**RESEARCH INVOLVING HUMAN SUBJECTS**

**REQUEST FOR APPROVAL**

GOSHEN COLLEGE

***All research involving human subjects, whether conducted by faculty, staff, or students, must be approved by the Goshen College Institutional Review Board.***

**I. PROJECT INFORMATION**

**Project Title: \_\_\_**

**Principal Investigator(s): \_\_\_\_**

**Department: \_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Name(s) of Investigator(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature(s) of Investigator(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Please ***sign and send this page with all relevant original signatures*** to IRB Chair Justin Heinzekehr via campus mail or bring the page to AD14F. Send your application and all attachments ***via email*** to the IRB Chair at justinbh@goshen.edu.

Note\*\*

***All persons listed*** on any IRB Application must have confirmation on file with the IRB that they have completed the online training modules provided by the National Institutes of Health (NIH) at: <https://phrp.nihtraining.com/users/login.php>

***If this is a student project, the faculty supervisor must sign below. Students, you must have your faculty supervisor review the proposal before submission.***

**I have discussed the proposed research with the student investigators and have reviewed the research protocol. The methodology and data collection process (e.g., wording and content of survey items) have my approval and I will give oversight to the work.**

**Name(s) of Faculty supervisor(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature(s) of Investigator(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**II. DETERMINATION OF REVIEW CATEGORY**

**The categories below will help you determine whether your project should be categorized as “exempt” or not. YOU MUST INDICATE whether your project is exempt and, if so, which of the five (5) possible exemption categories you would assign to your project.**

Research involving human subjects may be categorized “exempt”, following relevant federal guidelines (Section 46.101 of A Federal Policy for the Protection of Human Subjects, Subpart A).

**Exempt work is defined as:**

(1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as:

(i) research on regular and special education instructional strategies, or

(ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:

(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and

(ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

**NOTE: If the research involves children as participants, the research must be limited to educational tests (cognitive, diagnostic, aptitude, achievement) and observation of public behavior when the investigator(s) do not participate in the activities being observed. Research involving children that uses survey procedures, interview procedures, or observation of public behavior when the investigator(s) participate in the activities being observed cannot be granted an exemption.**

(3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under category 2 above, if either:

(i) the human subjects are elected or appointed public officials or candidates for public office; or

(ii) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

**To qualify for exemption #4, data, documents, records, or specimens must exist at the time the research is proposed and not prospectively collected.** *Attach either a data collection sheet or a list of all data points that will be collected.*

(5) Exemption #5 does not apply to studies done at Goshen College.

(6) Taste and food quality evaluation and consumer acceptance studies,

(i) if wholesome foods without additives are consumed; or

(ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural, chemical, or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture. [45CFR46.101(b)(1-6) and 21 CFR 56.104(d)]

**If “exempt” categories 1, 2, or 3 have been selected, answer the following:**

Will you be audio or video recording?

No

Yes.

*(double-click on the grey box to access a window that will let you “check” that box)*

Use the space below to type your explanation of how it will be assured that the identity of the subjects and/or link to the information obtained or the information recorded about the subjects does not place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, insurability, or reputation.

**Explanation:**

***Assign a Review Category to your project here:***

**By the definition above, I (we) understand the research in this request to be**

**Exempt (category #\_\_\_\_\_)\*\***   **Nonexempt\*\***

*(double-click on the grey box to access a window that will let you “check” that box)*

**\*\*Note: The IRB reserves the right to redefine exemptions and exemption categories.**

**III. Guidelines for Writing Research Protocol**

***You must address all five (5) of the items below for the IRB to consider your application complete.***

1. Brief statement of study purpose (including any hypotheses being tested). Please limit your statement of purpose to 3 pages.

2. Demographics: Briefly list number and characteristics of participants. If you are focusing your research on one demographic group (e.g., men, women, people over 50, etc.), please include a justification of why you are focusing on that particular group.

3. Describe briefly the study procedures. These include:

a. procedures you will use to recruit subjects

b. the actual text of any communications you will use to recruit subjects

c. any debriefing procedures

d. procedures for sharing findings with participants

4. Indicate the procedures designed to insure anonymity and/or confidentiality. These include:

a. how you will secure the data you collect so that people who are not conducting

the research will not have access to it.

b. how you will ensure that subjects’ identities are not revealed in the collection

and storage of the data.

In addition to the above, all non-exempt studies must include a proposal for an “Informed Consent” form; exempt studies – especially survey research – should address issues related to voluntary participation and include a “Study Information Sheet”.

5. Please attach copies of all paper-and-pencil and/or Web-based instruments (such as surveys) to be used in the study. If you are using interviews for research, you must include the questions you will ask the participants in your study.

**IV. EXAMPLE PROPOSAL INCLUDING EXAMPLE CONSENT FORM**

**Study Title:** “Math is Hard”: Replication of a gender priming study

**Purpose:**

Research has shown that stereotypes are more than just ideas, but that they manifest in concrete ways. Simply knowing a negative stereotype about one’s own social category can both contribute to decreased performance in the area of the stereotype as well as decreased preference (Steele & Aronson, 1995; Kawakami, Dovidio, & Dijksterhuis, 2003). This is due to a cognitive effect called priming (Bargh & Pietromonaco, 1982). Priming then leads to decreased performance through something known as the stereotype threat, which, according to Steele, Spencer, and Aronson (2002) is, “the concrete, real-time threat of being judged and treated poorly in settings where a negative stereotype about one’s group applies.” Steele and Aronson (1995) looked specifically at how this stereotype threat impacts the testing of African American students. They found that, because of the stereotype that African American students perform worse academically than white students, the African American students performed worse than they otherwise would when they were primed with their own social category. In addition, Kawakami, et al. (2003) looked at how stereotypes affect attitudes. Their study looked at elderly and skinhead stereotypes and found that, when primed with those categories, participants attitudes shifted to be more similar to those primes (more conservative for the elderly prime and more prejudiced for the skinhead primes).

These findings have big implications for the maintenance of discrimination in society, such as the continuing difference between men and women in traditional STEM fields. Even as women’s education rate went up, they maintained far lower numbers in the fields involving math (Beede, et al., 2011). Research shows that this gap is partially maintained by the aforementioned stereotype threat and attitude shift that accompanies any stereotype. To study this further, we will replicate a study by Steele and Ambady (2006). The study looked specifically at how women college students’ attitudes towards math and art are negatively or positively shifted based on the self-relevant prime “female.” Following the procedure used by Steele et al., we will assess the participants’ attitudes towards math and the arts through surveys in which they rate their how pleasant they think activities in each field sound. The prime will be applied through a questionnaire about gender-related items.

Based on the results from Steele and Ambady (2006), we hypothesize that the dependent variable, women’s attitudes towards math and the arts, will be significantly affected by the independent variable, gender prime, which will manifest in an expression of stronger preferences for arts fields and decreased preferences for math fields in comparison to those with the neutral prime. Significant results in this study would have implications about how stereotypes can affect women’s desire to engage in math-related activities, a likely contribution to the pattern of male dominance in the STEM field workforce.

Bargh, J. A., & Pietromonaco, P. (1982). Automatic information processing and social perception: The influence of trait information presented outside of conscious awareness on impression formation. Journal of personality and Social psychology, 43(3), 437.

Beede, D. N., Julian, T. A., Langdon, D., McKittrick, G., Khan, B., & Doms, M. E. (2011). Women in STEM: A gender gap to innovation. Economics and Statistics Administration Issue Brief, (04-11).

Kawakami, K., Dovidio, J. F., & Dijksterhuis, A. (2003). Effect of social category priming on personal attitudes. Psychological Science, 14(4), 315-319.

Steele, J. R., & Ambady, N. (2006). “Math is Hard!” The effect of gender priming on women’s attitudes. Journal of Experimental Social Psychology, 42(4), 428-436.

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. Journal of personality and social psychology, 69(5), 797.

Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. Advances in experimental social psychology, 34, 379-440.

**Demographics:**

Traditional, undergraduate students, including at least 60 females, from a variety of science and psychology courses will be invited to participate in a series of questionnaires and will be given extra credit for their specific science class for participating.

**Study Procedures:**

To recruit these students, we will go into several science courses, briefly describe the study, and pass around a sign-up sheet for the names, time-slots, and emails of volunteers in this convenience sample. For each participant, we will send a reminder email as the time they have signed up for approaches. When the participants arrive, a female investigator will hand them 2 sheets of paper and will inform them that they will complete each sheet in the order given and then asked to recite the alphabet backwards, a cognitive task used as distractor from the study’s purpose. The first paper they complete, described as a student life survey, will be one of two priming manipulations, either the gender prime or the neutral prime, followed by an academic interests questionnaire, which is the same for each participant. Finally, they will complete a few follow-up questions.

**To be read in classes:**

We invite you to participate in a brief study as part of our Research and Methods class. As part of this study, we will ask you to respond to a series of questions and do a brief activity, which will only take about 5-10 minutes to complete.

You will automatically have your name entered in a raffle to win a $25 gift certificate to either Java Junction or the Electric Brew.

If you’re interested, please sign up for a time and place that works for you on this sheet with your name and email.

**Follow-up Email:**

“To: <student>

From: <name of principle investigator and co-investigator(s)>

Date: (TBD)

Subject: Student Research participation request

Dear <participant>,

Thank you for participating in our study, your cooperation was greatly appreciated. We are sending you this email to explain the purpose and results of the study.

Our purpose was to measure the effect of “gender priming,” or, in other words, the effect of the stereotype that women are worse at math than men. To obtain this data, we only used the scores from the women who participated. However, we recruited from all genders to avoid suspicions about the purpose of the study, because distraction is key for the prime to function implicitly.

Come to our psychology forum on <date> to learn about the results of the study.

Thank you! Maddy, Emily, and Nick

**Confidentiality/Anonymity:**

PIs will not use participant names to report the findings of these survey data. Email replies will be moved to a password protected computer drive and deleted from the email server. The only persons with access to the secure computer drive will be the PIs. There will be no recording during this process, only paper files that will be shredded after the data is gathered.

**Interview/Survey Questions for data gathering:**

**Questionnaires Gender Primed Questionnaire**

1. Do you live on or off campus? \_\_\_\_\_ on campus \_\_\_\_\_off campus

2. Do you have a roommate? \_\_\_\_\_yes \_\_\_\_\_\_no

3. Is your floor coed or single sex? \_\_\_\_\_coed \_\_\_\_\_single sex

4. Do you prefer coed or single-sex floors? \_\_\_\_\_coed \_\_\_\_\_single sex

5. List three reasons why you would prefer a coed floor:

a.

b.

c.

6. List three reasons why you would prefer a single-sex floor:

a.

b.

c.

**Neutral Primed Questionnaire**

1. Do you lived on or off campus? \_\_\_\_\_ on campus \_\_\_\_\_off campus

2. Have you participated in official student life activities? \_\_\_\_\_yes \_\_\_\_\_no

3. Do you use campus food services? \_\_\_\_\_yes \_\_\_\_\_no

4. Do you study in the Library? \_\_\_\_\_yes \_\_\_\_\_no

5. How far do you travel to Goshen from your family home? \_\_\_\_\_\_\_\_\_\_\_

6. Do you walk to class? Bike? Other? \_\_\_\_\_walk \_\_\_\_\_\_bike \_\_\_\_\_\_other

**Survey Items**

Arts Survey Items

1. Writing an essay

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

2. Listening to music for a class assignment

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

3. Taking a literature exam

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

4. Analyzing a poem

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

5. Completing an art assignment for a visual arts course

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

Math Survey Items

1. Doing an algebra problem set

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

2. Computing compound interest

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

3. Solving an equation

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

4. Taking a calculus exam

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

5. Completing a geometry problem set

(not pleasant) 1 2 3 4 5 6 7 8 9 (very pleasant)

(not unpleasant) 1 2 3 4 5 6 7 8 9 (very unpleasant)

**Questions for the follow-up questionnaire**

1. Do you think that you know what the purpose of this study was? If so, please explain:

2. Have you declared a major? If so, what is your major? \_\_\_\_\_\_\_\_yes \_\_\_\_\_\_\_\_no

3. Do you have a religious affiliation? \_\_\_\_\_\_\_\_yes \_\_\_\_\_\_\_\_no

4. Do you identify as female? \_\_\_\_\_\_\_yes \_\_\_\_\_\_\_\_no

**Informed Consent Form**

**Goshen College**

**Study Title:**

Research Project - Maddy Garber, Emily Kauffman, Nick Yoder

**Purpose:**

You have been asked to take part in a research project described below. The researcher will explain the project to you in detail. You should feel free to ask questions.

**Description of the project:**

You have been asked to take part in a study about cognitive exercises and student life.

**Procedures:**

If you decide to take part in this study here is what will happen: You will fill out a two questionnaires, a cognitive task (saying the alphabet backwards), and then some follow-up questions. You will not interact with any people during this study except for the researchers who will give you the questionnaires. The study is being held in one of three places: Java, the dining hall, or the Leaf Raker, and will take place at the time you chose. Once you complete the questionnaires, activity, and follow-up questions, you will be done. All in all it will take about 5-10 minutes.

**Risks or discomfort:**

There are no expected risks or discomforts in this study.

**Benefits of this study:**

Although there will be no direct benefit to you for taking part in this study, the researcher will gain knowledge that is applicable to the science and psychology communities.

**Compensation <if any>:**

You will receive both extra credit for the specified class and a chance to win a $25 gift certificate to Java Junction or the Electric Brew.

**Confidentiality:**

Your part in this study is confidential. None of the information will identify you by name. All records will be coded for data. After the data is processed it will be eliminated.

**Voluntary participation and withdrawal:**

Participation in research is voluntary. You have the right to refuse to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions. Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

**Questions, Rights and Complaints:**

If you have any questions about this research project, please contact the investigators:

Maddy Garber (madelinerg@goshen.edu), Emily Kauffman (emilyk3@goshen.edu), or Nick Yoder (ncyoder@goshen.edu).

If you have any questions or concerns about your rights as a research participant in this study, please direct them to Justin Heinzekehr, the IRB chair here at Goshen College at ext. 7110, justinbh@goshen.edu.

You may also contact Julie Reese. Instructor and Faculty mentor for the project, at 574-535-7752 or email at juliecr@goshen.edu.

**Consent statement**

By signing this document you give your consent to participating in this study given by Emily Kauffman, Maddy Garber, and Nick Yoder, students at Goshen College.

This statement certifies the following: that you have read the content above and all your questions have been answered. You understand that you may withdraw from the study at any time and that you will not lose any of the benefits that you would otherwise receive by withdrawing early.

All of the answers you provide to Emily, Maddy, and Nick will be kept private.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature of Participant

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Typed/printed Name

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date