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How Abortion Status Predicts Stigmatizing Beliefs: Measuring Enacted Stigma Using The Stereotype Content Model

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HOW ABORTION STATUS PREDICTS STIGMATIZING BELIEFS: MEASURING ENACTED STIGMA USING THE STEREOTYPE CONTENT MODEL

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Jenna Laurin
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Abstract

Enacted stigma consists of active discrimination or negative treatment towards an individual who has received an abortion. Further, stereotypes of individuals typically fit within perceptions of competence and warmth, however these stereotypes have not been measured about women who have received an abortion despite the fact that they can indicate stigmatizing beliefs. Additionally, enacted stigma may present differently between men and women. The purpose of the current study was to measure perceptions of competence and warmth as a form of stigma about women with and without a history of abortion, as well as women who considered an abortion but did not receive one. Differences in ratings of competence and warmth among men and women were also measured. The results of the current study indicate that women who have received an abortion are stigmatized via significantly lower ratings of warmth. Further, compared to women, men indicate significantly lower ratings of warmth towards all women. These results suggest that abortion stigma is persistent and that gender differences in enacted stigma exist. Implications and directions for future research are also discussed.

How abortion status predicts stigmatizing beliefs: Measuring enacted abortion stigma using the stereotype content model

Abortion Stigma

Abortion is a common medical procedure. At current rates, approximately 1 in 4 women have had or will have an abortion in their lifetime, and according to data from 2008, abortion rates were once as high as 30% of women (Cowen, 2017). Despite the fact that abortion is a common procedure, women who have received abortions often report experiencing stigma from others based on their abortion decision. Goffman (1963, as cited in Millar, 2020) defined stigma as a deeply discrediting attribute that ascribes a negative value. Stigma creates a tainted identity for the stigmatized individual.

More specifically, when applied to abortion services, abortion stigma is defined as "a negative attribute assigned to women who seek to terminate a pregnancy that marks them, internally or externally, as inferior to ideals of womanhood" (Kumar et al., 2009, p. 4). Abortion stigma can be broken into three types: perceived, internalized, and enacted. Women who experience perceived stigma believe that their reproductive choice in requesting an abortion will be viewed negatively by others. When women internalize these beliefs and view themselves or their decision negatively, they experience internalized stigma. Finally, enacted stigma is the experience of discrimination and/or negative treatment by others as a result of abortion decisions (Hanschmidt et al., 2016).

Enacted abortion stigma is multifaceted, as individuals may take issue with many aspects of a woman or the abortion service itself. As of 2013, over half of all US adults

had negative attitudes toward the morality of abortion (Cockrill et al., 2013). Morality may also be tied to the belief that female sexuality is solely for the purpose of procreation, and/or that choosing to terminate a pregnancy and avoid birth may assert a woman's moral autonomy in a threatening nature (Kumar et al., 2009). These negative attitudes about abortion may also include under what circumstances abortion should be legal, as Millar (2020) asserts that others differentiate between "good" vs. "bad" abortions. The purpose of the current study is to assess the prevalence of enacted stigma.

Consequences of Abortion Stigma

Enacted abortion stigma can manifest in a number of ways, including the urge from others to distance oneself socially from a woman who has had an abortion. Enacted abortion stigma also affects how the woman reacts to her abortion service, as many women report maintaining their abortion as a secret or only selectively disclosing the procedure to others (Cockrill et al., 2013). In fact, Millar (2020) notes that abortion secrecy is the most commonly reported mechanism of managing abortion stigma. Secrecy is associated with high stress levels and feelings of guilt and shame. Abortion stigma in general is associated with lower social support and self-efficacy (Mehta, 2019).

However, the negative effects of enacted stigma are not only based in social relationships and self-perception. Abortion stigma is cited as one of the major risk factors for mental health issues among women who have received abortions. The APA (2008) proposes that abortion stigma may have many negative psychological and mental health consequences, including anxiety, social withdrawal, avoidance, depression, and

physiological distress. Women who experience abortion stigma also report more difficulty coping emotionally post-abortion (Mehta et al., 2019).

However, abortion stigma appears to be related to policy and societal-level factors, as stigma is lower in areas with more liberal abortion laws and fewer abortion restrictions (Gregson et al., 2001; Hanschmidt et al., 2016). The APA (2008) Task Force on abortion and mental health argues that the cultural view of abortion may impact the likelihood of clinical mental health issues among women who have had abortions on a larger, systemic level. The task force suggests that women who live in cultures that view abortions negatively and express these negative opinions may influence women's emotions post-abortion, leading them to experience more negative consequences (APA, 2008).

Other negative consequences of abortion stigma include increased likelihood of reproductive coercion (Millar, 2020). According to Kumar et al. (2009), one facet of abortion stigma is the idea that a woman's moral autonomy can become threatening. Meanwhile, abortion stigma serves to impact this decision making, aiming to discourage women from receiving abortions (Millar, 2020). Further, abortion stigma does not only impact the woman herself. Millar (2020) notes that abortion stigma has been expanded to include more than just those who have received an abortion. Likewise, the woman's sexual partner and support network, abortion providers, and even abortion-rights supporters are stigmatized (Millar, 2020). Indeed, a proportion of men whose partners have had an abortion report receiving negative reactions when they have disclosed the

abortion to others (Cowan, 2017). Lastly, abortion stigma works to uphold legal abortion restrictions (Millar, 2020). This is especially harmful in regions that criminalize abortion. In these areas, where maternal mortality and morbidity rates are high, restricting abortions can be fatal for women who are forced to remain pregnant (Millar, 2020).

As abortion services are viewed more negatively on a societal level, reactions to these negative opinions include legal restrictions on abortions. In June 2022, the Supreme Court of the United States rolled back federal protections for abortion in its Dobbs vs. Jackson decision, marking one of the most extreme restrictions to abortion access since the passing of Roe vs. Wade in 1972 as the Supreme Court revoked the constitutional right to an abortion (Center for Reproductive Rights, 2022). The APA (2008) task force suggests that women who experience messages and social practices that stigmatize abortion may be at an increased risk of mental health issues as a direct result of those messages and practices. The Dobbs vs. Jackson decision, which allows states to completely restrict abortion practices, may send the message to women that receiving an abortion is bad, serving as a form of enacted stigma. In fact, in the week preceding and following the release of the SCOTUS decision, state and federal law makers opposing abortions released statements that stigmatized the procedure (Benen, 2022; Sarisohn, 2022).

Abortion Belief Prototypes

Much of the debate on the topic of abortions is dominated by two opposing sides; those who describe themselves as pro-life overtly oppose abortion services in many or all

instances while those who describe themselves as pro-choice support the choice to an abortion in many or all instances. However, Rye and Underhill (2020) propose that these two categories are not enough to understand the nuance involved in abortion beliefs.

Rye and Underhill (2020) created prototypes as a mechanism of measuring abortion beliefs. The researchers (2020) state that the two competing sides of the issue characterize abortion as two vastly different actions. Those who subscribe to the pro-life ideology generally liken abortion to murder. Individuals who describe themselves as pro-choice, on the other hand, typically view abortion as nothing more than a typical medical procedure. However, Rye and Underhill (2020) note that these two ideologies fail to capture the differences in beliefs about autonomy and choice.

Originally proposed by Allen and Griffin (1993, as cited in Rye & Underhill, 2020), abortion beliefs can be separated by two dimensions: attitudes about abortion and attitudes about autonomy. These distinctions led to the creation of four abortion prototypes. The pro-life and pro-choice prototypes were retained, with the addition of dilemma-situationist and regulated-situationist prototypes. Each of these prototypes fit differently within the dimensions of abortion and choice attitudes. Pro-choice absolutists tend to view both choice and abortion as positive, while pro-life absolutists view both of these dimensions negatively. The dimensions are therefore mixed within the dilemma- and regulated-situationist perspectives; dilemma-situationists view choice positively but abortion negatively, while the regulated-situationists view choice negatively but abortion more positively (Rye and Underhill, 2020).

There is evidence to support these distinctions in abortion beliefs. Past studies have found that some individuals value some abortion regulations, based on the situation (i.e. later-term pregnancies), providing support for the regulation-situationist prototype. Further, some are personally opposed to abortion but value autonomy and choice above abortion regulations, providing support for the dilemma-situationist prototype (Rye & Underhill, 2020). Understanding the predictors of abortion attitudes may provide avenues for possible interventions later.

Gender and Abortion Beliefs

Past research on abortion attitudes between men and women has been inconclusive (Lizotte, 2015). According to Lizotte (2015), some research has indicated that men are more pro-choice than women, yet other research indicates that women are more pro-choice than men (Loll & Hall, 2019). Some researchers have found no gender difference in abortion attitudes at all (Altschuler et al., 2014). Lizotte (2015) proposes that the contradictory results may be due to how women view the morality of abortion and their own self-interests. Women are more likely to view abortion as morally wrong but may support legal abortions due to feminist attitudes and their personal self-interests (Lizotte, 2015). This ideology fits best within the dilemma-situationist prototype (Rye & Underhill, 2020). However, men and women's abortion attitudes, and therefore enacted abortion stigma, may be further complicated by the circumstances surrounding the abortion decision. Finlay (1981) found no significant differences in male and female college students' opinions of abortion except when measuring attitudes about an elective

abortion in which no reason for the abortion was given. Finlay (1981) found that female college students were significantly more in favor of legal abortion services when no reasoning was provided compared to male college students. Further, Loll and Hall (2019) found that women had more supportive attitudes of abortion, meaning they rated the action of receiving an abortion as more justifiable on a Likert-type scale ranging from never to always justifiable.

Abortion beliefs are further complicated by gender role ideologies. Glick and Fiske's (1996) ambivalent sexism inventory assesses benevolent sexism, positive feelings towards women who conform to traditional stereotypes, and hostile sexism, negative feelings towards women who violate traditional gender roles. Osborne and Davies (2009) found that those high in benevolent sexism showed lower support for elective and traumatic (medically necessary) abortions, while those high in hostile sexism shower significantly lower support for elective abortions only. Similarly, Begun and Walls (2015) also found a positive correlation between both benevolent and hostile sexism and anti-choice attitudes. However, Begun and Walls (2015) did not differentiate between elective and medically necessary abortions. Understanding the role of predictors of abortion attitudes helps to understand the sources of stigma.

Abortion Stigma and the Stereotype Content Model

Given that abortion stigma is defined in part as "a negative attribute assigned to women who seek to terminate a pregnancy" (Kumar et al., 2009, p. 4), it is logical to assume that abortion stigma would result in the attribution of negative traits or the lack of

application of positive characteristics. As such, the traits of competence and warmth are likely to be affected by application of abortion stigma. The stereotype content model was originally proposed by Fiske and colleagues (2002) as a measure of mixed stereotypes. The researchers asserted that most groups are stereotyped based on their perceived levels of competence and warmth. Similar to the abortion beliefs prototypes, Fiske et al. (2002) believed that stereotypes exist on two dimensions and most groups are viewed as having mixed levels of warmth and competence. Warmth is defined as providing accommodations that benefit others, while competence is defined as traits that can elicit desired events (Cuddy et al., 2008).

In the original study, Fiske and colleagues (2002) assessed the mixed models of stereotypes for various groups of individuals, including women and feminists. While Fiske et al. (2002) did find differences in perceptions of women overall, stereotypes about women who have had abortions are likely to be distinctly different than stereotypes about women in general. Some argue that having an abortion is viewed negatively as a woman is abandoning her presumed, or stereotypical, role of being a mother (Peng & Huang, 2022). This is a valid conclusion, as moms are viewed as higher on both competence and warmth. In fact, moms are viewed as more competent than the broader category of "women" (Fraser et al., 2022). Kumar et al. (2009) state that a key component of abortion stigma is the idea that a woman is instinctually nurturing to the vulnerable. Abortions contradict this notion, which may manifest as differing stereotypes applied to women who have terminated a pregnancy.

Women who have had abortions may also be viewed as nontraditional, as they oppose the stereotype of a traditional woman: being a mother (Peng & Huang, 2022). Fiske et al. (2002) concluded that nontraditional women are viewed as possessing high competence but very low warmth. However, the research did not specifically measure competence and warmth perceptions of women who had an abortion, therefore it is unclear what the exact stereotypical model for this group would look like. This is still a limitation of the stereotype content model, as there is little available data which applies the model to this group of women.

Integrating the Stereotype Content Model with Abortion Beliefs Prototypes

The abortion beliefs prototypes are relatively new and under-researched in the literature. Most studies that have cited these prototypes have used them to measure abortion attitudes (i.e. Smith et al., 2021) and the purpose of including the abortion beliefs prototypes in the current study was to measure for differences in enacted stigma based on prototypes. Given that individuals within each abortion belief prototype hold different views about abortion services themselves and the concepts of autonomy and choice, it is likely that they also view women who have had abortions differently. For example, Rye and Underhill (2020) note that pro-life individuals often view abortion as murder while pro-choice individuals may view the service as a routine medical procedure. Given the emotionally charged views of the pro-life group, for example, compared to the more uninvolved perspective of the pro-choice group, these groups likely view the women who have had abortions more negatively or positively, which can

influence the stereotypes and beliefs about competence and warmth that these groups hold. Understanding how abortion prototypes may influence implicit bias towards a woman who chooses to terminate a pregnancy aids in a better understanding of stigma.

Hypotheses

Fiske and colleagues (2002) found that nontraditional women were rated high on competence but low on warmth while moms were rated high on warmth. These findings, in combination with Peng and Huang's (2022) assertion that women who have had abortions are viewed as abandoning a woman's presumed motherhood role, increases the chances that women who have had abortions will be rated especially low on warmth.

Millar (2020) asserts that abortion stigma expands to other individuals aside from women who have actually received an abortion. Cowen (2017) concluded that the partners of women who had an abortion also receive negative, stigmatizing reactions to abortion decisions. Although these men have not had an abortion, they still are the targets of abortion stigma. It is likely that abortion stigma also extends to women who have not had an abortion but who considered it. These enacted stigma differences likely center around ratings of warmth, as a woman who has considered an abortion has considered abandoning motherhood. Mothers are rated higher on warmth than non-mothers (Fraser et al., 2022) and, assumingly, women who have considered abortion.

H1: Women who have had an abortion would be rated significantly lower on warmth than the woman who is pregnant and the woman who considered but did not have an

abortion. The woman who considered but did not have an abortion would be rated significantly lower on warmth than the woman who is pregnant.

Finlay (1981) found that female participants were significantly more supportive of abortion for no given reason than male participants. This suggests that women may have more positive overall abortion attitudes than men, which likely would manifest as higher abortion stigma from male participants than female participants for the woman who received or considered an abortion. Additionally, there is no reason given for the abortion decision and contemplation conditions in the current study, making it a good fit to measure abortion stigma for elective abortions. As such, the following hypothesis was formed:

H2: Women would rate the woman who received or considered an abortion significantly higher on competence and warmth than men.

Exploratory Research

Rye and Underhill (2020) collected descriptive data for the abortion belief prototypes, including the percentage of participants who identified with each prototype. In Rye and Underhill's (2020) sample, 47% of participants identified with the pro-choice prototype, 25.5% with the dilemma prototype, 20.5% with the regulated prototype, and 7% with the pro-life prototype. Descriptive data was also collected in the current study as a measure of comparison, to determine how undergraduate students at a midwestern university view abortion and autonomy.

Additionally, the participants were asked their opinions regarding the morality and accessibility of abortion services. Exploratory data analyses were conducted with this data as a way of understanding how college students at a midwestern university view abortion services and choice.

Both Osborne and Davies (2009) and Begun and Walls (2015) found that those high on ambivalent sexism endorsed more anti-choice attitudes. Endorsement of anti-choice attitudes, especially in the context of an individual high in ambivalent sexism, is connected to enacted abortion stigma. Abortion stigma can manifest as a result of a woman not fulfilling her perceived motherly role, which is a large component of traditional feminine gender roles. However, Osborne and Davies (2009) found that those high on hostile sexism were significantly less supportive of elective abortion but not of traumatic abortion. This suggests that those high on hostile sexism may support abortion in some, but not all, situations. This belief fits best within the regulated prototype, as individuals who endorse this prototype believe abortion should be regulated and should only be approved under certain criteria (Rye & Underhill, 2020). Descriptive analyses were conducted as part of the current study to assess ambivalent sexism, abortion attitudes, and abortion belief prototypes.

The Current Study

The purpose of the current study was to measure abortion attitudes and assess how abortion beliefs affect impressions of women who have had, considered, and did not have an abortion. The study was intended to answer two major questions. First, are there

significant differences in how women who have had, considered having, and did not have an abortion are perceived? Additionally, do men and women hold significantly different abortion beliefs and do they perceive women differently based on their abortion history?

The study was a 2 X 3 factorial design with abortion history serving as an independent variable and participant gender as a quasi-independent variable. Abortion history was manipulated using brief descriptive vignettes.

Method

Participants

Using a power analysis via G*Power software, 384 participants were required to detect a small effect size (d = 0.25). However, a total of 253 participants were recruited via SONA Systems at the University of North Dakota. Participants who completed less than 65% of the survey, and participants who did not identify as men or women were excluded from data analysis. As a result, data from a total of 251 participants were included in all subsequent statistical analysis.

Participants ranged in age from 18-55 (M = 20.68). The participant sample consisted of 180 women, 66 men, and 5 non-binary participants. The non-binary participants were excluded from data analysis. A total of 91.6% of participants identified as white, 4.4% as Asian, 3.6% as American Indian or Alaska Native, 2.8% as Black or African American, 0.8% as Native Hawaiian or other Pacific Islander, and 2.4% identified as another race.

Due to the inability to collect data from an adequate number of participants, resulting in low statistical power, many of the variables included as intended moderators were not included in the final data analyses. These potential moderators include abortion belief prototypes, hostile sexism, benevolent sexism, abortion attitudes, abortion availability opinions, and abortion morality opinions. These variables still serve as important factors that may impact abortion stigma and should remain a consideration for future research. As a result, any statistical analyses, aside from descriptive statistics, were not conducted.

Materials and Procedures

Prior to completing the survey, participants completed a general pre-screen as part of their SONA Systems registration. This prescreen included the measure of abortion belief prototypes. Participants who registered to complete the survey were first instructed to read a brief vignette before being asked to rate the woman on competence and warmth measures. Participants then answered questions about their abortion attitudes, including measures of availability and morality, and completed the ambivalent sexism inventory.

Measuring Abortion Attitudes

Participants were asked to indicate their attitudes regarding abortion availability, and morality. Participants completed these two scales after viewing the stimulus materials and completing their ratings of competence and warmth.

Abortion Availability Attitudes. The abortion attitudes measures for the current study were adapted from previous research. Given their use in prior studies, there was

precedent for using the questions included in the adapted questionnaire. Abortion access and restriction attitudes were measured using questions from measures created by Stets and Leik (1993), Hill (2004), and Begun and Walls (2015). These 11 questions were compiled based on their intent to measure support for the availability of and restrictions on abortion (α = .959 in the current sample). These questions asked about the participant's agreement with the availability of abortions in specific circumstances (i.e. "abortion should be equally available regardless of income"). The abortion availability questions can be found in Appendix A.

Abortion Morality Attitudes. Attitudes about the morality of abortions were assessed using questions created by Stets and Leik (1993). The purpose of these 7 questions (α = .971 in the current sample) was to measure how participants view the act of an abortion and whether they view abortions as inherently right or wrong (i.e. "abortion is against my beliefs"). These questions may align well with the pro-life and pro-choice absolutist prototypes and may allow for the prediction of one's prototype affiliation based on their beliefs about the morality of abortions. The abortion morality scale can be found in Appendix B.

Stimulus Materials

Participants were randomly assigned to read about a 30-year-old woman who recently discovered that she was pregnant. In the *abortion-received* condition, the description concluded by stating that the woman considered her options and decided to have an abortion to end the pregnancy. In the *abortion-considered* condition, the

description concluded with a statement that the woman considered her options but decided not to have an abortion and continue the pregnancy. In the *control* condition, the description concluded after the woman discovers she is pregnant; this description does not include any mention of abortion. The researcher selected the age of 30 for the woman in the vignette as it is the median age at a woman's first birth (Morse, 2022). This age was chosen so as to not make the woman appear too young or old to properly care for a child, which may affect attitudes about abortion in a given situation. The woman in each vignette's occupation is Registered Nurse, as this is the most common job held by women in the workforce (U.S. Department of Labor, n.d.). The vignettes that were used in the current study are included in Appendix C.

Measuring Abortion Stigma

Following the presentation of the vignettes, abortion stigma was measured using the stereotype content model questionnaire. Participants were asked about a series of traits (i.e. "capable", "friendly") which were compiled into overall measures of competence (α = .919 in this sample) and warmth (α = .946 in this sample). Lower values on each of these scales indicate perceptions of low competence and warmth, which are associated with negative stereotypes and stigmatizing beliefs. The stereotype content model questionnaire can be found in Appendix D.

Measuring Ambivalent Sexism

At the conclusion of the survey, the ambivalent sexism inventory created by Glick and Fiske (1996) was used to measure participants' endorsement of ambivalent sexism.

The inventory includes 11 questions assessing hostile sexism (i.e. “women are too easily offended”) and benevolent sexism (“many women have a quality of purity that few men possess”). Both hostile (α = .911) and benevolent (α = .719) sexism were assessed using this measure. The ambivalent sexism scale is included in Appendix E.

Results

Data Preparation

Creation of Composite Variables

Competence. Fiske and colleagues (2002) assessed competence using six questions in which participants were asked to rate a target on the following traits: competence, confidence, capability, efficiency, intelligence, and skillfulness. A reliability analysis for the measure including all 6 questions had high reliability (α = .914), however when confidence was removed from the measure, the reliability increased (α = .919). The stereotype content model is a collection of questions that has typically been used together, although not all 6 items are always included. In some instances, confidence is removed from the composite variable (see Caprariello et al., 2009). As a result, confidence was removed from the measure of competence for all statistical analyses.

Warmth. The questions used by Fiske and colleagues (2002) to assess perceptions of warmth consisted of asking for ratings on how friendly, well-intentioned, trustworthy, warm, good-natured, and sincere the target was. A composite measure combining all six of these questions yielded high reliability (α = .946). The reliability of

this measure would not have increased with the removal of any of the six questions, therefore, all six items were retained.

Benevolent Sexism. The 1996 ambivalent sexism inventory developed by Glick and Fiske separated the scale into two measures. The benevolent sexism scale consisted of 11 questions. A composite variable combining each of the 11 questions yielded acceptable reliability ($\alpha = .719$) within the current sample.

Hostile Sexism. The hostile sexism scale within the ambivalent sexism inventory was composed of 11 questions. An initial reliability analysis yielded high reliability ($\alpha = .911$) with the current sample.

Abortion Availability. The abortion availability scale was composed of a number of questions drawn from a series of scales included in previously conducted research (Begun & Walls, 2015; Hill, 2004; Stets & Leik, 1993). A composite variable was created with the 11 questions, which yielded high reliability ($\alpha = .946$). Removal of one item from the scale increased the reliability ($\alpha = .959$), leading to the removal of one of the eleven questions.

Abortion Morality. The abortion morality scale consisted of seven items. The scale was composed of items drawn from a previous study conducted by Stets and Leik (1993). A reliability analysis yielded high reliability ($\alpha = .971$). As a result of the high reliability analysis, a composite variable for abortion morality was created with all seven items.

Exploratory Analyses

Descriptive analyses were conducted for the potentially moderating variables, including the measures of abortion belief prototypes and ambivalent sexism. Descriptive analyses were also conducted for the abortion availability and morality scales. These descriptive analyses compared opinions between participants who identified as men and women but did not include non-binary participants as there were too few participants who indicated the non-binary gender identity. Additionally, due to the lack of statistical power, especially as it relates to the very low number of participants who identified as men, the regression analyses could not be conducted.

Abortion Belief Prototypes

Although the abortion belief prototypes data were not analyzed for moderating effects, as the number of men in the sample was too low and the study was underpowered as a result, data were collected, and descriptive analyses were conducted for all participants who were eligible and completed the pre-screen within SONA Systems. A total of 671 participants completed the pre-screen, with 162 identifying as men and 494 identifying as women, however, not all participants who completed the pre-screen self-selected into the abortion stigma survey. The data were analyzed by gender to determine the proportion of participants who identified with each abortion belief prototype.

Of the women, 46 (9.3%) identified with the regulated-situationist perspective, 55 (11.1%) identified with the pro-life absolutist perspective, 93 (18.8%) identified with the dilemma-situationist perspective, and 261 (52.8%) identified with the pro-choice absolutist perspective. The remaining 38 (7.7%) women declined to answer. Of the men,

21 (13%) identified with the pro-life absolutist perspective, 26 (16%) identified with the regulated-situationist perspective, 34 (21%) identified with the dilemma-situationist perspective, and 57 (35.2%) identified with the pro-life absolutist perspective. The remaining 24 (14.8%) men declined to answer the abortion-belief prototype question.

In total, the majority of participants (48.5%) identified with the pro-choice perspective, while the least number of participants (11%) identified with the regulated-situationist perspective. Further, 11.6% identified with the pro-life perspective and 19.4% identified with the dilemma-situationist perspective.

Ambivalent Sexism

Benevolent Sexism. On the benevolent sexism scale, higher scores indicate opinions that are more supportive of benevolent sexism beliefs. In an analysis of all participants, the sample scored just above the mid-point on the scale ($M = 3.13$, $SD = 0.63$). There was a significant gender difference as men ($M = 3.35$, $SD = 0.63$) scored significantly higher than women ($M = 3.05$, $SD = 0.62$) on benevolent sexism, $F(1, 241) = 10.71$, $p = .001$, $\eta^2 = .043$.

Hostile Sexism. Higher scores on the hostile sexism inventory suggest attitudes that are more supportive of hostile sexism towards women. Overall, the participants scored relatively low on the hostile sexism scale ($M = 2.96$, $SD = 0.94$). However, there was a significant difference between genders, such that men ($M = 3.51$, $SD = 0.77$), scored significantly higher on hostile sexism than women ($M = 2.76$, $SD = 0.91$), $F(1, 241) = 35.27$, $p < .001$, $\eta^2 = .128$.

Abortion Availability

Higher scores on the abortion availability scale indicate more supportive opinions about legal abortion availability. Men (M = 4.58, SD = 1.53) scored significantly lower than women (M = 5.40, SD = 1.56), indicating that men are less supportive of legal abortion availability, $F(1, 243) = 13.30$, $p < .001$, $\eta^2 = .052$. Overall, participants scored relatively high on the scale (M = 5.21, SD = 1.59), indicating more supportive attitudes towards legal abortion availability.

Abortion Morality

On the abortion morality scale, higher scores indicate more negative feelings about abortion morality. Individuals who score higher on the scale hold harsher opinions about abortion morality. On average, participants scored slightly above the mid-point on the scale, indicating somewhat negative views towards the morality of abortion services (M = 3.95, SD = 1.93). Men scored significantly higher on the abortion morality scale (M = 4.67, SD = 1.55) than women (M = 3.74, SD = 1.99), $F(1, 242) = 11.61$, $p < .001$, $\eta^2 = .046$.

Ratings of Competence

The results of a 2 x 3 factorial ANOVA indicated that the two-way interaction of the effects of pregnancy condition and participant gender on ratings of competence was not significant, $F(2, 238) = 0.91$, $p = .405$. The main effect for pregnancy condition also did not reach statistical significance, $F(2, 238) = 2.29$, $p = .10$. With the ratings of competence, there is a pattern of slightly decreasing perceptions of competence from the

control condition ($M = 4.06$), to the abortion considered condition ($M = 4.04$), to the abortion received condition ($M = 3.87$), although these changes are not statistically significant. The main effect for participant gender was nearing significance, with men rating the women across all vignettes slightly lower on competence ($M = 3.86$, $SD = 0.74$) than women ($M = 4.04$, $SD = 0.74$), $F(1, 238) = 3.30$, $p = .07$. A table including the means and standard deviations for each condition is included at the conclusion of this document.

Ratings of Warmth

The results of a 2 x 3 factorial ANOVA indicated that the two-way interaction of the effects of pregnancy condition and participant gender on ratings of warmth was not significant, $F(2, 239) = 1.44$, $p = .24$. The main effect for pregnancy condition was statistically significant, $F(2, 238) = 8.475$, $p < .001$, $\eta^2 = .066$. The woman in the abortion received condition was rated significantly lower on warmth ($M = 3.82$, $SD = 0.86$) than the woman in the control condition ($M = 4.25$, $SD = 0.71$). There also was a statistically significant main effect for participant gender, $F(1, 238) = 5.71$, $p = .018$, $\eta^2 = .023$. Participants who identified as men indicated significantly lower ratings of warmth ($M = 3.87$, $SD = 0.77$) than participants who identified as women ($M = 4.10$, $SD = 0.76$). Post-hoc tests using the Scheffé test indicated significant mean differences (0.43) between the abortion and control conditions ($p = .001$), where ratings of warmth were lower in the abortion condition, but no other mean comparisons reached significance. A table including the means and standard deviations for each condition is included at the

conclusion of this document. A figure of the ratings of warmth based on pregnancy condition and participant gender is also included at the end of the document.

Discussion

Hypothesis 1 predicted that the woman who received an abortion would be rated significantly lower on warmth than the women who considered an abortion and the woman who was pregnant (the control condition). Further, hypothesis 1 stated that the woman who considered an abortion would be rated significantly lower on warmth than the woman in the control condition. The results indicate that the woman who received an abortion was rated significantly lower on warmth, but only when compared to the control condition ($p < .001$). There were no statistically significant differences in the warmth ratings between the abortion received and abortion considered conditions, or the abortion considered and control conditions. As a result, hypothesis 1 was partially supported.

Hypothesis 2 predicted that women would rate the woman who received an abortion significantly higher on warmth than men. There was not a significant interaction effect between participant gender and pregnancy condition on ratings of warmth ($p = .240$). Hypothesis 2 was not supported. However, the results did indicate a main effect of gender on ratings of warmth, such that men indicated significantly lower ratings of warmth across all pregnancy conditions than women did ($p = .018$).

Implications

Patev and colleagues (2017) posit that enacted abortion stigma occurs, in part, because women who have received an abortion are viewed as morally deviant. The

results of the current study indicate that men rated women significantly lower on warmth. The ratings of competence were trending in the same direction, although they did not reach statistical significance, suggesting that men may be more punitive towards women in general. As a result, men may have more harsh opinions on abortion morality compared to women. Further, Patev et al. (2017) found an association between abortion stigma and legality, such that those who held more stigmatizing beliefs about abortion also hold more negative beliefs about abortion legalization. Based on the results of the current study finding that individuals engage in abortion stigma, that men are more punitive in ratings of warmth, and that men scored significantly lower than women on the abortion availability scale, it may be possible that men are less supportive of legal abortion services than women. This may be because cisgender men cannot become pregnant, thus women who have been pregnant and had an abortion are members of a definitive out-group. The combination of out-group bias, wherein individuals derogate members of outside groups (Dion, 1973), and mixed ratings of competence and warmth of out-group members (Fiske et al., 2002), might lead men to engage in enacted abortion stigma simply because it does not impact them personally.

Given the current composition of the Supreme Court, these gender differences in attitudes have important legal implications. Four out of the five Supreme Court justices who ruled in favor of the Dobbs v. Jackson decision were men. If men do hold more negative attitudes about abortion legality, it may partially explain why most male Supreme Court justices voted in favor of overturning Roe v. Wade. Furthermore, 72% of

members of the US congress are men. Given that men hold a majority of both the House of Representatives (71%) and the Senate (75%), they hold more legislative power than the women in both houses of Congress (Leppert & Desilver, 2023). This may have serious consequences for abortion legality at the national level.

The Dobbs v. Jackson Supreme Court decision returned the ability to legislate abortion legality to the states. It is important to note that 48 out of 50 state legislatures consist of majority male members (CAWP, 2023). Men hold more legislative power at the state level, allowing them to overrule women in all but 2 states on abortion legality decisions. The decreased support of abortion availability among men found in the current study may result in more restrictive abortion laws at the state level in addition to the reversal of the guaranteed right to abortion services at the federal level.

The possibility of more restrictive abortion laws can be dangerous for women in need of abortion services. In fact, abortion restriction laws enacted after the Dobbs v. Jackson decision are already harming women in a number of states. In one case, a woman in Frisco, Texas was unable to receive an abortion within the state even though her fetus would not survive after birth and the mother was exhibiting symptoms of Mirror Syndrome, including rising blood pressure and persistent coughing (Seitz, 2023). Another woman went into pre-term labor at only 18 weeks' gestation. Knowing her child would not survive, she sought an abortion in Texas but was forced to wait until she was septic and endured permanent damage to a fallopian tube to receive treatment (Sneed, 2023). In another nearly fatal example, a woman in Tennessee was unable to receive an abortion

due to the state's trigger ban and, as a result, endured a life-threatening pregnancy before delivering her child at 26 weeks after nearly bleeding to death (Surana, 2023).

Indeed, Loll and Hall (2019) concluded that women were more pro-choice than men. More specifically, Finlay (1981) found that female college students were more supportive of legal abortion services when no reason was provided for the received abortion. These findings are consistent with the current study, as a greater proportion of women than men self-selected into the pro-choice abortion belief prototype.

The results of the current study show that men rate women who have received an abortion lower on warmth than women do, although the study did not achieve the statistical power to detect a statistically significant effect. This indicates that men may hold more severe stigmatizing attitudes in regard to abortion and is consistent with the findings of Patev et al. (2017). Past research on gender differences in enacted abortion stigma has been inconclusive (Lizotte, 2015). The current study shows that men and women rate the woman in the control condition equally high on warmth ($M = 4.25$) while men rate the woman who has received an abortion lower on warmth ($M = 3.51$, $SD = 0.88$) than women ($M = 3.92$, $SD = 0.84$). This provides additional support for the idea that men engage in more enacted stigma than women.

The results of the current study suggest that women who have received an abortion experience abortion stigma as a function of being perceived significantly lower on measures of warmth when compared to women who have not received an abortion. This adds to the current stigma literature by expanding Fiske and colleagues' (2002)

Stereotype Content Model to women who have received an abortion. The results further suggest that perceived competence is not impacted by abortion status. A woman's competence is not affected by her decision to receive an abortion or continue a pregnancy. These findings are aligned with Fiske and colleagues' (2002) conclusion that most groups are characterized by mixed stereotypes. In the case of women with an abortion history, relatively high ratings of competence are retained while ratings of warmth decrease significantly, compared to pregnant women.

These experiences of enacted abortion stigma can be very negative for women with a history of abortion. Enacted abortion stigma is a contributor to negative mental health consequences (APA, 2008), social isolation (Mehta et al., 2019), and abortion secrecy (Millar, 2020). The results of the current study, in finding evidence of the existence of abortion stigma, provide support for the idea that women may feel the need to keep their abortion a secret in an attempt to avoid negative perceptions. When abortion history was disclosed in the research vignette, perceptions of warmth significantly decreased, and these same experiences may lead women to avoid disclosing their abortions to others outside of the research laboratory. Additionally, the results suggest that women with an abortion history may be experiencing worse mental health symptoms and more severe isolation as a result of their experiences with enacted abortion stigma (APA, 2008; Mehta et al., 2019, Millar, 2020). Further, abortion disclosure or secrecy can have physical health consequences. Abortion secrecy may be a protective factor against physical abuse, as some women report refusing to disclose their abortion history to their

partners under fear of physical harm, likely a result of enacted stigma (Woo et al., 2005). This is a serious public health issue that impacts women with an abortion history disproportionately due to the increased stigma towards this group.

Future Interventions

The results of the current study suggest that women with an abortion history are perceived as significantly less warm than women who remain pregnant. Cuddy et al. (2008) describe the warmth dimension as a trait that aims to profit others more than the self. Therefore, individuals who engage in enacted abortion stigma may be viewing women with an abortion history as engaging in selfish behavior (Cockrill & Nack, 2013). Reducing abortion stigma must target perceptions of warmth, preferably through education about abortion decisions. If abortion decisions are framed as selfless, or in service to others (Cuddy et al., 2008), enacted abortion stigma may be reduced.

In fact, many women do seek abortions for reasons that would benefit others. Biggs et al. (2013) surveyed 954 US women seeking abortion services and found that many mentioned others as a reason for receiving an abortion. A large proportion of women (29%) stated that they needed to care and provide for their other children, therefore terminating the pregnancy would allow them to focus on their older kids. Many women were also concerned about the fetus or the baby itself, as 12% described seeking an abortion because they wanted a better life for the baby than they could provide, while 2% discussed concerns for the health of the fetus. Women also considered other members of their personal life when choosing to terminate a pregnancy. A smaller number of

women (2%) felt that having a child would negatively impact their family and friends, while 3% noted that their partner did not want a baby (Biggs et al., 2013).

These conclusions from Biggs and colleagues (2013) indicate that many women do indeed seek abortion services, at least in part, to benefit others, an idea directly related to the concept of warmth (Cuddy et al., 2008). It is possible, then, that educating the general public on the reasons that women seek abortions may protect against enacted abortion stigma. Providing education about abortions and why they are sought could improve perceptions of warmth about women with an abortion history.

Limitations

A key limitation of the current study was the lack of statistical power due to a smaller sample size than anticipated. Data from additional participants should be collected to allow for the originally planned statistical analyses to be conducted. Conducting these additional analyses may answer more specific questions about abortion stigma and the variables that may moderate the relationship between pregnancy condition and enacted stigma.

Another notable limitation of the current study is the large proportion of participants who identified as women. The participant sample was skewed with a nearly 3:1 ratio of women to men. The low number of men in the study also reduces the statistical power and limits the analyses that can be conducted to detect potential gender differences within moderated regression analyses. Therefore, it was not possible to analyze whether the abortion belief prototypes and ambivalent sexism moderated

abortion stigma. Recruiting more men to participate in the study would be beneficial to allow for these additional analyses.

Directions for Future Research

Additional data will be collected to allow for the remainder of the proposed analyses to be conducted. More complete basic descriptive analyses, from a significantly larger sample size, would be advantageous to determine the proportions of participants who identify with the four abortion beliefs prototypes. Given the current pervasiveness and attention on the legality of abortion services in the United States, it is likely that most Americans hold some opinion on the issue. Conducting these descriptive analyses will allow the results from the current study to be compared with that of Rye and Underhill's (2020) study, to determine what, if any, differences exist in abortion beliefs between U.S. university students and the Canadian sample used in the prior study.

The more complete descriptive analyses of the larger sample will also provide information about the general abortion attitudes of the participant sample. The abortion attitudes measures, included after the stereotype content model, should be analyzed to determine how midwestern U.S. university students feel about the morality and legality of abortion services. It is especially important to collect and analyze this data relatively soon after the release of the Dobbs v. Jackson SCOTUS decision. This data can be compared to general abortion attitudes prior to the Supreme Court decision to assess how the overturning of Roe v. Wade may have impacted feelings about abortion services.

Abortion belief prototypes may moderate the effect of abortion history on abortion stigma. It is possible that an individual's beliefs about abortions and autonomy affect their perceptions of women who have had, considered, and did not have an abortion. Future analyses will utilize moderated multiple regression analyses to detect the extent to which the relationship between abortion history and abortion stigma is impacted by the abortion belief prototypes.

Benevolent and hostile sexism may also serve as moderators to enacted abortion stigma. Future research should measure how the various types of sexism impact enacted abortion stigma, if at all. It is possible that individuals high in at least one factor of ambivalent sexism will rate women who have had an abortion differently on warmth than women who have considered an abortion or did not have an abortion. A moderated multiple regression analysis will detect any of these differences and allow for the interpretation of the potential effects of sexism.

Research on abortion largely ignores the experiences of individuals who do not identify as women. Indeed, there has been very little abortion literature which includes transgender men or gender nonbinary individuals in the research and understanding of abortion experiences (Dyer et al., 2023). Some researchers propose that abortion stigma may exist due to the perception of women abandoning their natural nurturing role (Kumar et al., 2009; Peng and Huang, 2022). However, Gazzola and Morrison (2014) found that college students stereotype transgender men as being masculine, which may impact initial ratings on the stereotype content model (Fiske et al., 2002), compared to cisgender

women, and how abortion stigma presents within the model. Future research should assess perceptions of gender diverse individuals with an abortion history to determine the prevalence and presentation of abortion stigma.

Abortion stigma may also be moderated by the cause of pregnancy. Prior to the overturning of Roe v. Wade, many states allowed exceptions for abortion in the case of rape or incest within otherwise restrictive abortion policies. Approval of these exceptions are mimicked in public opinion, as 63% of Americans supported abortion, at any point during pregnancy, in the case of rape or incest. There were also exceptions in the Hyde Amendment for these cases (Evans et al., 2023). Given that the more people are supportive of abortion services for victims of rape or incest, their perceptions of these individuals are likely also impacted. Abortion stigma may be significantly diminished for these individuals compared to individuals seeking abortions for other reasons, and future research should study this potential difference.

Conclusion

The results of the current study indicate that enacted abortion stigma is persistent. Women who receive an abortion are perceived as significantly less warm than women who remain pregnant. Interestingly, although the participant sample indicate generally favorable views towards legal abortion availability, and the majority of participants ascribe to the pro-choice abortion belief prototype, there are still stigmatizing beliefs held about those who do choose to terminate a pregnancy.

Further, the findings suggest that men hold more punitive views of women overall, by rating women across all pregnancy conditions lower on warmth than participants who identified as women. This is less surprising when other results are considered. For example, the men in the current study were significantly less supportive of legal abortion availability and held harsher views about abortion morality.

Individuals may hold stigmatizing beliefs about women with an abortion history as a result of viewing abortion as a selfish act (Cockrill & Nack, 2013). In fact, many women have abortions for reasons that consider the impact of childrearing on others (Biggs et al., 2013). Education about abortion decisions may increase ratings of warmth among women with an abortion history, reducing enacted abortion stigma and its associated negative mental health consequences.

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Table 1

Means and Standard Deviations (in parentheses) for Competence based on Pregnancy Condition and Participant Gender

	Control	Consider	Abortion
Men	4.07 (0.72)	3.80 (0.61)	3.66 (0.84)
	n = 25	*n* = 20	*n* = 20
Women	4.07 (0.71)	4.12 (0.64)	3.93 (0.85)
	n = 57	*n* = 60	*n* = 62

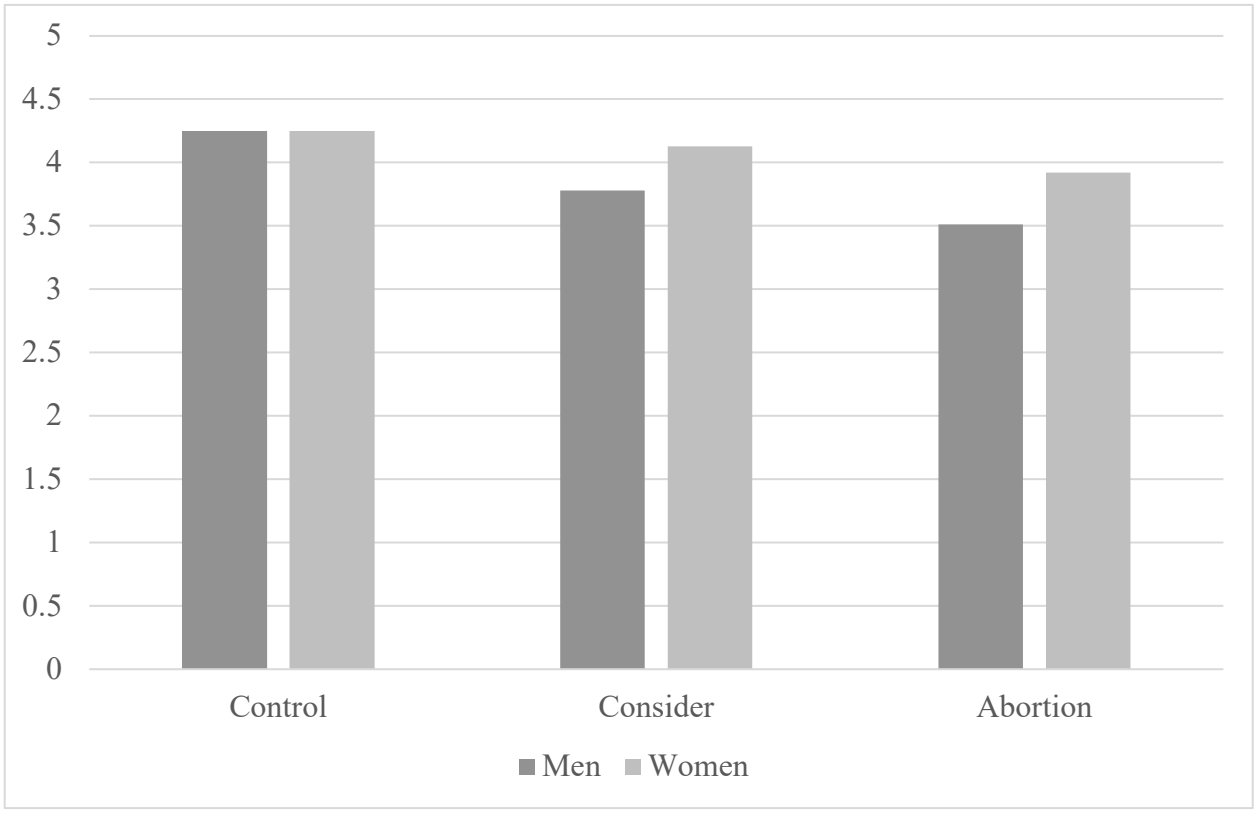
Table 2

Means and Standard Deviations (in parentheses) for Warmth based on Pregnancy Condition and Participant Gender

	Control	Consider	Abortion
Men	4.25 (0.58)	3.78 (0.69)	3.51 (0.88)
	n = 25	*n* = 20	*n* = 20
Women	4.25 (0.76)	4.13 (0.64)	3.92 (0.84)
	n = 57	*n* = 60	*n* = 63

Figure 1

Average Ratings of Warmth for Pregnancy Conditions by Participant Gender



Appendix A

Abortion Availability Scale

Questions are answered on a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree).

1) Abortion should be legal
2) Abortion should be legal in the case of incest
3) Abortion should be legal in the case of rape
4) Abortion should be equally available regardless of income
5) Abortion should be legal when the mother's health is in danger
6) Abortion should be legal when there are significant risks for serious damage to the baby
7) Abortion should be legal when the woman has had a previous abortion
8) Abortion should be legal when the woman is a junior in college and is hoping to go on to grad school
9) Abortion should be legal when the woman is mentally handicapped
10) Late-term abortions should be illegal in the United States (reverse code)
11) Abortion should be legal in all circumstances

$\alpha = .946$, $\alpha = .959$ after removing question 10

Appendix B

Abortion Morality Scale

Questions are answered on a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree).

1) Abortion is murder
2) Abortion is against my beliefs
3) Life exists from the moment of conception
4) Abortion is a sin against God
5) A fetus is a human being
6) A fetus should have legal rights
7) Abortion after the first trimester is murder

$\alpha = .971$

Appendix C

Stimulus Materials

Abortion Received Condition

Angela is a 30-year-old woman. Angela and her fiancé Ryan just moved to Virginia from Ohio. She currently works as a registered nurse. Angela's favorite part of her job is meeting patients from different walks of life, but the part of her career that she finds most difficult is the stress of caring for many patients at one time. When she is not working, Angela enjoys spending time outdoors as well as reading novels. Recently, Angela discovered she was pregnant. After considering her options, she decided to have an abortion and terminated the pregnancy.

Abortion Considered Condition

Angela is a 30-year-old woman. Angela and her fiancé Ryan just moved to Virginia from Ohio. She currently works as a registered nurse. Angela's favorite part of her job is meeting patients from different walks of life, but the part of her career that she finds most difficult is the stress of caring for many patients at one time. When she is not working, Angela enjoys spending time outdoors as well as reading novels. Recently, Angela discovered she was pregnant. She thought about having an abortion. After considering her options, Angela decided to continue the pregnancy.

Pregnant Condition

Angela is a 30-year-old woman. Angela and her fiancé Ryan just moved to Virginia from Ohio. She currently works as a registered nurse. Angela's favorite part of

her job is meeting patients from different walks of life, but the part of her career that she finds most difficult is the stress of caring for many patients at one time. When she is not working, Angela enjoys spending time outdoors as well as reading novels. Recently, Angela discovered she is pregnant.

Appendix D

Stereotype Content Model Questions

Questions are answered on a 5-point scale from 1 (not at all) to 5 (extremely).

In your view, how _____ is Angela?

- **Competence**
    - Competent
    - Confident
    - Capable
    - Efficient
    - Intelligent
    - Skillful
- **Warmth**
    - Friendly
    - Well-intentioned
    - Trustworthy
    - Warm
    - Good-natured
    - Sincere

Appendix E

Ambivalent Sexism Inventory

Questions are answered on a 6-point Likert-type scale from 0 (disagree strongly) to 5 (agree strongly).

1) No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.
2) Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality."
3) In a disaster, women ought not necessarily to be rescued before men.
4) Most women interpret innocent remarks or acts as being sexist.
5) Women are too easily offended.
6) People are often truly happy in life without being romantically involved with a member of the other sex.
7) Feminists are not seeking for women to have more power than men.
8) Many women have a quality of purity that few men possess.
9) Women should be cherished and protected by men.
10) Most women fail to appreciate fully all that men do for them.
11) Women seek to gain power by getting control over men.
12) Every man ought to have a woman whom he adores.
13) Men are complete without women.
14) Women exaggerate problems they have at work.

15) Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.

16) When women lose to men in a fair competition, they typically complain about being discriminated against.

17) A good woman should be set on a pedestal by her man.

18) There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances.

19) Women, compared to men, tend to have a superior moral sensibility.

20) Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.

21) Feminists are making entirely reasonable demands of men.

22) Women, as compared to men, tend to have a more refined sense of culture and good taste.