Moral Decision Making

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This study was conducted to assess the association between implicit biases and moral decision making. Implicit biases can control how we treat people and who we choose to associate ourselves with. We sought to determine if triggering those biases would cause a quantitative increase in moral decision making. We asked participants in the experimental group to complete the Implicit Association Test (IAT; Greenwald, Banajo, & Nosek, 1998a), two parts of the Moral Foundations Questionairre (Graham, Haidt, & Nosek, 2008) and a demographics questionnaire. No statistically significant differences were found in control vs experimental groups in terms of their morality scores but there was a statistically significant result in that conservatives scored higher than did liberals on the moral of obedience, while everyone scored the highest on the moral of fairness.

Keyword: implicit biases

The present study aimed to test the association between moral decision making and implicit biases. In order to examine these differences, we conducted a study using the Implicit Association Test for race (IAT; Greenwald, Banaji, & Nosek, 1998a), which is a computerized program that required participants to categorize people based on good and bad qualities, as a mediating task between the two sections of the Moral Foundations Questionnaire (MFQ; Graham, Haidt, & Nosek, 2008), which requires them to rate their agreeance on certain actions. By doing this, we hoped to gain insight on how the emphasis or visibility of racial differences impact how we make moral decisions. Additionally, we wanted to quantify moral decision

making and educate others on how implicit biases can sway moral decision making. The overall

purpose of this research was to be better able to understand prejudice and discrimination by

revealing the important role of implicit biases on our decisions.

In the research that van Nunspeet, Ellemers, and Derks (2017) conducted, they examined

and compared the effects that different social contexts and personal motives had on an outgroup

interaction, in this case, of Muslim women. They used the IAT to emphasize the moral

implications of their implicit biases, used an outgroup or minimal ingroup member to evaluate

the participants, and used a devalued outgroup member from the IAT (a Muslim woman) as an

evaluator. The researchers combined the results of the different contexts and motives to

determine implicit bias reduction and to determine if they interact with each other (van Nunspeet

et al., 2017). They also sought to determine how a reduction in implicit bias is achieved. They

also discovered that when the evaluator of the IAT was wearing a headscarf, implicit biases were

not as strong as when the evaluator was not wearing a headscarf. That is, when the evaluator was

viewed to be an ingroup member (i.e. White), the bias towards Muslim women was significantly

higher. Additionally, researchers found that when the evaluator was wearing a headscarf, or

perceived as a member of the devalued group, the participants responded slower to the IAT task.

When the implications of the study were emphasized in terms of morality (rather than

competence), participants took longer to complete congruent blocks of the IAT (van Nunspeet et

al., 2017). This means that when the participants were told that their results were going to be

seen in terms of morality, rather than in competence, participants took longer, and therefore

thought harder, on the IAT. One last finding was that for those who had the emphasized

competency task instead of the morality task, there were significantly stronger negative biases

towards Muslim women when the evaluator was wearing a headscarf. Overall, van Nunspeet et

al. (2017) revealed that IAT performance evaluation by a woman wearing a headscarf significantly impacted the reductions of non-Muslim's implicit biases toward Muslim women. In the condition of morality, participants showed significantly reduced implicit biases towards the outgroup member rather than the competence condition. Again, when emphasizing morality, there was no significant difference between those with or without an ingroup evaluator.

van Nunspeet, Ellemers, and Derks (2015) discuss in a previous study that implicit associations are changeable, and that people can alter them if they are motivated enough to do so. They found that by reminding people that their behavior has moral implications, their tendency to express implicit biases decreased, and that people appear to value morality more than competence groups (van Nunspeet et al., 2015). In a task that asked participants to think not about the past but to evaluate their own views on interethnic relations and egalitarian goals, implicit biases significantly decreased (van Nunspeet et al., 2015).

Another article by van Nunspeet, Ellemers, Derks, and Nieuwenhuis (2014) revealed similar results in that participants who took part in this study were told they would take the IAT and about what the results could mean about their behavior either as competence or moral values, then completed it in private. Participants who were in the morality condition showed significantly less implicit bias toward Muslim women than those who participated as a part of the competence condition, leading researchers to believe that people want to behave in ways that are consistent with their own values and how they perceive themselves morally rather than competently (van Nunspeet et al., 2014). Another study found that sharing moral values with others significantly impacts our identities and regulates our behavior (Pagliaro, Ellemers, & Barreto, 2011). This showed, similarly to van Nunspeet et al. (2017), that people place much value on being seen as moral by their ingroup members over being seen as competent (Pagliaro

et al., 2011). Together, these three studies revealed much about implicit biases and their impact on morality, including that participants want to be rated favorably by ingroup members and thus will express less implicit bias, that they want to match their own morals and will show less implicit bias accordingly, and that when prompted to think about their own morals participants tend to decrease implicit biases (Pagliaro et al., 2011; van Nunspeet et al., 2014; van Nunspeet et al., 2015).

There are many reasons that implicit biases are important to note, as they can affect our lives and how we treat others (Bruchmann, Koopmann-Holm, & Scherer, 2018; Stark, 2014; van Nunspeet et al., 2014; van Nunspeet et al., 2015; van Nunspeet et al., 2017). Additionally, it has been claimed that people act in ways related to their moral stances, and that people with strong moral ethics act more prosocially than those who do not (Capraro & Rand, 2018). Several studies have mentioned the way that humans tend to treat people they perceive as ingroup (their own group) better than those they perceive as outgroup (those in other groups) in different areas, including race and political affiliation (Bruchmann et al., 2018; Stark, 2014; van Nunspeet et al., 2014; van Nunspeet et al., 2015). One example of this was given by Stark (2014) in that many physicians tend to have an implicit association with Black individuals as being bad and White individuals as being good, which may affect the treatments that they receive. For example, Black patients tend to be less aggressively treated for heart attack symptoms than white patients. This differential treatment, Stark (2014) says, occurs not only in the case of heart attacks, but also many other areas of healthcare in general and can shorten the lifespans and decrease the quality of life for people of color. Stark (2014) also mentions that although people have explicit or known preferences for their own ingroups, she found that even Black Americans have an implicit association with White and good, an implicit preference for White Americans. Stark (2014) says

that while we may not be able to entirely remove or alter implicit associations, we can choose how we deal with them and attempt to retrain ourselves to be morally virtuous, as she says Aristotle wrote about in his works. By controlling our emotions and how we react to the feelings we may encounter when experiencing biases, we can reduce our overall prejudiced and discriminatory actions (Stark, 2014).

The IAT website also states that while the IAT may not be a perfect indicator of individual actions related to implicit biases, on a societal level those implicit biases build up (Greenwald et al., 1998b). It also says the IAT can give information to predict certain discriminatory behaviors, such as who will be hired or promoted within a company. This is not always the case, but for those who are not in the ingroup of the people they work for or with, or who interact with people in their outgroups on a daily basis, these biases can make a difference in their treatment and those around them. Additionally, they give some tips on reducing the implicit biases we may not want. Some ways the IAT website says we can reduce implicit biases include being consciously kinder and friendlier to those we have a known bias against or considering the things we watch on TV and experience in daily life and altering those to portray others in a more positive light (Greenwald et al., 1998b).

In a study that looked at similarity-liking effect in politics, Bruchmann, Koopmann-Holm, and Scherer (2018) sought to test how knowing someone's political orientation from a political post can influence impressions and lead to certain consequences. The similarity-liking effect is the hypothesis that people prefer other people who are similar to them, whether that similarity is significant or not (Bruchmann et al., 2018). We also tend to like people more if they change their attitudes or beliefs to better fit with our own. Bruchmann et al. (2018) claim that the similarity-liking effect is especially strong for political affiliations and that we tend to make

everyday life decisions based on the political affiliations of others, such as sharing an office space or having a romantic relationship. Like everything else, there are stereotypes that come along with political affiliation, such as that Democrats are viewed to be warmer and have their faces show more happiness and Republicans are viewed to be more competent and have angrier faces. Bruchmann et al. (2018) used the Moral Foundations Theory (Graham et al., 2013), which explains the different categories of moral ethics and their meanings, to show that liberals tend to endorse individualizing foundations such as promoting fairness and preventing harm, whereas conservatives are more likely to support loyalty, respect of authority, and purity. The researchers predicted that when a person learns of another's political affiliation, they are more likely to make judgements based on those foundations and stereotypes (Bruchmann et al., 2018).

   In the study, Bruchmann et al. (2018) had participants view the fabricated Facebook profile of a man and woman who either recently shared a pro-Republican or pro-Democratic post. Then participants rated how smart and likeable they thought the profile user was and indicated how likely it was that they would become friends with the fabricated person. Participants also completed a modified version of the MFQ. Scores for the MFQ were calculated based on two types of foundations: individualizing foundations, such as fairness and harm, and binding foundations, like loyalty, authority, and purity. Overall, Bruchmann et al. (2018) found that the similarity-liking effect was significant when Democrats were rating others based on their perceived level of harm and fairness moral foundations. They discovered that Republicans were not significantly likely to rate other Republicans more favorably based on higher ratings of loyalty, authority, and purity moral foundations (Bruchmann et al., 2018). They also found a positive association between the fabricated Democratic profile and individualizing foundations and the fabricated Republican profile and binding foundations, supporting the previous research

that stated that the two would be consistent. Similarity-liking effect tends to happen in ingroup situations, or when people are surrounded with those they feel are closely related to in some characteristic (Bruchmann et al., 2018). Implicit biases are underlying attitudes that are formed against those in the outgroup, or people who are dissimilar to the ingroup. Triggering those implicit biases has been shown to remind people that their decisions have moral consequences and can in fact cause them to alter their actions in due course (van Nunspeet et al., 2015). A separate study performed by Scheepers, Te Crotenhuis, and Van Der Silk (2002) found that these moral attitudes can be impacted by individual education level and religiosity, meaning that over time moral attitudes could change. This is significant because as moral attitudes and implicit biases change, our behaviors may change with them (Stark, 2014; van Nunspeet et al., 2015).

The present research is looking to combine the previous studies findings into one research design. We are using one part of the MFQ as a baseline and then having the experimental group take the IAT, hopefully triggering their implicit biases. The second part of the MFQ will then be taken and scored to determine if there are any differences in moral decision-making. Based on the previous literature, we have developed two hypotheses for the present study regarding moral decision making and implicit associations, as well as the relationship between political affiliation and morality. We hypothesized that participants in the experimental group will have higher scores on the second portion of the MFQ after taking the IAT, but those in the control group will not. We also hypothesized that participants who identify as conservative will score higher on obedience morals and those identifying as liberal will score higher on fairness morals.

Method

Participants

Anyone who signed up through Sona Systems (see Appendix A) as part of the Lindenwood Participant Pool (LPP) and anyone who signed up through SignUpGenius were eligible to participate in the study. The LPP consists of students that are in introduction level classes of sociology, anthropology, and criminology and criminal justice, and all courses in psychology. We posted a script on social media (see Appendix B) and hung flyers in Young Hall at Lindenwood University (see Appendix C). All participants were 18 or older and thus gave informed consent prior to participating. We collected demographics such as age, gender, race/ethnicity, year in school, and political affiliation. Those who participated through the LPP were compensated with three LPP credits which are used for extra credit in their participating class.

All participants were students at Lindenwood University and all class statuses were represented (freshman-senior). Our sample included 20 women and 4 men. Our sample included 17 people who identified as White, 2 who identified as biracial/mixed, 2 who identified as Black, 1 who identified as Hispanic, 1 who identified as Latino, and 1 who identified as Asian American. The ages of our participants ranged from 18-36, with an average of 20.3.

Materials and Procedure

After signing up through the appropriate pathway, the participants were first given the study information sheet (see Appendix D) and the informed consent form (see Appendix E). These outlined the study and the requirements for the participants if they wish to continue with the study. The forms also made it clear that participants could drop out of the study at any time and offer the principal researchers' contact information.

The MFQ (Graham et al., 2008; see Appendix F) was given after the informed consent. This asked a series of questions regarding taking others' feelings into account when making decisions and a series of situations for which they rated their agreeance (Graham et al., 2008). The participants were given one half of the 32 questions of the MFQ-30. After thoroughly reading the directions and completing half of the questionnaire, the participants either solved a series of scrambled words (see Appendix G) or moved to the computer to complete the Implicit Association Test for race (IAT; Greenwald et al., 1998a; see Appendix H). This tests for implicit biases, or unconscious feelings that arise in situation situations. At the end of the IAT, the participants were automatically given their computerized results about which race they show more of an inclination for (Black or White), if any inclination at all. The participants who completed the scrambled words were given the answer key (see Appendix G) and time to grade it themselves. We did not see these results of either the IAT or the scrambled words. The participants then completed the second set of 16 questions of the MFQ-30 (see Appendix F), completing the study. The participants then completed the demographics survey (see Appendix K). We then debriefed the participants and answered any questions they had.

After each group of participants have completed the study, we scored each half of the MFQ-30 using the scoring key (Graham et al., 2008; see Appendix F) and compared them to see what differences had arisen after the IAT was completed in comparison to the control group (the scrambled words). We also analyzed whether political affiliation had any correlation to the results of the MFQ-30.

Results

We hypothesized that participants who took the IAT would score higher on the second portion of the MFQ. To determine if our data supported our hypothesis, we ran an independent

samples t-est. The results of our independent samples t test on MFQ (Graham et al., 2008) difference scores between experimental (M = -2.83, SD = 12.38) and control groups (M = -0.25, SD = 6.41) revealed no statistically significant difference $t(17)$ = -0.64, p = .26. It should be noted that although there was no statistically significant difference between the control and experimental groups, the mean of the control group's difference scores was close to zero. In our current study, the difference found between the two tests was not significant, but this may be because we had a small sample size.

Additionally, we hypothesized that participants who identified as liberal would score higher than participants who identified as conservative on the moral of fairness. The results of our independent samples t test revealed no statistically significant difference in the fairness scores of liberal participants (M = 24.11, SD = 2.26) and conservative participants (M = 21.83, SD = 4.07), $t(7)$ = 1.25, p = 0.13. We also hypothesized that participants who identified as conservative would score higher on the moral of obedience than liberal participants. The independent samples t test revealed a statistically significant difference between the obedience scores of liberal participants (M = 14.11, SD = 4.4) and those of conservative participants (M = 19.67, SD = 5.09), $t(10)$ = -2.19, p = 0.03. The results of our study showed that nearly all participants scored higher on the moral of fairness and there was no significant difference in fairness scores of liberal and conservative participants. Obedience scores were significantly different, with conservatives scoring significantly higher on this moral than liberals.

Discussion

While there were no statistically significant results for the question of triggering a higher morality score, we did find statistical significance in the way conservatives scored higher on the obedience moral than did liberals. As in all studies, the present study faced some limitations.

Firstly, we have a limited sample of 24 participants, all of whom attend classes at Lindenwood University St. Charles. This is potentially limiting as it is a small sample size and represents a small subsection of the population. Of our student participants, most were also White women under the age of 30, which further limits the potential for a representative sample. Second, we also recognized a few errors within the study itself. We recognized that there were two errors in the set of word scrambles we created, one with a missing letter and one with an extra letter. We do not believe that these impacted our results in any way because we did not collect information on the scoring of the word scrambles, but it is a factor that we would want to fix if we continue this research in the future.

We also did not find statistically significant results in difference scores on the MFQ between participants who took the IAT and those who completed word scrambles. We believe that if we were able to collect data from more participants, a difference would emerge. It should be noted that in participants who took the IAT, the difference scores were larger than those in the control group, but since the scores both increased and decreased and the difference was not statistically significant, our hypothesis was not supported. This could also be due to the structure of the MFQ itself, as we now believe it differs more at an individual basis. We also found that all but two participants scored higher on the moral of fairness than the moral of obedience. We did not have a hypothesis about this, but overall fairness scores were higher among both liberal and conservative participants than obedience scores. Scores on the obedience moral were significantly higher among conservative participants. We would also be interested in seeing if different measures of bias, such as explicit questions about their biases instead of an implicit biases test, have a larger impact on people than IAT, or if we brought up actual discrimination by asking about their real experiences with discrimination rather than implicit biases.

Implications of this study are limited because of our small sample size and lack of statistically significant results. We hoped to be able to identify a change in morality scores based on the IAT (Greenwald et al., 1998a) bringing implicit biases to the attention of participants in the experimental group. This would have implied that our knowledge of previously unknown biases could correlate with a change in decision making, meaning our behaviors can change based on knowledge of our implicit biases. We believe it is possible that the small sample size did not allow us to collect enough data to obtain significant results, and that if future researchers replicating this study recruited more participants, they might find more statistically significant results. Additionally, we would have liked to obtain a more diverse sample of participants, considering the majority of our participants were mostly White women under the age of 25. We think that our lack of diversity and small sample size are what led to our insignificant results in difference scores. While we did not find support for all of our hypotheses, we gained insight into how to improve this study for future inquiries into this topic. In the future, we would hope to find a more statistically significant difference in the scores of those participants whose implicit biases are triggered. We think it's important to also consider the possibility of adding a task that asks about explicit biases as well, which might lead to a more statistically significant result. As this study is replicated by either us or a broader range of researchers, the more refined the study will become and hopefully, the more information can be garnered.

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Appendix A

Sona Systems Script Information (For LPP)

Title: Moral Decision Making

Brief Abstract: You will be asked to engage in a demographics survey, an online activity, and a questionnaire (split in two parts), this will take 25 minutes.

Detailed Description: For this study you will be asked to complete the first half of a questionnaire consisting of questions asking you to rate how strongly you agree with the ideas presented. Then, you will complete a short activity (either solving word scrambles or completing an online reaction test). You will then be asked to complete the second half of the same questionnaire. Finally, you will be asked to complete a short paper demographics survey.

Appendix B

Social Media Script

Hello, I am trying to recruit participants for a study we're conducting at Lindenwood University. If you are a Lindenwood Student, please read below to determine if you're interested in participating. You'll be asked to complete a demographics survey and a morality questionnaire on paper. You will also be asked to complete a short online activity. This should take about 25 minutes. You will not be able to see your individual morality test results but will be allowed access to the final group results at the end of the study, if you so desire. Please visit https://www.signupgenius.com/go/508054AA4AE22A0FC1-moral for an appointment.

Appendix C

Flyer

Appendix D

Research Information Sheet

LINDENWOOD

Research Information Sheet

You are being asked to participate in a research study. We are doing this study to determine if moral decision making changes after taking the Implicit Association Test for race (Greenwald et al., 1998). During this study you will complete the Moral Foundations Questionnaire (Graham et al., 2008), move onto an online activity, and then complete the second half of the Moral Foundations Questionnaire. It will take about 25 minutes to complete this study.

Your participation is voluntary. You may choose not to participate or withdraw at any time.

There are no risks from participating in this project. There are no direct benefits for you participating in this study.

We will not collect any data which may identify you.

If you are in the LPP you will receive three LPP credits in the course for which you signed up for the LPP. You will receive extra credit simply for completing this information sheet. You are free to withdraw your participation at any time without penalty. Participants who are not part of the LPP will receive no compensation beyond the possible benefits listed above. However, your participation is an opportunity to contribute to psychological science.

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the

researcher in a secure location. The only people who will be able to see your data are: members of the research team, qualified staff of Lindenwood University, and representatives of state or federal agencies.

Who can I contact with questions?

If you have concerns or complaints about this project, please use the following contact information:

Tommi Donnelly-Julian, trd296@lindenwood.edu

Dr. Michiko Nohara-LeClair, mnohara-leclair@lindenwood.edu

If you have questions about your rights as a participant or concerns about the project and wish to talk to someone outside the research team, you can contact Michael Leary (Director - Institutional Review Board) at 636-949-4730 or mleary@lindenwood.edu.

LINDENWOOD

Research Study Consent Form

Moral Decision Making

Before reading this consent form, please know:

- Your decision to participate is your choice

- You will have time to think about the study

- You will be able to withdraw from this study at any time

- You are free to ask questions about the study at any time

After reading this consent form, we hope that you will know:

- Why we are conducting this study

- What you will be required to do

- What are the possible risks and benefits of the study

- What alternatives are available, if the study involves treatment or therapy

- What to do if you have questions or concerns during the study

Basic information about this study:

- You will be asked to complete an online activity or watch a video about biases, a demographics survey, and two parts of a questionnaire about your values.
- We are interested in learning about the effects of biases on moral values
- Risks of participation include mild discomfort about results of an online activity

Appendix E

Informed Consent Form

LINDENWOOD

Research Study Consent Form

Moral Decision Making

You are asked to participate in a research study being conducted by Tommi Donnelly-Julian, Baylie Fowler, and Dr. Michiko Nohara-LeClair at Lindenwood University. Being in a research study is voluntary, and you are free to stop at any time. Before you choose to participate, you are free to discuss this research study with family, friends, or a physician. Do not feel like you must join this study until all of your questions or concerns are answered. If you decide to participate, you will be asked to sign this form.

Why is this research being conducted?

We are doing this study to find out if being made aware of biases influences decision making about morals and values.

What am I being asked to do?

You will complete the first half of a paper questionnaire in which you will decide how much you agree with ideas presented, (about 16 questions), then move on to the computer for an online activity (watching

a short video or completing a reaction test). Then, you will complete the second half of the same paper

questionnaire. Finally, you will be asked to complete a short paper demographics survey.

How long will I be in this study?

It will take about 25 minutes.

What are the risks of this study?

- Privacy and Confidentiality:

We will not be collecting any information that will identify you.

We will be collecting data from you using the internet. We take every reasonable effort to maintain

security. The online activity is completely anonymous and does not use the data to identify the

participants who participate. It is always possible that unidentifiable information during this research

study may be taken and used by others not associated with this study.

What are the benefits of this study?

You may benefit from this study. The potential benefits are having access to an online source that can be

used to identify your personal implicit biases. This offers a tool that may not have otherwise been known

to you. You will also become more aware of your own biases as well.

Will I receive any compensation?

If you are in a course that is participating in the LPP and you signed up on Sona Systems, you will receive

three LPP credits for participating in this study.

What if I do not choose to participate in this research?

It is always your choice to participate in this study. You may withdraw at any time. You may choose not to answer any questions or perform tasks that make you uncomfortable. If you decide to withdraw, you will not receive any penalty or loss of LPP credits. If you would like to withdraw from the study, please use the contact information found at the end of this form. If you are a student of a course participating for LPP credit, you will still receive full credit even if you withdraw from the study.

What if new information becomes available about the study?

During the course of this study, we may find information that could be important to you and your decision to participate in this research. We will notify you as soon as possible if such information becomes available.

How will you keep my information private?

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the researcher in a secure location. The only people who will be able to see your data are: members of the research team, qualified staff of Lindenwood University, representatives of state or federal agencies.

How can I withdraw from this study?

Notify the research team immediately if you would like to withdraw from this research study.

Who can I contact with questions or concerns?

If you have any questions about your rights as a participant in this research or concerns about the study, or if you feel under any pressure to enroll or to continue to participate in this study, you may contact the Lindenwood University Institutional Review Board Director, Michael Leary, at (636) 949-4730 or mleary@lindenwood.edu. You can contact the researcher, Tommi Donnelly-Julian directly at 417-684-3427 or trd296@lindenwood.edu. You may also contact Dr. Michiko Nohara-LeClair at mnohara-leclair@lindenwood.edu.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

_____   _____

Participant's Signature   **Date**

_____

Participant's Printed Name

_____   _____

Signature of Principle Investigator or Designee   **Date**

_____

Investigator or Designee Printed Name

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Appendix F

Moral Foundations Questionnaire (Graham, Haidt, & Nosek, 2008) PART 1

Part 1. When you decide whether something is right or wrong, to what extent are the following

considerations relevant to your thinking? Please rate each statement using this scale:

[0] = not at all relevant (This consideration has nothing to do with my judgments of right and wrong)

[1] = not very relevant

[2] = slightly relevant

[3] = somewhat relevant

[4] = very relevant

[5] = extremely relevant (This is one of the most important factors when I judge right and wrong)

_____1. Whether or not someone suffered emotionally

_____2. Whether or not some people were treated differently than others

_____3. Whether or not someone's action showed love for his or her country

_____4. Whether or not someone showed a lack of respect for authority

_____5. Whether or not someone violated standards of purity and decency

_____6. Whether or not someone was good at math

_____7. Whether or not someone cared for someone weak or vulnerable

_____8. Whether or not someone acted unfairly

_____9. Whether or not someone did something to betray his or her group

_____10. Whether or not someone conformed to the traditions of society

_____11. Whether or not someone did something disgusting

_____12. Whether or not someone was cruel

_____13. Whether or not someone was denied his or her rights

_____14. Whether or not someone showed a lack of loyalty

_____15. Whether or not an action caused chaos or disorder

_____16. Whether or not someone acted in a way that God would approve of

Part 2. Please read the following sentences and indicate your agreement or disagreement:

[0]	[1]	[2]	[3]	[4]	[5]
Strongly	Moderately	Slightly	Slightly	Moderately	Strongly
disagree	disagree	disagree	agree	agree	agree

_____17. Compassion for those who are suffering is the most crucial virtue.

_____18. When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.

_____19. I am proud of my country's history.

_____20. Respect for authority is something all children need to learn.

_____21. People should not do things that are disgusting, even if no one is harmed.

_____22. It is better to do good than to do bad.

_____23. One of the worst things a person could do is hurt a defenseless animal.

_____24. Justice is the most important requirement for a society.

_____25. People should be loyal to their family members, even when they have done something wrong.

_____26. Men and women each have different roles to play in society.

_____27. I would call some acts wrong on the grounds that they are unnatural.

_____28. It can never be right to kill a human being.

_____29. I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.

_____30. It is more important to be a team player than to express oneself.

_____31. If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.

_____32. Chastity is an important and valuable virtue.

Moral Foundations Questionnaire (Graham, Haidt, & Nosek, 2008) SCORING GUIDE

To score the MFQ yourself, you can copy your answers into the grid below. Then add up the 6 numbers in each of the five columns and write each total in the box at the bottom of the column. The box then shows your score on each of 5 psychological "foundations" of morality. Scores run from 0-30 for each foundation. (Questions 6 and 22 are just used to catch people who are not paying attention. They don't count toward your scores).

Question #	Your Response	Question #	Your Response	Question #	Your Response	Question #	Your Response	Question #	Your Response	Question #	Your Response
1		2		3		4		5		6	
7		8		9		10		11			
12		13		14		15		16			
17		18		19		20		21		22	
23		24		25		26		27			
28		29		30		31		32			

Harm / Care	Fairness / Reciprocit	In-group/ Loyalty	Authority / Respect	Purity / Sanctity

The average politically moderate American's scores are: 20.2, 20.5, 16.0, 16.5, and 12.6.

Liberals generally score a bit higher than that on Harm/care and Fairness/reciprocity, and much lower than that on the other three foundations. Conservatives generally show the opposite pattern.

The Moral Foundations Questionnaire (MFQ-30, July 2008) by Jesse Graham, Jonathan Haidt, and Brian Nosek.

Appendix G

Word Scrambles

The following strings of letters can be rearranged to form one word per line. Please do your best to solve

as many of these word scrambles as possible in the time allotted.

aabooerylrt = _____

babirt = _____

cdrboadr = _____

chocu = _____

dsyai = _____

eehacht = _____

fofcee = _____

gethispat = _____

isroscss = _____

jckeat = _____

keapesr = _____

kesna = _____

koneym = _____

lhaew = _____

ltopap = _____

luipt = _____

neplic = _____

nikcehc = _____

niktit = _____

nlio = _____

omisiusr = _____

paeccuak = _____

rimror = _____

ritge = _____

ssemgea = _____

taneelph = _____

tleeepnoh = _____

ttleob = _____

viome = _____

aabooerylrt = laboratory

babirt = rabbit

cdrboadr = cardboard

chocu = couch

dsyai = daisy

eehacht = cheetah

fofcee = coffee

gethispat = spaghetti

isroscss = scissors

jckeat = jacket

keapesr = speaker

kesna = snake

koneym = monkey

lhaew = whale

ltopap = laptop

luipt = tulip

neplic = pencil

nikcehc = chicken

niktit = kitten

nlio = lion

omisiusr = Missouri

paeccuak = cupcake

rimror = mirror

ritge = tiger

ssemgea = message

taneelph = elephant

tleeepnoh = telephone

ttleob = bottle

viome = movie

Appendix H

Implicit Association Test (Greenwald, Banaji, & Nosek, 1998)

https://implicit.harvard.edu/implicit/takeatest.html

Appendix K

Demographics Survey

Please answer the following questions to the best of your ability.

1. What race/ethnicity do you identify as?

_____

2. What is your gender identity?

_____

3. What year in school are you?

    a. Freshman

    b. Sophomore

    c. Junior

    d. Senior

    e. Other _____

4. How many years have you attended Lindenwood University?

_____

5. What is your political affiliation?

    a. Conservative

    b. Moderate

      c.   Liberal

      d.   Other

      e.   Prefer not say

6.   What is your age?

_____