powerful and independent individual with his own desires, who saves the female from harm. The woman in this piece represents the traditional female gender role, that of a loving and caring wife and mother and excellent housekeeper and cook. This story is thought to be consistent with the ideal, patriarchal image of a hero. The “inconsistent” story still portrays the man as a powerful and independent individual, but also captures the caring and nurturing aspect of his personality when he shares domestic responsibilities with his wife. Oppositionally, the man does not save the female in this story; rather, the woman saves herself. She is depicted as a strong, intelligent woman who has a successful career in which she desires to advance, yet she still retains the maternal aspect of her personality and cares for her husband and children. The third story is an unrelated control story with which the results of the consistent and inconsistent stories will be compared. This short piece details the dilemma of the endangered shark population and its continued exploitation by the shark fishing

industry. Each short story is approximately 1,160 words long so that length would not be a confounding variable.

In addition to three short stories, this study required the completion of three surveys, the Gender Attitude Inventory (GAI) produced by Ashmore, Del Boca, and Bilder (1995), the Personal Attributes Questionnaire (PAQ), created by Spence, Helmreich, and Stapp (1973), and the Bem Sex Role Inventory (BSRI), fashioned by Bem (1971). The purpose of the GAI is to assess attitudes and beliefs toward multiple objects that organize college student's thoughts and feelings about sex and gender. This survey is a 109-item inventory with fourteen primary scales, allowing for relatively fine-grained measurement of gender orientations. There are also three empirically-derived, second-order factor scales that provide a more general assessment of gender-related attitudes. The first second-order scale is the Societal Organization scale, which focuses on adult roles and societal-level issues, such as family roles, work roles, female political leadership, and women's rights, which are thought to be at a psychological distance from the college student population. The next second-order scale is the Sexual Relationships scale, which concentrates on female casual sex and female sexual initiative. The third, second-order scale is the Stereotypes scale, which centers on individual evaluative beliefs about males and females. Ashmore and his colleagues (1995) developed this survey from an intergroup relations framework, which states that relations between males and females are similar to other intergroup relations like Blacks and Whites and labor and management. This perspective centers on the notion that female-male, one-on-one personal relationships are just one of the many aspects of female-male relations, and that gender is a major societal system for social categorization (Ashmore, et al., 1995). The ways in which males and females relate to one another as groups, in roles, in relationships, and as individuals shape the perceptions that these groups have, culminating in stereotypes and attitudes. These attitudes allocate power and prestige to different social categories. For example, this heuristic recognizes that males are the dominant group because of political and economic advantages not given

to women. The intergroup relations perspective holds that men and women relate to each other at four interconnected levels: individual, interpersonal relationships, culturally-defined roles, and social categories within society. Ashmore and his colleagues (1995) have developed the GAI to capture and operationalize this principal. The three, second-order factor scales of the GAI work to cover the four levels of the intergroup relations framework, where the Stereotypes scale taps the Individual-Level Scales of attributes for men and women, the Sexual Relationships scale generally covers how relationships should be enacted (within the Relationships-Level Scale), and the Societal Organization Scale prescribes relations between men and women within culturally defined roles and groups in society, working to integrate the Role-Level and Societal-Level scales of the GAI. Smaller sub-scales will be defined in the results section if there are significant findings about them.

The Personal Attributes Questionnaire (PAQ) is a self-concept scale that measures two general categories: instrumental traits that are stereotypically regarded as masculine and are socially desired by both men and women, and expressive qualities that are stereotypically regarded as feminine and are positively rated by both genders (Yoder, et al., 1982).

The Bem Sex Role Inventory (BSRI) is a survey constructed on the foundation that the sex-typed person is someone who has internalized society's sex-typed standards of desirable behaviors for men and women. The developer believes that these standards of masculinity or femininity were derived from the basis of sex-typed social desirability, rather than from differential endorsement by males and females (Bem, 1974). This survey includes a masculinity scale and a femininity scale, each containing twenty traits, as well as an androgyny scale.

Design and Procedure

Participants were randomly assigned to one of three groups by receiving a randomly dispersed story, containing either the consistent story, the inconsistent story, or the control story (see Appendix A, B, and C for the respective stories). The Principal Investigator (PI) separated the three conditions by

placing a dot in the upper-right hand corner of the consistent story, and a dot in the upper-left hand corner of the inconsistent story in order to keep track of the different conditions. The control story had no marks. The PI gave the participants the informed consent form to be read and sign, asking that all cell phones and electronic devices be turned off at that time. Subjects sat in the laboratory room to read and sign this form. During that time, the PI dispersed stories to participants, each one receiving either the consistent, inconsistent, or control condition based upon which seat they had chosen. Participants were also given a survey packet, which included the Gender Attitude Inventory (GAI), the Personal Attributes Questionnaire (PAQ), and the Bem Sex Role Inventory (BSRI; see Appendix D, E, and F for the respective surveys). Surveys were counterbalanced using a Latin Square design. Subjects were instructed not to begin reading the stories or completing the surveys until asked to do so. When each participant had read and signed the consent form, they submitted the form to the Principal Investigator and waited patiently for the other participants to finish. After all subjects had completed their informed consent forms, the Principal Investigator instructed them to read carefully and thoughtfully through the stories given to them, paying attention to the characters and their attributes. This instruction was given to decrease the possibility that participants would hurriedly read through the stories and miss or overlook critical information about the characters, particularly the women characters in the stories. The PI also asked subjects to write their age and gender at the top of the survey packet. The PI then asked participants to begin reading, and after reading, participants began filling out the surveys. A debriefing form was dispersed after the study had been completed to inform participants about the study and provide an opportunity for questions to be asked of the Principal Investigator. Once all questions were answered and concerns addressed, the Principal Investigator thanked participants for their time, gave them their participation receipt to obtain credit, and dismissed them. The three surveys were scored by the Principal investigator based upon the survey developers' instructions. Statistical tests were

performed to determine correlations between the three short stories and participants' thoughts and feelings about gender roles for men and women.

Results

In order to examine the effect of short-fiction stories on college-aged men and women's gender role attitudes, the data gathered from the GAI, the PAQ, and the BSRI were used in a series of eighteen ANOVA tests. The hypothesis that men would display more sexist attitudes about gender roles when compared to women was supported by several subscales of the GAI.

There was a significant main effect for gender on the work roles subscale; females showed less support for differential work roles than males, $F(1, 124) = 22.26, p < 0.001$. That is, women did not appear to maintain that occupations should be unequally accessible to both women and men, while men were more apt to support this notion. Similarly, results demonstrated a significant main effect for gender on the family roles subscale, where females displayed less support for stereotyped family roles compared to men, $F(1, 124) = 16.43, p < 0.001$. In terms of female superiority, there was a significant main effect for gender, showing that men did not conceptualize women as superior to men, $F(1, 124) = 6.54, p < 0.01$. On the female sexual initiative subscale, there was a significant main effect for gender, $F(1, 124) = 18.58, p < 0.001$. Women supported female sexual initiative and equality over males. Additionally, results indicate a significant main effect for gender on the funded day-care subscale of the GAI. Women were more likely to support free day-care and equality of caregivers, $F(1, 124) = 4.26, p < .05$. Women were also more likely to support women's rights and equality when compared to men, $F(1, 124) = 3.9, p < 0.05$, and women were more likely to support female leadership and equality when compared to men, $F(1, 124) = 20.1, p < 0.001$. The last significant main effect for gender indicated on the heterosexual violence subscale shows that men scored lower than women on anti-male heterosexual violence attitudes, meaning that men were more likely to think that women provoke rape and domestic violence within and outside of romantic relationships, $F(1, 124) = 9.26, p = 0.003$.

Not only did the results yield significant main effects for gender, but supplementary, significant interactions were found in regard to the third hypothesis that participants who read the inconsistent story would display attitudes which demonstrate less traditional gender role acceptance. Results indicated a trend for story condition, $F(2, 124) = 2.91, p=0.05$, where participants who read the inconsistent story demonstrated less support for traditional gender roles. Additionally, there was a near significant interaction between gender and story condition on the GAI chivalry subscale, $F(2, 124) = 2.86, p = 0.06$. Women who read the inconsistent story were more likely to support female independence (and not male chivalry) compared to the other groups. Figure 1 shows the results of the ANOVA run for this subscale.

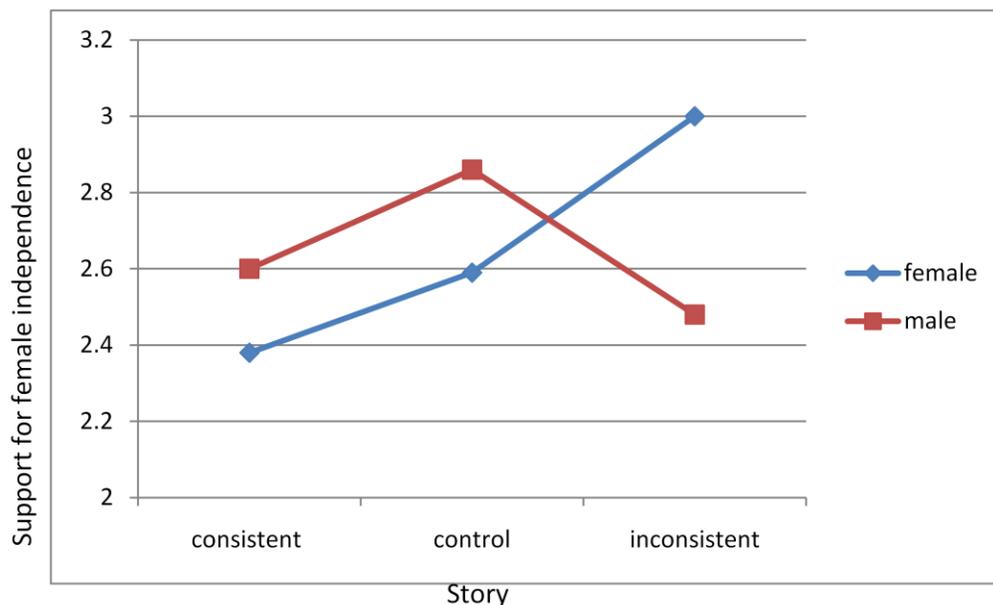


Figure 1. Gender by story interaction for female independence.

As predicted, there is a significant interaction between gender and story condition on the female sexual initiative subscale, $F(1, 124) = 3.26, p < 0.05$. Interestingly, the outcome of this interaction is contrary to the second hypothesis that participants who read the consistent story will produce more traditional gender role attitudes; women who read the consistent story were more supportive of female sexual initiative ($M=6.09$) than women who read the inconsistent story ($M=5.63$). Also surprising, the

greatest difference between genders occurs in the consistent story condition, not the inconsistent story condition. Additionally unresponsive to the second hypothesis, a main effect for story condition, $F(2, 124) = 3.74, p < 0.05$, shows that subjects who read the consistent story condition were more likely to support women as leaders compared to people who read the inconsistent story. Figure 2 illustrates this pattern.

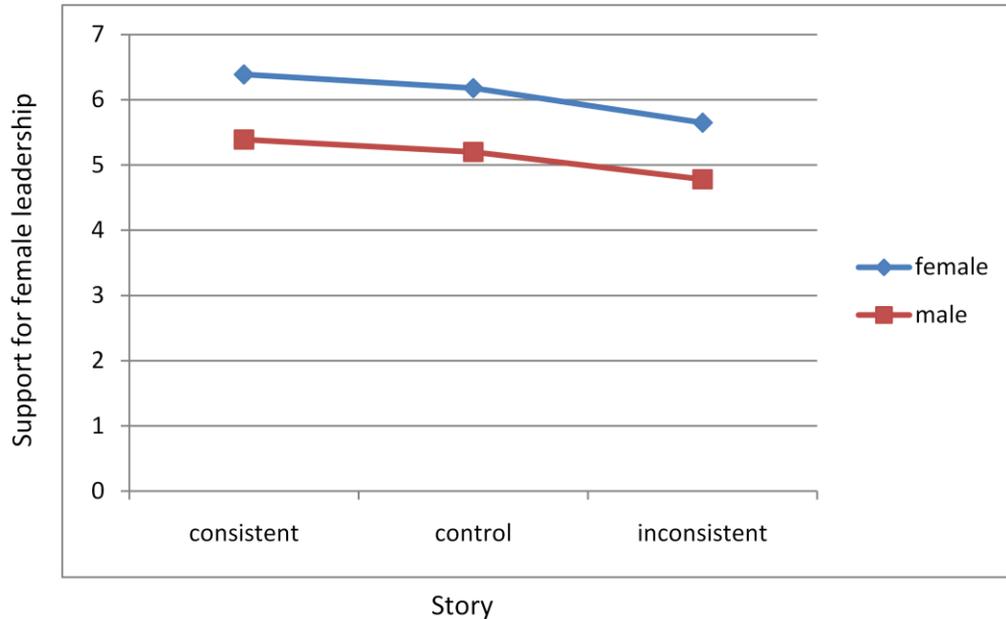


Figure 2. Gender by story interaction for female leadership.

Further results show a significant interaction between gender and story condition on the male heterosexual violence subscale, $F(2, 124) = 3.04, p = 0.05$. Women who read the consistent story were less likely to support male heterosexual violence against women compared to women who read the inconsistent story and to males in both conditions. This result is contrary to the hypothesis regarding

traditional gender role acceptance in the consistent story condition. Figure 3 depicts this interaction.

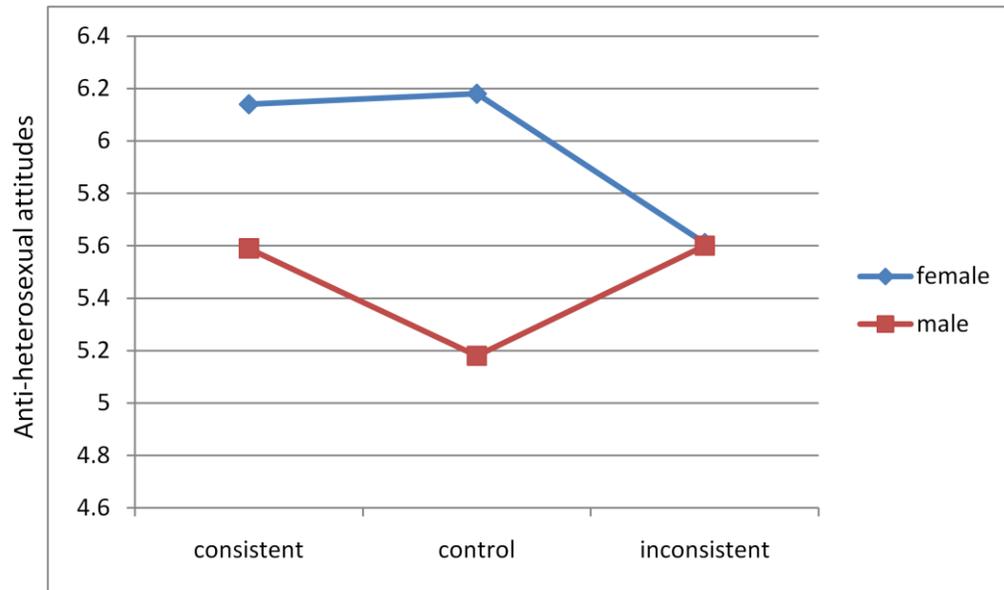


Figure 3. Gender by story interaction for anti-heterosexual attitudes.

ANOVAS were run to determine main effects of the masculinity and femininity scales of the PAQ. As predicted, there was a trend for gender on the masculinity scale of the PAQ, $F(1, 123) = 3.03$, $p = 0.08$, such that males scored higher than females. Likewise, there was a significant main effect for gender on the femininity scale of the PAQ, $F(1, 123) = 9.59$, $p < 0.01$, where females scored higher than males. No significant effects were found for story condition or the interaction between story condition and subscales.

ANOVAS were run to determine main effects of the masculinity, femininity, and androgyny scales of the BSRI. Results indicate a significant main effect for gender on the femininity scale, $F(1, 124) = 23.15$, $p < 0.001$. As predicted, women had higher feminine scores than men. Similarly, a significant main effect for gender on the masculinity scale ($F(1, 124) = 6.27$), $p = 0.01$ shows that males had higher masculine scores. No main effect was detected for the androgyny scale of the BSRI.

As a validity check, a correlation was run to determine if the PAQ and BSRI were related. As expected, the masculinity scales of the PAQ and BSRI were positively correlated ($r(128) = 0.75$, p

<0.001). The femininity scales of the two surveys were also positively correlated ($r(128) = 0.66$, $p < 0.001$).

Discussion

Supportive of the hypothesis that males in the study would generally display more sexist attitudes about gender roles when compared to females in the study, eight out of the eighteen ANOVAs displayed a significant effect for gender, where men were less supportive than women on various subscales of the GAI. Males were less supportive of equal work roles, equal family roles, women's rights, and female leadership within the Role-Level Scales and Societal Organization second-order factor scale of the GAI. Within the Individual-Level Scales and Stereotypes second-order factor scale of the GAI, men were also less supportive of female superiority than were women. In terms of the Relationships-Level Scales and Sexual Relationships second-order factor scale of the GAI, men were less likely than women to support female sexual initiative and displayed less anti-heterosexual violence attitudes when compared to women. The last discrepancy between men and women occurred within the context of Societal-Level Scales and the Societal Organization second-order factor scale of the GAI. Yet again, males showed less support for funded day-care when compared to females.

The fact that males demonstrated such pervasive differences in gender role attitudes compared to women supports the notion that men are conforming to socially-constructed prescriptions for what a man and a woman should look, think, and act like. As Range and Jenkins (2010) have stated, cultural expectations which appropriate certain qualities for men and for women are upheld by the occupations which men and women in today's society traditionally hold. The same idea can be translated to this study, where, when controlling for story condition, males are maintaining the dominant cultural script in most cases.

A social script refers to the complex set of learned responses to a particular situation that is formed by social influences (Walden, 2011). People around the world are constantly influenced by

others in society, whether one resists this influence or not. From birth, our society classifies men and women into the 'natural' categories that constitute heterosexuality (Walden, 2011). Female babies are categorized as 'girls', and male babies are classified as 'boys'. This classification would not hold much weight if there were not substantial meaning behind these categories. Ingraham (2003) notes the term 'heteronormativity', which arose during the second-wave feminist movements of the 1970's as an attempt to theorize and understand the source of women's oppression, as a term to describe heterosexuality as 'normal' and 'natural'. These feminists advocated that heterosexuality is a normalized power arrangement in society, which privileges men over women and naturalizes male dominance (The Purple September Staff, 1975, as cited by Ingraham, 2003). This power arrangement that second-wave feminists are referring to can be reframed as an institution of mainstream society. Institutions are patterned interaction and sets of expectations which are supported by and are supporting policies, cultural beliefs, practices, norms, and serving purposes both intended and unintended (Walden, 2011). The institution of heterosexuality works to create this sense that being heterosexual is the 'norm' in Western (and other) societies. A supporting cultural practice for heterosexuality is the classification of babies into one of two gender categories. Girls have a predetermined set of social standards which they are expected to meet, a hegemonic feminine script, and boys have a completely different set of social expectations, a hegemonic masculine script. Within these scripts, girls are expected and taught to be "good girls", which entails being dependent, quiet, obedient, caring, and helpful. Girls are conceptualized as being beautiful and dainty and may be called "princesses". They are expected to love to accessorize (this stereotype directly boosts the economy through heterosexual rituals such as proms and weddings), and may be seen as charmers in the sense that they are coy or flirty (a manipulative quality is associated with this characteristic). Boys are classified as being independent, adventurous, mischievous, brave, and strong. People refer to boys as athletically inclined if they have attractive qualities; epithets like, "Look at the arm on that one.", or

“He’s so strong!” are used instead of complementing a boy’s beauty. They are also expected to love the outdoors and to have the skills to lead and initiate, complementing a ‘tough’ persona, where being overly sensitive is out-of- the-question (Walden, 2011). These cultural practices not only support the institution of heterosexuality, but heterosexuality operates to support gender categorization. When an increasing amount of people uphold prescribed values for children, a dichotomous nature of ‘right’ and ‘wrong’ is established which, in turn, creates a society that functions on these very definitions of ‘normality’. There can be no room for deviations to the set standards of correctness, or, as Ingraham (2003) states,

The possibilities children learn to imagine are only as broad, as their culture allows. They are socialized to understand the importance of coupling, appropriate coupling, what counts as beauty, what counts as women's work and men's work, and how to become good consumers by participating in those heterosexual practices which stimulate their interests and emotions and reap the most rewards. (p. 243)

The institution of heterosexuality operates through the direct influence on people in society (children, in this example). In the present study, men may have shown less support than females for gender roles which compete with the accepted hegemonic feminine script due to this learned response from the beginning of their lives, which rewards them for being a ‘normal’ citizen. Women in this study might be wrestling with the constraints of traditional hegemonic feminine scripts and attempting to create an ascending script for women’s gender roles, therefore demonstrating more support for non-traditional gender roles.

Not only were general gender role attitudes between college-aged men and women examined, but specific effects of different short-fiction stories on these men and women were tested. Supportive of the hypothesis, a significant story condition trend showed that participants who read the inconsistent story did indeed show less support for traditional gender roles. Reasoning for this result could be that

the inconsistent story depicts both the female and the male protagonists in a non-traditional manner.

The female protagonist still fulfills the traditional role of mother, but also has a primary desire entirely of her own, to become an esteemed scientist. She also becomes the ideal heroine, saving herself in the midst of trouble, proving her autonomy in a physical manner. The male protagonist, while still portraying the traditional role of the successful male leader, helps the mother to raise their family, each spouse equally completing daily parenting tasks, such as cooking and transporting their children to and from school. Providing this nuanced frame-of-mind regarding gender roles for both female and males might have worked to create less traditional gender role attitudes in participants.

The interactions between gender and story condition also yielded results supportive of the hypothesis that subjects who read the inconsistent story would produce less traditional gender-role attitudes. Women who read the inconsistent story demonstrated less support for male chivalry and more support for female independence compared to women who read the consistent story and to men in both reading conditions. Similar to the previous result, a reason for this finding might be that the inconsistent story included a female protagonist who did not rely on chivalry to accomplish her goals; instead, she used her own intelligence and physical skills in the face of adversity. The inconsistent story could be changing women participants' traditional gender role schemas to be more inclusive, or to cross boundaries between gendered scripts. Women reading the inconsistent story had the opportunity to glimpse what a woman's independence would look like outside of the concern for her family and children, as in the idealized, patriarchal theory, and outside of identifying herself as a human-being through mother or father, as in psychoanalytic and feminist theories. The female protagonist in this story had a clear desire of her own, not contingent upon anybody else's influence. The inconsistent story could also relate to these participants' values of having autonomy as a woman, considering this result is demonstrated only in women who read the inconsistent story, and not men. This idea also speaks to the notion that men and women have different culturally accepted gender scripts, which

would validate the result that men did not show less-traditional attitudes about chivalry compared to women. Men are expected to be chivalrous in their relationships with women; in order to fulfill that expectation, men would not demonstrate a lack of support for chivalry. Ashmore et al. (1995) have proposed that males are the beneficiaries of current societal arrangements concerning gender, and that they would, therefore, display more traditional attitudes than females. In terms of chivalry in sexual relationships, males might exhibit more traditional attitudes in order to receive the most benefit in their relationship. This point makes the result that males did not support female sexual initiative over females and that males and females showed no difference in attitudes about female casual sex quite surprising, considering that men might benefit from women taking sexual initiative in relationships or having more casual sex, thereby gaining more access to women (Ashmore et al., 1995).

One reason that female casual sex was not valued differently by men and women might be that female casual sex does not fit into the heteronormative script, as discussed previously. Women who have casual sex are considered promiscuous in Western society (Walden, 2011), so women participants across story conditions may not have displayed less-traditional attitudes regarding casual sex in order to preserve their image as a 'good' girl. Likewise, male participants across story condition may not have exhibited less-traditional attitudes because of the stigma of promiscuous women in Western society; having casual sex with a promiscuous woman could lead to negative health effects for these men because promiscuous women are deemed as 'dirty' (Walden, 2011).

On the other hand, the content of the inconsistent story might not have produced these non-traditional values in the subjects at all. Another possibility for emerging non-traditional attitudes is that participants who read the inconsistent story might have had a non-traditional gender role schema initially. Participants who endorse non-traditional gender attitudes in the first place might be more likely to express these attitudes on the GAI. In addition to this proposal, subjects who read the inconsistent story might have recognized the link between the story and the purpose of the study due to

the information on the informed consent form, which briefly explains that the study is examining the effects of short-fiction on attitudes and beliefs. This link could have also been discovered due to viewing the survey packet before reading the story, as a few participants did.

Along with the idea that the content of the inconsistent story may not have produced less traditional gender role attitudes of participants, three results from interactions between gender and story condition contradict the hypothesis that participants who read the consistent story will display more traditional gender role attitudes. Surprisingly, women who read the consistent story were more supportive of female sexual initiative than women who read the inconsistent story. This result might be explained by the fact that the content of both stories did not include explicitly sexual material; attitudes about female sexual initiative may be due to participants' initial perspectives of female sexual initiative. Similarly, the greatest gender difference in attitudes about female sexual initiative occurred in the consistent condition rather than the inconsistent condition. Referring back to Walden's (2011) notion of hegemonic cultural scripts, males might have demonstrated less tolerance for female sexual initiative in the consistent condition due to the fact that it adversely impacts their image as a 'manly- man'. The hegemonic script for heterosexual males states that males are supposed to initiate sex due to the fact that they always want it and are ready for sex. Likewise, males are supposed to be the pursuers in a relationship, indicating that they are the person in charge of the relationship (Walden, 2011). An explanation for females displaying higher support for female sexual initiative than men in the consistent condition compared to the inconsistent condition could be that the female participants' retaliated against the hegemonic cultural script of femininity in the consistent condition. These women might have felt less obligated to rebel against hegemony in a condition that already recognizes woman's autonomous desires, such as the inconsistent condition. This finding may indicate support for the notion that women are recognizing their lack of autonomous desire; women may be retaliating due to this realization. Clearly, results of the consistent story condition could be due to outside factors, such as

the internalization of dominant cultural scripts, rather than the content of the specific stories themselves. Supportive of this idea is the result that females who read the consistent story were less likely to support male heterosexual violence against women compared to females who read the inconsistent story and to other groups. Both stories may not have tapped into the issue of male-heterosexual violence.

Also unsupportive of the hypothesis that the consistent story condition would yield more traditional attitudes, subjects who read the consistent story condition were more likely to support women as leaders compared to people who read the inconsistent story. This result may be due to the fact that both the consistent and inconsistent stories included the female protagonist in a leadership position. Whether that leadership position was as a mother and a chef, as in the consistent condition, or as a mother and an accomplished scientist, as in the inconsistent condition, the female character was indeed portrayed as a leader. Participants' definitions of a leader may be taken into account to explain this result. The subjects may have viewed the female protagonist in the consistent condition to be much more of a leader than in the inconsistent condition, which would account for the result. Further research could revise the stories so that the woman protagonist would have distinct leadership settings, where one female protagonist is solely a mother (in the consistent version), and one is solely a scientist (in the inconsistent version). In this manner, the female protagonist's autonomous desire might be more explicitly differentiated between the two stories. This revision might change the results to show that subjects prefer one style of female leadership over another.

In addition to recreating the consistent and inconsistent stories to be less similar in terms of female leadership, other revisions to the stories could produce stronger effects on participants' survey results. Future replications of this study might write the stories to include sexual material in order to better address participants' views about female sexual initiative or female casual sex. Another possibility for future replication could be that the consistent and inconsistent stories differ in terms of

the mother figure's desires revolving around her family. For example, in the consistent story, the woman protagonist is consumed by the fact that she misses her husband and children. Her husband eventually comes to whisk her away from harm. In the inconsistent story, the woman protagonist is still preoccupied with the fact that she misses her husband and children, but, different from the consistent version, she manages to save herself from harm. In regard to Benjamin's (1986) idea of the problem of women's desire, the inconsistent story may not actually be representing a desire outside of the woman character's life as a mother and a wife. A different inconsistent story might have the woman protagonist not be a mother or wife at all, and this change could result in more pronounced effects between story conditions on participants' gender role attitudes. This suggestion, however, brings up the dilemma of categorization of a woman's gender role. If the woman protagonist's role as a mother and wife is taken out of the picture for the inconsistent story and is included in the consistent story, does this mean that a woman is confined to these two roles (mother and spouse, or working woman)? Other studies might find a way to combat the dichotomous nature of a woman's desire.

One final suggestion for improvement with this study is that the research could be conducted outside of the college-aged population in order to better generalize to the population-at-large. The University of Colorado at Boulder's campus is not very racially diverse, nor does it capture the gradation of attitudes that might occur within and between different generations. As Glenda Walden (2011) has discussed in lecture classes at CU-Boulder, a major shift from previous generations to the current generation is that today's romantic relationships involve each partner knowing the other as friends before actually deciding to become a couple. In prior generations, a common reason for entering a relationship was to become married; interest in another partner seemed to simply entail if the prospective partner seemed like a 'good fit' as a wife or husband. These relationship roles generally only fit into the hegemonic scripts for heterosexuality. In regard to today's generation, as friends, two people share common interests and desires, as well as more interaction as individuals outside of the

hegemonic, gendered expectations that a romantic relationship entails. Becoming a couple after demonstrating one's autonomy creates possibilities for cross-gendered qualities to emerge within that relationship. Change in the possibility for a woman to find and express her true desire may emerge based upon the difference in relationship trajectories between generations. This affect remains to be seen in future research.

While there certainly are limitations to this study, implications of the research abound. Through demonstrating that these short-fiction stories had a significant effect on college-aged men and women's attitudes about gender roles, other studies can be performed to investigate how certain forms of literature can be utilized to combat existing societal scripts for gender. Studies have found that the prevalence of traditional gender attitudes predicted rates of sexual assault and domestic violence against women (York, 2010). Social capital was a contributing factor to this violence against women; counties with less social capital and higher traditional gender attitudes had higher rates of violence against women by men (York, 2010). In relation to this finding, literature may be used as a means to educate people of lower social capital counties, as well as other counties, about different gender roles and ascending scripts for gender to mitigate the rates of violence against women and to bring to light the societal structures which are creating these power differentials.

This study adds to previous research that used the GAI to assess participants' gender attitudes and beliefs and how those views affected aspirations and fears for the future. Hildenbrand (2008) found no significant gender differences in participants' views of themselves in the future, whereas this study indicates that there are several significant gender differences when participants read varying types of literature. These studies might be combined in order to test participants' aspirations and fears for the future after reading literature which contains differently gendered scripts. Additionally, the previous study found the opposite effect for gender; Hildenbrand (2008) stated, "the most traditional beliefs in this sample were associated with Chivalry and Individual Action" (p. 1). In this study, women's beliefs

about chivalry were not traditional when compared to other groups, and individual action had no significant effect for gender or story condition. This disparity between the two research designs shows that outcomes of using the GAI as a tool to investigate subjects' attitudes vary greatly when different mechanisms of measurement are used. In regard to Hildenbrand's recommendation that regional differences need to be examined, the results of this study do show a regional difference from Southern Illinois to Northern Colorado when compared to her study.

Most importantly, this study demonstrates the importance of dominant gendered scripts in our society, and the power that the institution of heterosexuality has to reinforce these scripts through different cultural practices, such as affect and expression toward babies and children, different social sanctions, such as economic sanctions, and different social agents, such as individual citizens. The latter agent of social control probably has the most influence for providing an impetus for social change. Every person, as an individual, has the ability to question these dominant heterosexual scripts and to create an identity which crosses the boundaries or is completely outside of the boundaries of the socially accepted scripts. Conscious negotiation of gender roles is a crucial step to enforcing societal change (Ingraham, 2003). Unless one has consciously chosen a path for their life, resentment and dissatisfaction are sure to follow. Internalization of these dominant scripts stops at the individual level. Every person has the opportunity to take a risk in determining their own social script and foundation for the future (Walden, 2011). Women may have their own desire, separate from ties to men or family, but first, deep introspection and transformation needs to occur on an individual, then interpersonal, then societal level, in order to create a lasting change.

References

- Ashmore, R. D., Del Boca, F. K., & Bilder, S. M. (1995). Construction and validation of the Gender Attitude Inventory: A structural inventory to assess multiple dimensions of gender attitudes. *Sex Roles, 32* (11/12), 753-785.
- Bem, S. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42* (2), 155-162.
- Bem, S.L., & Bem, D.J. (1973). Does sex biased job advertising "aid and abet" sex discrimination? *Journal of Applied Social Psychology, 3* (1), 6-18.
- Benjamin, J. (1986). A desire of one's own: Psychoanalytic Feminism and intersubjective space. In T. DeLauretis (Ed.), *Feminist studies/critical studies* (pp. 79-99). Bloomington & Indianapolis, IN: Indiana University Press.
- Crawford, M., & English, L. (1984). Generic versus specific inclusion of women in language: Effects on recall. *Journal of Psycholinguistic Research, 13* (5), 373-381.
- Hamilton, M. C. (1988). Using masculine generics: Does generic *he* increase male bias in the user's imagery? *Sex Roles, 19*, (11-12), 785-799.
- Hildenbrand, M. E. (2008). Gender roles and future possible selves related to career and work/family balance. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 68* (10-B), 6699.
- Ingraham, C. (2003). Ritualizing heterosexuality: Weddings as performance. In B. Crane & R. Heasley (Eds.), *Sexual lives: A reader on the theories and realities of human sexualities* (pp. 235-244). Boston, Ma: McGraw Hill.
- Mello, R.A. (1999). Narrating gender: Children's responses to gender roles depicted in orally told folk tales and other traditional stories. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 60* (6-A), 1947.

Range, L. M., & Jenkins, S. R. (2010). Who benefits from Pennebaker's expressive writing paradigm?

Research recommendations from three gender theories. *Sex Roles*, 63(3-4), 149-164.

Spence, J.T., & Helmreich, R.L. (1978). *Masculinity and femininity: Their psychological dimensions,*

correlates, and antecedents. Austin, TX: University of Texas Press.

Walden, Glenda. 2011. Unpublished lecture material. Boulder, CO: University of Colorado.

Yoder, J.D., Rice, R.W., Adams, J., Priest, R.F., & Prince, H.T. (1982). Reliability of the Attitudes Toward

Women Scale (AWS) and the Personal Attributes Questionnaire (PAQ). *Sex Roles*, 8 (6), 651-657.

York, M.R. (2010). Violence against women: The dynamics associated with traditional gender attitudes

and social capital. *Dissertation Abstracts International Section A: Humanities and Social*

Sciences, 70 (11-A), 4465.

Appendix A: Consistent Story

Luna is a very imaginative woman who always has her head in the stars, not knowing that one day, that is exactly where she would end up. She is the fine mother of two beautiful daughters and two talented sons. Luna never ceases to teach her children valuable life lessons and to help them in all of their endeavors. Luna's husband, Rick, works as a powerful CEO of a highly successful consulting firm in Washington. Rick isn't around the house very much due to his heavy workload, so Luna manages the household, doing chores, running the kids to- and- from school, taking them to practice, and making meals for her loving family. Luna loves her job as a mother and caretaker for her family, but wishes that she could start the locally-owned restaurant she has always dreamed of. Luna is an excellent cook and friends and family never hesitate to visit for a home cooked, gourmet meal. In fact, friends and relatives hardly ever stop coming by the house to nibble on Luna's goodies. Rick loves the fact that he can come home from work, eat one of his wife's delicious meals, relax with the kids, and lie with his beautiful, caring, perfect wife.

One seemingly normal day Luna woke to her daily six-o'clock alarm, got showered and dressed, prepared homemade strawberry waffles with freshly squeezed orange juice and her original orange marmalade jam recipe for Rick and the kids, and sent them all to work and school. After she had finished washing the dishes, preparing a grocery list of provisions needed later that week, calling her mother and father to visit, gathering the kids' practice clothes for after school, running errands, and reading her latest book-of-choice, Luna went outside to finish hanging some delicacies on the line to air dry. With all of these duties completed Luna sat down on her love seat to watch T.V. and dozed off, dreaming that she was still outside hanging laundry on the line.

Upon hanging her last freshly laundered v-neck, Luna tripped over a covered hole in the grass and fell into blackness. The trip took no more than three seconds, which seemed a normal amount of

time to have passed before Luna hit the ground. However, when Luna stood up, she realized that she was no longer anywhere near her bright, sunny, warm backyard, but had landed upon a star in the night sky. She wandered around, gazing admirably at the expansive beauty of the place. She could see all the way down to earth, circling and orbiting in all its glory. She wondered what her kids must be doing and began to panic, contemplating how she would ever get back to them. What would Rick think when he came home and she wasn't there to greet him? Won't the family be hungry? In the midst of all of this worry Luna was startled by what sounded like a jingling bell in the distance. She whirled around to see a beautiful woman with silver hair that looked like it was made out of the magic of Christmas itself. The woman, Nala, beckoned her to a door the size of a cat's eye that jingled upon opening on the star's luminous surface. Inside the door was a slide that emanated a cool breeze and smelled mysteriously of sweet peppermint and vanilla. The two women jumped down the slide, laughing and racing toward the center of the star.

When Luna landed she found herself amongst thousands of wondrous men and women, all just as beautiful as Nala. The star had a magical air about it, as if any dreams one had would come true right then and there. There were floating candles with an inexplicable bluish hue and sparkling jewels strung all throughout the purple-white air. The rolling landscape of fluffy cloudlike hills gave Luna a sense of comfort and warmth despite the light breeze that filled the deliciously scented atmosphere. The exquisite men and women came up to Luna one by one, bowing to her and exclaiming their joy that she had come to teach their people, the Niuinai.

"Thank you so much! How long we have been awaiting your arrival to teach us how to cook!" exclaimed one man.

"I will respect your every thought, instruction, and desire, my lady", stated another man.

“I would love to learn from your expertise and become as beautiful, devoted and caring as you”, proclaimed Nala.

Luna was very confused by this display of approbation and tried to deny the Niuinai’s advances, but, after a few thousand, became quite exhausted and accepted their compliments (not to mention she was extremely flattered by them). Thus, Luna agreed to teach the Niuinai how to cook among the stars.

Luna was more than able to aid and educate the Niuinai (considering her motherly qualities) and taught the men and women not only how to cook, but everything she knew, from cooking, to hanging laundry, to ironing, to washing a dish so that it sparkles like the stars. In return for her shared knowledge the Niuinai danced and praised the wonderful food that they were now able to make. Luna felt flattered and grateful that her recipes were being praised so highly. She ate her own creations with the Niuinai and danced and sang in celebration. Luna loved the festive atmosphere of the stars and being able to teach the Niuinai wonderful recipes and other domestics, but she longed for her children and Rick.

After a night of celebration, Luna was walking in the luminary garden outside of her house with Nala when a hand arose out of a hole in the ground. While Nala ran away in fright, Luna came closer to the hand and recognized the wedding ring upon it to be Rick’s! The love that she felt for her family washed over her as Luna desperately tried to grasp the hand and pull Rick into the star, but he only fell back through the hole every time she touched him. So Luna finally let go of Rick’s hand and ran sobbing into her bedroom.

The following day, Luna went to the same hole and waited for Rick to climb through, but it never happened. Day after day, for two weeks, Luna waited for Rick to come. On the first day of the third week of waiting, Luna was sitting by the hole in the garden when the Niuinai started to ambush the star

teacher. Luna looked around and all men and women of the star were rushing toward her with looks of outrage on their faces!

“You betrayed us!”

“We trusted you to teach us all recipes that you knew!”

“We made you our teacher!”

Terrified, Luna rushed into her house and locked the doors. She fell to the floor crying, wishing for a way out of this predicament. Right as Luna made the wish she heard a knock at her backdoor, a secret door only she knew about, as she created it. Luna went to answer the door and Rick burst inside and stood with his arms so wide they could have gone around the moon twice. He was covered in dirt, but grabbed Luna and embraced her as tight as he could. Luna could not remember an embrace so safeguarding as that of her strong husband.

Rick explained to Luna that he had discovered the hole in the backyard and saw her ring lying inside of it. He went to grab the ring and fell into the stars, much like Luna did. He was alone for a week on the star, cold and hungry until one night, he heard singing and laughing seeming to come from far-away. Rick searched and searched and finally found the door from which the sound was emitting. He jumped inside, but only to hit his head upon a roof of soil. Not knowing which direction to go next, Rick sat down to consider the dilemma. In the meantime, a tiny fairy flew by and saw Rick looking perplexed. Rick told the fairy that he was trying to find his beautiful, beloved wife, but couldn't get through the hole to Luna. The fairy told Rick that he would have to claw his way through the star soil (some of the toughest soil in the universe) day-by-day to reach Luna.

So Rick dug and clawed with his bare hands to find Luna. Occasionally, Rick would stop clawing because he felt someone above grabbing his hand, appearing to try and stop him from getting through.

When he finally got through Luna was nowhere to be found. Luckily, he saw thousands of amazing foreign people running toward a house and glimpsed Luna running into it at the last second. Rick ran to the house and found another door the size of a cat's eye, opened it, and found Luna on the other side!

Luna was exhilarated to hear of her husband's brilliant tale. Rick, equally elated, grabbed Luna and twirled her around. Luna's head was spinning as she woke to Rick rocking Luna back and forth, trying to awaken her. Rick had saved her from the Niuinai! Luna was so relieved to be back at home that she gave Rick the biggest kiss she had ever given and ran inside to hug and kiss her children until their faces were red as cherries. Thankful to be back in reality, Luna wrote down her dream as a reminder that all she wanted was to be a superb mother and wife.

Appendix B: Inconsistent Story

Luna is a very imaginative woman who always has her head in the stars, not knowing that one day, that is exactly where she would end up. She is the fine mother of two beautiful, intelligent daughters, and two talented, loyal sons. Luna never ceases to teach her children valuable life lessons and to help them in all of their endeavors. Luna's husband, Rick, works as a powerful CEO of a highly successful consulting firm in Washington, while Luna works as a top medical researcher in the United States currently studying the effects of a drug on meningitis. Because both Luna and Rick are extremely busy with their careers, they share the responsibility of managing the household, doing chores, running the kids to-and-from school, taking them to practice, and making meals. Rick will come home from work early, finish the chores, and cook a meal while Luna picks up the kids from practice one day; the next day they switch. Both Luna and Rick love their jobs as a parent and caretaker for their family as well as being successful leaders in their profession. Rick supports Luna's role as a leader in the medical field and values her accomplishments. Likewise, Luna finds Rick's work important and worthwhile and supports his leadership role.

One day Luna came home from work early on her day to finish chores and cook. As she was baking her chicken in the oven, she lay down on the couch to go over her recent findings from trials of different drugs. Luna was passionately hoping that some of the trials displayed significant results and envisioning a better life for millions of people, especially students, who may be at risk of suffering from the sudden and debilitating disease, meningitis. She was optimistic that her research would yield results impressive enough for Luna to obtain a bigger grant from the National Institute of Health (NIH) and be published worldwide. During all of her imaginations Luna started to dose off and began to dream.

In her dream, Luna was outside playing tag with her children when she tripped over a covered hole in the grass and fell into blackness. The trip took no more than three seconds, which seemed a

normal amount of time to have passed before Luna hit the ground. However, when Luna stood up, she realized that she was no longer anywhere near her bright, sunny, warm backyard, but had landed upon a star in the night sky. She wandered around, gazing admirably at the expansive beauty of the place. She could see all the way down to earth, circling and orbiting in all its glory. She wondered what her kids must be doing and began to panic, contemplating how she would ever get back to them. What would Rick and the kids think when they came home and she wasn't there to greet them? Won't the chicken be burnt? Won't the family be hungry? How would she continue her research? In the midst of all of this worry Luna was startled by what sounded like a jingling bell in the distance. She whirled around to see a beautiful woman with silver hair that looked like it was made out of the magic of Christmas itself. The woman, Nala, beckoned her into a door the size of a cat's eye that jingled upon opening on the star's luminous surface. Inside the door was a slide that emanated a cool breeze and smelled mysteriously of sweet peppermint and vanilla. The two women jumped down the slide, laughing and racing toward the center of the star.

When Luna landed, she found herself amongst thousands of wondrous men and women, all just as beautiful as Nala. The star had a magical air about it, as if any dreams one had would come true right then and there. There were floating candles with an inexplicable bluish hue and sparkling jewels strung all throughout the purple-white air. The rolling landscape of fluffy cloudlike hills gave Luna a sense of comfort and warmth despite the light breeze that filled the deliciously scented atmosphere. The exquisite men and women came up to Luna one by one, bowing to her and exclaiming their joy that she had come to lead their people, the Niuinai.

"Thank you so much! How long we have been awaiting your arrival to cure our insomnia and lead us toward health and happiness!" exclaimed one man.

"I will respect your every thought, instruction, and desire, my lady", stated another man.

“I would love to learn from your expertise and become as beautiful, intelligent, and thoughtful as you”, proclaimed Nala.

Luna was very confused by this display of approbation and tried to deny the Niuinai’s advances, but, after a few thousand, became quite exhausted and accepted their compliments (not to mention she was curious to see if she could improve their sleeping patterns). Thus, Luna agreed to lead the Niuinai toward health and happiness, exclaiming, “I will work to the best of my abilities in order for your people to prosper; your health and happiness is extremely important to me. Everyone deserves to live a full life!”

Luna was more than able to lead the Niuinai (considering her medical qualifications) and worked diligently to find a way to increase their sleep. She explored the wilderness of the star land and concocted some interesting medicines. She tested roots of the fluffy clouds, gathered precipitation from the peppermint-vanilla air, and crushed the sparkling jewels strung throughout the purple-white air. The Niuinai began to sleep increasingly longer and sounder with each trial, and, in return for her leadership, the Niuinai danced and praised the wonderful efforts that Luna put into leading their people toward health and happiness. Luna felt ecstatic and hopeful that she could find the ultimate cure for the Niuinai’s insomnia. She dreamt with the Niuinai and danced and sang in celebration. Luna was absolutely loving the festive atmosphere of the stars and being able to lead the Niuinai toward improved health and happiness, but she longed for her children and Rick.

After a night of celebration Luna was walking in the luminary garden outside of her house with Nala, discussing secret fountains and animals of the land that might lead Luna to creating a new concoction. Sleep washing over her, Luna retired to her bedroom and said goodnight to Nala, who also went to her chamber to sleep a long, peaceful sleep. As the moments before sleep usually go, Luna lay in her bed with a million thoughts running through her head. She just could not seem to get Rick and her

children out of her head; she missed them terribly. Imperative that she see them, Luna got up and started creating a disappearance syrup that she could ingest in order to escape the star and return to her beloved family. Luna mixed and re-mixed, and tested trial after trial of this concoction. Once complete, Luna drank the disappearance syrup and began her trek toward the door of the star (only after leaving an ample supply of the sleeping medicine for the Niuinai, complete with directions on how to make this wonder mix).

Upon walking swiftly past the dancing Niuinai, Luna was spotted by a girl on her way home from the celebration. The girl stopped Luna asking, "Why are you walking so fast; you're not leaving us are you? I need someone to walk me home". Perplexed as to why her fool-proof syrup wasn't working, Luna decided to join the girl in saying goodnight to the dancing and singing Niuinai and walking the girl home. Upon saying their goodbyes, Luna discovered that all of the Niuinai were able to see past her disappearing syrup. Cleverly, Luna decided to go to her bedroom and wait until all the Niuinai were fast asleep. Once Luna could hear no singing and dancing coming from outside, she dressed in a flowing purple-white gown so that she would be camouflaged against the surrounding terrain and made a dash for the door of the star.

Luna ran faster than ever before, thinking of nothing but her children and Rick. Just before the door she heard awful noises and turned around to see an ambush of the Niuinai coming her way; they had discovered her plot! Thinking quickly, Luna fell to the ground amongst the clouds, completely blending with her surroundings. The Niuinai halted, one shouting, "I saw her head bobbing up and down past my window, I know she is trying to escape!" They searched and searched, but no one could ever find their leader, Luna. Hours passed, and Luna crept toward the door, inch-by-inch, until she could touch the base of the door with the tip of her nose. As soon as the nearest Niuinai had past, Luna jumped up, sprung open the door, and slid back down to earth.

As Luna was sliding down to earth her heart leapt and she jolted upright to find herself sitting on the living room sofa.

“It was only a dream!” Luna delighted.

Thankful to be back in reality, Luna took the un-burnt chicken out of the oven, set the table, and wrote down her dream as a reminder that she could manage the task of being both a fine leader and a superb mother and wife. Fervently, Luna delved into her research, confident that she would produce sound results and move forward in her career.

Appendix C: Control Story

The first time I tried shark-fin soup was at Time Warner's annual dinner in Hong Kong, a few weeks after I had moved to the city. A server came to our table with a cluster of small white bowls, which a few of my colleagues politely declined. I knew the soup had a whiff of controversy around it, but I hadn't yet formed a personal policy, so I gave it a try. I found it underwhelming. The taste of shark-fin soup comes mostly from the quality of its broth. The fin itself, which I've eaten sliced into long, thin pieces, provides texture — a crucial element in Cantonese cuisine. (Shark fin falls somewhere between chewy and crunchy.)

Part of the reason the soup doesn't dazzle me is the price — up to \$100 a bowl in some restaurants. It's hard to say what a \$100 bowl of soup should taste like, but this isn't it. Of course, the price is part of the point: shark-fin soup is a luxury item in Hong Kong and China, its biggest consumers; it's a dish that embodies East Asia's intertwined notions of hospitality and keeping (or losing) "face." Once favored by Chinese Emperors for its rarity, shark-fin soup is now eaten at weddings, corporate celebrations and high-falutin' business lunches to demonstrate a host's good fortune. "It's like champagne," says Alvin Leung, owner of Bo Innovation, a two-Michelin-star Cantonese restaurant in Hong Kong. "You don't open a bottle of Coke to celebrate. It's a ritual."

Unfortunately, this gesture of largesse comes with a price tag much bigger than that \$100 bowl. Last week, as millions of viewers in the U.S. tuned in to Discovery Channel's Shark Week, probably nearly 1.5 million sharks were killed in the shark-fin industry — just like the weeks before. All told, up to 70 million sharks are culled annually for the trade, despite the fact that 30% of shark species are threatened with extinction. Indonesia, India, Taiwan, Spain and Mexico land the most sharks, according a recent survey of global shark populations conducted by the Pew Environment Group. "Sharks have made it through

multiple mass extinctions on our planet," says Matt Rand, director of Pew's Global Shark Conservation division. "Now many species are going to go the way of the dinosaur — for a bowl of soup.

The shark-fin industry has gained notoriety in recent years not just because of what it's doing to the global shark population but also because of what's known as finning — the practice of catching a shark, removing its fins and dumping the animal back into the sea. While a pound of shark fin can go for up to \$300, most shark meat isn't particularly valuable, and it takes up freezer space and weight on fishing boats. Today, finning is illegal in the waters of the E.U., the U.S. and Australia, among others; boats are required to carry a certain ratio of fins to carcasses to prevent massive overfishing. But there are loopholes in antifinishing laws that are easy to exploit. In the E.U., for example, ships can land the fins separately from the carcasses, making the job of monitoring the weight ratio nearly impossible. In the U.S., a boat found carrying nearly 65,000 lb. (30,000 kg) of illegal shark fins won a court case because it was registered as a cargo vessel, which current U.S. finning laws do not cover. "There's definitely a black market out there," says Richard Fitzpatrick, a filmmaker and marine biologist who studies shark behavior on the Great Barrier Reef. "To what degree it is, we don't know."

Sharks populations can't withstand commercial fishing the way more fecund marine species can. Unlike other fish harvested from the wild, sharks grow slowly. They don't reach sexual maturity until later in life — the female great white, for example, at 12 to 14 years — and when they do, they have comparatively few offspring at a time, unlike, say, big tunas, which release millions of eggs when they spawn. (Not that overfishing has left big tunas in much better shape than sharks, but that's another story.) As a result, the sharks that are netted are either adolescents that have not had a chance to reproduce or are among the few adults capable of adding new pups to the mix — and never will. "The shark stock on the Great Barrier Reef was hit hard when fishing started in earnest here 30 years ago, and it hasn't recovered at all," says Fitzpatrick.

Though Hong Kong is widely considered the hub of the industry in terms of both consumption and trade, sharks are caught throughout the world's oceans. Since the 1950s, the oceanic whitetip has declined 85% in the northwest and central Atlantic. In the past 25 years, certain hammerhead sharks have declined 83% in the northwest Atlantic and up to 70% in the eastern Pacific and southwest Indian Ocean. Together, 126 of an estimated 460 shark species are threatened with extinction.

Despite this carnage, only three shark species are banned from international trade under the Convention on International Trade in Endangered Species (CITES): the great white, the whale shark and the basking shark. In March, eight more endangered shark species were put before the body to be considered for protection; none were accepted. "Countries around the world have not done enough," says Rand. "It's the Wild West out in the open ocean."

When top predators like sharks disappear from their environments, ecosystems fall out of whack. Sharks help maintain the genetic health of the fish populations they feed on by eating the weak, sick and injured. They also keep their prey populations in balance. Off the North American West Coast, for example, as shark numbers have declined, the giant Humboldt squid has proliferated, moving from its traditional territory on the southern coast of the Americas as far north as Alaska. The squid, which can grow up to 6 ft. (1.8 m) long, have attacked divers in southern California, and commercial fishermen in Washington have reported them stealing salmon off their hooks. On the East Coast of the U.S., where large predatory sharks have also been overfished, cownose ray populations have exploded, taking a bite — literally — out of the bay scallop fishery. **(Can the world's fisheries survive our appetites?)**

Conservationists argue that given the global decline of shark species, preserving shark populations is becoming more valuable than fishing them. Pew has worked with the governments of Palau and the Maldives to help establish the world's only shark sanctuaries in their waters. Both places are big dive destinations, and local governments know the price vacationers are willing to pay to see sharks in their

natural habitats. In the Coral Sea, off the northeast coast of Australia, shark populations are healthier than those in the Great Barrier Reef because, while the sharks are still unprotected, the area is less frequented and has not been fished as heavily. Fitzpatrick, who has been lobbying to establish a mixed-use marine park in the region, says bringing divers to these remote waters would generate more income than using them as fishing grounds. "Each shark is worth \$60,000 a year in potential tourist dollars, and they are going to live for 30 years," he says. "A live shark is way more valuable than a dead shark."

The shark's plight is starting to be weighed against the delicacy's cultural value. In July, Hawaii became the first state in the U.S. to ban the sale, trade and possession of shark fins. In 2006, at a WildAid press conference in China, NBA star Yao Ming swore he would never eat shark-fin soup again. In Hong Kong, a Chinese-language Facebook campaign against shark fin has become unexpectedly popular in recent months. The World Wildlife Fund (WWF) has persuaded several companies, including HSBC and Swire, to go shark-free and not serve shark fin at their events in Hong Kong. The conservation group has also lobbied local restaurants that offer the classic nine-course banquet served at Cantonese weddings, of which shark fin is traditionally a part, to offer a no-shark menu as a choice to couples. "People are realizing that there will not be shark fin to consume if we continue as we are," says Andy Cornish, the director of conservation for WWF in Hong Kong. Leung, the chef at Bo Innovation, serves only imitation shark fin, made from mung bean, at his establishment. "There are some cultures that are worth keeping and certain things that are not," Leung says. "I believe it's a waste of money."

After my first, less-than-memorable encounter with shark-fin soup, I decided that, like my colleagues, I would probably skip it next time. Unfortunately, that next time came at an intimate dinner in a small, private dining room, where I was both a guest and a stranger. When the soup — the centerpiece of the meal — was set down before me, I ate it. Apparently, I'm not the only one to cave. "You go to a wedding, and you don't eat and walk out on them because you're insulted — I'm not that extreme,"

Leung, the chef, says. "If other people believe that it brings luck or brings face, I'd be a spoilsport." To make a dent in the slaughter of the sharks, however, there are going to have to be a lot of people willing to spoil this particular sport.

Appendix D: Gender Attitude Inventory (GAI)

Here are the questions which are included in the GAI, but some questions have been taken out of the original version, as seen in the Ashmore et al., 1995 research paper. They were formatted into a comprehensive survey for participants to take.

Gender Attitude Inventory

Please read the following statements and indicate how much you agree or disagree with each statement using this scale:

1	2	3	4	5	6	7
strongly			neutral			strongly
agree						disagree

- ___ 1. On average, women are better than men.
- ___ 2. Women are a creative force, and men are a destructive force, in the world today.
- ___ 3. Women are more helpful than men.
- ___ 4. Compared to women, men have many undesirable qualities.
- ___ 5. Women are morally superior to men.
- ___ 6. Compared to women, men tend to be cruel.
- ___ 7. Men are more competitive than women.
- ___ 8. Men are generally more adventurous than women are.
- ___ 9. Men are generally more egotistical than women.
- ___ 10. On the average, men are more arrogant than women.
- ___ 11. Women are more gentle than men.
- ___ 12. Men are more independent than women.
- ___ 13. Men are more sure of what they can do than women are.
- ___ 14. Compared to men, women tend to be gullible.
- ___ 15. Compared to men, women are more able to devote themselves completely to others.
- ___ 16. Women should take the passive role in courtship.
- ___ 17. A woman should allow the man to take charge of their sexual relationship.
- ___ 18. Women should have the same sexual freedom as men.
- ___ 19. It is acceptable for a woman to have sex with a casual acquaintance.
- ___ 20. I would have no respect for a woman who engages in sexual relationships without any emotional involvement.
- ___ 21. It is all right for a woman to have sexual intercourse with someone she knows well and likes but does not love.
- ___ 22. Men should continue to show courtesies to women such as holding open the door or helping them on with their coats.
- ___ 23. Special attentions like standing up for a woman who comes into a room or giving her a seat of a crowded bus are outmoded and should be discontinued.
- ___ 24. Chivalrous gestures toward women on the part of men should be encouraged.

- ___ 25. The special courtesies extended to women are demeaning because they keep women felling helpless and in their place.
- ___ 26. A man should protect a woman from physical harm even at his own expense.
- ___ 27. Chivalry is generally demeaning to women.
- ___ 28. In an emergency, women and children should be evacuated first.
- ___ 29. Most of the women who get raped have invited it in some way.
- ___ 30. Women provoke rape by their appearance or behavior.
- ___ 31. In most cases, when a woman gets raped, she was asking for it.
- ___ 32. In most cases of wife beating, the woman is just as much at fault as the man.
- ___ 33. Most charges of "wife beating" are made up by the woman to get back at her husband.
- ___ 34. If a woman is making out and she let's things get out of hand, it's her own fault if the man forces sex on her.
- ___ 35. In forcible rape, the victim never causes the crime.
- ___ 36. A man is sometimes justified in hitting his wife.
- ___ 37. It's all right for the woman to have a career and the man to stay home with the children.
- ___ 38. I approve of a wife entering the labor force and leaving her husband at home to take care of the children.
- ___ 39. I would not respect a man if he decided to stay at home and take care of his children while his wife worked.
- ___ 40. The wife should have primary responsibility for taking care of the home and children.
- ___ 41. A woman should work only if she can do so without interfering with her domestic duties.
- ___ 42. The husband should have primary responsibility for support of the family.
- ___ 43. In marriage, the husband should take the lead in decision making.
- ___ 44. Working women should not be expected to sacrifice their careers for the sake of home duties to any greater extent than men.
- ___ 45. Women should be concerned with their duties of child-rearing and house-tending, rather than with desires for professional and business careers.
- ___ 46. As head of the household, the husband should have more responsibility for the family's financial plans than his wife.
- ___ 47. Care of the children should be shared equally by both spouses.
- ___ 48. There are almost no jobs which should be closed to women because of the physical requirements.
- ___ 49. Many jobs should be closed to women because of the physical requirements.
- ___ 50. Men and women are better suited to different kinds of occupations due to physical strength.
- ___ 51. All occupations should be equally accessible to both men and women.
- ___ 52. There are many jobs in which men should be given preference over women in being hired or promoted.
- ___ 53. There are some professions and types of business that are more suitable for men than women.

- ___ 54. In today's world the idea of "women's work" and "men's work" makes no sense.
- ___ 55. It is appropriate to divide work into "men's work" and "women's work."
- ___ 56. A woman's work and a man's work should be fundamentally different.
- ___ 57. It would be appropriate for a woman to be president of the United States.
- ___ 58. I would vote for a politically qualified woman to be President of the United States.
- ___ 59. Women, as well men, should be found in top political offices.
- ___ 60. Women should be included on all levels of political activity on an equal basis with men.
- ___ 61. There are many good reasons why a woman should not be President of the United States.
- ___ 62. Women are too emotional to fill high positions in government.
- ___ 63. The political and moral leadership of a community should remain largely in the hands of men.
- ___ 64. Only if women organize and work together can anything really be done about sex discrimination.
- ___ 65. It is not enough for a woman to be successful herself, women must work together to change laws and customs that are unfair to all women.
- ___ 66. Women can best overcome sex discrimination by pursuing their individual career goals.
- ___ 67. The best way to handle problems of sex discrimination is for each woman to make sure she gets the best training possible for what she wants to do.
- ___ 68. Most women have only themselves to blame for not doing better in life.
- ___ 69. The best way for women to overcome sex discrimination is by working on their own to prove their abilities.
- ___ 70. Women have been offered plenty of opportunities to get ahead. If they don't make the most of them, it's their problem.
- ___ 71. The truly qualified woman in a career has no trouble achieving recognition and success.
- ___ 72. Government-sponsored child care centers would be a big waste of money.
- ___ 73. Mothers who work have no right to expect the government to pay for free child care centers.
- ___ 74. There should be free child-care centers to help mothers who have to work.
- ___ 75. Financial support for day care centers should be available to all.
- ___ 76. The issue of comprehensive day care for all should become a high priority for politicians and lawmakers.
- ___ 77. There should be easily available child-care so that women can take jobs.
- ___ 78. Public hospitals should offer abortion to any woman requesting it.
- ___ 79. Every woman has the right to decide whether or not she should have an abortion.
- ___ 80. A woman who is true to her maternal instincts would not have an abortion

Appendix E: Personality Attitudes Questionnaire (PAQ)

The items below inquire about what kind of person you think you are. Each item consists of a PAIR of characteristics, with the letters A-E in between. For example,

Not at all artistic**A.....B.....C.....D.....E****Very artistic**

The letters form a scale between the two extremes. **You are to circle a letter which describes where YOU fall on the scale.** For example, if you think that you have no artistic ability, you would choose A. If you think that you are pretty good, you might choose D. If you are only medium, you might choose C.

Not at all aggressive	A.....B.....C.....D.....E	Very aggressive
Not at all independent	A.....B.....C.....D.....E	Very independent
Not at all emotional	A.....B.....C.....D.....E	Very emotional
Very submissive	A.....B.....C.....D.....E	Very dominant
Not at all excitable in a major crisis	A.....B.....C.....D.....E	Very excitable in a major crisis
Very passive	A.....B.....C.....D.....E	Very active
Not at all able to devote self completely to others	A.....B.....C.....D.....E	Able to devote self completely to others
Very rough	A.....B.....C.....D.....E	Very gentle
Not at all helpful to others	A.....B.....C.....D.....E	Very helpful to others
Not at all competitive	A.....B.....C.....D.....E	Very competitive
Very home oriented	A.....B.....C.....D.....E	Very worldly
Not at all kind	A.....B.....C.....D.....E	Very kind
Indifferent to others' approval	A.....B.....C.....D.....E	Highly needful of others' approval
Feelings not easily hurt	A.....B.....C.....D.....E	Feelings easily hurt
Not at all aware of feelings of others	A.....B.....C.....D.....E	Very aware of feelings of others
Can make decisions easily	A.....B.....C.....D.....E	Has difficulty making decisions
Gives up very easily	A.....B.....C.....D.....E	Never gives up easily
Never cries	A.....B.....C.....D.....E	Cries very easily
Not at all self-confident	A.....B.....C.....D.....E	Very self-confident
Feels very inferior	A.....B.....C.....D.....E	Feels very superior
Not at all understanding of others	A.....B.....C.....D.....E	Very understanding of others
Very cold in relations with others	A.....B.....C.....D.....E	Very warm in relations with others

Very little need for security

A.....B.....C.....D.....E

Very strong need for security

Goes to pieces under pressure

A.....B.....C.....D.....E

Stands up well under pressure

Appendix F: Bem Sex Role Inventory (BSRI)

This survey contains all options from the original version, but the format has been altered in order to fit into a comprehensive survey packet for participants.

Personality Survey

Rate yourself on each item, choosing the best response for your personality. Put the number of your choice next to each corresponding question.

- | | 1 | 2 | 3 | 4 | 5 |
|---|-------|--------|---------|-------|--------|
| | never | rarely | neutral | often | always |
| <input type="checkbox"/> self reliant | | | | | |
| <input type="checkbox"/> yielding | | | | | |
| <input type="checkbox"/> helpful | | | | | |
| <input type="checkbox"/> defends own beliefs | | | | | |
| <input type="checkbox"/> cheerful | | | | | |
| <input type="checkbox"/> moody | | | | | |
| <input type="checkbox"/> independent | | | | | |
| <input type="checkbox"/> shy | | | | | |
| <input type="checkbox"/> conscientious | | | | | |
| <input type="checkbox"/> athletic | | | | | |
| <input type="checkbox"/> affectionate | | | | | |
| <input type="checkbox"/> reliable | | | | | |
| <input type="checkbox"/> analytical | | | | | |
| <input type="checkbox"/> sympathetic | | | | | |
| <input type="checkbox"/> jealous | | | | | |
| <input type="checkbox"/> leadership ability | | | | | |
| <input type="checkbox"/> sensitive to other's needs | | | | | |
| <input type="checkbox"/> truthful | | | | | |
| <input type="checkbox"/> willing to take risks | | | | | |
| <input type="checkbox"/> understanding | | | | | |
| <input type="checkbox"/> secretive | | | | | |

- _ makes decisions easily
- _ warm
- _ solemn
- _ willing to take a stand
- _ tender
- _ friendly
- _ aggressive
- _ gullible
- _ inefficient
- _ acts as a leader
- _ childlike
- _ adaptable
- _ theatrical
- _ assertive
- _ flatterable
- _ happy
- _ strong personality
- _ loyal
- _ unpredictable
- _ forceful
- _ feminine
- _ compassionate
- _ sincere
- _ self-sufficient
- _ eager to soothe hurt feelings
- _ conceited
- _ dominant

- _ soft spoken
- _ likable
- _ masculine
- _ individualistic
- _ does not use harsh language
- _ unsystematic
- _ competitive
- _ loves children
- _ tactful
- _ ambitious
- _ gentle
- _ conventional