Sigma: Journal of Political and International Studies is a multidisciplinary publication of student articles on topics in political science and international studies. *Sigma* addresses topics such as economics, international relations, political science, and area studies. Our aim is to publish the work of diligent students who have fresh policy recommendations and new perspectives to offer, which would otherwise go unnoticed.

Sigma is supported and sponsored by the BYU chapters of the Pi Sigma Alpha (National Political Honor Society) and Sigma Iota Rho (Honor Society for International Studies). Our appreciation for them is manifest in the title for this journal. You may find more information on these organizations at politicalscience.byu.ed/Pages/Clubs/BYUPAS and kennedy.byu.edu/student/SIGMA/.

We also express our gratitude for the support received for this journal from the Political Science Department and the David M. Kennedy Center for International Studies. Our gratitude also goes to the Kennedy Center communications team for their editorial and graphic design support.

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A Letter From the Editor

As you enter Brigham Young University, one of the first things you see are the words, "Enter to Learn; Go Forth to Serve." This year's edition of *Sigma* represents not only the highest quality research from undergraduate students but each author's fulfillment of this mandate. Most importantly, each article in this edition addresses a crucial and timely topic. The authors focus on the stereotypes around gender and corruption, how female representation affects immigration policy, and the link between religion and suicide. Our authors also address why the U.S. pulled out of the Trans-Pacific Partnership and how being a member of the LGBTQ+ community affects your perceived success in college. However, the authors do not simply elaborate on current research. They present original findings and offer practical solutions—exemplifying how education allows us to understand and improve the world around us.

Sigma does not just appear out of thin air, and there are many people involved with this process who deserve special mention. I would like to formally thank our faculty advisor Professor Scott Cooper for his continued guidance and support of *Sigma*, as well as those professors who dedicated time to reviewing and editing the research. We were also blessed with a talented editorial staff who more than once stayed up late to meet deadlines and who worked hard to perfect these already well-written articles. And of course, I am especially grateful to our authors for staying with us through several rounds of edits and revisions.

I am both happy and proud to present this year's edition of *Sigma*.

Sincerely,

Tanner Cox
Editor-in-Chief

“Tell Us About Yourself”: Does Sexuality Hurt Perceived Success in College?

Matthew J. Easton and Patricia C. Franks

Introduction

LGBTQ+ group identity is on the rise. The most recent Gallup poll found that about 4.5% of the population in the U.S. identifies as LGBTQ+. This population increases to 8.2% among millennials born 1980–1999 (Newport 2018). However, despite the increasingly prevalent reality of LGBTQ+ members in the community, the basic rights and protections of homosexual and nonconforming sexual identities are still largely surrounded by controversy. According to another Gallup poll, 67% of respondents thought gay and lesbian relationships were morally acceptable, while 30% of respondents did not (“Gay and Lesbian Rights”). Although most respondents said homosexual relationships were morally acceptable, there is reason to believe that this number might still be lower than reported (Phillips 1972).

In this controversy, LGBTQ+ adolescents are especially vulnerable. They are 3.3 times more likely to have thoughts of suicide and three times more likely to attempt suicide than other teens (Hazlett 2011). Since most of these adolescents atttend public schools, how to best protect these students through school policy is under significant debate. According to the Gay, Lesbian, and Straight Education Alliance, an organization advocating for inclusivity and safety in U.S. schools, only 49% of the LGBTQ+ community live in states that have laws to stop bullying specifically based on gender identity and sexual orientation. GLSEN argues that these types of school policies are vital for LGBTQ+ student safety. We wondered if any aspect of LGBTQ+ discrimination was not being addressed that should be in these types of protections. Specifically, we wondered whether LGBTQ+ students were academically disadvantaged.

To better identify policy changes that can help LGBTQ+ students, we first need to understand the specifics of the stigma that LGBTQ+ students face. By considering

the perceptions of and attitudes toward LGBTQ+ students, policy makers can know how to better empower LGBTQ+ individuals, and LGBTQ+ students can be better prepared to face stigma. Thus, our research question is "How do people's perceptions of a student change when that student identifies as LGBTQ+?"

To answer this question, particularly with regard to academic skill, we researched respondent perceptions of a hypothetical college applicant through a survey experiment. As such, our independent variable was including an LGBTQ+ sexual identity in the description of a college applicant. We focused on sexual identity instead of gender identity. Our dependent variables were if people thought the student in the application 1) would be accepted to college, 2) would receive a scholarship (and if so, how much), 3) would have a certain grade point average (GPA), 4) was trustworthy, and 5) was likeable. In addition to LGBTQ+ identity, we researched the intersectionality of race and LGBTQ+ attributes, specifically whether identifying as a racial minority in addition to being LGBTQ+ made an impact on perceptions more intensely than for white LGBTQ+ students.

Of the five measured outcomes, likelihood of acceptance into college and predicted average GPA in college produced null results. There was no statistically significant or substantially significant difference between a student who was gay and a student who was straight for measures of college academic success. When asked to predict the amount of scholarship the student would receive, respondents favored the gay student for more scholarship than the straight student by three percentage points. The final two measured outcomes of likability and trustworthiness also had no statistically significant difference between gay and straight students. Examining intersectional identities—being gay and black; gay and female; and gay, black, and female together—no negative statistically significant differences in perceptions were found. Intersectional identities only influenced perceptions of GPA. Respondents perceived gay females as having a 0.6 point higher GPA than straight male students. We attribute this to perceptions of females as hardworking, rather than solely a reflection of the perception of gay females.

The implications of these results are encouraging. These null results show that LGBTQ+ students are not facing significant academic discrimination, so we would not recommend efforts to focus on helping these students academically. While more work should be done in this area, this is promising evidence that many do not attach harmful associations of academic success on others based on sexual orientation.

Literature Review and Theoretical Framework

Based on previous research on sexuality, political behavior, and political psychology, we theorized that stating a non-heteronormative sexuality or non-cisgender on a college application would adversely impact people's perceptions of the applicant. Additionally, we anticipated that when LGBTQ+ identity was combined with racial minority status, these adverse impacts would intensify. To better construct and defend this approach, we built on the current theory of "fundamental attribution error" and applied it to the specific situation of LGBTQ+ identity and racial intersectionality.

Broadly speaking, fundamental attribution error is a well-known psychological fallacy in which individuals will see one attribute of a person and use it to determine their entire character, even though a single characteristic is usually not representative (McCombs 2013). This error in judgement can be positive or negative, although positive characteristics are found to be weak in convincing individuals of another person's character. When this attribute or behavior is negative, it is much more likely to cause viewers to deem the person as entirely bad or less deserving than themselves or others. Additionally, fundamental attribution error stipulates that individuals are more critical (or experience greater judgmental error) when the person they are critiquing is different than them (Sabini et al. 2001). This difference is most easily manifest in noticeable demographic differences, such as race and gender, but can also be evident when differing political and religious beliefs are made apparent. Substantial research in both political psychology and broader psychology alike has confirmed that this error is a common occurrence in the average American (Gilovich and Eibach 2001), supporting our theory that this error would likely occur among our survey respondents.

An example of fundamental attribution error in the classroom by Claire Fox and Michael Boulton investigated teacher and peer perceptions of bullying victims. It found that individuals perceive bullying victims to have poorer social skills (Fox 2005). We wondered if there were unique perceptions of social or academic skills when individuals were LGBTQ+. No significant previous research about peer or teacher perception of LGBTQ+ student academic performance has been done.

Vast research exists about the influence of teacher bias on a variety of opportunities available to students. Harriet Tenebaum and Martin Ruck conducted a study that examined whether teachers' expectations, referrals to special programs, or positive and negative language changed depending on the race of their students. This article argues that teachers' systematic bias can affect many aspects of children's lives. In an analysis of many different studies, teachers were more likely to hold high expectations for Asian Americans and European Americans over Hispanic- or African-American students, and more positive feedback was given to European-American students over the other groups (Tenenbaum 2007). This same logic can be applied to teacher expectations of LGBTQ+ students, particularly in calibrating these expectations based on shortcuts of the fundamental attribution error. While this study focuses on teachers, everyone in children's lives can influence their self-perception and eventual success.

As such, we stipulated that for our particular research, seeing LGBTQ+ attributes on the application would engage fundamental attribution error in respondents, who would then view the overall admission as more negative, leading to lower responses on college acceptance, GPA, scholarship, trustworthiness, and likeability. The fundamental attribution error would be even stronger among intersectional identities, such as LGBTQ+ females or black LGBTQ+ men, causing even lower scoring on these outcomes.

Although identifying as LGBTQ+ is not an inherently bad or negative attribute, we theorized that current statistics and modern media representations of LGBTQ+

individuals, particularly youth and students, lead people to think negatively about this group. For example, according to GLSEN, LGBTQ+ students are at a higher risk of dropping out of high school than other students and of experiencing increased disciplinary action including detention, suspension, and expulsion (Palmer et al. 2016). These statistics are even higher for LGBTQ+ students of color, with nearly half of this demographic experiencing some form of discipline while at school. Additionally, LGBTQ+ students are three times more likely to be suicidal, act out, become depressed, and experience anxiety (NAMI 2019). We theorized that these statistics influence people's perceptions of LGBTQ+ college applicants, because people attribute these negative possibilities—dropping out, causing disciplinary problems, and developing mental health issues—with an inability to function well in college. Common perceptions show that LGBTQ+ students are less likely to perform well, and we predicted this bias would become evident in respondents' answers.

In addition to current statistics on LGBTQ+ students, modern media portrayals of LGBTQ+ characters still promote a dramatic (and often negative) stereotype of this community, which likely influences respondent fundamental attribution error. For example, LGBTQ+ people are most often portrayed as extremely dramatic, hypersexual, and mentally unstable (Cook 2018). Even media efforts to change perceptions of the LGBTQ+ community still feed into these stereotypes, such as the popular TV show *Modern Family* with its portrayal of gay-father Cam as extremely emotional, irrational, and flamboyant (The Data Lounge 2013). These media messages attach moral characteristics to the LGBTQ+ identity, ingraining such stereotypes into the typical American. Therefore, we stipulated that when respondents saw "LGBTQ+" on the application, they applied what they have seen in media—dramatic responses, hypersexuality, and lack of ambition or focus—to the characteristics of these student applicants.

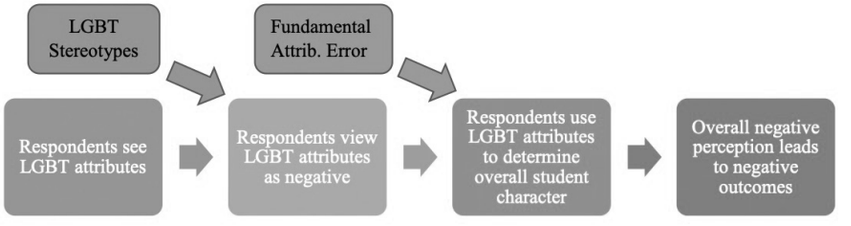
Overall, we took the theory of fundamental attribution error and applied it to LGBTQ+ identity among students to hypothesize that this identification would negatively impact respondents' perceptions. To this end, our causal logic was as follows:

1. Respondents will see LGBTQ+ identifiers on the application.
2. This identifier will trigger statistics, media representation, and stereotypes of the LGBTQ+ community.
3. Fundamental attribution error will influence respondents to use the LGBTQ+ identifier as a negative measure of the student's entire character.
4. This negative insight will reduce perceptions of college acceptance, scholarship, GPA, likeability, and trustworthiness.

It is important to note that we understood our current research question was in equipoise. Essentially, we recognized the possibility of our findings being directly contradictory to what we predicted. We believed this could potentially happen because of current efforts to destigmatize LGBTQ+ issues and to diversify and promote inclusion on college campuses across the U.S. (Windmeyer 2017). For this reason, we noted

the potential for null results. As homosexuality and transgenderism are becoming less taboo in American society (Morini 2017), respondents may have been less likely to be influenced by an LGBTQ+ condition at all. While these two scenarios were a possibility, we still believed that traditional stereotypes of the LGBTQ+ community and the current obstacles LGBTQ+ students still face in school and college would be more influential in determining public opinion on this issue than its positive or null alternatives.

Figure 1. Causal Chain



Methodology and Data

Definitions

The following is a list of relevant terms and operations for important concepts in our research:

1. LGBTQ+: This stands for lesbian, gay, bisexual, and transgender. The "LGB" in this term refers to sexual orientation. Some do not conform to these labels and refer to themselves as queer, asexual, and so forth, hence the "Q+." This term is preferred because in this research we will be signaling non-heteronormative relationships without specifically identifying sexual orientation or gender identity.
2. Sexual orientation: We define sexual orientation as a pattern of emotional, romantic, and/or sexual attractions between people. Heterosexual is the attraction of men to women or women to men. Homosexual is the attraction of men to men or women to women. Finally, bisexual is the attraction of one to both sexes, but this is not a sexual orientation that we tested in this research. Sexual orientation also has reference to a person's sense of self and social identity within a community ("Sexual Orientation and Homosexuality").
3. Trustworthiness: Trustworthiness indicates the ability to be relied upon as honest or truthful. We have chosen this measure as it is a virtue typically seen as positive and valuable for interpersonal relationships. For our research, this will be measured by survey respondents agreeing with the statement "this student is trustworthy" on a 7-point scale from "Strongly Agree" to "Strongly Disagree." This is to measure the theory that people perceive LGBTQ+ people as more dramatic, prone to exaggeration, and potentially less stable or reliable than others.
4. Likability: Simply put, this means agreeableness. We have included this measure because it offers greater insight into how people might view the student

in a common setting, such as working on a college project together. Likeability is an important part of social relationships and one that will help us predict how well the student may or may not function at university.

Data Collection and Survey

Understanding the operational definitions we use, we next set out to answer our research question by gathering data through a randomly controlled survey experiment administered on Amazon's Mechanical Turk. We collected 1,500 observations and used Qualtrics survey software to randomize our treatments and record the data. We ran the survey experiment in March 2019.

We found several advantages to running a survey experiment to gather our data. The randomization feature enabled us to directly observe the impact of our treatment and, when controlling for demographic variables, we could make a stronger claim to causation through statistical analysis. Additionally, the survey gave us the ability to ask more directly about our outcome variables, which improved the accuracy and internal validity of our experiment. The survey included twelve basic demographic questions, including age, gender, ethnicity, political party, political ideology, employment status, sexual orientation, transgender identity, religion, political interest, and family income. We then showed the respondents a theoretical vignette of a high school student applying to college, randomizing sexual orientation, gender, and race. We note that after we showed the vignette, we began each survey with the following disclaimer: "On the following page, you will be shown a hypothetical biography of a high-school student preparing to apply to college. Please read the biography and then answer the questions that follow." The vignette, along with explanations for our choices, is below.

[Name] is a senior at Lincoln High School. [He/She] is seventeen years old and the middle child of three. [He/She] is on the school's track-and-field team and participates in yearbook club. [He/She] scored a 26 on the ACT and [his/her] GPA is 3.5. [He/She] hopes to attend college to study business administration. [Name] and [his/her boyfriend/girlfriend] recently attended their high school prom, "Under the Stars."

We randomized names both by gender (a boy or girl name) and race (a white- or black-sounding name). We chose the following names based on recent research determining the "whitest" and "blackest" sounding names in the U.S. (Leavitt and Dubner 2015):

1. Madeline (female, white)
2. Connor (male, white)
3. Aliyah (female, black)
4. DeShawn (male, black)

We chose Lincoln High School as the name of the school because it is the most common school name in the U.S. (Petroski 2018) and is found in all regions of the country; therefore, the name was unlikely to provoke a regional bias. We included age and "middle child" to add unbiased information about the student. We chose track-and-field,

because it is one of the top ten most popular high school sports for both boys and girls but is less likely than other sports (such as basketball or football) to qualify someone for athletic scholarship, which could skew the results (Stanmyre 2014). Additionally, we chose yearbook as an extracurricular activity, because it is one of the most popular after-school activities for U.S. students, but it does not have a strong connotation for strong or poor academics, which again could skew the responses (Billock 2018). We included the average ACT score and GPA for university-bound students in the U.S. and chose business administration as the student's choice of study, as it is the most popular major for men *and* women and also does not carry connotation of strong or poor academics. (CollegeFactual 2017). Finally, we signaled sexuality through indicating whether the student attended prom with a boyfriend or girlfriend. To avoid the possibility that the respondents did not read the information regarding sexuality, we placed it at the end of the paragraph so that it would stand out more than if it were placed in the middle of the vignette. In total, we had the following control and treatments:

1. Heterosexual treatment (used as our baseline or control): equally randomized between white-male, white-female, black-male, and black-female vignettes.
2. Homosexual treatment: equally randomized between white-male, white-female, black-male, and black-female vignettes.

A comprehensive list of the vignettes can be found in the appendix.
Following the vignette, we asked the following five outcome measures:

1. If the respondent thinks the student will get accepted into college
   a. "What are the chances that this student will get accepted into college?"
      - Very likely
      - Likely
      - Flip of a coin
      - Unlikely
      - Very Unlikely
2. How much scholarship the respondent thinks the student will get
   a. On a scale of 0% to 100%, indicate how much scholarship you think this application would receive from the university. (0% indicates no scholarship and 100% indicates a full tuition scholarship.)
3. What GPA the respondent thinks the student has
   a. "What do you think the GPA of this student will be in college?" (scale from 1.0 to 4.0)
4. How trustworthy the student appears
   a. "This student is trustworthy"
      - Strongly Agree
      - Agree
      - Somewhat Agree

- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree
- Strongly Disagree

5. How likeable the student appears
   a. "This student is likeable"
      - Strongly Agree
      - Agree
      - Somewhat Agree
      - Neither Agree nor Disagree
      - Somewhat Disagree
      - Disagree
      - Strongly Disagree

We have carefully selected these outcome measures to capture various ways individuals may view students and their college applications. The scales we used are derived from Likert scales, the most commonly used scales in academic psychology and political science survey research methods (McLeod 2008).

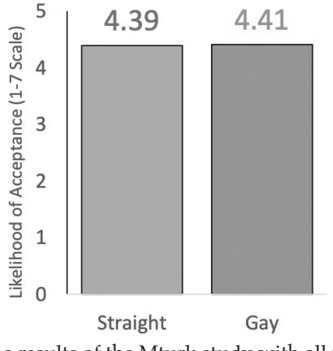
Using the sample from Mechanical Turk was an appropriate approach to gathering American public opinion due to its low cost and convenience, although we recognize that there are several limitations to this specific sample. Mechanical Turk respondents were typically younger, were female, had lower income, and were more liberal than the average American (Ipeirotis 2009). We recognize this sample is not representative of the U.S. public, but we stipulate that if we find the effect we are anticipating in this sample, it is likely to hold constant should we change the sample's composition (Berinsky, Huber, and Lenz 2012). We can say this with confidence, because we were testing LGBTQ+ bias among a group that is most likely to be favorable toward the queer community. If this group still exhibits the bias we expected, then we are likely to find the same effects (if not greater) among a nationally representative sample that is overall less friendly toward LGBTQ+ people. Notwithstanding these potential issues, Mechanical Turk is still regarded as an effective and prevalent source of organizational data among social and other sciences (Keith, Tay, and Harms, 2017), and we used the data we received from our survey experiment.

Once we gathered our data, we conducted simple regression analysis to identify the causal mechanisms at play. Specifically, we ran OLS regression models on each of our five outcomes and included the controls listed above. To account for the potential intersectional influences, we created dummy variables for our main treatment (sexuality) as well as binary variables for the gender and ethnicity of our treatments. We also looked at heterogeneity differences between variables of note, specifically age, political party, and ideology. Finally, we included regressions that merged the gay treatment with gender and ethnicity.

Results

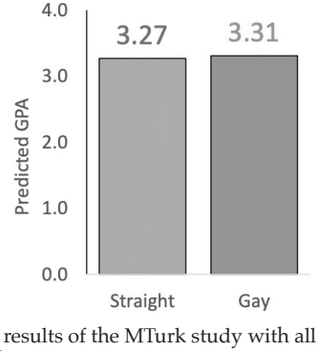
Overall, our first three outcomes—likelihood of acceptance, average GPA, and scholarship—produced no results. Specifically, when asked whether the student in our profile is likely to be admitted into college, respondents answered the same for the straight treatment as they did for the gay treatment; no statistical or substantive difference between the two was found. This result also held when respondents were asked to predict the student's GPA in college, with the straight student averaging a 3.27 GPA and the gay student a 3.31 GPA, with no significant difference at the 95% level. In the case of predicting the amount of scholarship the student would receive, respondents actually *favored* the gay student, predicting that he/she would receive almost 3 percentage points more scholarship than the straight student. These findings are pictured below, and their corresponding regressions are available in the appendix.

Figure 2. "How Likely is the Student to Be Accepted into College?" by Treatment



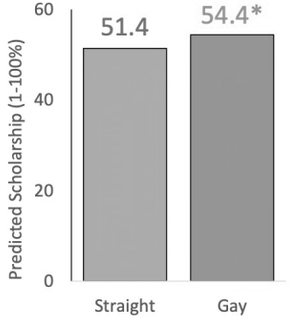
Note: This figure displays the results of the Mturk study with all respondents pooled together (N=1,500). The y-axis shows the likelihood of acceptance into college from a 1–7 scale with 1 meaning very unlikely and 7 very likely. We find no statistical or substantive difference between the two.

Figure 3. "What Do You Think the College GPA of This Student Will Be?" by Treatment



Note: This figure displays the results of the MTurk study with all respondents pooled together (N=1,500). The y-axis shows the predicted GPA on a continuous scale from 1.0 to 4.0 (1.0 meaning all Ds, 4.0 meaning all As). The x-axis represents whether the student mentions a straight or gay sexuality. We find no statistical or substantive difference between the two.

Figure 4. "How Much Scholarship Do You Think This Student Will Receive?" by Treatment

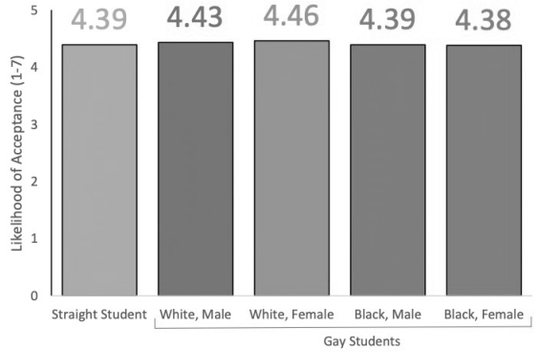


Note: This figure displays the results of the Mturk study with all respondents pooled together (N=1,500). The y-axis shows the predicted scholarship once in college on a continuous scale from 0–100 with 0 meaning no scholarship and 100 meaning 100% full scholarship. We find 90% statistical significance between the two, with the gay treatment receiving more scholarship.

In addition to analyzing whether the student's sexuality influences people's perceptions of college success, we looked deeper into intersectional identities, specifically race (being black) and gender (being female). When examining these intersectional identities—being gay and black; gay and female; and gay, black, and female together—we find no negative statistical or substantive difference in perceptions. For the most part, intersectional identities appear not to influence perceptions of success at all, except for GPA—respondents perceived gay females as having a 0.652-point higher GPA when compared to straight male students, which had a 90% statistical significance measure. This result is also substantively significant, as a 0.6 increase in GPA indicates enough of a change to influence academic scholarship. We think this is due to general stereotypes of women as harder workers and better students, though feelings of female success are possibly conflated with the influence of the gay treatment. Figure 5 below highlights the null relationships among intersectional identities with our first outcome measure, likelihood of college acceptance.

Beyond our success outcomes, our characteristic measures—how trustworthy the student appears and how likeable he/she seems—also had no statistical or substantive difference between the sexuality treatments. Interestingly, we found that the gender of the vignette positively influenced perceptions of character independent of the sexuality treatment; females (both gay and straight) experienced a 0.09-point increase in trustworthiness at the 90% level and a 0.11-point increase in likeability at the 95% level. However, both increases are on a 7-point scale and therefore carry little (if any) substantive significance. We observe similar findings among our intersectional analysis, with gay women 0.02 points more trustworthy at the 95% and 0.26 points more likeable at the 99% level. We purport that the influence of the gay-and-female interaction is significant because of the overall significance of females and not as much because of the sexuality. A full report of these regressions is available in the appendix.

Figure 5. "How Likely is the Student to Be Accepted to College?" by Intersectional Interactions



Note: This figure displays the results of the Mturk study with all respondents pooled together (N=1,500). The y-axis shows the predicted likelihood of acceptance into college from a 1–7 scale with 1 meaning very unlikely and 7 very likely. We find no statistical or substantive difference between the five.

Although our overall treatment appeared to have little to no effect, we find that splitting outcomes by certain heterogeneities uncovered unique patterns. Specifically, when looking at age, political party, and ideology, we find certain groups produced significantly different results. Age groups—split at the median age with 36 years and up categorized as "old" and 36 years and under as "young"—did not have as markedly different results as might be expected. Older people were not more likely to hold negative opinions about gay students; on the contrary, we found that among older respondents, the results showed gay students having a higher GPA, receiving more scholarship, and appearing more likeable than the baseline control at the 95% statistical significance level. These positive attitudes are in line with the overall findings and suggest that generational differences (such as biases and prejudice against the LGBTQ+ community, usually apparent in older Americans) are either not present in our sample or in the United States more generally.

While age did not produce negative differences, political party and ideology did. Although Republicans and conservatives did not exhibit any statistical differences in perceptions of student ability (including acceptance, GPA, and scholarship), they *did* showcase significantly more negative attitudes on character traits of the gay student. Both Republicans and conservatives viewed the gay student as less trustworthy and less likeable, with trustworthiness decreasing 0.26 units among Republicans and 0.31 units among conservatives and likeability decreasing 0.24 units among Republicans and 0.34 units among conservatives; all these differences are statistically significant at the 99% level. These findings are in direct contrast to Democrats and liberals, both of which showed no difference between the gay treatment and control except in trustworthiness and likeability (but in the opposite direction); both groups saw the gay student as more trustworthy and likeable, at the 90% significance level. Clearly, political party

and ideology (which are highly correlated with one another) did indeed produce different outcomes, with Republicans and conservatives exhibiting negative perceptions of the gay student's personal character.

Implications

These results indicate that knowing about sexuality does not negatively impact people's perceptions of a student's college acceptance and success. While we initially thought identifying as gay might negatively skew people's perceptions, it appears it makes no difference at all. If anything, mentioning homosexuality might actually *help* perceptions, particularly views on whether or not the student will receive a scholarship. This positive finding might be due to perceptions of diversity scholarships and showcases that people think homosexuality might qualify individuals for more unique monetary benefits.

However, these findings only hold when considering perceptions as a whole; once split by political party and ideology, perceived success remains the same but perceived character does not. This should not indicate too much of a stumbling block for future students, unless they expect to attend a strongly conservative university. For example, Brigham Young University (BYU)—with a strong history of conservative beliefs and a strict moral code—might pose an issue to openly gay students who are seeking to attend. Overall, these findings are good news for most students in high school, because they suggest that students are not being systematically discriminated against academically. This might also be encouraging for students who are considering whether to release their sexuality on college applications or to college counselors. Their sexuality is not likely to influence how these advisors view them as students (again, noting the exception of conservative universities such as BYU). On the contrary, gay students can be expected to be treated just like everyone else—even when they also identify as black, female, or both.

Of course, it is important to note some limitations to our study. Our survey pool was not nationally representative and was comprised of average Americans, not college admissions members. Additionally, Mechanical Turk is known to have more liberal, open-minded respondents; we are possibly missing more traditional, conservative Americans, who might be more likely to hold discriminatory opinions towards the LGBTQ+ community. Moreover, people's perceptions of acceptance, GPA, scholarship, trustworthiness, and likeability do not actually mean the student will achieve success in each of these categories; rather, it is meant to measure how the people in their everyday lives (such as parents, teachers, and colleagues) will view the potential success and in turn motivate the student to achieve that very success. In many regards, this is the most important measure, as it relates to how much support and encouragement a student is likely to receive, which will also affect actual potential to attend and succeed in college.

As a quantitative study, we were restricted by budget and length to only include five outcome variables. While we did our best to carefully select what dependent variables we measured, it is impossible within the scope of our survey to include all the

outcomes needed to provide a completely comprehensive analysis of public opinion and perceptions of LGBTQ+ people. Additionally, the questions we seek to measure might lack external validity, as perceptions about LGBTQ+ students may change when considered within the context of a college application as opposed to other contexts, such as when creating classroom rules to protect disadvantaged students or gaining admittance into a particular program once accepted to the university. Notwithstanding the potential error in external validity, the questions we chose still cover a variety of perceptions and are broad enough to be applicable in a variety of situations.

Much still needs to be explored regarding LGBTQ+ identity and perceived success, both in college and among other important indicators. For example, our research does not address the difference between sexual orientation and gender identity; how might transgender individuals be seen differently from homosexual ones? Furthermore, using the vignette of a high school student who is comfortable enough to bring a same-gender date to prom might signal a state of privilege, as the student most likely feels safe and has enough familial and friend support to be open in high school. It would be interesting—and important—to compare perceptions of a confident student who took a date to prom with LGBTQ+ students who might be more shy or more subtle in signaling their sexuality.

Overall, one fact is clear: whether you are a student faced with answering the age-old essay question, "Tell Us About Yourself," or you are a mentor or friend encouraging a student in writing the essay, mentioning sexuality will not have a strong impact. As our research shows, little (if any) difference exists in perceptions of success, so including sexuality is not likely to shift results negatively or positively. In our modern day, minority sexualities are becoming more and more normalized, indicating that perceptions of success and character are not intrinsically tied to one's sexuality.

APPENDIX

Complete list of vignettes for survey.

White Male Heterosexual

> Connor is a senior at Lincoln High School. He is seventeen years old and the middle child of three. He is on the school's track-and-field team and participates in yearbook club. Connor and his girlfriend recently attended their high school prom, "Under the Stars." He hopes to attend college to study business administration.

White Female Heterosexual

> Madeline is a senior at Lincoln High School. She is seventeen years old and the middle child of three. She is on the school's track-and-field team and participates in yearbook club. Madeline and her boyfriend recently attended their high school prom, "Under the Stars." She hopes to attend college to study business administration.

Black Male Heterosexual

> DeShawn is a senior at Lincoln High School. He is seventeen years old and the middle child of three. He is on the school's track-and-field team and participates in yearbook club. DeShawn and his girlfriend recently attended their high school prom, "Under the Stars." He hopes to attend college to study business administration.

Black Female Heterosexual

Aliyah is a senior at Lincoln High School. She is seventeen years old and the middle child of three. She is on the school's track-and-field team and participates in yearbook club. Aliyah and her boyfriend recently attended their high school prom, "Under the Stars." She hopes to attend college to study business administration.

White Male Homosexual

Connor is a senior at Lincoln High School. He is seventeen years old and the middle child of three. He is on the school's track-and-field team and participates in yearbook club. Connor and his boyfriend recently attended their high school prom, "Under the Stars." He hopes to attend college to study business administration.

White Female Homosexual

Madeline is a senior at Lincoln High School. She is seventeen years old and the middle child of three. She is on the school's track-and-field team and participates in yearbook club. Madeline and her girlfriend recently attended their high school prom, "Under the Stars." She hopes to attend college to study business administration.

Black Male Homosexual

DeShawn is a senior at Lincoln High School. He is seventeen years old and the middle child of three. He is on the school's track-and-field team and participates in yearbook club. DeShawn and his boyfriend recently attended their high school prom, "Under the Stars." He hopes to attend college to study business administration.

Black Female Homosexual

Aliyah is a senior at Lincoln High School. She is seventeen years old and the middle child of three. She is on the school's track-and-field team and participates in yearbook club. Aliyah and her girlfriend recently attended their high school prom, "Under the Stars." She hopes to attend college to study business administration.

Regression Output

- Acceptance, by treatment and interactions
- GPA, by treatment and interactions
- Scholarship, by treatment and interactions
- Trustworthiness, by treatment and interactions
- Likeability, by treatment and interactions

How Likely Will This Student get Accepted to College

VARIABLES	(1) accept	(2) accept	(3) accept	(4) accept
Gay Treatment	0.0218	0.0301	0.0690	0.0219
	(0.0325)	(0.0460)	(0.0459)	(0.0325)
Black Treatment	-0.0236	-0.0154	-0.0234	-0.0148
	(0.0327)	(0.0460)	(0.0327)	(0.0461)
Female Treatment	0.0652**	0.0652**	0.112**	0.0740
	(0.0326)	(0.0326)	(0.0460)	(0.0460)
Gay x Black	-	-0.0166	-	-
		(0.0651)		
Gay x Female	-	-	-0.0944	-
			(0.0651)	
Female x Black	-	-	-	-0.0178
				(0.0651)
Female	0.0684**	0.0685**	0.0691**	0.0684**
	(0.0333)	(0.0333)	(0.0333)	(0.0333)
White	0.178**	0.177**	0.180**	0.177**
	(0.0818)	(0.0819)	(0.0818)	(0.0819)
Black	0.159*	0.159*	0.157*	0.159*
	(0.0871)	(0.0871)	(0.0870)	(0.0871)
Latino	0.223**	0.222**	0.222**	0.223**
	(0.0912)	(0.0912)	(0.0911)	(0.0912)
Asian	0.132	0.131	0.134	0.131
	(0.0927)	(0.0928)	(0.0927)	(0.0928)
Native American	-0.0120	-0.0133	-0.0128	-0.0123
	(0.115)	(0.115)	(0.115)	(0.115)
Middle Eastern	-0.272	-0.274	-0.278	-0.271
	(0.271)	(0.272)	(0.271)	(0.271)
"Other" Ethnicity	0.336	0.335	0.336	0.335
	(0.321)	(0.321)	(0.320)	(0.321)
Age	0.00394**	0.00393**	0.00402***	0.00394**
	(0.00155)	(0.00155)	(0.00155)	(0.00155)
Education	0.0506***	0.0506***	0.0500***	0.0508***
	(0.0140)	(0.0140)	(0.0140)	(0.0140)
Married	0.0113	0.0114	0.0118	0.0111
	(0.0201)	(0.0201)	(0.0201)	(0.0201)
Homosexual	0.0299	0.0296	0.0292	0.0298
	(0.0255)	(0.0255)	(0.0255)	(0.0255)
Transgender	-0.122**	-0.122**	-0.122**	-0.122**
	(0.0568)	(0.0568)	(0.0568)	(0.0568)
Political Ideology	0.0517***	0.0517***	0.0526***	0.0517***
	(0.0183)	(0.0183)	(0.0183)	(0.0183)
Republican	0.0794*	0.0788*	0.0788*	0.0799*
	(0.0421)	(0.0422)	(0.0421)	(0.0422)
Democrat	0.0214	0.0213	0.0228	0.0213
	(0.0497)	(0.0498)	(0.0497)	(0.0498)
Income	0.0138***	0.0138***	0.0138***	0.0138***
	(0.00524)	(0.00524)	(0.00524)	(0.00524)
Constant	3.418***	3.415***	3.389***	3.414***
	(0.182)	(0.182)	(0.183)	(0.182)
Observations	1,517	1,517	1,517	1,517
R-squared	0.047	0.047	0.048	0.047

Standard errors in parenthese

*** p<0.01, ** p<0.05, * p<0.1

What GPA do You Think This Student Will Have?

VARIABLES	(1) gpa	(2) gpa	(3) gpa	(4) gpa
Gay Treatment	0.0382**	0.0511**	0.00839	0.0382**
	(0.0173)	(0.0245)	(0.0245)	(0.0173)
Black Treatment	-0.0427**	-0.0298	-	-0.0552**
	(0.0245)	(0.0245)		(0.0245)
Female Treatment	-	-0.0258	-	-
		(0.0347)		
Gay x Black	-	-	0.0597*	-
			(0.0346)	
Gay x Female	-	-	-	0.0251
				(0.0346)
Female x Black	0.0131	0.0130	-	-
	(0.0173)	(0.0173)		
Female	0.0386**	0.0388**	0.0382**	0.0387**
	(0.0177)	(0.0177)	(0.0177)	(0.0177)
White	-0.00320	-0.00444	-0.00454	-0.00221
	(0.0436)	(0.0436)	(0.0436)	(0.0436)
Black	0.0343	0.0336	0.0356	0.0349
	(0.0464)	(0.0464)	(0.0464)	(0.0464)
Latino	0.0814*	0.0803*	0.0816*	0.0816*
	(0.0486)	(0.0486)	(0.0485)	(0.0486)
Asian	0.0412	0.0400	0.0401	0.0424
	(0.0494)	(0.0494)	(0.0494)	(0.0494)
Native American	0.0337	0.0317	0.0341	0.0340
	(0.0612)	(0.0612)	(0.0611)	(0.0612)
Middle Eastern	0.209	0.205	0.213	0.208
	(0.145)	(0.145)	(0.145)	(0.145)
"Other" Ethnicity	-0.114	-0.114	-0.114	-0.113
	(0.171)	(0.171)	(0.171)	(0.171)
Age	0.00105	0.00104	0.000991	0.00104
	(0.000826)	(0.000826)	(0.000826)	(0.000826)
Education	-0.0141*	-0.0142*	-0.0137*	-0.0142*
	(0.00745)	(0.00745)	(0.00745)	(0.00745)
Married	-0.00259	-0.00235	-0.00294	-0.00234
	(0.0107)	(0.0107)	(0.0107)	(0.0107)
Homosexual	-0.0308**	-0.0313**	-0.0304**	-0.0308**
	(0.0136)	(0.0136)	(0.0136)	(0.0136)
Transgender	-0.198***	-0.198***	-0.198***	-0.198***
	(0.0303)	(0.0303)	(0.0302)	(0.0303)
Political Ideology	0.0102	0.0101	0.00964	0.0102
	(0.00973)	(0.00973)	(0.00973)	(0.00973)
Republican	-0.00794	-0.00884	-0.00756	-0.00868
	(0.0224)	(0.0225)	(0.0224)	(0.0225)
Democrat	-0.0309	-0.0311	-0.0318	-0.0308
	(0.0265)	(0.0265)	(0.0265)	(0.0265)
Income	0.00658**	0.00657**	0.00659**	0.00664**
	(0.00279)	(0.00279)	(0.00279)	(0.00279)
Constant	3.333***	3.330***	3.352***	3.338***
	(0.0967)	(0.0969)	(0.0972)	(0.0970)
Observations	1,519	1,519	1,519	1,519
R-squared	0.063	0.064	0.065	0.064

Standard errors in parenthese
*** p<0.01, ** p<0.05, * p<0.1

How Much Scholarship Will the Student Receive?

VARIABLES	(1) scholar	(2) scholar	(3) scholar	(4) scholar
Gay Treatment	3.040**	3.663**	2.726	3.040**
	(1.249)	(1.767)	(1.765)	(1.249)
Black Treatment	3.288***	3.906**	3.287***	3.488**
	(1.256)	(1.765)	(1.256)	(1.769)
Female Treatment	-0.705	-0.706	-1.019	-0.506
	(1.250)	(1.250)	(1.766)	(1.766)
Gay x Black	-	-1.245	-	-
		(2.500)		
Gay x Female	-	-	0.628	-
			(2.498)	
Female x Black	-	-	-	-0.399
				(2.497)
Female	2.282*	2.288*	2.278*	2.281*
	(1.277)	(1.277)	(1.277)	(1.277)
White	-5.710*	-5.770*	-5.724*	-5.725*
	(3.142)	(3.145)	(3.144)	(3.145)
Black	5.500	5.466	5.514*	5.492
	(3.343)	(3.345)	(3.345)	(3.345)
Latino	4.105	4.049	4.106	4.102
	(3.501)	(3.503)	(3.502)	(3.502)
Asian	-2.362	-2.416	-2.374	-2.381
	(3.560)	(3.562)	(3.561)	(3.563)
Native American	6.795	6.703	6.800	6.789
	(4.409)	(4.414)	(4.410)	(4.410)
Middle Eastern	-16.48	-16.65	-16.43	-16.45
	(10.42)	(10.43)	(10.42)	(10.42)
"Other" Ethnicity	-9.604	-9.632	-9.607	-9.620
	(12.31)	(12.31)	(12.31)	(12.31)
Age	-0.134**	-0.134**	-0.134**	-0.134**
	(0.0595)	(0.0595)	(0.0596)	(0.0595)
Education	-1.330**	-1.334**	-1.326**	-1.327**
	(0.537)	(0.537)	(0.537)	(0.537)
Married	-1.017	-1.006	-1.021	-1.021
	(0.772)	(0.772)	(0.772)	(0.772)
Homosexual	-3.071***	-3.094***	-3.067***	-3.072***
	(0.979)	(0.980)	(0.979)	(0.979)
Transgender	5.415**	5.395**	5.414**	5.412**
	(2.180)	(2.181)	(2.181)	(2.181)
Political Ideology	-1.198*	-1.200*	-1.204*	-1.198*
	(0.701)	(0.702)	(0.702)	(0.702)
Republican	-1.423	-1.466	-1.419	-1.412
	(1.618)	(1.620)	(1.618)	(1.620)
Democrat	0.393	0.384	0.384	0.392
	(1.910)	(1.910)	(1.911)	(1.910)
Income	-0.395**	-0.396**	-0.395**	-0.396**
	(0.201)	(0.201)	(0.201)	(0.201)
Constant	81.40***	81.24***	81.59***	81.32***
	(6.972)	(6.981)	(7.016)	(6.993)
Observations	1,519	1,519	1,519	1,519
R-squared	0.072	0.072	0.072	0.072

Standard errors in parenthese
*** p<0.01, ** p<0.05, * p<0.1

How Trustworthy Does This Student Seem?

VARIABLES	(1) trust	(2) trust	(3) trust	(4) trust
Gay Treatment	0.0271	0.0511	-0.0891	0.0271
	(0.0499)	(0.0707)	(0.0705)	(0.0499)
Black Treatment	-0.00599	0.0178	-	0.118*
		(0.0706)		(0.0706)
Female Treatment	-	-0.0480	-	-
		(0.1000)		
Gay x Black	-	-	0.233**	-
			(0.0997)	
Gay x Female	-	-	-	-0.248**
				(0.0997)
Female x Black	0.108**	0.108**	-	-
	(0.0500)	(0.0500)		
Female	-0.00841	-0.00817	-0.0101	-0.00902
	(0.0511)	(0.0511)	(0.0510)	(0.0510)
White	0.282**	0.279**	0.276**	0.272**
	(0.126)	(0.126)	(0.125)	(0.126)
Black	0.220	0.218	0.225*	0.214
	(0.134)	(0.134)	(0.134)	(0.133)
Latino	0.268*	0.266*	0.269*	0.267*
	(0.140)	(0.140)	(0.140)	(0.140)
Asian	0.185	0.183	0.181	0.173
	(0.142)	(0.142)	(0.142)	(0.142)
Native American	0.143	0.140	0.145	0.140
	(0.176)	(0.177)	(0.176)	(0.176)
Middle Eastern	0.360	0.353	0.375	0.374
	(0.417)	(0.417)	(0.416)	(0.416)
"Other" Ethnicity	-0.342	-0.343	-0.343	-0.351
	(0.492)	(0.492)	(0.492)	(0.492)
Age	-0.00585**	-0.00587**	-0.00607**	-0.00578**
	(0.00238)	(0.00238)	(0.00238)	(0.00238)
Education	-0.0160	-0.0161	-0.0143	-0.0142
	(0.0215)	(0.0215)	(0.0214)	(0.0214)
Married	-0.0714**	-0.0710**	-0.0728**	-0.0739**
	(0.0309)	(0.0309)	(0.0308)	(0.0308)
Homosexual	-0.0653*	-0.0662*	-0.0636	-0.0658*
	(0.0391)	(0.0392)	(0.0391)	(0.0391)
Transgender	0.236***	0.235***	0.235***	0.234***
	(0.0872)	(0.0872)	(0.0871)	(0.0871)
Political Ideology	0.0563**	0.0562**	0.0541*	0.0563**
	(0.0281)	(0.0281)	(0.0280)	(0.0280)
Republican	-0.284***	-0.286***	-0.283***	-0.277***
	(0.0647)	(0.0648)	(0.0646)	(0.0647)
Democrat	-0.114	-0.115	-0.118	-0.115
	(0.0764)	(0.0764)	(0.0763)	(0.0762)
Income	0.0185**	0.0184**	0.0185**	0.0179**
	(0.00804)	(0.00804)	(0.00803)	(0.00803)
Constant	5.983***	5.977***	6.054***	5.933***
	(0.279)	(0.279)	(0.280)	(0.279)
Observations	1,519	1,519	1,519	1,519
R-squared	0.050	0.050	0.053	0.054

Standard errors in parenthese
*** p<0.01, ** p<0.05, * p<0.1

How Likeable is the Student in the Vignette?

VARIABLES	(1) like	(2) like	(3) like	(4) like
Gay Treatment	-0.0155	0.0116	-0.139**	-0.0155
	(0.0478)	(0.0677)	(0.0675)	(0.0478)
Black Treatment	0.00887	0.0357	0.00842	0.0576
	(0.0481)	(0.0676)	(0.0480)	(0.0678)
Female Treatment	0.127***	0.127***	0.00391	0.176***
	(0.0479)	(0.0479)	(0.0675)	(0.0676)
Gay x Black	-	-0.0542	-	-
		(0.0958)		
Gay x Female	-	-	0.247***	-
			(0.0955)	
Female x Black	-	-	-	-0.0977
				(0.0956)
Female	0.0487	0.0490	0.0469	0.0485
	(0.0489)	(0.0489)	(0.0488)	(0.0489)
White	0.0573	0.0547	0.0517	0.0535
	(0.120)	(0.120)	(0.120)	(0.120)
Black	0.0495	0.0480	0.0548	0.0473
	(0.128)	(0.128)	(0.128)	(0.128)
Latino	0.248*	0.246*	0.249*	0.248*
	(0.134)	(0.134)	(0.134)	(0.134)
Asian	-0.00269	-0.00506	-0.00731	-0.00730
	(0.136)	(0.136)	(0.136)	(0.136)
Native American	-0.0597	-0.0638	-0.0578	-0.0612
	(0.169)	(0.169)	(0.169)	(0.169)
Middle Eastern	0.388	0.381	0.404	0.394
	(0.399)	(0.400)	(0.399)	(0.399)
"Other" Ethnicity	-0.607	-0.608	-0.608	-0.611
	(0.472)	(0.472)	(0.471)	(0.472)
Age	0.00310	0.00307	0.00286	0.00312
	(0.00228)	(0.00228)	(0.00228)	(0.00228)
Education	-0.00206	-0.00223	-0.000349	-0.00139
	(0.0206)	(0.0206)	(0.0205)	(0.0206)
Married	-0.0352	-0.0347	-0.0367	-0.0362
	(0.0296)	(0.0296)	(0.0295)	(0.0296)
Homosexual	-0.0549	-0.0559	-0.0531	-0.0551
	(0.0375)	(0.0375)	(0.0374)	(0.0375)
Transgender	-0.0419	-0.0427	-0.0422	-0.0424
	(0.0835)	(0.0836)	(0.0834)	(0.0835)
Political Ideology	0.0959***	0.0958***	0.0936***	0.0959***
	(0.0269)	(0.0269)	(0.0268)	(0.0269)
Republican	-0.248***	-0.250***	-0.247***	-0.245***
	(0.0620)	(0.0621)	(0.0619)	(0.0620)
Democrat	-0.00348	-0.00387	-0.00709	-0.00375
	(0.0732)	(0.0732)	(0.0730)	(0.0732)
Income	0.0234***	0.0233***	0.0234***	0.0231***
	(0.00770)	(0.00770)	(0.00769)	(0.00770)
Constant	5.530***	5.524***	5.606***	5.511***
	(0.267)	(0.267)	(0.268)	(0.268)
Observations	1,519	1,519	1,519	1,519
R-squared	0.047	0.047	0.051	0.047

Standard errors in parenthese
*** p<0.01, ** p<0.05, * p<0.1

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The Trans-Pacific Partnership

Lillie Haggard

Introduction

Countries use free trade as both an economic and political tool to unite and strengthen allies. Many countries have opted to engage in regional free trade agreements (FTAs) in order to ease into global free trade and develop specific political alliances. In 2016, what was to be the world's largest free-trade deal (covering 40 percent of the global economy) was signed by President Barack Obama and put up for ratification. This was the Trans-Pacific Partnership (TPP), which consisted of twelve nations: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam.

The TPP was controversial, however, especially due to rising populism and new protectionism in the United States. In order to understand why the TPP was signed by President Obama, failed to be ratified, and was then rejected by President Trump, this paper will first outline the timeline, content, and potential benefits of the TPP. Then societal groups affected by the TPP will be analyzed, followed by a discussion of governmental structures and actors involved in accepting and rejecting the TPP.

Societal groups and industries who benefited from the TPP in the U.S. put pressure on the U.S. government and the public to support the TPP signage, while those who were disadvantaged by the deal put on a similar pressure to oppose it. President Obama's main aim for the foreign policy behind the TPP was geopolitical strategy in the Asia-Pacific region. Because the structure of the U.S. government gives so much power to the executive branch concerning foreign policy, President Obama pushed the TPP forward until he signed it, notwithstanding the growing populism in society. In the end, however, despite the potential economic and strategic benefits, societal pressure in the voting and election system influenced both Congress and President Trump to prevent U.S. involvement in the TPP.

The History of the TPP

Timeline of the TPP

While President Obama drove the formation of the TPP, he did not originally formulate the Asian-focused deal. The TPP began as an Asian-focused FTA called the Trans-Pacific Strategic Economic Partnership Agreement, also known as the P4 (Canadian Government 2019). The agreement was signed in 2005 by Brunei, Chile, New Zealand, and Singapore. In 2008, more countries began talks to join the P4, including the U.S. at the end of President George Bush's term (Chatzky and McBride 2019). In 2009 President Obama continued international talks on joining the P4, and in 2010 the U.S. officially joined the negotiations, renaming the deal the Trans-Pacific Partnership (Canadian Government 2019). In February 2016, President Obama signed the deal for the U.S. along with eleven other countries. Because this was the year of a U.S. presidential campaign, Congress did not ratify the deal, as it had become a target for both Democrat and Republican candidates, which will be discussed later. In January 2017, on President Trump's first full day in office, he formally withdrew from the TPP (Chatzky and McBride 2019).

Contents of the TPP

The TPP negotiations took many years, because so many countries were involved, and each country wanted its special interests to be accounted for. For example, countries like Mexico, Australia, and New Zealand wanted agricultural goods to be covered in the TPP, as their economies were agriculturally dependent (Lee 2018). The U.S., on the other hand, wanted the TPP to cover intellectual property rights as well as services. The U.S. wanted these special interests to be included so that services like accounting and software products could be unrestrained by trade barriers, while simultaneously being protected from copyright infringement (Lee 2018).

According to the United States Trade Representative (USTR), the U.S.'s goal was for the TPP rules to have comprehensive market access, a regional approach to commitments, a way to address new trade challenges, inclusive trade, and the creation of a platform for regional integration (USTR 2015). The thirty chapters of the TPP outlined rules that covered many topics and areas of interest to attain these goals. The chapters discuss eliminating nontariff barriers (NTBs) and tariff barriers on U.S. goods and increasing the service sector's access to foreign markets. Also included were heavier intellectual property and copyright protections, foreign direct investment (FDI) protections with balancing rules that protect a state's rights to regulate in the public interest, and environmental and labor standards. Next, the chapters outlined additional pressure to provide transparency and reporting on monetary policy. This was to be accomplished by requiring regulatory communication among TPP countries to avoid currency manipulation and increase governing transparency with due process. Finally, "the most expansive disciplines on state-owned enterprises ever in a US FTA or the WTO, albeit with exceptions, to advance fair competition with private firms based on commercial considerations" (Fergusson et al. 2015) were included.

The thirty chapters of the TPP created a rule book to achieve the benefits that the TPP countries wanted in this massive deal.

The elimination of tariffs meant significant changes for companies within the TPP. It was estimated that tariffs and NTBS would be reduced by 98 percent on a variety of goods. These goods included automotive and other manufactured products, textiles and apparel, and agricultural commodities, such as meat, dairy, produce, and grains (Chatzky and McBride 2019). This elimination would have a direct effect on U.S. industries; there would be direct competition from the other TPP countries' companies as the TPP opened a huge part of the trade world to a level playing field. In other words, comparative advantage would no longer be distorted from NTB and tariff costs. This meant that whoever produced a product at the cheapest cost and/or the best quality would win that given market's customers.

The regulations around technology in the TPP were new and economically valuable for many U.S. companies. It was the first regional trade deal that included comprehensive rules on digital commerce. This would have ensured the free flow of information across countries and required consumer privacy protections. There were also extensive requirements on intellectual property. These included patent enforcement, copyright terms, and protection for technology and trade secrets, which encompassed medications as well (Chatzky and McBride 2019). As the U.S. continued to specialize and had a comparative advantage in technology, these new rules in international trade were necessary, because the U.S. would lose money and create competitors if no system was in place to prevent intellectual property from being stolen. Including these rules incentivized U.S. companies to expand their products internationally while being protected.

The deal was historical in its environmental and labor standards. It surpassed the standards set in previous trade deals by committing the signing countries to prohibit forced and child labor, improve workplace conditions, strengthen environmental protections, and allow labor unions (Chatzky and McBride 2019). These regulations were important to include, as environmentalist and other human rights groups often oppose free trade deals due to these issues. NAFTA, for example, was criticized, because it increased international transportation, which increased pollution and other resource problems (Karpilow et al. 2015). The labor standards were also supported by the U.S. as a way to help balance the loss of manufacturing jobs, because if the cost of labor increased in some Asian countries, then the difference in wages would not be as extreme between the U.S. and other countries. This potentially meant that not as many jobs in this area would be lost.

Projected Benefit from the TPP

Overall, the TPP was designed to decrease or eliminate tariffs, liberalize the services trade, open markets to FDI, provide guidelines on digital or e-commerce, protect intellectual property rights, and stipulate standards for labor and the environment. These rules and guidelines in the TPP text were designed to increase economic

benefits around the globe. The TPP was to be the largest free-trade deal the world had ever seen, covering 40 percent of the global economy (Chatzky and McBride 2019). From an economic standpoint, lowering trade barriers benefits the economies of all involved. International competition causes companies to produce quality goods as cheaply as possible, so the consumers benefit by having more options to buy from at lower costs. Companies that produce the best product in their industry can expand their markets and consumers and increase profits. While there is some shrinking in a given country's inefficient markets, the overall net gain is positive.

This trend of potential net gain from free trade was seen in predictions of the TPP's outcomes. Some of the predictions are debatable, because trying to foresee the future of the largest FTA ever proposed is not easy. According to an article written in 2016 by the Peterson Institute for International Economics, the TPP would have increased U.S. wages and increased U.S. exports by 9.1 percent. By 2030, it was projected to increase U.S. real incomes by $131 billion a year, or 0.5 percent above the baseline GDP (Petri et al. 2016). The Peterson Institute estimated higher increases than study predictions put out by the United States Trade Commission (USITC 2016), who predicted a 0.15 percent increase in GDP or $42.7 billion increase. However, the USITC model only accounts for tariffs and not NTBs, while the Peterson report tries to predict the effects of both the NTBs and the tariff changes of the deal. Because tariffs only consisted of about 12 percent of the economic benefits in the TPP (Fergusson and Williams 2016), the Peterson's analysis is potentially more accurate. A study by Tufts University actually reports that there could have been net losses from the deal (Capaldo et al. 2016), but this study ran contrary to international trade theory, causing some economists to argue that the methodology was "ill-suited to examine a trade agreement" (Fergusson and Williams 2016).

The studies were also in general consensus that the trade deal could potentially decrease employment and output in the natural resources, manufacturing, and energy sectors. The growth would be shifted to services and agricultural production (Fergusson et al. 2015). This economic aspect was a heavy influence in domestic politics as different industries might have profited and hurt from the deal. Aside from economic incentives, there were also political and strategic incentives to form economic alliances with Asia. These domestic and political state-interested influences shaped U.S. interest and the signing of the deal but also induced controversy that would lead to President Trump's decision to back out of the deal.

Domestic Politics—Societal Groups

To see what was going on in the U.S. with regard to the signing of the TPP, understanding societal groups is necessary. Tension between groups who would be affected differently by the TPP influenced the U.S.'s withdrawal. The industrial sectors, such as agriculture, technology, and manufacturing, were focused primarily on the economic benefits and drawbacks. Industries that encouraged the signing of the TPP were those predicted to receive economic benefit from the FTA. There were also environmental

groups in society who were invested in whether or not the U.S. joined the TPP. Finally, populism was on the rise in society, which also contributed to lack of domestic support for the TPP.

Agriculture

Most of the agriculture industry supported the TPP, from soybeans to beef and pork. Markets such as Malaysia, Japan, and Vietnam did not have an FTA in agriculture before the TPP, so it would mean opening large markets for them (Fergusson and Williams 2016). Other areas in agriculture faced some complications. Dairy producers were unsure about the TPP; they too would receive access to new markets, but it would also mean more competition from countries like Canada and Australia, who could produce dairy cheaply as well. The area within agriculture that opposed the TPP entirely was the U.S. sugar industry. The sugar industry was represented by the American Sugar Alliance (Fergusson and Williams 2016). This opposition is understandable given the U.S.'s high tariffs on sugar. Once tariffs were removed, the U.S. sugar industry would have had to lower their prices and profits in order to keep up with foreign sugar prices. However, the Sweetener Users Association, which represents candy makers and other sugar-consuming industries, was in great support of the TPP. The TPP would allow cheaper sugar to be brought into the U.S., so candy makers could, in turn, produce candies cheaper and gain more profit (Fergusson and Williams 2016). Agriculture companies who benefited from access to new markets (which was the majority) supported the TPP; those who benefited from the tariffs were opposed to the TPP because they produced food products at a higher cost compared to foreign competitors.

Analyzing the attitude and actions taken by the American Farm Bureau Federation (AFBF) accurately describes how the agriculture industry pushed for the TPP to be signed. The AFBF conducted its own research on the effect the TPP would have specifically on agriculture, hoping to create awareness of the agricultural benefits and get the farming community involved in supporting the TPP. The AFBF was explicit about the predicted gain in revenues from this research: "The Trans-Pacific Partnership will tear down trade barriers and help level the playing field for US agricultural exports to 11 nations across the Pacific Rim. Ratifying TPP will boost annual net farm income in the United States by $4.4 billion," (AFBF 2016). The research and public support sought to convince individuals in the agricultural industry to support the TPP.

Technology

Similar to the agriculture industry, the technology sector also wanted the TPP. U.S. tech companies produced data and software better than other countries in the deal, giving them a clear competitive advantage in the global market for these products. The TPP also protected intellectual property rights and would include e-commerce in a way that prevented countries from prohibiting cross-border flows of data over the Internet. What this means is that high-tech companies could sell their product without having to move servers or data in-country (Fergusson and Williams

2016). U.S. companies could reach more markets with their specialized technology and data systems without losing profit from intellectual property theft.

The technology sector also tried to influence the government through lobbying. A primary example of this is the BSA's actions and support for the TPP. BSA is a large lobbying group for tech companies that aims to bolster copyright law. Companies they represent include IBM, Microsoft, Adobe, Apple and others (Fang 2015). The BSA publicly endorsed the USTR in the TPP, lobbied to Congress representatives about the benefits that the TPP would have on the technology sector, and conducted press releases to further educate the public on the matter. According to the CEO of BSA, "TPP is a leap forward in trade agreements, establishing rules that truly reflect 21st century trade. It ensures opportunities and growth for all sectors that rely on data innovation by establishing the first-ever strong and enforceable general application trade rules on cross-border data flows in a multilateral agreement" (BSA 2016).

The agriculture and technology industries formed the U.S. Coalition for TPP. In 2011, this coalition wrote a letter directly to President Obama, encouraging progress on the TPP and outlining specific details that should be emphasized in the deal as negotiation rounds were occurring. The letter was signed by seventy-three U.S. businesses including Oracle, Kraft Foods, and Microsoft (Business Roundtable 2011). By 2016, more leadership had joined the coalition, including the Emergency Committee for American Trade, the AFBF, the Business Roundtable, the National Association of Manufacturers, and the US Chamber of Commerce (Needham 2016). The coalition focused on encouraging both Congress members and citizens alike to move forward the trade deal. In the coalition's words they were, "intensifying [their] broad education and advocacy efforts on the Hill and around the country as the administration and Congressional leaders work to address the next steps that are required to secure passage of the TPP" (Needham 2016).

Manufacturing

However, not all industries supported the TPP. While the service and tech industries in the U.S. had the comparative advantage in many of their goods and stood to profit from the elimination of tariffs, those in manufacturing did not. Countries such as Vietnam, Peru, and Malaysia all had cheaper unskilled labor compared to the United States. Accordingly, ratification of the TPP would likely have resulted in a loss of U.S. jobs and wages in the unskilled labor manufacturing industry. While there would be net benefits from the TPP and new jobs would be created elsewhere, these unskilled workers may not have the labor mobility (due to lack of education for the new job, inability to move away from family, etc.) to relocate to new jobs (Autor 2016). Thus, many manufacturing workers saw the TPP as a direct threat and were against the deal.

In the U.S., low-skilled workers often depend on labor unions to lobby the government for their needs. The AFL–CIO's actions, which now represents thirteen million workers nationwide (Open Secrets 2019), reflected how manufacturing workers in the U.S. felt about the TPP and what was done to prevent it. The president of the AFL–CIO held an interview with PBS to spread public awareness and influence the TPP, stating

that "this agreement is not worthy of the American people and the American worker" (PBS NewsHour 2015); the president further discussed specific points of the TPP that needed revision. The union also spent a total of $5,755,000 in lobbying in the year 2011 alone. Second only to Obama in contributions, the AFL–CIO gave Elizabeth Warren $19,750 (directly from the organization and individuals), as she was an outspoken opponent of the TPP and an advocate for workers' rights (Open Secrets 2019). The AFL–CIO's public statements and lobbying costs show their dedication to be heard and affected the policy decisions during TPP negotiations.

Environmental

Another significant interest group that opposed the TPP were environmentalists. While there were standards for environmental protection in the TPP, there was also a provision that allowed companies to sue countries who prohibited trade. The language of the agreement could have been interpreted in a way that allowed companies to sue against environmental or health standards (Ho 2016). An increase in international trade also meant an increase of the transportation of goods by boat, plane, and trucks, which would increase fossil fuel outputs. One of the main organizations opposing the TPP was the Sierra Club (Ho 2016). The Sierra Club works strategically with individuals and organizations to create social and public awareness on issues. For example, the Sierra Club collected more than half a million petitions criticizing the TPP in relation to climate disruption, clean air, and clean water. The Sierra Club collaborated with other organizations, such as Friends of the Earth, Green America, Greenpeace, and others, to collect and deliver all petitions to the Capitol (Carr 2016).

Populism

In 2016, American society experienced a rise in populism, demonstrated by the election of the populist presidential candidate Donald Trump. Populism is the belief that the elite in a country are corrupt and take advantage of the general populace. Populists accuse elite and/or outside forces and powers for the hardships of the lower class (Balfour 2017). During this time, people accredited loss of jobs to globalization and also feared international dealings, such as immigration, were a threat to the nation's cultural identity (Balfour 2017). The rise of populism in the U.S. brought free-trade deals under public scrutiny, because they were seen as taking advantage of the American people (Lima 2016). This caused a lack of public support for the TPP, which in turn caused a lack of congressional support as well.

Domestic Politics—State Structures

The amount of lobbying that different industries and interest groups conducted with both Congress and the president shows that the U.S. government is designed to listen its people. The system of frequent election holds legislators accountable to U.S. citizens. These influences and checks and balances within the government affected the outcome of the TPP.

Executive Bureaucracy

The president's power as head of state and chief diplomat has grown exponentially as the world continues to globalize. The president can lead negotiations and conduct trade-deal talks, which set the framework and goals for U.S. foreign policy. During this period of globalization specifically, the Obama administration aimed to strengthen relations in Asia since the region was a growing power. President Obama emphasized the environmental benefits but was primarily concerned about the strategic capability of the deal by way of political and economic alliances in Asia.

President Obama argued for the labor and environmental benefits of the TPP. In his final address to the UN as president of the U.S., he discussed the TPP's effect of increasing global standards: "We've worked to reach trade agreements that raise labor standards and raise environmental standards, as we've done with the Trans-Pacific Partnership, so that the benefits are more broadly shared" (White House 2016). Obama frequently made these types of comments about the strong environmental and labor standard laws in the TPP to dispute the environmentalist complaints about the deal. Throughout his presidency, Obama emphasized that the world was continuing to globalize and increase in trade, whether the U.S. was involved or not. However, if the U.S. was involved, they could put pressure on countries to adhere to environmental and labor standards that would otherwise not be kept.

While the new environmental and labor laws in the trade deal were important to the president, Obama also keenly focused on the geopolitical strategy of the TPP. For these reasons, looking at who was in the TPP was just as important as noticing who was left out—China. China had become an opposing force to U.S. foreign policy in Asia. By uniting and strengthening other Asian countries' ties to the U.S., the U.S. would ultimately strengthen forces against China. If there was a strong U.S. alliance in Asia, the U.S. would have more pressure on China to adhere to international law, such as protecting intellectual property. Also, in 2012 China began forming its own massive FTA, called the Regional Comprehensive Economic Partnership or RCEP (New Zealand Government 2019). This trade agreement includes fifteen countries, such as India, Australia, Thailand, Japan, Singapore, and China, but excludes the United States. This deal would strengthen China's influence throughout the region—another reason why the U.S. needed to tighten their alliances and increase its presence in Asia. The TPP was just as much of a tool to increase environmental and labor standards as it was to economically and politically combat China's RCEP, if not more so. In May 2016, President Obama wrote an op-ed for the Washington Post about the RCEP: "As we speak, China is negotiating a trade deal that would carve up some of the fastest-growing markets in the world at our expense, putting American jobs, businesses and goods at risk," (Obama 2016). Here the president emphasized just how important beating China on this deal is. Interest groups who were afraid of losing jobs or harming the environment would lose on both if the U.S. did not sign the TPP, which would allow China to pull ahead in leading trade in the Asia-Pacific region.

Obama had more to say in his op-ed about the opportunities of global leadership the U.S. would have by signing the TPP: "Building walls to isolate ourselves from the global economy would only isolate us from the incredible opportunities it provides. Instead, America should write the rules. America should call the shots. Other countries should play by the rules that America and our partners set, and not the other way around. . . . The world has changed. The rules are changing with it. The United States, not countries like China, should write them," (Obama 2016). The president was explicitly saying that the TPP is both an economic and geopolitical opportunity for the United States. He viewed the TPP as a way to secure U.S. global leadership and to direct what the future would look like for the world.

Increasing the economic benefits of the Asian countries in the TPP also showed another side of U.S. strategy and leadership opportunities. As the TPP would increase these Asian countries' GDPs, it would make these countries even more effective allies in the region. Their economies would also become more dependent on the U.S., as the U.S. bought more of their products. This economic leverage would be politically beneficial for the U.S. when pressuring TPP countries to adhere to U.S. foreign policy. By specifically strengthening U.S. allies economically, it would also strengthen U.S. allies from aggressive Eurasian countries that challenged the U.S., such as Russia, North Korea, and China. Illustrating this point, Secretary of State Hillary Clinton described the allied country of Japan as "the cornerstone of peace and stability in the region" (Clinton 2011). This is a direct reference to the geopolitical strategy of the Obama administration during the time of the TPP. By strengthening the U.S. ally of Japan, the U.S. was strengthening the cornerstone of peace and stability against countries that were opposing these principles, at least in the eyes of U.S. leadership.

The United States Trade Representative (USTR) writes foreign policy for the president and lobbied extensively on behalf of the deal. The USTR Michael Froman emphasized President Obama's goal of getting the TPP signed by outlining both the strategic and economic benefits: "[The] TPP is as important strategically as it is economically. Economically, TPP would bind together a group that represents 40 percent of global GDP and about a third of world trade. Strategically, TPP is the avenue through which the United States, working with nearly a dozen other countries (and another half dozen waiting in the wings), is playing a leading role in writing the [trade] rules of the road for a critical region in flux" (Fergusson and Williams 2016).

The Department of State (DOS) is another vital component in helping carry out the foreign policy of the president and United States. In 2015, Secretary of State John Kerry emphasized the president's goal of getting the TPP signed by again outlining the strategic and security benefits, stating that

> TPP also matters for reasons far beyond trade. The Asia-Pacific includes three of the globe's foremost populous countries and its three largest economies. Going forward, that region is going to have a big say in shaping international rules of the road on the Internet, financial regulation, maritime security, the environment, and many other

> areas of direct concern to the United States. Remember that, in our era, economic and security issues overlap; we can't lead on one and lag on the other. (Fergusson and Williams 2016)

Congress

While Obama had signed the TPP in 2016, a major state-structured obstacle was still in the way of full implementation of the TPP—Congress and (unavoidably) political parties. The deal needed to be passed by both the House and the Senate. The responses of industries and interest groups reflected and shaped much of the political leaders' feelings about the TPP. With the service and agriculture industries pushing for the TPP and other groups, such as environmentalists or the manufacturing sector, vehemently opposing the TPP, voting on the treaty became a political field of landmines.

Democratic senators received support from environmentalists but also from several service industries. Republican senators sought political support from manufacturing workers but also from farmers. Voting yea or nay had potential political backlash for both parties. With the rising populism in the U.S., free trade deals were becoming unpopular; a vote could potentially threaten a representative's reelection. Ultimately, these factors caused congressional leaders on both sides to refrain from putting the TPP up for a vote to be ratified. For these reasons, in January 2016, Senator Chuck Summer (who was the chamber's top Democrat at the time) told AFL–CIO leaders that the TPP would not be ratified. Speaker of the House Paul Ryan confirmed this by declaring the GOP did not have the votes to pass the TPP in the House (Raju and Jones 2016).

The upcoming presidential election in November 2016 caused even more domestic and structural political challenges for congressional representatives and the TPP. After Obama signed the TPP, Republican presidential nominee Donald J. Trump called the TPP "a rape of our country" (Lima 2016). This pressured the Republican senators to not support the TPP, because if they did, they would be opposing their own party's nominee. Going against one's party nomination would isolate voters and cause disunity before a presidential election. Further, should Trump be elected, it would be politically unwise to argue against the president, especially one of the same party. Voicing these thoughts, Senator Mitch McConnell, the Senate majority leader at the time, said the Senate would not act on the TPP during the lame-duck session of Congress. McConnell continued: "If the next president wants to negotiate a trade agreement, he has the opportunity to do that and to send it up. . . . It's certainly not going to be brought up this year and it'd be up to discussions with the new president as to, you know—I think the President-elect made it pretty clear he was not in favor of the current agreement" (Raju and Jones 2016). Republicans held the majorities in both the Senate and the House in 2016; with the Republican candidate so anti-TPP, Republicans did not have incentive to hold a vote to ratify the TPP. And because they controlled the majority of votes, they did not have to.

The upcoming presidential election also posed challenges for Democrats in Congress. Hillary Clinton, the Democratic presidential nominee, had switched positions

on the TPP, claiming during the campaign that she would get rid of it. Switching sides on the TPP caused voters to doubt Clinton's sincerity on the issue. And so, similar to Republicans, supporting the TPP would cause disunity with the Democratic Party's presidential nominee. While Obama still supported the TPP until the end of his presidency, ultimately it ended his presidency. If elected, Hillary Clinton would shape U.S. foreign policy for the next four to eight years, not Obama. And so, because the new Democratic nominee no longer supported the TPP, neither would the Democrats in Congress.

Thus, when the TPP went to Congress to be ratified in February of 2016, nothing happened. Neither the House nor the Senate pushed for the treaty to be put on the floor for a vote. The presidential race with two complicated candidates, pressure from voters and interest groups in society, as well as state-structured political party pressures made the treaty too politically controversial and risky to hold a ratification vote. And so, the TPP stalled until the election of the new president, which turned the stall to an abrupt stop.

Domestic Politics—President Trump's Withdrawal from the TPP

After analyzing the industrial and interest groups who were for and against the TPP and after examining how the U.S. government functions, President Trump's decision to withdraw from the TPP can be explained. During Trump's campaign, he sought the support of citizens who were ideologically populist; he promised to withdraw from international trade deals, portraying the U.S. as a victim in these trade deals and claiming the deals were "not fair" to the American people (Smith 2017). As discussed above, the manufacturing industry was particularly opposed to TPP trade deals. This sector and its workers became a base for Trump; in order to win another election in four years, he would have to follow through on his campaign promises to maintain this support for both reelection and support for his desired legislation. When signing the executive order against the TPP, Trump said, "It's a great thing for the American worker" (Smith 2017). By "worker," Trump was referring specifically to manufacturing workers.

Once Trump took the executive office, he became the chief diplomat and negotiator of foreign policy for the United States. And so, despite years of negotiations by two past presidents, he had the power to dismiss the TPP with a simple signature. Once Trump withdrew, there was no deal to confirm in Congress, and the TPP died in the United States. However, the TPP still exists in the other eleven countries who signed what is now called the CPTPP; the door is not closed for the U.S. should there be a change in presidential policy toward the free trade agreement (Chatzky and McBride 2019).

Conclusion

The Trans-Pacific Partnership sought to create the largest free-trade deal that focused on Asia. The U.S. would contribute a large part of the trade with the other eleven countries in the deal. While signed by President Obama, the TPP was ultimately

not ratified by Congress; eventually, the U.S. withdrew from the TPP with President Trump's executive order. In order to understand why the deal was signed and why it was taken away, one must consider both domestic societal groups, state structures, and politics. Industries such as agriculture and technology stood to profit from the TPP; thus, they formed coalitions and supported lobbyist groups like the BSA. These coalitions and groups pressured the public and the U.S. government to sign the TPP. On a state-structured level, President Obama supported the deal and controlled the foreign policy power of the U.S. government, including the Department of State and the USTR. There was geopolitical significance in the TPP for the U.S. by both strengthening ties with Asian allied countries and by excluding opposing Asian countries, such as China.

However, the same structures became obstacles to the ratification of the TPP as well. Manufacturing industries and environmentalist interest groups opposed the TPP and levied strong pressure against it. Growing populism in society made free-trade deals unpopular among many voters. When the presidency changed hands, President Trump was in full control of the deal that had yet to be ratified by Congress. He then issued an executive order on his first day in office, rescinding the U.S.'s signature on the TPP. Congress had delayed the vote of ratification due to the complex pressures coming from domestic political struggle. Not wanting to upset their voting base or political parties, congressional representatives put off the vote until Trump came into office, ultimately closing the door on the TPP. The TPP demonstrated how domestic aspects of the U.S. influence foreign policy decisions. It also sheds light on how the government is structured and how power is distributed to advance or hinder foreign policy deals and treaties. Perhaps in an American future where there are less manufacturing jobs, more environmentally cleaner ways of transportation, and political leaders who see economic ties to Asian allies as a critical geopolitical strategy, the TPP could return. For now, U.S. reentry into the TPP will not happen anytime soon.

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Uneven Influence: Why Female Representation Affects Some Migration Policies but Not Others

Lauren Olsen

Introduction

In the past decade, the migration crisis has been at the center of every major political debate in Europe. In countries where more women participate in the legislature, are the resulting immigration policies fundamentally different than in countries with fewer female legislators? Many scholars have shown that when women participate in the policymaking process, the resulting policies are different (Hunt 2007; Matthews 2017). The implication is that in countries where more women participate in the legislature the resulting immigration policies may be fundamentally different than in countries with fewer female legislators. Accordingly, my research addresses the following question: What is the relationship between the percentage of women in legislatures and the restrictiveness of immigration policy?

To answer this question and to address the gap in the literature, I use panel data for the original EU-15 from 2000 to 2010 to evaluate the relationship between female representation and the restrictiveness of immigration policy. I find that though female representation has no impact at the aggregated level when I disaggregate immigration policy into five individual sub-dimensions, female representation matters. Specifically, female representation matters for family reunification, asylum and refugee policies, and enforcement (how strictly immigration policy is enforced) but not labor migration and co-ethnics (policies targeted toward immigrants with ancestry from the host country). In my analysis, I investigate why female representation affects some areas of immigration policy but not others.

Theoretical Framework

Much of the current literature on gender asserts that feminine values, such as sympathy and nurturing behaviors, have long been undervalued and underrepresented in society (Matthews 2017). Because most legislators and policymakers are male, most legislation and policies adhere to traditional male values, such as authority and autonomy (Gilligan 1993; Noddings 1984). This male perspective is certainly valid and beneficial. However, the equally valid female perspective has been consistently underrepresented in governments throughout the world. This is why many scholars believe achieving higher female representation in legislatures is so crucial. Women comprise half of the world's population, yet few countries even come close to achieving gender parity in their legislatures.

Greater female representation strongly correlates with numerous measures of good governance, including lower corruption, increased economic competitiveness, and greater political stability (Esarey and Schwindt-Bayer 2019; Hudson et al. 2012; Hunt 2007). Joni Lovenduski (2001) asserts that, due to their distinct characteristics and experiences, women provide a unique standpoint and have different policy priorities from the traditional male focus. For example, women often have more experience working in nongovernmental organizations (NGOs), which makes them more familiar with social problems and marginalized populations (Chattopadhyay and Duflo 2004; Hunt 2007; Matthews 2017). Additionally, even when women work in prominent government positions, they are more likely to be appointed to departments and given responsibilities that deal with sociocultural matters (Crage et al. 2013).

Because of these unique experiences, women are often more likely to focus on care issues, to have a broader definition of security, and to be more ethical and trustworthy (Hunt 2007; Lovenduski 2001). Combining this distinct female perspective with the traditional male approach provides a more comprehensive approach in any policy area, particularly in areas that are traditionally neglected by men (Matthews 2017). Because women define security more broadly than men, they often pay more attention to "low politics" issues like healthcare, education, and the environment (Krook and O'Brien 2012; Paxton and Hughes 2010; Reynolds 1999; Studlar and Moncrief 1999).

Immigration policy is certainly not considered a low politics issue; most often, it is included with security issues, which are typically shaped by more masculine values (Crage et al. 2013; Faist 2004). However, it is better classified as both a security and a care issue. A care issue is one that "contributes to the well-being or development of other people" (Dwyer 2013; England 1992; England 2005). Thus, Crage and her colleagues classify a policy dealing with border control as a security issue, because it involves state safety, but a policy about immigrant integration as a care issue, because it involves individual well-being (Crage et al. 2013; Heckmann and Schnapper 2003).

Because of this duality, male and female opinions about immigration policy often differ (Sides and Citrin 2007). For example, women are more likely to control prejudice, which influences their attitudes and voting patterns on immigration issues (Harteveld and Ivarsflaten 2018). One recent study found that asylum policies are

significantly more women-friendly in countries with higher female representation (Emmenegger and Stigwall 2019). This research provides some initial evidence that women in legislatures do have a discernible impact on immigration policy. However, asylum is only one small aspect of immigration policy, which is itself complex and multifaceted. The female influence is also likely to affect other characteristics of immigration policy beyond women-friendliness, such as overall restrictiveness.

This combined scholarship indicates that the gender of policymakers plays a significant role in shaping immigration policy. Women's broader definition of security, their focus on marginalized populations, their distinct policy priorities, and their experience in care issues give them a valuable perspective that shapes their views about immigration policy. Based on this evidence, I present my hypothesis: As female representation in legislatures increases, the restrictiveness of immigration policies will decrease.

Based on the reviewed literature, I expect that this will occur because as more women participate in legislatures, there will be an increased focus on care issues, including the care aspects of immigration. This increased attention and additional perspective will alter how legislatures approached immigration policy. With a greater focus on marginalized populations, immigration policy will be less restrictive in order to accommodate more immigrants and refugees.

Methodology

Representation and Restrictiveness Defined

Based on this theoretical framework, I investigate female representation as my key independent variable of interest. For the purpose of this research, this term refers to the percentage of female legislators in a country's national parliament. The female perspective could reasonably affect immigration policy through other forms of representation, including interest groups, elections, or referendums, but I reserved their analysis for future studies. Female representation in legislatures provides the most consistent, quantifiable, and accessible measurement available and has been shown in the literature to be an important indicator of women's participation in policymaking (Davidson-Schmich 2016; Emmenegger and Stigwal 2019).

Using World Bank data, I measured female representation by the percentage of female legislators elected to the lower or single house of a country's national legislature (The World Bank 2019c). I used only the lower or single house in order to standardize the measurement across countries, since some countries do not have upper houses, and amongst those that do, there is significant variation. Using only the lower or single house is a common practice many datasets use when calculating female representation (Interparliamentary Union 2019; The World Bank 2019c).

To measure immigration policy restrictiveness, I used data from the Immigration Policies in Comparison (IMPIC) index. This dataset represents the results of a comprehensive study designed to objectively evaluate the restrictiveness of immigration policies across thirty-three OECD countries from 1980 to 2010 (Helbling et al. 2016). The authors defined restrictiveness as the degree to which "a regulation limits or liberalises the rights and

freedoms of immigrants" (Helbling et al. 2017). In evaluating restrictiveness, the authors designed the study to avoid normative evaluations and instead to create a neutral tool that systematically compares different aspects of immigration policy.

The index evaluates each country on five key dimensions that experts agreed were most relevant to immigration policy: family reunification, labor migration, asylum and refugees, co-ethnics, and control. Family reunification policy refers to laws that make it easier for separated family members to obtain legal authorization to cross national borders to join their families. Labor migration involves laws about work visas, employment eligibility, etc. Asylum and refugee policies encompass recognized refugees, asylum seekers, and people with humanitarian protection. Co-ethnic policies involve regulations about migrants who are "entitled to easier access to immigration and settlement in a country because of a cultural or historical affinity with the native population" (Bjerre et al. 2016). Control policy incorporates laws that dictate the enforcement of immigration laws, both internally and externally. Though control policies include border control, they also involve other laws that dictate implementation of other policies within a country. For the sake of clarity and precision, I refer to control policies as enforcement policies.

The authors of the IMPIC study selected several specific measures to assess each of these five dimensions and then interviewed experts on each country and policy area. They closely followed

Control Variables

Besides female representation and policy restrictiveness, existing studies have identified the two main influences on immigration policy as economic and ideological issues (Givens and Luedtke 2005; Milner and Tingley 2011). To control for the economic factors, I used World Bank data on each country's yearly GDP per capita, unemployment rate, and growth rate (The World Bank 2018; The World Bank 2019a; The World Bank 2019b). These factors are important, because if a country is struggling economically, its citizens are more likely to oppose immigration out of fear that immigrants will threaten their jobs or consume their resources.

In addition to economic factors, I also added several variables to account for other variables that could affect immigration policy. For example, countries that receive more immigrants could oppose immigration more than others, because they have to bear heavier costs. To control for this, I included each country's yearly immigrant flows using data from the OECD's International Migration Database (OECD 2019). I also expected that countries that experience more terrorist activity would be more inclined to limit immigration out of fear, so I included data from the Global Terrorism Database about each country's yearly terrorist attacks as well (Global Terrorism Database 2018). Finally, partisanship can also play a major role in influencing immigration policy (Givens and Luedtke 2005; Money 1999). In order to control for this, I included a variable that captures the political strength of the left by calculating the percentage of parliamentary seats held by parties on the left compared to the right. I obtained this data from the Parliaments and Governments Database using their elections dataset

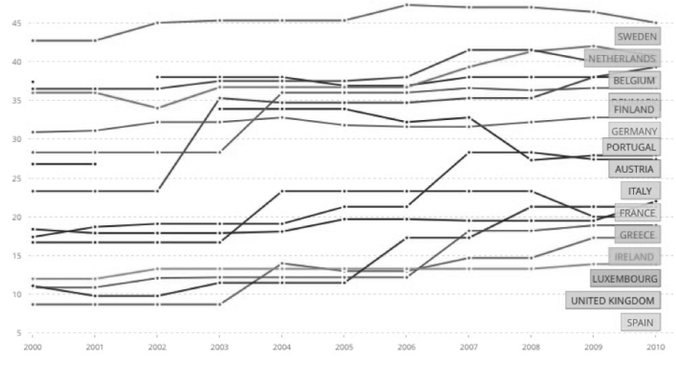
(ParlGov 2018). These economic and ideological control variables allowed me to mitigate the effect of omitted variable bias in my analysis.

Though I carefully controlled most confounding variables, I acknowledge that all research has constraints. Due to the limited scope and resources of this study, I cannot thoroughly investigate every possible variable that could affect immigration policy. For example, I would have liked to include a variable about public opinion on immigration, but during the years my study covers, no consistent measures exist. The Eurobarometer, European Social Survey, and other common sources of public opinion data began to include immigration questions only recently. Before they did, public opinion data on immigration was sparse and inconsistent. Trying to measure it would involve creating an index based on multiple sources and inconsistent questions that would exceed the scope of this paper. However, by using established statistical measures and carefully planning my research design, I did address the most common factors discussed in the literature, as well as those with major theoretical importance.

Empirical Analysis

I analyzed the EU-15: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom, which provided a diverse sampling of female representation, with Sweden being the highest in the EU and Ireland being the lowest. The range of female representation ratios across these countries is depicted in figure 1. For the sake of manageability, I only analyze the last decade of data from the index.

Figure 1. Female Representation Ratios in the EU-15



I estimated a panel fixed-effects regression, clustered by country. I used fixed-effects regression in order to mitigate autocorrelation error in my analysis. Because my data involves multiple countries over multiple years, a simple OLS regression would overestimate the relationships between restrictiveness and representation because each country's values would be highly correlated with their same values from the previous

year. This would bias the relationship upward by making it appear stronger than it really is. Instead, using a fixed-effects regression allowed me to automatically correct for correlation between each country's values.

Results

Aggregated Immigration Policy Model

Table 1
Dependent Variable: Immigration Policy Restrictiveness

	Model 1	Model 2
Female Representation (% Of Female Legislators)	-0.001 (0.001)	-0.001 (0.002)
GDP Per Capita	0.028 (0.037)	0.012 (0.088)
Unemployment Rate	-0.006 (0.004)	-0.058 (0.111)
Growth Rate	0.001 (0.003)	0.122** (0.046)
GDP Per Capita X Unemployment Rate	-	0.005 (0.011)
GDP Per Capita X Growth Rate	-	-0.010** (0.003)
Unemployment Rate X Growth Rate	-	-0.002* (0.001)
Political Strength of The Left	-0.002 (0.002)	-0.002\ (0.002)
Terrorist Attacks	0.001 (0.001)	0.0004 (0.001)
Immigrant Flows	-4.35e-08 (5.68e-08)	-3.59e-08 (5.37e-08)
Constant	0.294 (0.409)	0.417 (0.936)
Observation	157	157
R-Squared	0.284	0.344
Adjusted R-Squared	0.251	0.299

Notes: Standard errors appear in parentheses beneath coefficients and are heteroskedasticity-robust and clustered at the country level to allow for serial correlation in the error within a state. Coefficients are individually statistically significant at the *10%, **5%, and ***1% significance level. Dependent variables are measured on a scale of 0–1, with higher numbers being more restrictive. GDP per capita is calculated as the natural logarithm of GDP per capita to account for distortion from large values.

The results of my initial regression appear as model 1 in table 1. Though I included the most theoretically compelling variables in the literature, none has a significant impact on immigration policy restrictiveness in my analysis. Based on this surprising result, I investigated in model 2 whether there are any interactions or nonlinear relationships among my variables that have conceptual significance. For example, having a high GDP with a slowing growth rate would likely affect a country's attitudes about immigration policy differently than having a low GDP with an accelerating growth rate. I accounted for these effects by including interactions between the three economic variables in addition to the other control variables. I tested each interaction before adding it to the regression and found that all three improved the model's adjusted R-squared both individually and jointly.

Surprisingly, both models indicate that female representation in legislatures has no impact on immigration policy restrictiveness. This contradicts my hypothesis that female representation would significantly reduce policy restrictiveness. This unexpected result likely occurs because the regression only evaluates the relationship between female representation and the restrictiveness of immigration policy as a whole. However, due to the dual nature of immigration policy as both a security and a care issue, it is possible that women's greater focus on care issues has a greater impact on the care aspects of immigration. Lumping all five aspects into a single measure of policy restrictiveness likely obscures women's actual effect.

Disaggregated Immigration Policy Model

Based on this expectation, I analyzed each of the five policy dimensions individually. In table 2, I included five more fixed-effects regressions, replacing overall immigration policy restrictiveness as the dependent variable with the restrictiveness of the individual policy dimensions: family reunification, labor migration, asylum and refugees, co-ethnics, and enforcement. Though many of the control variables were insignificant in my initial regression, I still included them in the subsequent regressions in order to evaluate whether they affect individual policy dimensions differently. The results of these regressions, which appear in table 2, indicate that female representation does influence certain aspects of immigration policy, although it clearly does not influence other aspects.

As the table demonstrates, most of the disaggregated models had higher adjusted R-squared values than the initial model, which indicates that breaking immigration policy into its individual dimensions offers a better fit for the data. In interpreting this data, I mostly focused my analysis on the direction and significance of each variable. Because restrictiveness is measured from zero to one as less restrictive to more restrictive, a quantitative interpretation of the relationship has little real-world significance. For example, it is not very meaningful or helpful to say that as GDP per capita increases by one U.S. dollar enforcement policy restrictiveness increases by 0.124 points. In contrast, the direction and significance of the relationships are extremely instructive, because they indicate whether female representation makes policies significantly more or less restrictive. Therefore, I focused my analysis on those aspects rather than the numerical values.

Table 2
Disaggregated Immigration Policy Restrictiveness

	Family Reunification	Labor Migration	Asylum/ Refugees	Co-Ethnics	Enforcement
Female Representation (% Of Female Legislators)	-0.010* (0.005)	0.003 (0.002)	-0.003** (0.001)	0.007 (0.005)	0.002* (0.001)
GDP Per Capita	0.092 (0.225)	0.009 (0.116)	0.064 (0.045)	0.069 (0.157)	-0.124 (0.077)
Unemployment Rate	-0.085 (0.296)	0.066 (0.191)	-0.005 (0.071)	0.005 (0.223)	-0.267** (0.098)
Growth Rate	0.010 (0.029)	-0.007 (0.018)	0.0006 (0.007)	-0.003 (0.023)	0.026** (0.009)
GDP Per Capita X Unemployment Rate	0.466** (0.204)	0.222** (0.078)	-0.007 (0.050)	0.091 (0.089)	-0.101 (0.065)
GDP Per Capita X Growth Rate	-0.038** (0.017)	-0.017** (0.006)	0.001 (0.004)	-0.008 (0.009)	0.008 (0.006)
Unemployment Rate X Growth Rate	-0.008* (0.004)	-0.006* (0.003)	-0.0005 (0.0006)	-0.001 (0.002)	0.002*** (0.0006)
Political Strength off The Left	-0.003 (0.007)	-0.005* (0.002)	-0.001 (0.001)	0.005* (0.002)	-0.004*** (0.0008)
Terrorist Attacks	0.002 (0.002)	-0.001 (0.001)	-0.0001 (0.0007)	-4.93e-05 (0.000766)	0.001** (0.0004)
Immigrant Flows	-8.92e-08 (2.22e-07)	-9.38e-10 5.98e-08)	≈	-1.59e-07 (1.46e07)	-7.11e-08* 3.60e-08)
Constant	-0.447 (2.504)	0.591 (1.210)	-0.273 (0.511)	-0.470 1.580)	2.064** (0.802)
Observation	157	157	157	114	157
R-Squared	0.360	0.422	0.338	0.404	0.539
Adjusted R-Squared	0.316	0.382	0.292	0.346	0.508

Notes: Standard errors appear in parentheses beneath coefficients and are heteroskedasticity-robust and clustered at the country level to allow for serial correlation in the error within a state. Coefficients are individually statistically significant at the *10%, **5%, and ***1% significance level. Dependent variables are measured on a scale of 0–1, with higher numbers being more restrictive. GDP per capita is calculated as the natural logarithm of GDP per capita to account for distortion from large values.

The disaggregated regression indicates that female representation has a significant negative relationship with the restrictiveness of family reunification policies in Europe. As female representation in legislatures increases, family reunification policies become significantly less restrictive. The aforementioned research about care issues in immigration policy reveals why this would be the case. Family reunification is more concerned with individual and family well-being than with state well-being, so it exhibits more characteristics of a care issue than a security issue. It is unsurprising that the female effect would emerge in this area.

In contrast to family reunification policy, female representation has no statistically significant impact on the restrictiveness of labor migration policies. This result appears consistent with the literature about women's focus on the care issues mentioned above. Though labor migration does offer some benefits to individuals, politicians generally advocate for it, because it brings economic benefits to the state, not to the individuals. Thus, labor migration is not typically considered a care issue, so the insignificant effect of female representation is unsurprising.

Of all the dimensions of immigration policy, female representation has the most significant effect on asylum and refugee policy. As female representation increases, the restrictiveness of asylum and refugee policies decreases significantly. This result is rather unsurprising. Asylum and refugee policies explicitly aim to improve the well-being of individuals, so they strongly exhibit the characteristics of a care issue. Interestingly, this result supports the results of recent research from Emmenegger and Stigwall, who found that countries with higher female representation have more women-friendly asylum policies (Emmenegger and Stigwall 2019). Even using a separate dataset and significantly different methods, I too found statistically significant evidence that female representation in legislatures affects asylum and refugee policy.

It is also interesting that female representation is the only variable in the regression that had any significant effect on asylum and refugee policy. None of the other variables that the current literature typically highlights had any impact, including economic concerns, partisanship, terrorist attacks, or immigrant flows. Since no other factors matter, this evidence indicates a serious need to evaluate how female representation shapes asylum and refugee policy. Is women's effect on asylum and refugee policies positive or negative for the individual countries? Is it positive or negative for the refugees? These questions highlight the need for further research on this subject.

In contrast with asylum and refugee policy, female representation has no significant impact on the restrictiveness of co-ethnic policies. It is unsurprising that female representation had no significant impact in this area, because it does not appear to be a care issue that specifically or directly promotes individual well-being.

The final dimension of immigration policy—namely, enforcement—is more perplexing than the other dimensions. Female representation has a significant positive relationship with the restrictiveness of enforcement policy. This is puzzling for two reasons. First, my theoretical framework indicates that the influence of female representation is strongest for care issues. However, enforcement policy arguably contributes more to state well-being than to individual well-being. It does not, therefore, appear to be a care issue, yet its relationship with female representation is statistically significant. Second, in contrast to family reunification policies and asylum and refugee policies, the relationship between female representation and enforcement policy is positive, not negative. This means that as female representation increases, enforcement policy restrictiveness increases. Future qualitative research could investigate why this occurs, but one possible explanation is that women are willing to help immigrants that already reside

within their country, but they fear letting in more immigrants because of the problems associated with immigration.

Conclusions and Future Research

By disaggregating immigration policy into its separate dimensions, I uncovered relationships that were obscured at the aggregated level. I concluded that female representation has a significant impact on the restrictiveness of only certain dimensions of immigration policy, particularly those that are generally considered care issues, such as family reunification and asylum and refugee policy. Though policy restrictiveness does not necessarily correlate with effectiveness, my analysis indicates that women's perspective makes a difference. This study does not make any normative claims about whether that difference is positive or negative, or whether more restrictive policy is better or worse than less restrictive policy. Future research will need to evaluate whether female policies are more or less effective, compassionate, and beneficial. However, if female representation does make a perceptible difference in shaping immigration policy, policymakers concerned with the effectiveness of their policies need to consider how the female influence is affecting those policies.

Though the results of this research were interesting and instructive, I have only begun to examine the relationship between female representation and immigration policy restrictiveness. My research involved primarily large-n, quantitative analysis. However, to further establish the causal mechanisms at work and to evaluate the relative merit of the female perspective on immigration policy, future research will need to examine additional qualitative evidence that offers insight into the exact causal mechanisms that make female representation matter. Such evidence could include parliamentary records, news sources, political speeches, and other primary sources.

One limitation I faced in this study was that the IMPIC database only includes records through the year 2010. Though the causal mechanisms likely remain consistent across time, recent events, most notably the 2015 immigration crisis, might alter the precise relationship between female representation and immigration policy restrictiveness. In one scenario, the rapid increase of refugees could cause the female perspective to become even more relevant, potentially having a greater effect in some of the other policy dimensions that are not typically care issues. Alternatively, it is also possible that the female perspective would become less relevant, because increased immigrant flows would cause more security-related problems at home. Future research with an extended dataset could better examine how this relationship between immigration policy restrictiveness and female representation was affected after the 2015 immigration crisis.

Another constraint I experienced was that I had to maintain feasibility by limiting the number of countries I analyzed. Because I was adding six additional variables for each country per year, I only had the resources to evaluate fifteen countries. In the future, I would like to look at other countries in the EU, as well as countries outside the EU, to confirm how my theoretical framework applies in other immigration

settings. I am especially interested in how female representation would affect the restrictiveness of immigration policies in the United States.

A final limitation I faced was that I only had access to observational data. Because randomly assigning female representation ratios or immigration policies to the countries in Europe is not possible, I could not manipulate reality in order to establish causality. I acknowledge that the same social movements and forces that produce increased female representation in legislatures could also prompt changes in immigration policy. I controlled for partisanship in order to limit one major source of this distortion but others likely exist. However, the related literature in the field supports my causal argument that having women in the legislature affects immigration policy (Crage et al. 2013; Emmenegger and Stigwall 2019). Beyond the correlation versus causation problem, any observational research design must also address the possibility of reverse causality. In the case of this research, it seems extremely unlikely that the restrictiveness of immigration policy changes female representation, unless perhaps women grow frustrated with male immigration policies. However, there is little real-world evidence that this kind of causality actually occurs, so I maintain my original causal sequence.

The disappointing gap in the literature on gender and immigration indicates that much research still remains. However, my analysis has added to the current literature on gender and immigration and has provided insight into what areas need more investigation. The results of this study will be immensely valuable for policymakers as they seek to combat the fractionalization and hostility that threaten the liberal consensus of Europe. I have demonstrated that female representation is negatively correlated with the restrictiveness of certain dimensions of immigration policy. In light of this evidence, scholars and politicians need to do more to understand women's effect on immigration policy and the implications for their respective countries. Female participation is certainly not the only factor affecting immigration policies, but my analysis indicates that its influence is more significant than the current literature suggests. The task that remains is determining whether that influence is helping or hurting the countries of Western Europe. Women's distinct perspective could be the key to easing the immigration crisis and restoring stability and harmony to Europe.

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Religion and Suicide: The Consequences of a Secular Society

Pearce Solomon and Sean Peterson

Introduction

In 2017, suicide rose to become the tenth leading cause of death for U.S. citizens (U.S. Department of Health and Human Services 2018a). In the twenty years preceding 2017, the suicide rate increased significantly across the country. Twenty-five states experienced at least a 30 percent increase in suicide rates, and some states like North Dakota saw increases of as much as 57 percent (U.S. Department of Health and Human Services 2018b). The significant upswing in suicide rates affects the well-being of every American, both directly and indirectly. Indeed, one of the strongest indicators of a person's likelihood to attempt suicide is exposure to the suicide of people close to them in their social network (Niederkrotenthaler et al. 2012; Ramchand et al. 2015). Beginning in the 1960s, American policymakers started taking suicide prevention seriously. The Center for Studies of Suicide Prevention was established as part of the National Institute of Mental Health in 1966, and government intervention culminated with the unprecedented *Surgeon General's Call to Action to Prevent Suicide* in 1999 (U.S. National Library of Medicine 2016; U.S. Public Health Service 1999). Subsequent legislation like the Garrett Lee Smith Memorial Act of 2004 and the Joshua Omvig Veterans Suicide Prevention Act of 2007 continue to combat suicide (Suicide Prevention Resource Center 2016). However, while these government programs focus on providing resources and support for Americans struggling with suicidal tendencies, our understanding of what motivates someone to end his or her life remains dangerously inadequate as suicide rates continue to increase unabated (Ross, Yakovlev, and Carson 2012).

History of Suicide Research

The history of human understanding of suicide extends thousands of years into the past. The Greek philosopher Socrates spoke at length about the morality of suicide as long ago as 470 BC, and popular mythos point to suicide as the cause of his death (Dorter 1976). The Bible mentions suicide several times in the Old and New Testaments, primarily in relation to shame or regret (2 Samuel 17:23; Matthew 27:3–5; Gearing and Lizardi 2009). The shift from the early understanding of suicide as an act of shame or remorse to the new perception in the Middle Ages of suicide as an act of repugnance theoretically correlates with the rise of Christianity. Early Christians considered suicide a moral sin beginning in the fifth century, and the public attitude expressed in secular writings mirrors that perception (Eckardt 1972).

The secular understanding of suicide research was not formalized until 1897 when the French sociologist Emile Durkheim provided an operational definition of suicide, which researchers still use today (Abrutyn and Mueller 2014; Gearing and Lizardi 2009; Pescosolido and Georgianna 1989; Stark, Doyle, and Rushing 1983). He defined suicide as "all cases of death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result" (Durkheim 1897). Durkheim further divided suicide into four categories, which form the foundation of most modern suicide research: egoism (lack of integration), altruism (overwhelmed by group expectations), anomie (lack of direction), and fatalism (sense of overregulation) (Dohrenwend 1959; Harriford and Thompson 2008). Durkheim's contribution provided the theoretical backbone for the current understanding of social structures and how social capital prevents suicide from taking place, and each of these four categories has applications in a person's religiosity or lack thereof (Jones 1986).

Durkheim's argument can be simplified into two primary predictive indicators of suicidality: integration and regulation (Pope 1975). Durkheim stated that religion prevented suicide "because it is a society" and that "the stronger the integration of the religious community, the greater its preservative value" (Jones 1986). The strength of a person's social capital continually proves to reduce his or her sense of isolation and risk of suicide (Putnam 1995). Durkheim recognized that religious institutions are uniquely qualified to provide congregational integration and firm regulations of their adherents more than any other social organization and would therefore likely see fewer suicides amongst their parishioners (Durkheim 1897).

Unfortunately, researchers largely abandoned Durkheim's emphasis on the unique qualities of religion and treated religious identification with the same level of importance as other social organizations (Pescosolido and Georgianna 1989). By neglecting the regulatory impact of religious doctrine and practice, post-Durkheim researchers incorrectly minimized the unique impact religion has on suicidality; this negligence has negatively impacted suicide research for more than a hundred years.

Present State of Suicide Research

Though Durkheim's theory is foundational to suicide research, researchers incorrectly diminished his theory and did not include robust measures of religion in modeling suicide rates. The consequences of this exclusion have led researchers to focus the study of suicide on individual characteristics where social and contextual factors play a role—which are important indicators in their own right—but researchers continually ignore the fundamental impact of religious identity on suicidality (Wray, Colen, and Pescosolido 2011, 505). Political scientists and sociologists focus their research on common outward personal identifiers found in population studies, such as gender, mental health, and financial problems. Their research has yielded important insights into suicidality and is, therefore, important to include in our study. Because the defining role of religion does not currently receive the attention it merits, including religion will address previously unperceived, omitted variable bias. We will provide a brief description of the current body of knowledge on the most common indicators of suicidality.

The main physiological factors studied with suicide are gender, age, and mental illness, as those three characteristics are highly correlated with suicide. Gender has a clear, though complex, relationship with suicide. Men are more likely to successfully carry out a suicide attempt (U.S. Department of Health and Human Services 2018a), while women are more likely to attempt suicide than men (Girard 1993; World Health Organization 2002). This relationship has been observed for several decades (Ellis et al. 2013). Age is also directly correlated with suicide rates. As people grow older, their likelihood of committing suicide increases (U.S. Department of Health and Human Services 2018b), and age is a consistent indicator of suicidality when race, family structure, and support system are used as control factors (Pampel and Williamson 2001; Conwell et al. 1998). Mental illness and suicide are undoubtedly linked (D'Orio and Garlow 2004), with some doctors estimating that between 50 and 80 percent of those who commit suicide suffer from mental disorders (Güngörmüş, Tanriverdi, and Gündoğan 2015; Suominen et al. 1996).

Beyond personal physiological differences, the relationship between cultural and societal differences and suicide has also been studied at length. In the U.S., Caucasians and American Indians commit suicide at nearly three times the rate of African Americans, Asians, and Pacific Islanders (Kubrin, Wadsworth, and DiPietro 2006; Burr et al. 1999; American Foundation for Suicide Prevention 2019). Despite the clear differences in suicidality between races and cultures, the cause of these differences is still unclear.

Extensive research has linked economic stability and suicidality in individuals and societies. For example, financial struggles—usually characterized by unemployment—have long been associated with suicide both globally (Preti 2003; Yip and Caine 2011; Nortsröm and Grönqvist 2015) and in the United States (Marcotte 2003; Almgren et al. 1998; South 1984). Some studies show that a person facing financial struggles is three to nine times more likely to commit suicide than the general public

(Blakely 2003; Nordt et al. 2015). Economic fluctuation occurs consistently throughout history, and suicide rates have mirrored stability and instability in the economy (Dome et al. 2013). We expect the variation in the strength of the U.S. economy and the job market to influence the suicide rate and will, therefore, use the unemployment information provided by the Bureau of Labor Statistics for the years included in our study.

One of the most studied areas of pre-existing suicide research is the effect of the relationship network—or social capital—of an individual. A significant relationship has been established between social relationships and mental health (Umberson and Karas-Montez 2010). Research on the decrease of social interaction over the last thirty years corresponds with the increase in mental illness and suicide rates in the U.S. (Putnam 1995). Social interactions range from as wide as a community to as intimate as a marriage between two individuals. In several studies, a person who is single, divorced, or widowed is two to three times more likely to commit suicide than a person who is married (Wray, Colen, and Pescosolido 2011; Weerasinghe and Tepperman 1994; Stack and Wasserman 1993). Recent research has indicated that suicide rates might change based on a change in relationship status rather than the type of relationship itself. One study discovered that 10.7 percent of suicide victims had a change in marital status within the previous five years compared to only 5.6 percent for suicide victims who remained static in their relationship status (Roškar et al. 2011).

Within the last several decades, public pressure led researchers to identify a growing trend of suicidality among individuals in the lesbian, gay, bisexual, and transgender (LGBT) community. This group was mostly ignored by suicide researchers for decades despite reports of elevated risk (Clements-Nolle et al. 2001), but after the Obergefell v. Hodges decision by the Supreme Court in 2015 granting homosexual marriage under the law, the LGBT lobby has significantly influenced legislators to provide more funding and attention to suicide research (Roberts 2018). Some claim that LGBT individuals are several times more likely to commit suicide than the general population (Mathy et al. 2009; Strohm et al. 2009), but other researchers believe the actual discrepancy in suicide rates is nonexistent after other factors are included in the analysis (Shaffer et al. 1995; Renaud et al. 2010). Researchers on both sides agree, however, that assessing a suicide victim's sexual orientation is difficult to accomplish accurately, which likely results in significant measurement error (King et al. 2008). The true effect of belonging to the LGBT community on suicidality is not clear, but the public divide over support for this issue is likely highly correlated with attitudes toward suicide according to religious identification.

All of the above measures of suicide have extensive research to back them, but we believe that including a specific understanding of religious indicators will increase the validity of each of the aforementioned factors and account for significant omitted variable bias.

Religion

Given the comprehensive body of research pertaining to suicide since Durkheim first presented his work *Le Suicide*, the research community's neglect of religion as a

factor is concerning. Indeed, the study of religion in American political science has been the subject of often purposeful neglect (Swierenga 1990). Some even say that "[religion] is beyond the realm of social science" (Wald and Smidt 1993). Perhaps this neglect is due to the complexity of religious measurement or the potential bias of social scientists against theology (Rothman, Licther, and Nevitte 2005). *The American Political Science Review*, the most influential political science journal in the twentieth century, averaged only one substantive article concerning religion every four-plus years (Wald and Wilcox 2006). This inattentiveness of the social sciences toward religion until the last several decades had a direct effect on the lack of substantial research on the relationship between religious affiliation and suicide. While researchers developed theories of how gender, race, and economics affect suicide, the study of religion and suicide endured nearly a century of academic neglect.

Researchers who understood the importance of religion on social and political science needed an objective, operational definition of religious tradition. The first widely accepted attempt at a classification index was established in 1990 by T.W. Smith and was called the FUND scheme (Smith 1990). This method had several shortcomings, however, because FUND separated the population into divisions based solely on their ethno-religious background and varying levels of fundamentalism but did not account for changing trends in religious identification. Political scientists began to understand that religion is better defined in terms of "belonging, behavior, and belief" (Green 2010; Wald, Owen, and Hill 1990). Researchers developed a more inclusive religious classification system called RELTRAD—short for religion and traditionalism, which combines the modern ethno-religious identification of American religious practice and traditionalism. This new method abandoned the fundamentalism measurement that formed the core of the FUND index (Steensland et al. 2000). By updating the religious classification of American religious identity to six major categories—namely, Catholicism, Historically Black Protestantism, Evangelical Protestantism, Mainline Protestantism, Judaism, and "others"—and by adding weekly attendance and biblical literalism, the predictive power of RELTRAD exceeds that of the outdated FUND measure (Steensland et al. 2000).

We accept the findings of Steensland et al. and include the six religious categories they identified in RELTRAD. Additionally, we include a measure of church attendance in combination with the person's understanding of biblical literalism to strengthen the results of our analysis. Church attendance is one of the most widely available and categorical measures of religious behavior (Caplow 1998). Perception of biblical literalness is a very strong measure of religious belief that provides insight on the traditionalism of a person's religious ideology, even when excluding religious identification (Friesen and Wagner 2012).

We deviate from RELTRAD in one important way, however, in that we isolate The Church of Jesus Christ of Latter-day Saints (Latter-day Saints) from the "other" category, while still including a category for the remainder of the "others." For

decades, researchers have acknowledged the difficulty of predicting the "other" category because of the diversity of religions included in it (Woodberry et al. 2012; Sullins 2004; Vandermeer 1981; Brown 1964). Muslims, Latter-day Saints, Jehovah's Witnesses, Hindus, and Unitarians are grouped together in the "others," and they tend to have more differences than commonalities. Because the Latter-day-Saint population was recently measured at 1.6 percent of the U.S. population (in contrast, the Jewish population with its own category is at 1.9 percent), Latter-day Saints are by far the largest denomination within the "others" (Pew Research Center 2015a). Latter-day Saints comprise a group nearly double the size of the Muslim population (0.9 percent), which is the next largest religious identification in the "other" category in the U.S. (Pew 2015a). Including Latter-day Saints as their own subgroup allows us to account for nearly half of the "other" category. The remainder of the "other" category will be separated out from Latter-day Saints in our tests. Additionally, both authors of this paper identify as members of The Church of Jesus Christ of Latter-day Saints, which influenced our decision to isolate that church from the "other" category.

The last category of religious identification we use comprises those who identify as atheist, agnostic, or nonreligious (religious "nones") and forms the baseline of our research. We recognize the RELTRAD classification system is not perfect and acknowledge the criticisms of other researchers (Shelton 2018; Hackett 2008), but given the robust results RELTRAD provides, we join with the majority of political scientists and consider RELTRAD the gold standard for measuring religious identity (Shelton 2018).

Understanding the relationship between the major religious divisions identified by RELTRAD and what they teach about suicide is central to our theory and causal mechanisms. Christianity has a complicated history with suicide, and the Bible does not give a clear understanding of the morality of suicide; the initial ambiguity was formalized early in Christendom following the Nicaean Creed of AD 325 (Gearing and Lizardi 2009). Early Christian theologians like Saint Augustine (AD 354–430) and later Thomas Aquinas (AD 1225–1274) extensively addressed the eternal consequences of ending one's own life and condemned the practice (Phipps 1985). The Protestant Reformation of the sixteenth century brought new, diverse interpretations of the eternal consequences of suicide that continue through to Protestant denominations today (Gearing and Lizardi 2009). Judaism, like Christianity, has a long history of teachings on suicide, which contributed to the early Augustinian understanding of the subject (Blacker 1994; Dorff 1998). We expect that the teachings of the major religious traditions will follow the predictions of Emile Durkheim and have substantial and statistically significant effects on both attitudes toward suicide and the total rate of suicide. We will outline each of the major religious traditions in our study and provide theoretical framework for the hypothesized relationship each religious distinction might have concerning attitudes towards suicide.

Catholicism

Catholicism maintains the same doctrinal position on suicide as was established by Augustine and Aquinas over a thousand years ago. Similar to their understanding

of abortion, Catholics view life as a gift given directly from God and that knowingly and willingly violating this gift is a mortal sin—a sin by which salvation is forfeit and the eternal fate of the soul is inescapable damnation. From their youth, devout Catholics go through an education process called the Catechism. The Catechism teaches this about the sanctity of life: "Everyone is responsible for his life before God who has given it to him, . . . we are stewards, not owners, of the life God has entrusted to us. It is not ours to dispose of" (Catechism of the Catholic Church 2280). Catholicism teaches that suicide is a violation of the fifth commandment, "Thou shalt not kill," and for centuries those who committed suicide were denied Catholic funeral services and burial in Catholic church cemeteries next to their families (Alessi 2014). The Catholic Church believes that in order to enter heaven, one must confess their sins before they die (Gearing and Lizardi 2009). Suicide does not allow a person to confess the sin of suicide, therefore, the suicidal are not granted the rights to enter heaven (Stark 1983). Although the Catholic Church has attempted to soften the public image of their suicide doctrine, Catholicism stays true to its foundational disapproval of suicide (McKibben 2018). Catholicism integrates its doctrine very well into its practitioners, but many Catholics attend services very sparsely, meaning regulation of those doctrines is likely to be weaker. With this in mind, we expect faithful Catholics to have a deep-seated disapproving attitude toward suicide, which should lead to lower rates of suicide than nonreligious individuals, which may vary depending on the level of activity within the church.

Black Protestantism

Black Protestants are perhaps the most cohesive and homogeneous group within the RELTRAD classification system, and their attitude toward suicide is no different. Black Protestantism is theologically split between aspects of the Evangelical and Mainline branches of Protestantism and tends to focus more deeply on the importance of freedom and the quest for justice than the other major denominations (Steensland et al. 2000; Lincoln and Mamiya 1990; Roof and McKinney 1987). While Black Protestants tend to lean more liberal on most economic topics like poverty and wealth redistribution, they are significantly conservative on social issues and the value of the nuclear family (Steensland et al. 2000). Researchers indicate that Black Protestants are more likely to participate in church activities and the church community. As Durkheim emphasized, this type of sociality serves as a deterrent to suicidality (Pescosolido and Georgianna 1989). The National Baptist Convention, the largest Black Protestant organization, does not have a specific stance on suicide or physician-assisted suicide. The closest approximation to a specific policy on suicide is "the length of one's life is the providence of God, and you let it take its course" (Pew Research Center 2013). We expect that the emphasis on communitarianism within Black Protestantism will mean that regulation of doctrine should be quite strong, even though integration of specific anti-suicide doctrine is not particularly clear. We expect that Black Protestant practitioners will have a more negative attitude toward suicide than nonreligious individuals.

Evangelical Protestantism

Evangelical Protestants for the last century have formed the largest categorization of religious identity in the U.S., but recent reports may indicate that nonreligious identifiers have grown slightly larger (Shermer 2018). Despite their large numbers and the multiplicity of denominations, Evangelicals are surprisingly unified in doctrine (Steensland et al. 2000; Green 2010). The four major tenets of Evangelical Protestantism are 1) salvation through Christ alone, 2) salvation is individual, 3) believers are responsible to evangelize, and 4) the Bible is the uncontested Word of God (Woodberry et al. 2012). The largest governing body within evangelicals, the National Association of Evangelicals, does not have any information or teachings on suicide. The only official policy concerning end-of-life issues pertains to elder care, where they teach that life should be honored from "womb to tomb." In cases where withholding life support will end the life of a patient, it is acceptable for family members of the patient to stop treatment (National Association of Evangelicals 2014). Although suicide is not considered a moral sin among Evangelical Protestants as it is for Catholics, the deep integration of their beliefs should cause their suicide rates to be lower. In addition, their respect and emphasis on traditional family values and community involvement lead us to believe that Evangelical Protestants' internal regulation of doctrines should be strong, and their opinion toward suicide will be similar to Black Protestants and Catholics.

Mainline Protestantism

Mainline Protestantism has adapted to modern social norms more than any of the other major religious categorizations in RELTRAD. Historically, it has been the most accepting of social justice and secular ideations into its doctrine. Unlike Catholicism, Black Protestantism, or Evangelical Protestantism, Mainline Protestant denominations do not share a strong doctrinal core or standard of faith to which all denominations adhere (Hacket and Lindsay 2008). Instead, Mainline Protestants on average are ambivalent toward the absolute authority of the Bible and attend church at a much lower rate than the previously mentioned faiths (Woodberry et al. 2012; Green 2010). The largest Mainline denomination, the United Methodist Church, stands as a direct contrast to the Catholic Church on suicide. Their web site declares, "A Christian perspective on suicide begins with an affirmation of faith that nothing, including suicide, separates us from the love of God" (United Methodist Church 2016). Mainline Protestantism's abstention from condemning suicide in doctrine, in addition to the lack of a strong communitarian tradition connected to congregational worship, leads us to predict that Mainline Protestantism will correlate with preventing suicidality at a lower rate than the other major religious identifications.

Judaism

The Jewish position on suicide has a long, deep history, which extends to the first passages of their holy scripture, the Torah. Comparable to the Old Testament in the Christian Bible, the Torah states "And surely your blood of your lives, will I require" (Genesis 9:5). Some of the first Jewish scholars like Rabbi Solomon ben Isaac (1140–1105)

used this passage to teach that those who take their own life are sinning and are responsible to God (Ratzabi 2017). Jews who commit suicide are also not allowed to be buried in Jewish cemeteries or receive burial rights, similar in practice to Catholicism; Orthodox Jews in modernity maintain this hardline view (Rabbi Meredith Cahn 2013). However, contemporary Judaism is deeply divided between Orthodox and Reform Judaism, and the Jewish perception of suicide is different for each sect. Reform Judaism does not focus on suicide as a sin but rather as a tragic side effect of mental illness (Rabbi Meredith Cahn 2013). However, suicide rates among Orthodox Jews are nearly twice as low as their Reform counterparts. Researchers at Tel Aviv University have established a significant link between those practicing Judaism and lowered rates of suicide, showing that Jewish teens who practice their faith are 45 percent less likely to commit suicide (Shoval and Amit 2014). Because Judaism's doctrine about suicide is split between the two extremes of orthodoxy and reformism, including religious behavior and belief is essential to differentiating the effect of Jewish faith on suicide attitudes (Steensland et al. 2000). Because the Jewish community is highly cohesive, and Jewish doctrine prohibits suicide, we expect the Jewish integration and regulation of their beliefs to be strong. We expect the attitude toward suicide among those who are active in their faith to be significantly lower than nonreligious individuals.

The Church of Jesus Christ of Latter-day Saints (Latter-day Saints)

The last and smallest division we will include in our study is members of The Church of Jesus Christ of Latter-day Saints. As previously stated, we choose to single out this denomination from the "other" category in the RELTRAD index, because they represent the largest plurality of religious "others," and quantitatively they are comparable to American Judaism in number.

The central leadership of the Church teaches its members to refrain from judging the actions of others and that the ultimate judgement for a person's actions belongs solely with God. Within the governing handbook of the Church, the following statement expresses the Church's official stance: "It is wrong to take a life, including one's own. However, a person who commits suicide may not be responsible for his or her acts. Only God can judge such a matter" (The Church of Jesus Christ of Latter-day Saints 2019). M. Russell Ballard, a member of the second-highest governing body of the Church known as the Quorum of the Twelve Apostles, said, "It is obvious that we do not know all the circumstances surrounding suicide. . . . Only the Lord knows all the details and it is He who will judge . . ." (1987). Members of The Church of Jesus Christ of Latter-day Saints are taught that life continues for all after death, and that people will have the chance to correct shortcomings after they leave this world (Gospel Principles 2011). Although suicide is clearly taught to be a sin, Latter-day-Saint theology takes a more merciful tone when talking about the culpability of suicide victims in comparison with the other religious denominations in RELTRAD.

Because Latter-day Saints are taught not to judge suicide victims, attitudes toward suicide are likely to be more forgiving as well. The unity of belief and doctrine within the

Latter-day Saint faith is remarkably consistent throughout its worldwide congregations, and Latter-day Saints are well-known to be supportive of one another in times of crisis (Alder 2018). Additionally, as of 2014, 55 percent of the population of Utah identified as members of The Church of Jesus Christ of Latter-day Saints, which might complicate the correlation of religion and abnormally high suicide rates within that state (Pew 2015a). It is unclear if religion contributes to the elevated rate or if other factors such as altitude influence it as well, but this state-specific abnormality might affect results concerning the Latter-day-Saint population. Although Latter-day Saints are taught that suicide is a sin, a mixture of the positive effects of their strong communitarian network and the negative effects of Latter-day-Saint cultural forgiveness of suicidality with Utah's elevated suicide rate lead us to have an unclear expectation of the "Latter-day-Saint effect" on integration and regulation.

Nonreligious/Atheist

The final grouping of religious identity we include in our study is perhaps the hardest to categorize but the most important for understanding the relationship between religious identifiers and the increasing rate of suicide in the United States. These nonreligious individuals, or religious "nones" as they are commonly called, have been growing in proportion to the religious population of the U.S. at a high rate (Pew Research Center 2009; Pew Research Center 2015b). The secular perspective on suicide is founded on Enlightenment thinkers like Immanuel Kant (1724–1804), who said suicide is wrong, because "an agent who takes his own life acts in violation of the moral law" (Brassington 2006). Ludwig Wittgenstein (1889–1951) spent much of his life theorizing on the morality of suicide and finally concluded that suicide is "neither good nor evil" (1917). Indeed, the secular position on suicide has been characterized as "an undeniable force in the trend toward the neutral or even positive attitude toward suicide" (Hecht 2013).

Vibrant debate among researchers surrounds what motivates a person to identify as nonreligious instead of "other" or one of the major religious denominations (Steensland et al. 2000; Woodberry et al. 2012). The simple assumption is that religious nones are simply atheists or agnostics, but research shows that "nones" include those who are lapsed, unaffiliated, and "spiritual but not religious" (Whitley 2018). Interestingly, studies indicate that up to 49 percent of religious "nones" believe in God but feel ostracized from the religion of their youth (Alper 2018; Shermer 2018). Indeed, this very alienation from the guiding influence of religion is what sets the impact of religious "nones" apart from people who leave any other social group. Durkheim theorized that one of the primary functions of religion is a sense of community, and researchers have linked a sense of belonging to religious community and mental distress as inversely related (Ross 1990). Many religious "nones" experience more than an alienation from those communities; they feel an overt adversarial relationship with religion (Baker and Smith 2009). In opposition to the negative relationships we predict with religious identification and attitudes toward suicide, we expect the nonreligious population to have a much more accepting view toward suicide than the religious population.

Each of these religious traditions is unique in its doctrine toward suicide, yet all offer similar reasons for us to believe that members of those religious traditions should have less favorable opinions toward suicide than religious "nones." In their own way, the major religious traditions of the U.S. help to mitigate the theorized underlying causes of suicide: isolation, abandonment, and hopelessness. Returning to Durkheim's theory, a lack of integration and regulation in a person's life leaves a void, which is often filled with suicidal nihilism. Religion provides regulation by creating the perception of eternal sanctions for inappropriate actions. Religion also acts as a uniquely qualified support network, influencing a person's life by providing friendship and interdependency in a way that no other public or private institution can fulfil (Cheng et al. 2000).

Our theory expands on the theoretical foundation built by Durkheim and reintroduces religiosity as a valuable indicator in suicidality using the most modern and robust religious index available. The effect of religious belief, religious behavior, and religious belonging on suicide is a strong yet neglected indicator of a person's likelihood to commit suicide; our analysis aims at proving the existence of significant, omitted variable bias in existing research. Our addition to the existing body of suicide research will open the understanding of the causal conditions of suicide, with the intent of influencing public policy and improving our ability to help those who desperately need support. Based on the preexisting research and the expectations developed through careful study of RELTRAD, we will empirically test two hypotheses that align with our theory.

Hypothesis One

> *Religious individuals will have lower levels of acceptance concerning the morality of suicide based on their religious belonging, belief, and behavior compared to nonreligious individuals.*

Religion serves as a strong indicator of a person's opinion regarding the morality of suicide. If we accept Hypothesis One, then it serves as evidence that religion uniquely impacts a person's perception of suicide and is responsible for omitted variable bias. By extension, logic indicates that this difference in attitude would directly affect an individual's likelihood of committing suicide. Thus, we formulate Hypothesis Two.

Hypothesis Two

> *People who demonstrate higher levels of religious behaviors, beliefs, and belonging are less likely to commit suicide.*

Unfortunately, it is impossible to accurately measure religious indicators of an individual who has committed suicide. To estimate the effect of religion on an individual level, one would have to construct a longitudinal data set with all the appropriate questions spanning several decades. Because this information does not currently exist, we attempt to indirectly measure the effect of religion on suicide by using state-level data. We offer a Revised Hypothesis Two to match the available data.

Revised Hypothesis Two

> *States with higher levels of religious behaviors, beliefs, and belonging as measured by RELTRAD will have lower suicide rates.*

Hypothesis Three

> *We theorize that religions will have different effects on the support of suicide and suicide rates. Based on each religion's teaching and beliefs, we give our hypothesis starting from the least supportive to the most supportive.*

1. Catholic
2. Jewish
3. Black Protestant
4. Evangelical Protestant
5. Mainline Protestant
6. Nonreligious

> We believe this pattern will hold for reducing suicide rates.

Hypothesis Four

> *We hypothesize that people who have more literal beliefs in scripture will be the least supportive of suicide, while those who disbelieve scripture will be the most supportive of suicide. We also theorize that as people participate more in their religion, they will be less supportive of suicide. These attitudes should be reflected in lowered suicide rates.*

Data

To test our hypotheses, we created two separate datasets to address the different levels of analysis in our two hypotheses. The first dataset uses individual-level data that has common measures of religion and detailed questions about attitudes toward suicide. We refer to this individual-level data as Dataset One and will use it to test Hypothesis One. Data to test Hypothesis Two was understandably more difficult to collect. Despite the proliferation of data in the modern era of the Internet, significant limitations exist in obtaining appropriate data for Hypothesis Two. First, one cannot survey those who successfully commit suicide. If it were somehow possible to obtain the necessary data through a close relationship, there is a serious risk of obtaining inaccurate data and having the results subject to measurement error. Also, a survey of individuals who have successfully committed suicide might introduce selection bias that would lead to inaccurate results. A longitudinal study might solve some of these problems if it tracked important variables in a random sampling of individuals from birth to death, but a study of this magnitude would be difficult and expensive, making this an unrealistic approach. Rather than use this ideal data, we create a dataset using state-level indicators and refer to it as Dataset Two.

Dataset One

The first step to test our two-part theory is to verify the idea that religion has a significant effect on an individual's support or opinion of suicide. The General Social Survey (GSS) perfectly fits this task, because it contains both measures of religious belonging, belief, and behavior and questions about the morality of suicide. The survey also includes many demographic questions that the broad body of previous research has identified as key indicators of suicidality. In order to estimate smaller religions like Judaism and The Church of Jesus Christ of Latter-day Saints, we pooled together data from 1990 to 2016 (General Social Survey 2017).

After pooling the data, we used a simple OLS regression with robust standard errors. Our general model appears as follows: $Suicide\ Support\ Score=(Religious\ Belonging \times Religious\ Belief)+Religious\ Behavior+Controls+\varepsilon$

Below we describe the dependent variable, the key independent variables, and the control variables.

Dependent Variable: Suicide Support Index

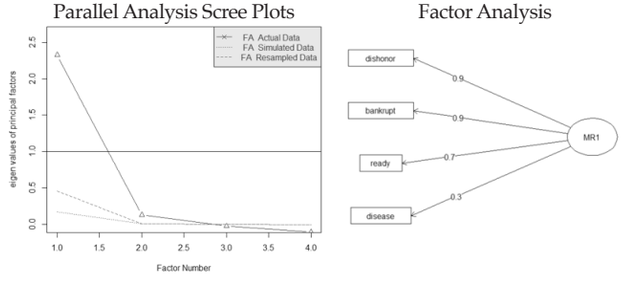
To measure support for suicide, we created a variable called the "Suicide Support Index" by combining a series of questions about suicide given in the GSS. The questions are as follows:

"Yes or No, do you support suicide when . . ."

1. "the person has an incurable disease?"
2. "the person has gone bankrupt?"
3. "the person has dishonored their family?"
4. "the person is tired of living and ready to die?" (General Social Survey 2017)

To find the best combination of questions, we performed a factor analysis and a Cronbach's Alpha test. The scree plot in figure 1 shows strong evidence of at least one underlying factor and some evidence that there are two factors. In the factor analysis that assumes there is one underlying factor, "disease" was the only question that did not load well onto the factor. When testing for two underlying factors, "dishonor" and "bankrupt" loaded onto one factor with high eigen values; however, "ready" and "disease" loaded onto the other factor with much weaker eigen values.

Figure 1. Parallel Analysis Scree Plot and Factor Analysis Plot



The Cronbach's Alpha test revealed a very similar result with an alpha of 0.75 when "disease" is included and 0.88 when "disease" is excluded. Based on these analyses, we chose to leave out the question on "disease" from the Suicide Support Index in order to isolate the effect of religious doctrine on attitudes toward suicide. Using the remaining questions, we added all three responses together and coded a yes as 1 and a no as 0. Finally, we divided the sum by three to create an index that ranges from 0 to 1, with 0 being no support and 1 being full support. We tested other options for the Suicide Support Index in the appendix and found that the OLS results are only slightly different using different indexes (appendix A table 2 and appendix B figure 6).

Independent Variables: Religious Tradition, Religiosity, Party, and Demographics

To measure religion, we modified the Stetzer and Burge (2016) code to sort individuals into RELTRAD categories. RELTRAD was used as our religious belonging dimension. We further grouped the GSS respondents into three religious belief categories: those who believe scriptures are fables, those who believe scriptures are inspired, and those who believe scriptures are literal. Finally, we used self-reported church attendance to measure religious behavior.

To validate our claim that religion needs much more attention in suicide research, we included common factors that have been shown to be significant predictors of suicide: work status, marital status, gender, education, party affiliation, ideology, age, and views on homosexuality. If including all these variables does not cause the religion variables to lose significance, then we can conclude that our theory about religious teachings is reasonable. If we then take the religion variables out and the effects of the control variable change, it will be evidence in support of our claim that current studies on suicide suffer from omitted variable bias due to the exclusion of religion.

Results of Hypothesis One: Attitudes

Table 1 in appendix A shows the results of the regression analysis. Religion is both a statistically and substantively significant predictor of individual attitudes toward suicide. Regression (4) in table 1 shows that religious belonging, belief, and behaving all lower support for suicide even after including all of the control variables. Figure 2 visually demonstrates the variation between religious traditions by plotting predicted support for suicide. As we theorized, individuals of every religious denomination scored lower on average in their support of suicide than those who identify as nonreligious (predicted level of support: .15), though not all predictions are statistically different. As we predicted in our theory, those who identify as Catholic had the lowest support for suicide (.10). They are followed by Evangelicals (.12) and Black Protestants (.12), both of which have shared teachings that we predicted would lower suicide support. The Jewish category (.18) is higher than expected, but this may be because everyone in the Jewish category is not religious. Even when religious Jews are isolated, the division between Orthodox and Reform Jews likely causes the diminished magnitude of these results. Finally, Latter-day Saints (.13) and

Mainline Protestants (.14) rank the highest amongst Christian religions and have overlapping confidence intervals with nonreligious support for suicide. Thus, our Hypothesis Three is shown to be close to correct in figure 2.

Figure 2. Predicted Suicide Support by Religious Tradition

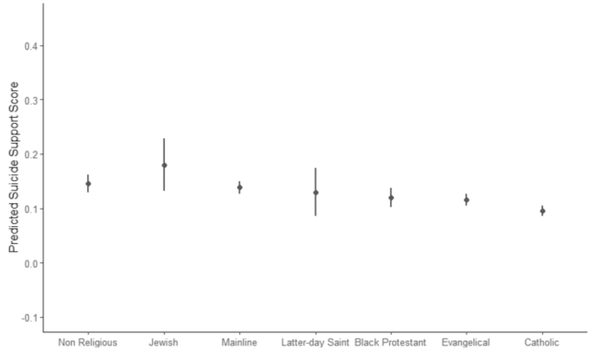
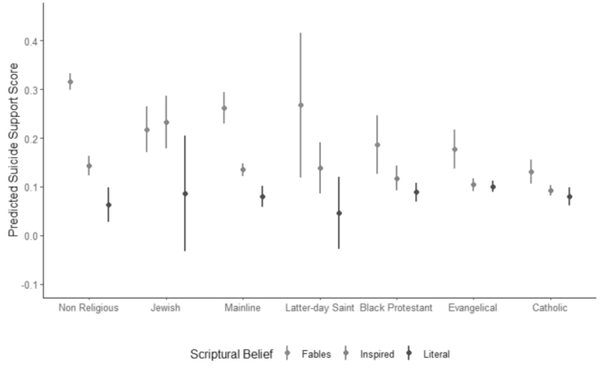


Figure 3 shows the importance of belief in correlation to belonging. People who interpret scripture literally as the word of God are consistently the least supportive of suicide within and across religious traditions. Those with an inspired interpretation of scripture are typically more supportive of suicide within their religious tradition than the literalists, and the level of support varies between tradition. The group most supportive of suicide is those who believe scriptures are books of fables. This finding confirms our theory encapsulated in Hypothesis Four and once more shows that Hypothesis Three approximated the results.

Figure 3. Predicted Suicide Support by Religious Tradition and Scriptural Belief



Again, with variation between religious traditions, we see a clear and strong effect of religious belonging that is occurring even among those who might not have a strong belief in their religion. Using attendance as our measure of religious behavior,

we can estimate that increasing attendance from never to once a week or more results in a 0.035 decrease of an individual's Suicide Support Index score, holding all other factors constant (p-value = .01). While statistically significant, this is a very small difference in support, considering the magnitude of the change in attendance. While attendance is not substantively significant, the fact that it is statistically significant may indicate that other behaviors will have larger substantive effects on support for suicide.

This evidence leads us to conclude that religious belonging, believing, and behavior are all significant factors in determining attitudes about suicide even after controlling for a wide variety of demographics. We assert that our theory remains mostly intact and include the possibility that religious behavior is not as important an indicator as we had previously thought. To support our claim of omitted variable bias, table 1 (appendix A) shows that removing religion inflates the statistical and substantive significance of typical suicide measures. Thus, we can safely conclude that omitted variable bias ought to be a major concern when leaving out religion in suicide studies.

With our theory surviving the first test, we move on to the next phase: testing whether religion affects state-level suicide rates. We suspect that because religion is associated with lower support of suicide, religious people will be less likely to commit suicide themselves because of the beliefs inculcated into their subconscious through their religions. With this theorized relationship in mind, we expect that suicide rates will be lower in states with higher levels of religious belonging, belief, and behavior.

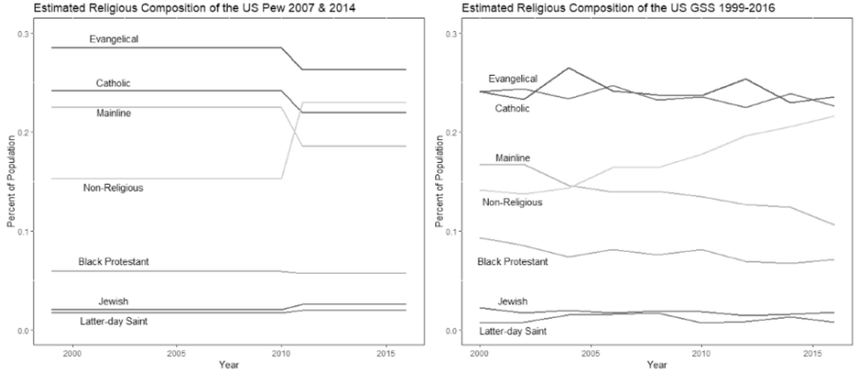
Dataset Two

Dataset Two was constructed to test Hypothesis Two, which says states with higher levels of religious behaviors, beliefs, and belonging will have lower suicide rates. Though Dataset Two includes state-level panel data and not individual-level data like Dataset One, we attempted to make the data as similar to Dataset One as possible. We did this by using variables most similar to the variables found in Dataset One, and instead of using individual-level information, we use the proportion or rate of people in a state that answered the survey the same way. For example, rather than indicating the religion of the respondent, Dataset Two uses the proportion of people in the state that identify as that religion.

Dataset Two merges data gathered from three sources: the Centers for Disease Control and Prevention (CDC), Bureau of Labor Statistics (BLS), and the Pew Religious Landscape Survey (PRLS). We first found the suicide rate for each state from 1999 to 2016 on the database maintained by the CDC (U.S. Department of Health and Human Services 2018c). Taking the CDC data, we merged it with unemployment data collected from the BLS for each state from 1999 to 2016 (U.S. Department of Labor 2019). Gathering yearly, statewide data for our religious variables proved to be very difficult. No databases exist with enough respondents from each state to make yearly estimates. Instead, we use the PRLS from 2007 and 2014 to estimate statewide, yearly religious composition (Pew Research Center 2015a). From 1999 to 2010, we use the numbers from the 2007 PRLS. From 2011 to 2016, we use the numbers

from the 2014 PRLS. While this is not a perfect measure of yearly religious composition, it will not result in overestimated coefficients. Rather, it will likely dampen any effects that would otherwise be found in the data by diminishing the correlation between religious rates and suicide rates. We further verify that the PRLS estimates are reasonable from 1999 to 2016 by comparing them to the estimates from the General Social Survey (GSS). The GSS does not have enough respondents in a single year to make state-level estimates, but it is nationally representative as demonstrated in figure 4.

Figure 4. Religious Composition of the United States from 1999 to 2016



By comparing the national estimates of the PRLS from 2007 and 2014 to the more frequently measured GSS national estimates, we clearly see the PRLS estimates of religious composition closely approximate the national estimates given by the GSS. Figure 4 demonstrates the relative stability of most religions in each survey and captures the increasing trend of nonreligious affiliation and the decrease in Mainline Protestants. Through this comparison, we have no reason to believe that state-level religious composition should be radically different than the national trends represented by both surveys. It is unlikely that any major trends are being overestimated in the 2007 and 2014 PRLS. We use the PRLS for all other variables in this panel dataset in the same way that we estimated religious composition.

We have chosen to use a fixed-effects model for our panel data, as suggested by Sven Wilson and Daniel Butler (2007). Other possible models we could have used are random effects, between effects, and random coefficients models. We chose to use a fixed-effects model with year and state fixed effects, because it has the fewest required assumptions, it is the most conservative of the models, and it produces results that are the easiest to interpret. However, because we have chosen the most conservative approach, any results we find in our analysis are likely to also be found in the other less-conservative models and the magnitude of our results might be underestimated. Our general model will look like this: *Suicide Rate= (Religious Behavior×Religious Belief)+Religious Behavior+Controls*

Below we give descriptions of the dependent variable, the main independent variables, and the control variables.

Dependent Variable: State Suicide Rate

The CDC gathers suicide information from reports generated by hospitals and other medical facilities that determine the cause of death. Although the cause of death is sometimes difficult to ascertain, we doubt a significant underreporting of suicides exists because of the standardized collection methods employed by the CDC. The CDC reports yearly suicide rates at both the state and national level. The rates are measured at 1 suicide per 100,000 people.

Independent Variables: Religious Tradition, Religiosity, Party, and Demographics

Using the Pew Religious Landscape Survey, we measured religious belonging by calculating the proportion of the state that identifies with each religious tradition. We used the same method to assign the proportion of three categories of religious believing: scriptures are fables, scriptures are inspired, and scriptures should be taken as literal. We calculated the average church attendance of the state's populace to indicate religious behaving. We included the seasonally adjusted yearly unemployment rate provided by the BLS. Finally, we employed the same methods we used in calculating the religious measures to estimate state-level proportions of the following controls: marital status, education, party affiliation, and views on homosexuality. We also included the average age and political ideology score of the state. Rather than using decimals to indicate proportions, we converted them into percentage points for ease of interpretation in the regression analysis.

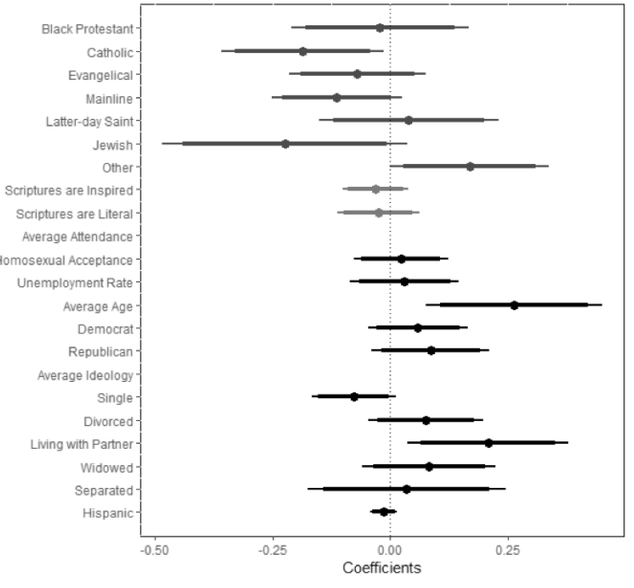
Results of Hypothesis Two: Suicide Rates

Table 2 in the appendix shows that religion has a significant effect on the suicide rates of the state. To more easily visualize these results, we provide figure 5, which shows that as the percent of Catholic and Jewish religious identification rises in a state, the suicide rate goes down. The model also estimates that suicide rates go down as Evangelical, Mainline, and Black Protestant identification increases in a state, though these are not statistically significant at the 95 percent confidence level. The only religion estimated to increase the suicide rate in our model is The Church of Jesus Christ of Latter-day Saints, though it is also not statistically significant.

The results of this model fit our theory and once again show that Hypothesis Three and Four, while not perfect, do reflect reality. Catholics and Jews both have policies and doctrinal stances that strongly oppose suicide; as indicated in figure 5, states with larger Catholic or Jewish populations have the lowest rates of suicide. Evangelical, Mainline, and Black Protestants all have similar estimated effects on state-wide suicide rates, and in theory, we did not expect them to have as strong an effect on suicide rates as the Catholic or Jewish faiths. The Church of Jesus Christ of Latter-day Saints might not show an effect because its doctrine, while condemning suicide as wrong, takes the most merciful tone about suicide of the major Christian

religions. Though the "other" category has a statistically significant positive coefficient, the odd conglomeration of religions in this group does not allow for a theory-driven explanation.

Figure 5. Regression Results from Table 3



With regard to these findings, we wish to be clear about the real-world implications of these results. Due to the structure of the data, the ecological fallacy must be considered. We do not know who is committing suicide more or less in the states. It is possible, for example, that as the proportion of Catholics increases in a state, the suicide rate goes down, because Catholics are less likely to commit suicide. However, it might also be that some societal or cultural change affects the entire populous of the state that we cannot estimate it is somehow correlated with large Catholic populations. Regardless of the underlying cause and interpretation of the models, religious belonging clearly affects suicide rates. Religious belief or behavior does not appear to affect suicide rates as we see in religious belonging, but it is important to note that the estimated coefficients are negative. Due to the small sample size and the conservative nature of fixed-effects modeling, it might be that there are stronger effects this model does not allow for with this specific data set. Again, we caution against drawing conclusions about individuals from this model, because of the ecological fallacy inherent in a state-level study.

To substantiate our claim of omitted variable bias, table 3 shows what happens when we remove religion. Variables that were once significant lose their significance. This is clear evidence of omitted variable bias when religion is neglected in studies

about suicide. Religion is complex and intertwined in almost all aspects of life. Including religion can bring clarity to other predictors of suicide such as race, gender, and marital status.

Conclusion

As we theorized, there is a significant relationship between religion and suicide. Religious belonging, believing, and behaving are important factors in measuring individuals' attitudes toward suicide and state-level suicide rates. Using modern measures of religion within the preexisting framework of suicide research shows the enormous potential for omitted variable bias if religion is left out. Regardless of the neglect suicide researchers have shown religion in the past, new research must discover the true impact that religion has on suicide. Even when we tested the data using the most conservative statistical methods available, religion always remained a significant predictor of suicide measures. Although it is unclear exactly how religious belonging, belief, and behavior affect attitudes toward suicide and suicide rates, the data indicates that a relationship exists even when controlling for the most commonly studied causes of suicide. We feel confident in concluding that religion is highly effective in decreasing support of suicide. However, while we believe religion might significantly decrease overall suicide rates, we understand that due to the ecological fallacy we cannot be sure how religion affects an individual's choice to take his or her own life.

Building on our study, additional data should be created for future studies. Given sufficient time and resources, we recommend a longitudinal study that tracks people before they attempt to commit suicide. This study would include all the classical measures of suicide as well as religious ones. We would go as far as to include information about the religion of the families of victims. Finally, we recommend using more advanced and specialized techniques for analyzing the data we already have. We have chosen the most conservative approach for its reliability, but there are better methods more suited to the compositional data we assembled. While our analysis is limited and constrained, it should mark an important turning point in the study of suicide. We call on policy makers and researchers alike to set aside past neglect and include religion in their future studies.

APPENDIX A

Regression Tables

Table 1. Individual Suicide Support by Religion
Dependent Variable: Suicide Support Index

	(1)	(2)	(3)	(4)	(5)
	Religious Measures				
Evangelical	-0.191***	-0.087***	-0.058***	-0.139***	
	(0.008)	(0.009)	(0.014)	(0.038)	
Mainline	-0.141***	-0.066***	-0.044***	-0.053	
	(0.009)	(0.009)	(0.015)	(0.038)	
Black Protestant	-0.198***	-0.093***	-0.060***	-0.129**	
	(0.009)	(0.010)	(0.016)	(0.056)	
Catholic	-0.175***	-0.100***	-0.087***	-0.184***	
	(0.008)	(0.009)	(0.014)	(0.027)	
Jewish	-0.003	0.020	-0.018	-0.098*	
	(0.022)	(0.023)	(0.038)	(0.051)	
Latter-day Saint	-0.177***	-0.084***	-0.054*	-0.048	
	(0.018)	(0.018)	(0.031)	(0.128)	
Other Religion	-0.082***	-0.032**	-0.012	-0.053	
	(0.014)	(0.014)	(0.023)	(0.043)	
Believe the Bible is Inspired		-0.122***	-0.108***	-0.172***	
		(0.008)	(0.013)	(0.024)	
Believe the Bible is Literal		-0.168***	-0.132***	-0.253***	
		(0.008)	(0.013)	(0.023)	
Attendance (scaled 0–1)		-0.040***	-0.032***	-0.035***	
		(0.006)	(0.010)	(0.010)	

Table 1 Continued			
Demographic Controls			
Homosexuality (1 wrong–4 not wrong)	0.027*** (0.003)	0.026*** (0.003)	0.043*** (0.003)
Democrat	0.002 (0.010)	0.001 (0.010)	-0.012 (0.009)
Republican	0.001 (0.010)	-0.0003 (0.010)	-0.014 (0.010)
Ideology (1–7)	-0.010*** (0.003)	-0.010*** (0.003)	-0.019*** (0.003)
Male	-0.024*** (0.007)	-0.024*** (0.007)	-0.045*** (0.007)
Part-Time Work	-0.005 (0.011)	-0.004 (0.011)	-0.006 (0.011)
Temporarily Not Working	0.015 (0.024)	0.017 (0.024)	0.008 (0.024)
Unemployed	0.008 (0.018)	0.009 (0.018)	0.006 (0.017)
Retired	0.008 (0.011)	0.007 (0.011)	0.014 (0.011)
Student	0.003 (0.022)	0.006 (0.021)	0.007 (0.022)
House Keeper	0.010 (0.010)	0.010 (0.010)	0.010 (0.010)
Other Work Situation	-0.006 (0.019)	-0.005 (0.019)	-0.012 (0.018)
Widowed	0.011 (0.011)	0.011 (0.011)	0.008 (0.011)
Divorced	0.024** (0.010)	0.026*** (0.010)	0.031*** (0.010)
Separated	-0.021 (0.016)	-0.019 (0.016)	-0.008 (0.017)
Single	0.011 (0.009)	0.012 (0.009)	0.021** (0.009)
Education (0–20)	0.011*** (0.001)	0.011*** (0.001)	0.013*** (0.001)
Age	-0.0001 (0.0003)	-0.0001 (0.0003)	-0.0001 (0.0003)

Table 1 Continued					
Interaction Terms					
Evangelical: Inspired				0.100** (0.042)	
Mainline: Inspired				0.045 (0.043)	
Black Protestant: Inspired				0.103* (0.061)	
Catholic: Inspired				0.134*** (0.032)	
Jewish: Inspired				0.187** (0.080)	
Latter-day Saint: Inspired				0.044 (0.135)	
Other: Inspired				0.087 (0.055)	
Evangelical: Literal				0.177*** (0.041)	
Mainline: Literal				0.071* (0.041)	
Black Protestant: Literal				0.155*** (0.058)	
Catholic: Literal				0.201*** (0.031)	
Jewish: Literal				0.121 (0.101)	
Latter-day Saint: Literal				0.032 (0.128)	
Other: Literal				0.102* (0.053)	
Constant	0.263*** (0.007)	0.325*** (0.009)	0.158*** (0.029)	0.202*** (0.031)	0.011 (0.026)
Observations	19,367	18,630	8,251	8,251	8,931
R2	0.057	0.091	0.129	0.135	0.090
Adjusted R2	0.057	0.091	0.126	0.131	0.088
Note: *p**p***p<0.01 Robust Standard Errors. Compared against Nonreligiously affiliated.					

Table 2. Individual Suicide Support by Religion Comparing Indices
Dependent Variable: Suicide Support Index

	(1) All 4	(2) No Disease	(3) Bankrupt & Dishonor	(4) Disease & Ready
Religious Measures				
Evangelical	-0.092*** (0.034)	-0.139*** (0.038)	-0.133*** (0.038)	-0.046 (0.037)
Mainline	-0.024 (0.032)	-0.053 (0.038)	-0.042 (0.038)	-0.012 (0.031)
Black Protestant	-0.126** (0.053)	-0.129** (0.056)	-0.112** (0.056)	-0.136** (0.059)
Catholic	-0.147*** (0.022)	-0.184*** (0.027)	-0.167*** (0.026)	-0.117*** (0.023)
Jewish	-0.060 (0.040)	-0.098* (0.051)	-0.098* (0.051)	-0.022 (0.035)
Latter-day Saint	0.008 (0.107)	-0.048 (0.128)	-0.106 (0.131)	0.129 (0.124)
Other Religion	-0.045 (0.036)	-0.053 (0.043)	-0.055 (0.043)	-0.029 (0.034)
Believe the Bible is Inspired	-0.142*** (0.020)	-0.172*** (0.024)	-0.162*** (0.024)	-0.110*** (0.020)
Believe the Bible is Literal	-0.257*** (0.022)	-0.253*** (0.023)	-0.236*** (0.022)	-0.267*** (0.031)
Attendance (scaled 0–1)	-0.095*** (0.010)	-0.035*** (0.010)	-0.022** (0.010)	-0.165*** (0.013)

Table 2 Continued

Demographic Controls				
Homosexuality (1 wrong–4 not wrong)	0.034*** 0.003)	0.026*** (0.003)	0.023*** (0.003)	0.046*** (0.003)
Democrat	0.006 (0.009)	0.001 (0.010)	0.002 (0.009)	0.008 (0.011)
Republican	0.009 (0.009)	-0.0003 (0.010)	0.004 (0.010)	0.012 (0.011)
Ideology (1–7)	-0.013*** (0.002)	-0.010*** (0.003)	-0.008*** (0.003)	-0.018*** (0.003)
Male	0.025*** (0.007)	0.024*** (0.007)	0.018** (0.007)	0.033*** (0.008)
Part-Time Work	-0.005 (0.010)	-0.004 (0.011)	-0.009 (0.011)	-0.002 (0.012)
Temporarily Not Working	0.005 (0.021)	0.017 (0.024)	0.013 (0.023)	0.002 (0.025)
Unemployed	0.001 (0.016)	0.009 (0.018)	-0.002 (0.017)	0.006 (0.019)
Retired	0.002 (0.010)	0.007 (0.011)	-0.0004 (0.011)	0.009 (0.013)
Student	0.002 (0.020)	0.006 (0.021)	-0.004 (0.021)	0.013 (0.022)
House Keeper	-0.003 (0.010)	0.010 (0.010)	0.007 (0.010)	-0.012 (0.012)
Other Work Situation	-0.004 (0.019)	-0.005 (0.019)	-0.016 (0.019)	0.010 (0.026)
Widowed	0.009 (0.011)	0.011 (0.011)	0.011 (0.010)	0.008 (0.014)
Divorced	0.026*** (0.009)	0.026*** (0.010)	0.022** (0.010)	0.030*** (0.011)
Separated	-0.005 (0.016)	-0.019 (0.016)	-0.013 (0.016)	0.005 (0.019)
Single	0.003 (0.009)	0.012 (0.009)	0.011 (0.009)	-0.004 (0.010)
Education (0–20)	0.011*** (0.001)	0.011*** (0.001)	0.010*** (0.001)	0.012*** (0.001)
Age	-0.0003 (0.0003)	-0.0001 (0.0003)	-0.0003 (0.0003)	-0.0003 (0.0003)

Table 2 Continued

Interaction Terms				
Evangelical: Inspired	0.060	0.100**	0.101**	0.011
	(0.037)	(0.042)	(0.042)	(0.041)
Mainline: Inspired	0.032	0.045	0.028	0.036
	(0.037)	(0.043)	(0.043)	(0.036)
Black Protestant: Inspired	0.088	0.103*	0.088	0.085
	(0.057)	(0.061)	(0.060)	(0.065)
Catholic: Inspired	0.099***	0.134***	0.123***	0.062**
	(0.027)	(0.032)	(0.032)	(0.029)
Jewish: Inspired	0.136**	0.187**	0.205***	0.062
	(0.065)	(0.080)	(0.079)	(0.057)
Latter-day Saint: Inspired	0.008	0.044	0.120	-0.117
	(0.115)	(0.135)	(0.139)	(0.132)
Other: Inspired	0.061	0.087	0.097*	0.011
	(0.048)	(0.055)	(0.055)	(0.047)
Evangelical: Literal	0.132***	0.177***	0.176***	0.079*
	(0.038)	(0.041)	(0.040)	(0.047)
Mainline: Literal	0.070*	0.071*	0.059	0.081*
	(0.038)	(0.041)	(0.041)	(0.045)
Black Protestant: Literal	0.155***	0.155***	0.137**	0.170**
	(0.056)	(0.058)	(0.057)	(0.067)
Catholic: Literal	0.179***	0.201***	0.194***	0.148***
	(0.030)	(0.031)	(0.030)	(0.039)
Jewish: Literal	0.101	0.121	0.144	0.055
	(0.094)	(0.101)	(0.100)	(0.102)
Latter-day Saint: Literal	-0.009	0.032	0.103	-0.133
	(0.110)	(0.128)	(0.132)	(0.134)
Other: Literal	0.111**	0.102*	0.103**	0.109*
	(0.050)	(0.053)	(0.052)	(0.061)
Constant	0.278***	0.155***	0.137***	0.418***
	(0.028)	(0.031)	(0.031)	(0.032)
Observations	8,060	8,251	8,365	8,119
R2	0.217	0.135	0.112	0.243
Adjusted R2	0.213	0.131	0.107	0.239

Note: *p**p***p<0.01
Robust Standard Errors. Compared against Nonreligiously affiliated.

Table 3. Suicide Rate by State Religious Composition
Dependent Variable: Suicide Rate (per 100,000)

	(1)	(2)	(3)	(4)	(5)
Religious Measures					
Black Protestant	-0.071	-0.070	-0.008	-0.022	
	(0.139)	(0.137)	(0.135)	(0.096)	
Catholic	-0.119**	-0.113	-0.106*	-0.186**	
	(0.052)	(0.073)	(0.064)	(0.088)	
Evangelical Protestant	-0.050	-0.045	-0.030	-0.070	
	(0.054)	(0.059)	(0.055)	(0.074)	
Mainline Protestant	-0.058	-0.042	-0.032	-0.114	
	(0.056)	(0.076)	(0.068)	(0.070)	
Latter-day Saint	-0.101	-0.079	-0.014	0.039	
	(0.090)	(0.090)	(0.086)	(0.097)	
Jewish	-0.272*	-0.282*	-0.238	-0.224*	
	(0.148)	(0.169)	(0.153)	(0.132)	
Other Religion	0.206***	0.205***	0.226***	0.168*	
	(0.079)	(0.079)	(0.080)	(0.086)	
Believe Bible is Inspired		-0.034	-0.046	-0.032	
		(0.044)	(0.042)	(0.036)	
Believe Bible is Literal		-0.025	-0.036	-0.026	
		(0.042)	(0.040)	(0.044)	
Average Attendance		2.774	1.018	-3.030	
		(6.895)	(6.784)	(7.768)	

Table 3 Continued

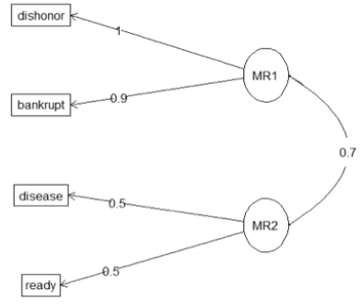
Demographic Controls					
Support Homosexuals		0.001 (0.059)	0.003 (0.054)	0.022 (0.051)	0.025 (0.049)
Unemployment Rate			0.012 (0.063)	0.030 (0.059)	-0.044 (0.073)
Average Age			0.173 (0.109)	0.262*** (0.096)	0.167 (0.111)
Democrat				0.059 (0.054)	-0.067 (0.060)
Republican				0.086 (0.064)	-0.039 (0.066)
Average Ideology				-2.633 (2.534)	-0.618 (2.038)
Single				-0.077* (0.046)	-0.097* (0.055)
Divorced				0.076 (0.062)	0.067 (0.068)
Partner				0.207** (0.087)	0.112 (0.083)
Widowed				0.082 (0.072)	-0.065 (0.058)
Separated				0.035 (0.108)	-0.022 (0.142)
Hispanic				-0.014 (0.015)	-0.024 (0.019)
State Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Arellano Clustered SE	Yes	Yes	Yes	No	No
Observations	900	900	900	900	900
R2	0.073	0.077	0.086	0.139	0.061
Adjusted R2	-0.009	-0.010	-0.002	0.046	-0.029

Note: *p**p***p<0.01
Independent Variables are percent composition of the state. Example, for (5) a 1 percentage point increase in Catholics estimates a decreased suicide rate of -.328.

APPENDIX B

Factor Analysis

Figure 6. Factor Analysis Plot



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The Fairer Sex? Understanding the Link between Gender and Corruption

Kayla Jackson

Introduction

In the social sciences, studies have revealed a significant correlation between female presence and the level of government corruption. Specifically, evidence reveals that an increase of female representatives in public office as well as an increase of women in the labor force significantly reduces government corruption (Swamy 2001; Hao, Change, and Sun 2018). On an individual level, experimental research has also discovered that women are less tolerant of corruption than men (Alatas 2007; Esaray and Chirillo 2013). Such findings have shifted the narrative in global development and governance as policies have arisen encouraging anti-corruption measures through the active recruitment of female leaders within the public realm.

While many studies have confirmed the relationship between women and reduced government corruption, it is unclear why gender representation has this effect. Studies finding that women are less likely to engage in corruption have largely based their arguments on personality traits and characteristics found more often in women, and such traits have often aligned with traditional gender stereotypes. First, an explanation of the relationship has assumed that women are more ethically minded and hold higher standards of honesty and morality. Placing women on a pedestal or deeming them as the "fairer sex" has long remained a tradition from long-held sexist thinking that women are inherently weaker. Second, when it comes to making decisions or engaging in calculated strategy, women are perceived to be more risk-averse than men (Barnes and Beaulieu 2017). Some claim this trait is an inherent feminine characteristic, while others hold that because of gender discrimination, harsher punishments for women translate into cautious behavior in the public sphere (Esarey and Chirillo 2013). Last, when making personal decisions, women are perceived to be more inclined to consider the

potential for improving the collective good. This ability to be more socially minded and less selfish is often categorized as a feminine attribute and trait, which translates into a public servant more concerned about achieving the collective good rather than engaging in corrupt practices that may advance them personally.

Alternatively, two studies conducted in African countries argue that the lower levels of corruption tolerance displayed in women have little to do with their exhibited personality traits and more to do with the opportunities to engage in corruption (Alhassan-Alolo 2017; Howson 2012). Less engagement among women can be better explained by women's exclusion and marginalization in public life. Such exclusion has resulted in barriers preventing women's access to the networks that engage in corruption.

While current literature highlights personality differences of gender as a means to explain findings on gender and corruption, little has been done to empirically test how much these personality traits actually mediate the relationship between gender and corruption. Although evidence has confirmed in Ghana and Senegal that opportunity plays a larger role in corruption tolerance levels than gendered characteristics, no research has looked beyond the continent of Africa to discover if such theories hold up all over the world. This paper seeks to determine if risk aversion and prosocial attitudes mediate the relationship between gender and reduced corruption and evaluates how corruption tolerance levels change among women depending on their opportunity to engage in corruption.

Upon completing a statistical analysis using survey data collected by the World Values Survey, I found that risk aversion and social mindedness mediate the relationship with gender corruption. While men exhibit slightly higher rates of tolerating corruption, upon interacting risk aversion and social mindedness with gender, I found the effect of gender alone disappears, and no difference in the risk aversion and prosocial attitudes on acceptance of corruption is found between men and women. I also found that opportunity influences corruption tolerance levels among women, as women employed within the government are more tolerant of corruption than women in the private sector. Both findings indicate that while relationships may exist between women and reduced government corruption, it may be inaccurate to claim that such a relationship exists because women hold certain traits that are inherent to their womanhood.

Literature Review

Studies show that while the overall female ratio of the population produces negligible results in reducing corruption, corruption is less severe when a larger percentage of parliamentary or legislative seats and senior positions in government bureaucracy are occupied by women (Swamy 2001; Hao, Change, and Sun 2018). More broadly, higher female ratios within the labor force are also significantly associated with a lower level of societal corruption (Hao, Change, and Sun 2018; Dollar, Fisman, and Gatti 2001).

On the individual level, studies confirm that women are less likely than men to condone and actively engage in corrupt practices. Several studies indicate that women are less likely to accept a bribe (Ionescu 2018; Torgler and Valev 2010; Esaray

and Chirillo 2013), men are more likely to extend and accept bribes, and one study indicates that men are more likely to extend a bribe to a woman over a man although the expectation of acceptance is low (Rivas 2013).

While research in corruption has come to accept the relationship between the two variables, many analyses have sought to understand the causality by examining previously omitted variables. Some argue that gender plays a secondary role to government structure. Specifically, empirical evidence indicates that women are less prone to corruption in democratic institutions but more prone within autocratic societies (Esaray and Chirillo 2013). One study argues that liberal democracy takes precedence over gender in determining corruption levels, as the liberal democratic environment encourages a level of transparency that prioritizes better governance and gender equality (Sun 2003). In countries where social institutions deprive women of their freedom to participate in social life, corruption is higher (Ziegler 2011; Caballero 2012). These findings imply that highlighting different traits displayed in women that are not displayed in men may not sufficiently explain the relationship between gender and corruption. Gender alone may not be sufficient enough to explain reduced government corruption.

In determining theories to explain the phenomena between gender and corruption, many studies have relied upon colloquial stereotypes directed toward women. Three themes within conventional wisdom have emerged in the current literature surrounding gender and corruption: ethical standards and morality, risk aversion, and an inclination toward socially minded actions.

Ethical Standards and Morality

Many studies in current literature rely upon the assumption that women maintain a higher set of morals and values than do men. There is a sense of expectation that when integrated into public life, women will be "more likely to behave with integrity . . . which will ultimately carry an efficient pay off of reducing public sector corruption" (Goetz 2017, 88). The development of higher morals has either been attributed as "inherent in their femininity" (Alhassan-Alolo, 228) or shaped by the socialization of certain cultural expectations and norms. These expectations have influenced the rise of certain policies across the world. For example, "on the basis of women's presumed higher ethical standards, most African governments are currently being encouraged, by their development partners, to integrate women into the public sector as a potential anti-corruption remedy" (Alhassan-Alolo 2017, 228). Regardless of whether men and women are equally likely to engage in corruption or not, the perception that women are more ethical and less prone to engage in corrupt practices permeates society (Barnes and Beaulieu 2017).

Risk Aversion

Another explanation given to understand the relationship between gender and corruption falls upon the presumption that women are more cautious in their public dealings. Conventional wisdom claims that when men and women are faced with identical risky situations, women will be less likely to choose the risky behavior than men. Women are also perceived to be more risk averse, which has led people to believe

that women are best equipped to combat corruption (Barnes and Beaulieu 2019). Because of these findings, it has been advised that "women politicians may be well-served by emphasizing the priority they place on careful, calculated, and cautious decisions" (Barnes and Beaulieu 2019, 159).

In contrast to the arguments claiming a genetic predisposition, some argue that women are prone to risk aversion because they are marginalized and deemed outsiders in the public arena. For women, "it is riskier for them to flout formal or informal rules of political culture because transgressions are more likely to invite retaliation. Thus, if a political culture discourages corruption, then women will avoid corrupt activities more and profess greater aversion to it (compared to men) because they anticipate suffering more severe consequences than their male counterparts" (Esaray and Chirillo 2013, 365). Research indicates that regardless of the risk-aversion levels found in men and women, women will rationally choose to engage in corruption less frequently, because the cost of getting caught is higher among women than among men (Zemoitel-Piotrowska, Marganski, and Piotrowski 2017).

Socially Minded

Similar to the expectation of higher moral standards, women are expected to consider the collective good in decision-making and remain socially minded at a higher degree than men are. In an attempt to explain the relationship between descriptive representation and lower ratios of corruption, one study claimed that "women will be less likely to sacrifice the common good for personal (material) gain" (Dollar, Fisman, and Gatti 2001, 424). One study nicely summarized the attempts of government policies campaigning for increased female representation as "integrity experiments call[ing] upon women to use their gender as the intrinsic regulator of probity in public action" (Goetz 2011, 89). The pressure to elevate collective consciousness and produce higher quality governance is placed on women.

Alternative Causal Explanations of Gender and Corruption

Beyond the influence of formal institutions and dependence on widely accepted gender norms, several studies indicate that cultural context and political opportunity affects gendered responses of corruption. In survey data collected in Ghana, women failed to exhibit higher ethical standards than men when presented with hypothetical scenarios where engaging in corrupt practices provided opportunities to access certain advantageous networks (Alhassan-Alolo 2007). Similar results were found in a case study evaluating border activity in Senegal, only this time women manipulated feminine roles and stereotypes in successful attempts to illegally smuggle goods across country borders. These actions were women's desperate attempts to secure needed resources in providing for family members (Howson 2012). In these instances, decisions based in pragmatism and the necessity of survival were prioritized over ethical ones. The implications of these studies suggest that opportunity, rather than gender, is the stronger determinant in tolerating corruption.

Theory and Hypothesis

While the current literature relies upon conventional gendered assumptions, no additional research has been performed to empirically confirm that such presumptions are correct. In my research, I will attempt to provide an analysis that determines whether there are additional variables that moderate and, in turn, better explain the negative relationship between gender and corruption. Specifically, using the claims of previous literature, I will evaluate whether risk aversion and social mindedness mediate the relationship between gender and corruption.

Contrary to what has previously been accepted, I believe there is significant variation in personality traits and characteristics among gender. To say that all women are more ethically inclined or that all have similar levels of risk aversion seems overreaching. In fact, previous research indicated that while women in Australia were less tolerant of corruption, there were no gender differences with corruption found in India, Indonesia, and Singapore (Alatas 2009). Such results open the doors for greater consideration that levels of risk aversion and social mindedness found in women are not universal.

Second, I believe that when explicitly controlling for the level of risk aversion and social mindedness, gender will lose its significance in predicting corruption. The characteristics held by an individual, rather than one's gender, will have a stronger relationship with corruption tolerance.

Last, upon reviewing the alternative causal explanations between gender and corruption, I expect to find confirmation with the notion that men and women are just as likely to engage in and accept corruption when they have an equal opportunity to (Alhassan-Alolo 2007; Howson 2012). While previous research has found evidence in favor of the previous statements, only specific case studies completed in two countries have been utilized to confirm such claims. I seek to confirm these theories by using survey data of nationally representative samples collected across sixty countries.

In seeking to measure opportunity, I have decided to evaluate levels of corruption tolerance according to one's employment. Three types of industry will be examined: government and public institution, private sector, and private nonprofit organization. Consistent with the findings of previous research (Alhassan-Alolo 2017; Howson 2012), I theorize that government employees who are women will have higher levels of corruption tolerance than women in the private sector, since their access to engage in corruption will be greater. Because of greater access, I hypothesize that the gender gap will close for employees found in government employment, because the opportunity to engage in corruption will be great. The gender gap between men and women will remain in the private sector, because access to corrupt opportunities within the private sector is often limited to higher executives, positions that are held more often by men.

Research Design

In order to determine the underlying variables that mediate the relationship between gender and corruption, I analyzed survey data from the World Values Survey sample (Wave 6), containing cross-sectional data from 2010 to 2014. This dataset pro-

vided a nationally represented sample across sixty countries, dedicated to capturing a wide range of attitudes, values, and basic demographic information of more than 85,000 respondents. Survey questions with topics ranging from economic, political, and social values to basic information pertaining to education, employment, and skill level were encompassed within the data. I chose this dataset, because the survey best captured the attitudes of social mindedness, risk aversion, and corruption tolerance. Based on my limited resources, this was my best option. In the future, additional surveys may be created and distributed to more accurately capture these attitudes to my liking.

In determining the outcome in corruption levels, my research drew upon the survey question that asks an individual to assess how often it is acceptable to accept a bribe in the course of their duties on a scale of 1 (never justifiable) to 10 (always justifiable). The data collected from this question acted as my dependent variable.

The independent variables included gender and attitudinal measures for risk aversion, social mindedness, and opportunity to engage in corruption according to one's employment. For risk aversion, two survey questions were utilized. It was my hope that using data from two survey questions would fully capture an individual's tendency toward (or against) risk aversion. The first question asked the individual to evaluate whether living in secure surroundings is important to this person (scale of 1–5, 1 meaning very much like me, 5 meaning not at all like me). The second question dedicated to risk aversion asked the person to consider whether it is important to always behave properly and to avoid doing anything people would say is wrong (scale of 1–5, 1 meaning very much like me, 5 meaning not at all like me).

Individuals were also asked how important it is for this person to do something for the good of society (scale of 1–5, 1 meaning very much like me, 5 meaning not at all like me) and whether it is important to help people nearby and care for their well-being (scale of 1–5, 1 meaning very much like me, 5 meaning not at all like me). Again, two questions were used to ensure that the characteristic of social mindedness was accurately captured.

Third, I evaluated whether the opportunity to engage in corruption influences corruption tolerance by analyzing responses of the dependent variable by employment classification. Three categories of employment were included in the World Values Survey and were evaluated: government or public institution, private business or industry, and private nonprofit organizations.

In each data analysis, control variables were included to reduce omitted variable bias and the appearance of spurious relationships. These variables include age, employment, religiosity, country fixed effects, and skill level.

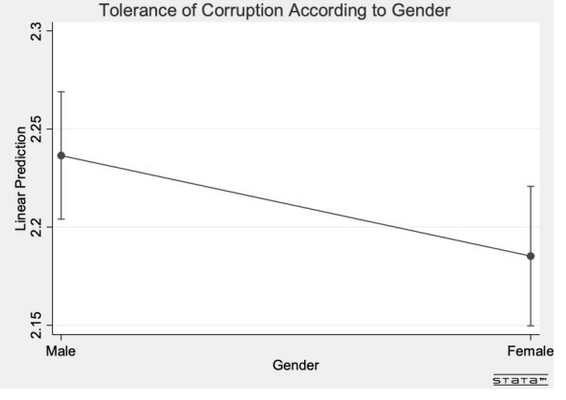
Results and Discussion

Relationship between Gender and Corruption Tolerance

Before engaging in my research design, I chose to examine my data and evaluate whether it aligned with previous findings of gender and corruption. My first regression analysis focused on confirming previous research, which found a significant link between gender and reduced government corruption. Previous studies illustrated that

women are less likely to tolerate corruption than men (Alatas et al. 2009; Torgler 2010; Rivas 2013; Ionescu 2018). This claim matched the evidence found within my own initial data analysis. From a sample size of 24,470 survey respondents, women were 0.051 points (on a ten-point scale) less likely to justify an individual's acceptance of bribes in the course of their duties (see figure 1). This difference is significant at the 95-percent level.

Figure 1. Corruption Tolerance According to Gender



First Measure of Risk Aversion

Next, I analyzed the link between risk aversion, gender, and corruption tolerance. The first survey question used to evaluate risk aversion asked survey participants whether it is important to the individual to avoid danger and live in secure surroundings. This was measured on a six-point scale; thus, higher values of this variable indicate that a person is more risk acceptant.

When evaluated individually, both men and women exhibited similar effects of risk aversion on their acceptance of corruption. Women and men who were more risk acceptant were more likely to accept corruption. Each one-point increase in risk acceptance among women resulted in a 0.111-point increase in finding bribes justifiable; among men, a one-point increase in risk acceptance resulted in a 0.130-point increase in finding bribes justifiable. Both measurements were significant at the 99-percent level. With each one-point increase toward risk acceptance, men displayed higher rates of accepting corruption (see table 1).

In order to determine the strength of gender and risk aversion on corruption, I then interacted the two variables in my following regression. This time, gender was not rendered as significant in the regression, along with the interaction of gender and risk aversion. Risk aversion did display significance (p-value < .001) with a one-point increase toward risk acceptance resulting in a 0.125 increase in corruption acceptance, an indication that risk aversion placed a stronger hold in determining an individual's propensity for or against corruption than gender by itself. The interaction terms were

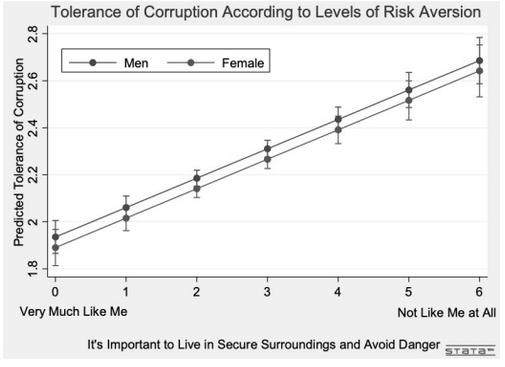
insignificant, indicating that men and women have statistically indistinguishable acceptance of corruption when they have the same levels of risk aversion.

Table 1. The Effect of Risk Aversion on Corruption Tolerance
Dependent Variable: Is it justifiable to accept bribes during the course of one's duties?

Variables	(1) Corruption Tolerance Among Men	(2) Corruption Tolerance Among Women	(3) Corruption Tolerance
Female			-0.0200 (0.0521)
Risk Aversion #1	0.130** (0.0153)	0.111** (0.0138)	0.125** (0.0132)
Interaction between Gender and Risk Aversion #1			-0.0117 (0.0190)
Log of Age	-0.176** (0.047)	-0.342** (.054)	-0.231** (0.035)
Education	-0.003 (0.008)	-0.052** (0.009)	-0.023** (0.006)
Religiosity	0.042** (0.008)	0.063** (0.009)	0.053** (0.006)
Employment: Gov't or Public Institution	0.049 (0.042)	0.205** (0.049)	0.111** (0.032)
Employment: Private Nonprofit	-0.064 (0.065)	0.109 (0.067)	0.043 (0.046)
Democracy	0.203** (0.048)	-0.357** (0.519)	-0.270** (0.035)
Constant	3.472** (0.277)	2.736** (0.216)	2.983** (0.169)
Observations	11,029	13,158	24,187
R-squared	0.243	0.225	0.231

Notes: Dependent Variable is survey responses on the justifiability of accepting a bribe on a 10-point scale (1=Never, 10=Always). The independent variable risk aversion #1 measures survey responses to whether it is important to live in secure surroundings and avoid danger on a 6-point scale (1=Very Much like Me, 6= Not at All Like Me). Control variables also included in each regression: log of age, education, religiosity, country, employment classification, and democracy. Coefficients are significant at the *5%, **1% significance level. Standard errors in parentheses.

Figure 2. Tolerance of Corruption according to Levels of Risk Aversion (Measurement #1)



Second Measurement of Risk Aversion

The second survey question used to evaluate risk aversion focused on the behavior and actions of an individual. Once again, survey participants were asked to evaluate on a six-point scale how important it was to behave properly and avoid doing anything that people would perceive as wrong. The higher one's score on the six-point scale, the more risk acceptant that individual was. Again, both men and women exhibited that in this measurement of risk aversion, increased risk acceptance resulted in acceptance of bribery. Men displayed a 0.071-point increase in bribery acceptance for every point increase towards risk acceptance, whereas women displayed a 0.068-point increase (see table 2). Both were significant at the 99-percent level.

When linking this risk aversion measurement with gender, the interaction and gender itself resulted in insignificant results while risk aversion produced significance (p-value < .001) with a one-point increase toward risk acceptance, resulting in a 0.084-point increase in tolerating corruption. Adding risk aversion into the regression closed the gender gap between men and women in their levels of corruption tolerance.

Figure 3. Tolerance of Corruption According to the Levels of Risk Aversion (Measurement #2)

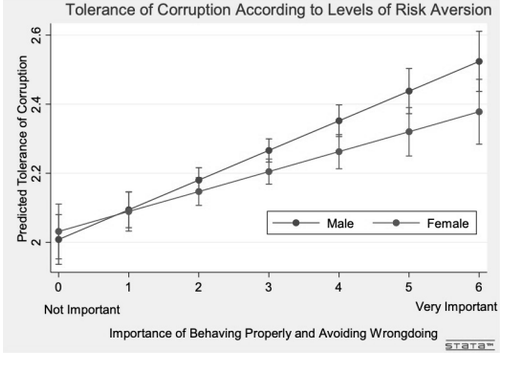


Table 2. The Effect of Risk Aversion on Tolerance of Corruption
Dependent Variable: Is it justifiable to accept bribes during the course of one's duties?

Variables	(1) Corruption Tolerance Among Men	(2) Corruption Tolerance Among Women	(3) Corruption Tolerance
Female			0.0248 (0.0539)
Risk Aversion #2	0.0682** (0.0139)	0.0710** (0.0129)	0.0842** (0.0124)
Interaction between Gender and Risk Aversion #2			-0.0300 (0.0177)
Log of Age	-0.349** (0.054)	-0.183** (0.042)	-0.229** (0.035)
Education	-0.054** (0.009)	-0.003 (0.008)	-0.021** (0.006)
Religiosity	0.063** (0.009)	0.042** (0.008)	0.049** (0.006)
Employment: Gov't or Public Institution	0.199** (0.050)	0.052 (0.042)	0.129** (0.032)
Employment: Private Nonprofit	0.103 (0.067)	-0.069 (0.065)	0.041 (0.046)
Democracy	-0.367** (0.052)	-0.215** (0.048)	-0.271** (0.035)
Constant	3.561** (0.279)	2.792** (0.217)	3.035** (0.169)
Observations	11,029	13,158	24,187
R-squared	0.240	0.223	0.229

Notes: Dependent Variable is survey responses on the justifiability of accepting a bribe on a 10-point scale (1=Never, 10=Always). The independent variable risk aversion #2 measures survey responses to whether it is important to avoid doing what people deem as wrong on a 6-point scale (1=Very Much like Me, 6=Not at All Like Me). Control variables also included in each regression: log of age, education, religiosity, country, employment classification, education levels, and democracy. Coefficients are significant at the *5%, **1% significance level. Standard errors in parentheses.

First Measure of Social Mindedness

The first measurement of social mindedness used a survey question asking respondents to evaluate their individual preferences on whether it is important for a person to do something for the good of society. Respondents ranked themselves according to a six-point scale (1 meaning very much like me, 6 meaning not at all like me).

Individually, men and women responded similarly along the six-point scale. For every 1-point increase on the scale, men's tolerance for corruption increased by 0.170 points and women's tolerance for corruption increased by 0.125 points. For both men and women, the less socially minded, the more likely to tolerate the use of bribes in the course of one's duties. Both measurements were significant with a p-value less than .001 (see table 3).

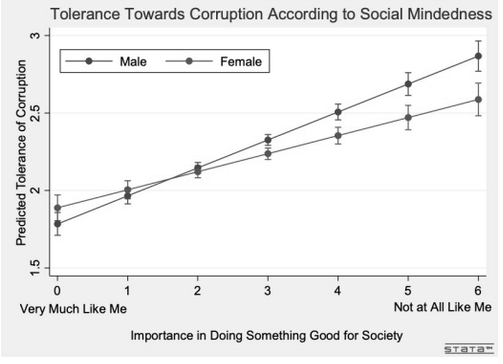
Table 3. The Effect of Social Mindedness on Corruption Tolerance
Dependent Variable: Is it justifiable to accept bribes during the course of one's duties?

Variables	(1) Corruption Tolerance Among Men	(2) Corruption Tolerance Among Women	(3) Corruption Tolerance
Female			0.110* (0.0550)
Social Mindedness #1	0.121** (0.0155)	0.170** (0.0141)	0.180** (0.0135)
Interaction of Female and Social Mindedness #1			-0.0675** (0.0191)
Log of Age	-0.345** (0.054)	-0.169** (0.047)	-0.229** (0.035)
Education	-0.052** (0.009)	-0.001 (0.008)	-0.021** (0.006)
Religiosity	0.060** (0.009)	0.038** (0.008)	0.049** (0.006)
Employment: Gov't or Public Institution	0.216** (0.049)	0.071 (0.042)	0.129** (0.032)
Employment: Private Nonprofit	0.123 (0.067)	-0.027 (0.065)	0.041 (0.046)
Democracy	-0.350** (0.052)	-0.208** (0.048)	-0.271** (0.035)
Constant	3.394** (0.279)	2.522** (0.217)	2.782** (0.169)
Observations	11,029	13,158	24,187
R-squared	0.243	0.230	0.234

Notes: Dependent Variable is survey responses on the justifiability of accepting a bribe on a 10-point scale (1=Never, 10=Always). The independent variable social mindedness #1 measures survey responses to whether an individual does something for the good of society as wrong on a 6-point scale (1=Very Much like Me, 6= Not at All Like Me). Control variables also included in each regression: log of age, education, religiosity, country, employment classification, education levels, and democracy. Coefficients are significant at the *5%, **1% significance level. Standard errors in parentheses.

Upon linking gender with my first measure of social mindedness, I found that social mindedness and the interaction between gender and social mindedness were significant, while gender displayed a weak significance (p-value = .058; see figure 4). Initially, women displayed a higher tolerance of corruption than men; however, with each 1-point shift away from being socially minded, women displayed lower levels of tolerance than men. Even including this measurement of social mindedness, women were 0.0675 points less likely to tolerate corruption than men.

Figure 4. Tolerance of Corruption According to Social Mindedness (Measure #1)



The second measurement of social mindedness evaluated survey responses regarding the following statement: "It is important to this person to help people nearby and to care for their well-being." Survey participants were required to rank themselves on a six-point scale (1 meaning very much like me, and 6 meaning not at all like me).

Men and women responded almost identically to this survey question. A one-point move away from social-mindedness resulted in a 0.111-point increase among men for corruption tolerance and a 0.102-point increase among women (see table 4). In interacting the two variables no significance was produced through the interaction or among gender separately, but there was significance with one's level of social mindedness (see figure 6). A 1-point increase away from being socially minded resulted in a 0.120-point increase in accepting corruption, significant at the 99-percent level, confirming again that perceptions of corruption are the consequence of one's characteristics and not one's gender.

Corruption Tolerance According to Opportunity

Next, I evaluated the relationship between employment, gender, and corruption tolerance (see table 3 and figure 7). Three categories of employment were analyzed: government or public institution, private business or industry, and private nonprofit organization. The private business or industry (private sector) served as my baseline category. Within the private sector, women were 0.147 points less likely than men to tolerate corruption. This was significant at the 99-percent level. Women in government employment were 0.035 points more tolerant of corruption than men. Though a very slight difference, it was significant at the 95-percent level. There was no difference between men and women within nonprofit organizations.

In comparing varying levels of corruption tolerance among women, women employed by government or public institutions were 0.164 points more tolerant of corruption than women in the private sector, significant at the 99-percent level. Women employed by private nonprofit organizations also displayed even higher levels of tolerance than women in the private sector, as they were 0.212 points more likely to tolerate corruption, significant at the 95-percent level.

Table 4. The Effect of Social Mindedness on Corruption Tolerance
Dependent Variable: Is it justifiable to accept bribes during the course of one's duties?

Variables	(1) Corruption Tolerance Among Men	(2) Corruption Tolerance Among Women	(3) Corruption Tolerance
Female			0.0136 (0.0549)
Social Mindedness #2	0.102** (0.0157)	0.111** (0.0144)	0.121** (0.0138)
Interaction of Female and Social Mindedness #2			-0.0675** (0.0191)
Log of Age	-0.345** (0.054)	-0.169** (0.047)	-0.229** (0.035)
Education	-0.052** (0.009)	-0.001 (0.008)	-0.021** (0.006)
Religiosity	0.060** (0.009)	0.038** (0.008)	0.049** (0.006)
Employment: Gov't or Public Institution	0.216** (0.049)	0.071 (0.042)	0.129** (0.032)
Employment: Private Nonprofit	0.123 (0.067)	-0.027 (0.065)	0.041 (0.046)
Democracy	-0.350** (0.052)	-0.208** (0.048)	-0.271** (0.035)
Constant	3.394** (0.279)	2.522** (0.217)	2.782** (0.169)
Observations	11,029	13,158	24,187
R-squared	0.243	0.230	0.234

Notes: Dependent Variable is survey responses on the justifiability of accepting a bribe on a 10-point scale (1=Never, 10=Always). The independent variable social mindedness #1 measures survey responses to whether an individual thinks it's important to help people nearby and care for their well-being on a 6-point scale (1=Very Much like Me, 6=Not at All Like Me). Control variables also included in each regression: log of age, education, religiosity, country, employment classification, education levels, and democracy. Coefficients are significant at the *5%, **1% significance level. Standard errors in parentheses.

Figure 5. Tolerance of Corruption According to Social Mindedness (Measure # 2)

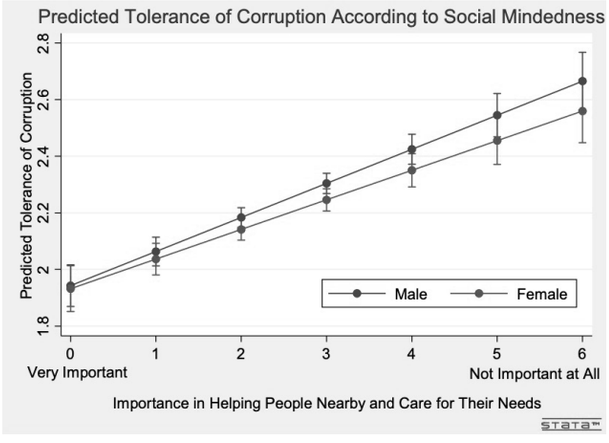


Figure 6. Tolerance of Corruption According to Employment

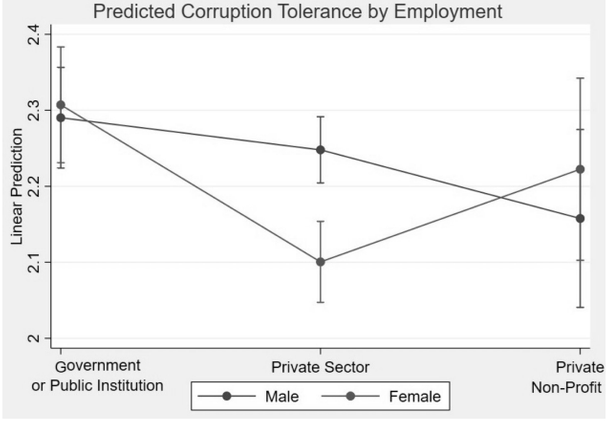


Table 3. The Effect of Employment on Tolerance of Corruption
Dependent Variable: Is it justifiable to accept bribes during the course of one's duties?

Variables	Corruption Tolerance
Female	-0.147** (0.0344)
Government/Public Institution	0.0422 (0.0404)
Nonprofit Organization	-0.0903 (0.0638)
Interaction of Female and Government/ Public Institution	0.164** (0.0598)
Interaction of Female and Private Nonprofit Interaction	0.212* (0.0909)
Log of Age	-0.245** (0.035)
Education	-0.024** (0.006)
Religiosity	0.056** (0.006)
Democracy	-0.286** (0.035)
Constant	3.364** (0.166)
Observations	24,603
R-squared	0.229

Notes: Dependent Variable is survey responses on the justifiability of accepting a bribe on a 10-point scale (1=Never, 10=Always). Control variables also included in each regression: log of age, education, religiosity, country fixed effects, employment classification, education levels, and democracy. Coefficients are significant at the *5%, **1% significance level. Standard errors in parentheses. Baseline category is male in the private sector.

Conclusion

Out of the four measurements used to evaluate levels of risk aversion and social mindedness, three closed the gender gap of corruption tolerance levels among men and women. Each of these three measurements followed the same pattern. First, when separated out individually, risk aversion and social mindedness held a statistically significant relationship in determining corruption tolerance levels among men and women, with men holding a higher tolerance than women. However, when gender interacted with the three measurements (two of risk aversion and one of social mindedness), neither gender individually nor the interaction terms was significant. It was the two individual measurements of risk aversion and the second measure of social mindedness that remained significant, indicating that characteristics are a more accurate measurement to

determine corruption tolerance than gender alone. If women are displaying lower levels of corruption tolerance, it is because more women exhibit higher levels of risk aversion or social mindedness than men. When men and women display similar levels of risk aversion and social mindedness, the difference in corruption tolerance levels disappear. While these characteristics may have closed the corruption tolerance gender gap in this study, further analysis that determines the strength of such characteristics on tolerance levels relative to each other may add to our understanding.

As for the first measurement of social mindedness, the weak significance of gender and the stronger significance of the interaction between the two variables suggests that something more is creating a gap in tolerance levels among men or women. Women who are not concerned with doing something good for society still display lower levels of corruption tolerance than men, significant at the 99-percent level. It may be that while these women do not feel inclined to do good in public life, they still feel a duty to do good in other spheres such as private or domestic life. That feeling of responsibility may be felt more deeply within women over men as more women still maintain the traditional roles of full-time mother and primary caretaker of children. The remaining gap in this measurement may be due to the fact that the survey questions used in this study fail to properly measure these motivations. Further research should be conducted to better understand such gap.

Regarding opportunity, employment matters in uncovering the variation of corruption tolerance levels of women. Women employed by the government are more tolerant of corruption than women in the private sector. While my theory relies upon the previous research regarding opportunity, other factors may influence these levels. Women in government may be exposed to corruption more frequently than in the private sector, causing them to feel desensitized toward corruption. The culture within the government may breed an environment that causes individuals to turn a blind eye to unlawful behavior. Regardless, all possible explanations eventually lead to an environment where access to corrupt practices may be more prevalent in public institutions than in private ones. Further research on the nature of government employment and its effect on women and corruption may also prove to be useful.

Overall, the findings of this study result in a rejection of the ideology that certain characteristics are inherent according to one's gender. While gender essentialism fails to explain the variance between men and women, an acknowledgement of each individual's values, morals, and general traits more accurately captures such variance.

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