1. **What is the title of this study?**

   Effects of Gender Priming on Attitudes toward Health and Mate Preferences

2. **Who are the research personnel and what is their contact information?**

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<tr>
<td>Role</td>
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<td>Student Researcher</td>
<td>Student Researcher</td>
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<tr>
<td>Institution</td>
<td>Pacific University</td>
<td>Pacific University</td>
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3. **Provide an overview of the study.**

   a. **What is the purpose of this study?**

   Research over the past 30 years tended to focus on the measurement of gender norms, ideology, orientation, and identity as individual difference variables that could be compared and contrasted. More contemporary researchers, coming from a more social constructionist orientation (West & Zimmerman, 1987) focused on gender as an “achieved” phenomenon. This had far-reaching implications for social psychologists examining the role of stereotype and stereotype activation in that a more dynamic understanding of the influence of gender on attitudes and behaviors was now necessary.

   Bargh, Chen, and Burrows (1996) reported that priming individuals with various social stereotypes such as “elderly” or specific traits such as “rudeness” using anagrams or word completion tasks resulted in measurable behavioral differences as well as specific effects on individual thoughts and attitudes. A more recent study by Steele and Ambady (2006) found that women who were primed with “female” or “femininity” showed preferences in more gender stereotypic ways than women who were primed with masculine or neutral primes. Together, these studies provide additional evidence and support for examining the effects of priming social groups and that ability to impact specific cognitions, attitudes, and behaviors. The current study seeks to expand upon the few studies conducted to date to examine whether priming gender roles will have an influences on two areas typically associated with strong gender differences: namely health attitudes and behaviors and mate preferences.

   Gender differences in the health-related attitudes and behaviors of men and women are commonly found in the empirical literature (Lorber, 2000). While increased morbidity rates are reported among women throughout their lifetime, research with men shows not only underutilization of healthcare services but also increased risk associated with 15 of the most common causes of death. Given these well-documented effects, social scientists have attempted to examine biopsychosocial influences that might account for these effects, focusing more
recently on the role and influence of gender, gender role ideology, and gender norms on attitudes and behaviors. For example, researchers (Courtenay, 1998a, 1998b; Messner & Sabo, 1994; Messner, 2001; White et al., 1995) had reported that men are found to sacrifice or risk their health in pursuit of ideal masculinity by participating in behaviors that would harm themselves physically and psychology.

Another area of research that has shown strong and stable gender differences is mate preferences. Buss’ (1987; 1998) theory of sexual selection strategies is rooted in the primary need for reproduction and the propagation of one’s genetic material based on preferences for mates (e.g., younger versus older) and specific sexual mating strategies (e.g., short-term versus long-term). While research by the author has suggested stable, cross-cultural differences, other researchers (Eagly & Wood, 1999) challenged these assumptions by examining the ability of gender inequality to explain what are considered to be typical and traditional mate preferences of men and women. Given the results of this latter study, gender-related phenomenon combined with specific situational factors may influence mate preferences.

The current study proposes to examine the effects of gender (male/female) and influence of gendered stereotypes (feminine/masculine/neutral) on attitudes towards health and mate preference. Based on previous research, we hypothesize males and females would report traditional health-related attitudes and mate preferences in the neutral condition. However, we expect these patterns would vary based on priming condition. We also expect that gender and priming condition would interact to result in differential reports in not only health-related attitudes but also mate preference.

b. What is the basis of this undertaking?
The current study uses a between participants experimental design. Male and female participants will be randomly assigned to one of three conditions (masculine, feminine, neutral) and asked to solve anagrams aimed at priming gender roles and stereotypes. Upon completion of the task, participants complete a questionnaire assessing health-related attitudes and behavior, mate preference, and demographic and background factors. Statistical analyses will include a 2 (gender) x 3 (priming condition) factorial ANOVA for each dependent variable to examine main effects of each individual variable as well as the interaction between gender and priming condition on health attitudes and mate preferences.

c. What do you plan to do with the results of this study?
Study results will be disseminated in aggregate form only to local, regional and national conferences in Psychology. The ultimate goal would be to submit study results in the form of a manuscript to the journal *Sex Roles*, which publishes research on the impact of gender, gender roles, and gender stereotypes on cognitions, attitudes, and behaviors.

4. What is the nature of your intended sampling and data collection activities?
Complete section (a) if you will be gathering new data for your study. Complete section (b) if you will be using data that already exists. If your study will include both types of data, complete both sections. Section (c) addresses all data collected for and/or used in the study.

a. Does the study involve interaction or intervention with living people?
Yes, the current study proposes to have participants over the age of 18 complete a 5-10 minute anagram task serving as the stereotype prime followed by a questionnaire assessing attitudes towards health and mate preference.

i. **Describe the intended sample size and the relevant demographics.**
A sample of approximately 250 male and female participants above the age of 18 will be recruited to participate in the current study. This sample size is based on a priori power analysis with 80% power and a medium effect size and considering sample sizes for both IVs and their interaction, or about 20 persons with equal sample sizes.

ii. **Delineate the recruiting plan.**
Undergraduate students over the age of 18 at Pacific University will be recruited through flyers. Instructors will be contacted directly and asked to post flyers and forward an email to their students asking for their participation. The email includes a link for the online survey. Males and females above the age of 18 will also be recruited via invites placed on social networking sites (e.g., Facebook) using the same recruitment email.

iii. **Explain the procedures.**
Students will be recruited directly by the researchers or by their course instructors via flyers, email, or social networking sites to participate in a study problem solving and attitudes towards health and mate preference. Once participants click on the survey location on SurveyMonkey, they will be directed to a tacit consent page that describes the study, their length of involvement, verifies the participant’s age, and that they have read and understood the material presented. After providing consent, participants will be randomly assigned participants to one of three conditions and asked to solve anagrams aimed at priming gender roles and stereotypes (masculine, feminine, neutral). Upon completion of the word scrambles, participants will complete questionnaires assessing health-related attitudes and behaviors, mate preference, and various demographic and background factors (see survey for primes and survey questions). At this time, all participants will be thanked for their participation and given the opportunity to print out a survey completion certificate that can be used for course credit by their instructors (if offered) and an opportunity to be directed to an external site to provide their name, mailbox, and email address to be entered into a drawing to win one of three $25 Amazon gift certificates.

iv. **State the timeline for recruitment, data collection, analysis, and dissemination.**
Recruiting will begin once IRB approval has been obtained. Data collection will begin upon project approval and will end in May 2013. Statistical analyses will consist of various descriptive statistics to summarize characteristics of the sample and measures, and also a series of 2 (gender) x 3 (priming condition) factorial ANOVAs assessing attitudes towards health and mate preference. Study results will be disseminated in aggregate form only to local, regional and national conferences in Psychology. The ultimate goal would be to submit study results in the form of a manuscript to the journal *Sex Roles*, which publishes research on the impact of gender, gender roles, and gender stereotypes on cognitions, attitudes, and behaviors.

v. **How will you protect the privacy of your participants?**
They current study results will be anonymous with no identifying information collected from participants except that they are able to legally provide consent (over the age of 18 years
old). Only members of the research team (the faculty investigator and student assistants) who have completed the NIH Training and received certification will be eligible to assist with analysis of raw survey data. Computers will be required to be password-protected, as well as electronic data files, and Internet Protocol (IP) addresses will be deactivated. All data presented and shared will be done so in aggregate form only.

Survey data will be collected using SurveyMonkey, an online survey collection tool enabling researchers to administer surveys and questionnaires with a variety of question formats. The SurveyMonkey account is a personal account and is password protected. Only the research team will have access to the account and data. Downloadable data will only be stored on password-protected computers by members of the research team. Similarly, analyses will be conducted using the Statistical Package for the Social Sciences (SPSSx) by members of the research team and only on password-protected computers. Data downloaded from the account will be stored securely on a password protected computer or other media. All raw data (either online or on a protected computer) will be kept by the primary investigator for no more than three years after completion of the study, after which time it will be deleted.

vi. Explain how the minimal risk criterion is met.
It is possible that participation in this study may expose participants to currently unforeseeable risks associated with responding to items asking about health-related experiences or preferences in partners. However, these risks are considered minimal in that they are no greater than those ordinarily encountered in daily life.

vii. Does participation in this study provide direct benefit or compensation?
There are no direct benefits for participants. Participants who choose to provide contact information in the form of an email address, campus mailbox, or other contact information will be entered into a raffle to win a one of three $25 Amazon gift card as compensation for their participation in the study. Drawings will take place by the end of May 2013.

viii. How will informed consent be obtained and documented?
We are requesting a waiver to informed consent requirements and have included the “Request to Alter of Waive Informed Consent” form.

b. Does any data that will be used in this study already exist? (Was it created by someone else for an unrelated purpose?)
No existing data will be used in the current study.

i. Is the data set, as it exists, expected to remain private, by law?

ii. Do you have ready access to the identities of the individuals from whom the information was obtained (through the agency with which you are working)?

iii. If all personal identifiers have been removed from the data source, could you re-identify the data?

iv. Explain in precise detail the nature of the data you will be using. Note where it is housed, how you will gain or be permitted access, and how participant privacy will be protected.
c. **How will the data and study materials be treated after the study is complete?**
   After the study is completed, all raw data (either online or on a protected computer) will be kept by the primary investigator for no more than three years after completion of the study, after which time it will be deleted. Downloaded data will only be available to the investigator and members of the research team. Names and contact information collected for the drawing will be deleted after the drawing is held.

5. **Who is sponsoring and/or funding this study? Are there any potential conflicts of interest?**
   a. **If this is a clinical investigation as defined in Category 6 or Category 7 (21 CFR 56.104), list and describe who is sponsoring this study. Provide addresses for all key sponsors.**
      N/A
   b. **List and describe any funding for this study.**
      N/A
   c. **Describe any potential or apparent conflict(s) of interest that may exist.**
      There are no apparent conflicts of interest based on the use of these funds for participant incentives.

6. **Describe any relevant authorizations.**
   No permissions are required for the current study.
Informed consent is a process. Federal regulations (45 CFR 46.116 and 21 CFR 50.20) require that no investigator may involve a human being as a subject in research unless legally effective informed consent has been obtained. Researchers are required to inform participants in written or verbal form of the primary purpose of the research project and of any procedures which they will undergo. Additionally, participants are to be informed of their rights regarding the study (i.e., voluntary participation, protecting anonymity or confidentiality, privacy, etc.) and any risks or benefits associated with the project. Occasionally there are reasons to request IRB approval to waive obtaining written consent or to alter the requirements of consent. The IRB will determine and approve which type of consent applies to your research.

1. Study Title
   Effects of Gender Priming on Attitudes toward Health and Mate Preferences

2. Type of Waiver Request
   - I am requesting to waive the required documentation of signed informed consent. Complete Section A.
   - I am requesting to waive or alter the required elements of the informed consent process. Complete Section B.

Section A: Request for Waiver of Documentation of Signed Informed Consent

If you are requesting IRB approval to waive the required documentation of signed informed consent (e.g., for telephone or mailed surveys, internet research, etc.), indicate the condition that best fits your research study. Explain how your research study meets this condition and answer the question that follows. **Note:** For research involving a clinical investigation governed by 21 CFR 50 and 21 CFR 56, only Condition 2 applies.

   - X Condition 1
     The informed consent document would be the only record linking the subject and the research. The principal risk in collecting informed consent would be the potential harm resulting from a breach of confidentiality. Each subject will be asked whether s/he wants documentation linking her/him with the research, and the subject’s wishes will govern.

We would like to request a waiver for the traditional signed informed consent in favor of an implied consent process. The current study and data collection procedures are completely anonymous and obtaining a signature from participants would be the only source for a breach of anonymity. As shown, the tacit informed consent will present the research study’s purpose, duration and type of participation, potential risks and benefits, and opportunities for compensation for participation. Participants will also be made aware their data is confidential, analyzed in aggregate form, and their participation is completely voluntary and can be ceased at any time without penalty or loss of benefits.
Condition 2
The research presents no more than minimal risk to the subject and does not involve procedures for which written consent is normally required outside of the research context (i.e., questions are not being asked that could result in potential embarrassment, personally or professionally).

Anticipated risks of participation are minimal in that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

Condition 3
The requirements in 21 CFR 50.24 are met. These pertain to exceptions in gathering informed consent due to emergency research situations.

If you are requesting to waive signed informed consent, you must submit a verbal script or cover letter to the IRB that addresses the required elements of consent as stated in 21 CFR 50.25 and 45 CFR 46.116. In cases in which the documentation requirement is waived, the IRB may require the investigator to provide subjects with a written statement regarding the research (21 CFR 56.109, 45 CFR 46.117(c)).

Section B: Request for Alteration or Waiver of the Informed Consent Process

I am requesting to alter the required elements of the informed consent process.

I am requesting to waive the required elements of the informed consent process.

Non-Clinical Studies
You must justify your request to waive or alter the informed consent process in accordance with each of the following four criteria established under 45 CFR 46.116(d)(1-4). Note: In the case of a clinical investigation governed by the FDA, these criteria do not apply and waiver or alteration of the informed consent is allowed only in accordance with 21 CFR 50.23 and 21 CFR 50.24.

1. The research involves no more than minimal risk to the subjects.

2. The waiver or alteration will not adversely affect the rights and welfare of the subjects.

3. The research could not practicably be carried out without the waiver or alteration.

4. Whenever appropriate, the subjects will be provided with additional pertinent information after participation.

Clinical (Medical Device and/or Drug) Studies
You must justify your request for an exception from the general requirements for obtaining informed consent in accordance with 21 CFR 50.23 (i.e., circumstances are life-threatening; informed consent
cannot be obtained from the subject; time is not sufficient to obtain consent from the subject's legal representative; no alternative method of approved or generally recognized therapy is available that provides an equal or greater likelihood of saving the life of the subject) or 21 CFR 50.24 (i.e., emergency research).
Description of Recruitment Materials

1. **Email and Social Networking Sites.** Instructors will be contacted directly and asked to forward an email to their students asking for their participation. The email includes a link for the online survey. Participants also will be recruited via invites placed on social networking sites (e.g., Facebook) using the same recruitment email. To expand this example, the Microsoft Word application materials include a screenshot. The PDF application materials include a PDF from the source.

2. **Flyer.** Instructors will be contacted directly and asked to post flyers in their classrooms.
You are invited to participate in an IRB-approved online survey (IRB # Removed) examining gendered associations on attitudes towards health-related behaviors and mate preferences. The survey should take approximately 20 minutes to complete.

At the end of the survey, you will be directed to a separate, unlinked survey in which to provide your contact information to win one of three $25 gift cards to be awarded spring semester. Please click the link to start the survey: Link Removed.

If you have questions, please contact the Principal Investigator, Name Removed, at Email Removed.

Thank you for your interest and participation!

Name Removed
Study Participants Needed

Please help us examine gendered associations on attitudes towards health-related behaviors and mate preferences.

Who Are We Looking For?

- We are looking for male and female participants over the age of 18.

How Can You Participate?

- You will take an IRB-approved (IRB # Removed) online survey.
- The survey should take approximately 20 minutes to complete.

Participate For A Chance To Win

At the end of the survey, you will be directed to a separate, unlinked survey in which to provide your contact information to win one of three $25 gift cards to be awarded this spring.

Questions?

Please contact the Principal Investigator, Name Removed, at Email Removed.
Data Collection Materials

Description of Data Collection Materials

This documentation is available within the PDF application materials as part of the SurveyMonkey PDF.

1. **Informed Consent.** The tacit informed consent will present the research study’s purpose, duration and type of participation, potential risks and benefits, and opportunities for compensation for participation. Participants will also be made aware their data is confidential, analyzed in aggregate form, and their participation is completely voluntary and can be ceased at any time without penalty or loss of benefits.

2. **Stimulus Materials.** Gender stereotype primes were presented to participants in the form of anagrams (i.e., word scrambles) to be solved with conditions 1 and 2 having an equal number of positive, neutral, and negatively valenced words associated with each gender. Conditions are presented in the table below.

<table>
<thead>
<tr>
<th>Feminine</th>
<th>Masculine</th>
<th>Neutral</th>
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</thead>
<tbody>
<tr>
<td>1. Dress (NEUT)</td>
<td>1. Suit (NEUT)</td>
<td>1. Pencil (NEUT)</td>
</tr>
<tr>
<td>2. Kind (POS)</td>
<td>2. Tough (POS)</td>
<td>2. School (NEUT)</td>
</tr>
<tr>
<td>3. Girl (NEUT)</td>
<td>3. Boy (NEUT)</td>
<td>3. Table (NEUT)</td>
</tr>
<tr>
<td>5. Sweet (POS)</td>
<td>5. Strong (POS)</td>
<td>5. Class (NEUT)</td>
</tr>
<tr>
<td>6. Moody (NEG)</td>
<td>6. Rude (NEG)</td>
<td>6. Pens (NEUT)</td>
</tr>
<tr>
<td>8. Pretty (POS)</td>
<td>8. Athletic (POS)</td>
<td>8. Campus (NEUT)</td>
</tr>
</tbody>
</table>

3. **Mate Preferences.** The Mate Preference Questionnaire (Buss, 1989) examines participant criteria for choosing a mate. The first section asks participants to report on how important several factors are in the choice of a mate (e.g., good cook, housekeeper, etc.) from 0 = irrelevant to 3 = indispensable. The second section asks participants to rank order of their most desirable qualities of a mate (e.g., intelligent, good earning capacity, etc.) from 1 = least desired to 13 = most desired.

4. **Health Attitudes and Behaviors.** The Health Belief Inventory-20 (Courtenay et al, 2002; Levant, Wimer, & Williams, 2011) is a 20-item measure assessing health-promoting (e.g., diet, prevention, medical compliance) and health-risk (e.g., anger, substance use, stress and coping) behaviors. Participants rated each statement from 1=never to 7=always. Risk behaviors were assessed using the revised 30-item Domain-specific Risk-Taking Scale (DOPsERT; Blais & Weber, 2006), which examines risk taking in five content domains: financial decisions (investing versus gambling), health/safety, recreational, ethical, and social decisions.
5. **Gender Attitudes.** The Liberal Feminist Attitude and Ideology Scale (LFAIS; Morgan, 1996) is an 11-item measure assessing egalitarian attitudes from $1 = \text{strongly disagree}$ to $6 = \text{strongly agree}$. Additional items were chosen from Liss et al. (2001), which asked participants to rate the extent to which they considered themselves to be gender egalitarian, agreed with most of the objectives of the feminist movement, and privately considered themselves to be gender egalitarian but did not call themselves one when around others. Participants were also asked to rate their level of endorsement with each item from $1 = \text{strongly disagree}$ to $7 = \text{strongly agree}$.

6. **Demographic and Background Information.** Basic demographic items will include the participant’s age, gender, racial/ethnic group, and sexual orientation. Additional background items will include educational questions (e.g., class standing) and other key factors associated with health-risk behaviors (e.g., anger, substance use, stress and coping).

7. **Survey Participation for Incentives.** Participants will be thanked for their participation and given the opportunity to print out a survey completion certificate that can be used for course credit by their instructors (if offered) and an opportunity to be directed to an external site to provide their name, mailbox, and email address to be entered into a drawing to win one of three $25 Amazon gift certificates.