# Collaborative Replication and Extension Research Project (CREP)

*PY222, Spring 2022*

*Description.* In this course, you will learn to design, conduct, analyze, and write research through hands on experience. The main project for the course (project 2) is to carry out a replication and minor extension of an important study with in psychology. Replication is held as the gold standard for scientific research, and as such, you will be producing research that is meaningful to the field.

Working in teams of 3-4 students, each team will select a study from a provided list that they would like to attempt to model their project after (see pages below). You will work together to think of a way to add something minor, but novel to the existing research. For example, you might add a different IV, change the way the IV is measured, change the way the DV is measured, and so on. Below we have included the abstracts from ten relatively recent articles spanning a decent variety of topics.

By the date listed on the syllabus, each student will provide us with a list of your top-three choices – the studies you would most like to replicate and extend with your research project. Teams will then be assigned based on common interests. We will work hard to put everyone in their first or second choice, though we cannot guarantee it.

NOTE: \*If you have an idea you want to explore that is not on the list, we will consider it. Typically, there isn't enough time to start from ground zero and pull off a completely novel study in the short time we have together.

Project Constraints: A few constraints / guidelines to consider as you ponder your research ideas:

* The project should be an experiment, preferably a factorial design. We will consider very well thought out single-factor experimental, but don’t count on them.
* We must have the equipment available at BSC to conduct the study and will have to be on-line. We will be using BSC PY-101 students as participants. As much as I’d like to mess around with fMRI machines and the like, we don’t have access.
* The study must be able to be carried out within the short timeframe we have for data collection. We will help you figure that out.

The project will unfold across many steps and will culminate in an *individually* written APA-style paper. You will be evaluated by your fellow group members on effective collaboration / teamwork. It is important to contribute equally and fairly. Again – while the idea, design, and data collection phases of the project are collaborative, *the writing of the paper(s) is an individual assignment.*

**Possible Studies to Replicate and Extend***:* Before providing us with your top-three list, we *strongly encourage you to read the articles* you are interested in working on. Please don’t make your decision based solely on reading the abstract. Think about whether the study sounds interesting and whether you feel confident in your ability to attempt a replication and extension of the study. Most of the articles will contain more than one study, so make sure to indicate in your selection which *one* of the studies you want to work with. Finally, as you read the articles and abstract, begin to think about what you may like to do differently (the extension part). At the end of this document, we offer you a few ways you might go about generating research ideas.

## CREP Articles/Topic List

\*The list is in alphabetical order by first authors’ last names.

**Apostol, M.A., & Getz, L.M. (2022). Kill one to save five? How time pressure, religiosity, and framing effects impact utilitarian judgments. *Psi Chi Journal of Psychological Research, 27(1),* 33-45.**

ABSTRACT: The dual-process model states that utilitarian judgments occur through effortful, rather than automatic, processes. In 3 studies, we built on this model by evaluating how framing effects and religiosity impact utilitarian judgments. Study 1 (N = 120) incorporated a 2 x 2 design in which participants rated the moral permissibility of a utilitarian judgment vignette, which varied in subject frame and decision time. Religiosity scores were recorded. The results indicated that moral permissibility judgments did not differ if made automatically or deliberately, F(1, 116) = 0.33, p = .57, nor were they influenced by subject frame, F(1, 116) = 0.25, p = .62, or religiosity, F(1, 116) = 1.09, p = .30. Study 2 (N = 42) addressed low ecological validity ratings of the vignette in Study 1. By comparing 5 potential utilitarian vignettes, a grocery store vignette was found to be the most ecologically valid, p < .001. Thus, Study 3 (N = 81) was a replication of Study 1 using the new vignette. To better test the dual-process model, half of the participants deliberated for 30 seconds before making a judgment about the moral permissibility of the utilitarian behavior, whereas the other half made the judgment automatically. Despite efforts to invoke effortful deliberation, the results mirrored those of Study 1, p > .05. Taken together, these 3 studies indicated that utilitarian judgments can be endorsed without deliberation, which suggests that the dual-process model needs further scrutiny. Additionally, future research should prioritize ecological validity when relying on vignettes to study moral processes.

KEYWORDS: morality, judgment, utilitarian, framing effects, religiosity ***(STUDY 1 or 3)***

**Dovidio, J. F., & Gaertner, S. L. (2000). Aversive racism and selection decisions: 1989 and 1999. *Psychological Science, 11(4),* 315-319.**

Abstract—The present study investigated differences over a 10-year period in whites’ self-reported racial prejudice and their bias in selection decisions involving black and white candidates for employment. We examined the hypothesis, derived from the aversive-racism framework, that although overt expressions of prejudice may decline significantly across time, subtle manifestations of bias may persist. Consistent with this hypothesis, self-reported prejudice was lower in 1998–1999 than it was in 1988–1989, and at both time periods, white participants did not discriminate against black relative to white candidates when the candidates’ qualifications were clearly strong or weak, but they did discriminate when the appropriate decision was more ambiguous. Theoretical and practical implications are considered.

**Gurung, A. R., Punke, E., Brickner, M., & Badalamenti, V. (2018). Power and provocativeness: The effects of subtle changes in clothing on perceptions of working women. *Journal of Social Psychology,* DOI: 10.1080/00224545.2017.1331991**

ABSTRACT. The current study investigates the effects of subtle changes in professional women’s dress on women’s perceptions of power and competence. We replicate and extend Howlett, Pine, Cahill, Orakcioglu, and Fletcher’s (2015) research showing that women in provocative clothing are rated as less competent. We used a larger sample, tested a second independent variable, and fine-tuned the design for higher face validity. Participants (N = 198, 170 women and 29 men) from a Midwestern university in the USA rated four photographs of professionally dressed women whose blouses varied in the number of buttons left undone and whether they wore a camisole. We found main effects of buttons (undone/done) and camisoles (on/off) for participants perceptions of intelligence, competence, powerfulness, and on a global rating score. Results also showed significant interactioneffects between buttons and camisoles on ratings of powerfulness. The results have many implications for how women dress professionally.

**Knight, J. L., & Guiliano, T. A. (2001). He’s a Laker; She’s a “Looker”: The consequences of gender-stereotypical portrayals of male and female athletes by the print media. *Sex Roles, 45(3/4),* 217-229.**

Abstract. Although an extensive qualitative literature shows that coverage of women’s sport often focuses on female athletes’ attractiveness (to the exclusion of their athleticism), there is a dearth of quantitative research examining exactly what effect this coverage has on people’s perceptions of athletes. As part of a 2 (Gender of the Athlete: Female or Male) × 2 (Gender of the Participant: Female or Male) × 2 (Focus of the Article: Physical Attractiveness or Athleticism) between-subjects design, 92 predominantly White undergraduates (40 men, 52 women) read a fictitious newspaper profile about an Olympic athlete in which the article focused on the athlete’s attractiveness (as coverage of female athletes often does) or on the athlete’s athleticism (as coverage of male athletes often does). Interestingly, participants neither had favorable impressions of nor liked articles about female and male athletes when attractiveness was the main focus of an article. These findings suggest that the media should be cognizant of the harmful and erroneous impressions that can result from portraying athletes in terms of their personal attributes rather than their athletic accomplishments.

**Koller E.C., Swanda, A.L., Noonan, J.N, & Sisneroz, M.T. (2018). The effects of physical attractiveness and political affiliation on facebook friend acceptance. *Psi Chi Journal of Psychological Research, 23(4),* 274-281.**

Abstract. The purpose of the present study was to investigate the effects that physical attractiveness and political affiliation have on the likelihood of “accepting” a Facebook friend request. Participants included 120 undergraduate students randomly assigned to view 1 of 6 conditions of a White male Facebook profile. Physical attractiveness of the Facebook profile picture was manipulated in 2 conditions: physically attractive and unattractive. In addition, political affiliation, as identified in the “describe who you are” box on the profile, was manipulated in 3 conditions: Republican, Democrat, and Independent. Following each condition, participants were asked to answer how likely they would be to accept the Facebook friend request of the profile viewed. It was primarily hypothesized that participants would report a significantly higher likelihood of accepting the Facebook friend request for profiles that appeared to be physically attractive and similar to their own political affiliation compared to other profiles. Statistical analyses revealed that, although physical attractiveness significantly increased the likelihood of accepting a Facebook friend request (*p* < .001), neither similarity of the profile’s political affiliation to participants nor the interaction of the two variables were significantly related to acceptance. However, exploratory analyses (*p* = .03) highlighted that participants who identified as Independent were equally likely to accept the attractive and unattractive profiles. Democrat and Republican participants were more likely to accept attractive rather than unattractive profiles, with slight nuances depending on the profile’s political affiliation. Findings are discussed with an emphasis on characteristics associated with the different political parties.

**Lewis, M. B. (2011). Who is the fairest of them all? Race, attractiveness and skin color sexual dimorphism. *Personality and Individual Difference, 50,* 159 – 162.**

Abstract. Previous research has suggested that perceived attractiveness and personality are affected by the race such that White faces are more attractive but less masculine than Black faces. Such studies, however, have been based on very small stimulus sets. The current study investigated perceived attractiveness and personality for 600 Black, White and mixed-race faces. Many of the investigated personality traits were correlated with race when rated by White participants. Attractiveness specifically was greater for Black male faces than White male faces and among mixed-race faces. Blackness correlated with increased attractiveness. A reverse pattern was found for female faces with Whiteness being associated with attractiveness. The results are discussed in terms of the sexual dimorphism demonstrated in skin color.

**Mazzocco, P. J., Brock, T. C., Brock, G. J., Olson, K. R, & Banaji, J. B. (2006). “The cost of being black: White Americans’ perceptions and the question of reparations,” *Du Bois Review: Social Science Research on Race*, 3¸ 261–297.**

This is not the abstract, just my brief review. This study found that White Americans underestimate the cost of being Black in American society. For example, on average, White Americans believe that $10,000 would be fair compensation for them having to live the rest of their life as a Black person (well, at least in 2006 dollars). In contrast, compensation for giving up television was estimated at $1 million. I’ve been curious if this might replication using gender/sex instead of race and using cell phones instead of TV. See also: “Unequal Perspectives on Race Inequality,”

http://www.washingtonpost.com/wp-dyn/content/story/2008/03/24/ST2008032400157.html for coverage of this research by *The Washington Post* on March 24, 2008.

**Pennycook, G., Cannon, T. D., & Rand, D. G. (2018). Prior exposure increases perceived accuracy of fake news. Journal of Experimental Psychology: General, 147(12), 1865-1880.**

Abstract. The 2016 U.S. presidential election brought considerable attention to the phenomenon of “fake news”: entirely fabricated and often partisan content that is presented as factual. Here we demonstrate one mechanism that contributes to the believability of fake news: fluency via prior exposure. Using actual fake-news headlines presented as they were seen on Facebook, we show that even a single exposure increases subsequent perceptions of accuracy, both within the same session and after a week. Moreover, this “illusory truth effect” for fake-news headlines occurs despite a low level of overall believability and even when the stories are labeled as contested by fact checkers or are inconsistent with the reader’s political ideology. These results suggest that social media platforms help to incubate belief in blatantly false news stories and that tagging such stories as disputed is not an effective solution to this problem. It is interesting, however, that we also found that prior exposure does not impact entirely implausible statements (e.g., “The earth is a perfect square”). These observations indicate that although extreme implausibility is a boundary condition of the illusory truth effect, only a small degree of potential plausibility is sufficient for repetition to increase perceived accuracy. As a consequence, the scope and impact of repetition on beliefs is greater than has been previously assumed ***(STUDY 2).***

**Stellar, J. E., Gordon, A., Anderson, C. L., Piff, P. K., McNeil, G. D., & Dacher, K. (2018). Awe and humility. Journal of Personality and Social Psychology, 114(2), 258-269.**

Abstract. Humility is a foundational virtue that counters selfish inclinations such as entitlement, arrogance, and narcissism (Tangney, 2000). We hypothesize that experiences of awe promote greater humility. Guided by an appraisal-tendency framework of emotion, we propose that when individuals encounter an entity that is vast and challenges their worldview, they feel awe, which leads to self-diminishment and subsequently humility. In support of these claims, awe-prone individuals were rated as more humble by friends (Study 1) and reported greater humility across a 2-week period (Study 2), controlling for other positive emotions. Inducing awe led participants to present a more balanced view of their strengths and weaknesses to others (Study 3) and acknowledge, to a greater degree, the contribution of outside forces in their own personal accomplishments (Study 4), compared with neutral and positive control conditions. Finally, an awe-inducing expansive view elicited greater reported humility than a neutral view (Study 5). We also elucidated the process by which awe leads to humility. Feelings of awe mediated the relationship between appraisals (perceptions of vastness and a challenge to one’s world view) and humility (Study 4), and self-diminishment mediated the relationship between awe and humility (Study 5). Taken together, these results reveal that awe offers one path to greater humility. *Keywords:* humility, awe, emotion, self-concept ***(STUDY 3).***

**Wilson, J. P., Hugenberg, K., & Rule, N. O. (2017). Racial bias in judgments of physical size and formidability: From size to threat. *Journal of Personality and Social Psychology*, *113*, 59-80.**

Abstract. Black men tend to be stereotyped as threatening and, as a result, may be disproportionately targeted by police even when unarmed. Here, we found evidence that biased perceptions of young Black men’s physical size may play a role in this process. The results of 7 studies showed that people have a bias to perceive young Black men as bigger (taller, heavier, more muscular) and more physically threatening (stronger, more capable of harm) than young White men. Both bottom-up cues of racial prototypicality and top-down information about race supported these misperceptions. Furthermore, this racial bias persisted even among a target sample from whom upper-body strength was controlled (suggesting that racial differences in formidability judgments are a product of bias rather than accuracy). Biased formidability judgments in turn promoted participants’ justifications of hypothetical use of force against Black suspects of crime. Thus, perceivers appear to integrate multiple pieces of information to ultimately conclude that young Black men are more physically threatening than young White men, believing that they must therefore be controlled using more aggressive measures.

***Keywords:*** *intergroup relations, motivated perception, person perception, race bias* ***(STUDY 1)***

**Other Random Ideas:**

**-Gender in Advertisement** – I one had a group of students examine whether female Ps would be more likely to say they’d want to purchase a dress (the exact same one) that was modeled wither on a thin model or a plus sized model (b/t Ss). The sample size was very small, but the trend was that those exposed to the thin model indicated they’d be more likely to but the dress than did those exposed to the dress on the plus-sized model.

**Generating Research Ideas**: See Heath, chapter 2, from which much if this comes.

* *Combine areas of research.* One good way to generate ideas for extensions is to consider how different areas of research among the choices below could be combined to address a new question. For example, for a recent project I noticed that there was a whole set of literature on prejudice against atheists and there was another set of completely different literature on how people can discern, at above chance levels, social category information from faces only (e.g., whether someone is gay or straight, etc.) So, I combined the two to examine if people could discern atheists from Christian from just their faces and parts of faces.
* *Extending the external validity* by using a different kind of stimulus (e.g., if they used male stimuli, maybe use female stimuli instead; change the kind of stimulus used; maybe think of a segment of the population for whom you’d expect the findings to NOT apply or a situation in which it the outcome may be different.)
* *Improve internal validity*: If you can turn a correlational study into an experiment that can be a good idea for a new study.
* *Improve the construct validity.* Perhaps you have good reason to believe that a study’s IV manipulated more than the researcher intended and you have a better way to do so. Even if the researchers used a relatively good measure of the construct they wanted to measure, it is unlikely that any single measure of a broad construct will fully capture the entire construct. Therefore, if the original study finds a relationship using one set of operational definitions, it may pay to replicate the study using different operational definitions of the construct(s) *especially if you think the results may differ*. For example, when early research suggested that men have greater “spatial ability” than women, critics questioned whether the tasks used to measure spatial ability fully captured the construct of spatial ability. This questioning led to further research. That research has given us a better picture of how men and women differ on spatial ability. (On the average, men are much faster than women at mentally rotating objects, are slightly better at picking out figures that are hidden in a complex background and are not nearly as good at remembering where objects are.)
* *Moderators.* Think of variables that may moderate the relationship found in the study (moderate means to intensify, weaken, or change the direction of). To appreciate the general value of finding a moderator variable, think about children who only know the spelling rule “i before e.” They are frustrated by the exceptions; they may even doubt that there is a rule at all. However, when they learn that “c” is the moderator variable—when they are told “i before e, except after c”—they will be happy to know that some aspects of spelling follow rules. Ask yourself under what conditions might this result not hold – are their exceptions to the rule? For example, it is well known that people tend to be most attracted to those like themselves, but under what conditions might “opposites attract?”
* *Looking for other effects: Use other dependent variables.* Almost any treatment (IV) will have more than one effect. Effects can be short term, long term, behavioral, physiological, emotional, cognitive, good, and bad. So, if people are looking at the good effects of pursuing the American Dream, you could look for the bad effects. Similarly, if others look for the good effects of attractiveness, you could look at the bad effects. The key is to realize that a treatment has many more effects (on beliefs, feelings, thoughts, actions, and bodily reactions) than one might first think.
* *Reverse Cause and Effect: Switch Independent and Dependent Variables.* Rather than adding dependent measures or replacing one dependent variable with another one, you might convert your dependent variable into an independent variable. For example, suppose you have a rather ordinary hypothesis such as if a person is attractive, participants will be more likely to help that person than if the person is not attractive. In other words, your hypothesis is that being attractive (independent variable) causes one to be helped (dependent variable). Your idea is to make a friend look either moderately attractive or very attractive and see if the friend is helped more when she looks very attractive. You could make this hypothesis more interesting by changing which variable is the cause and which is the effect. That is, you could hypothesize that being helped leads to being perceived as attractive. Thus, you might give some participants a chance to do your friend a favor and see if those participants rate your friend as being more attractive than those who are not given that opportunity. For another example, rather than looking at whether increased income leads to happiness, Diener and Seligman (2004) have looked at whether happiness leads to increased income.
* *Look for mediators*. A mediator variable is one that is the mechanism—the biological, mental, physical, emotional, or behavioral process—that comes between a cause (e.g., a stimulus) and its effect (e.g., a response). For example, if a study shows that people tend to like to be around attractive people more so than less attractive people, you might try the age-old trick all 4-year-olds know so well, and ask, “Why?” That may then lead you to speculate on potential mediators (e.g., maybe it makes you feel good about yourself to be worthy of such company, etc.)
* *Make precise predictions about when more may be too much—or not enough.* Maybe you want to examine the *functional relationship* between variables. For example, studies with only two levels of an IV may show that exercising for 20 minutes a day is good for one’s stress-level and exercising for an hour a day is even better. But perhaps it’s only the right amount of exercise that works. By adding another level of the IV where participants exercise only 5 minutes or for 2 hours, you may find a more curvilinear relationship. Going with my example in the last paragraph, maybe you would find that people generally prefer being around attractive others, up to a point. Perhaps that effect begins to diminish when we consider being around super-attractive people. Likewise, research shows that heterosexual women tend to find low levels of muscularity unappealing, moderate, and high levels of muscularity appealing, and extremely high levels of muscularity unappealing (Frederick & Hazelton, 2007).

There are many other ways to generate good research ideas. A few other things to keep in mind: (1) your idea must be testable. That is, you must have a way of operationalizing your variables, and (2) you must hypothesize differences. You cannot hypothesize “no difference” between conditions or “the same amount” between conditions. Recall, you cannot prove the null hypothesis.