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THE EFFECTS OF POWER AND RELIGIOUSLY MOTIVATED INGROUP
PREFERENCE ON SOCIAL AFFILIATION

By

HERNAN A. ESCOBAR, Bachelor of Science

Presented to the Faculty of the Graduate School of

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ABSTRACT

Human beings are fundamentally social animals motivated by a need to establish and maintain close social relationships. The creation of these relationships inevitably leads to the creation of groups, along with a desire for power as a method of determining how resources are to be allocated within these groups. Most groups are characterized by individuals who belong to the ingroup and those who are relegated to an outgroup, and one powerful motivator of ingroup favoritism is religious affiliation. Although research has shown that feelings of low power increase the drive to socially affiliate, research has not yet explored how religious belief influences the relationship between power and social affiliation. The current study explored how Christian participants primed with low power react to potential social partners when they belong to their religious ingroup or a differing religious outgroup. Findings indicated that when compared to a neutral control, Christian participants elected to sit farther away from both a Muslim and atheist who were ostensibly occupying a chair at the far end of a table. Despite the increased need for social affiliation when experiencing low power, the presence of a religious outgroup member may inhibit an individual's affiliative motivation.

Keywords: Power, Social Affiliation, Religion, Ingroup, Outgroup

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THE EFFECTS OF POWER AND RELIGIOUSLY MOTIVATED INGROUP PREFERENCE ON SOCIAL AFFILIATION

Introduction

Human beings are fundamentally social animals motivated by a need to establish and maintain close social relationships (Baumeister & Leary, 1995). Within most social groups, some individuals possess power and control over the allocation and use of resources, whereas others do not (Galinsky, Gruenfeld, & Magee, 2003). Recently, research has explored the intersection between the domains of power and social affiliation. For example, people who are made to feel powerless are more likely to seek out opportunities for social affiliation, which can help them reestablish a sense of control (Case, Conlon, & Maner, 2015). This research suggests that social affiliation motives are moderated by psychological variables such as feelings of power.

But how does the psychological experience of power affect individuals who belong to religious groups that are inherently affiliative? Indeed, research has established the importance of religion as a means through which people affiliate with others (Epley, Akalis, Waytz, & Cacioppo, 2008). Although many religions promote social closeness, it is also the case that religious individuals tend not to associate with members of religious outgroups (Weeks & Vincent,

2007). This begs the question: When religious individuals are made to feel powerless, will they choose to affiliate with someone even when that person belongs to a different religion? Although research has examined the relationship between power and social affiliation, the question of how the cohesiveness of a religious ingroup alters the human desire to socially affiliate with a member of a religious outgroup under conditions of low power has yet to be tested empirically.

The Psychological Effects of Having (and Lacking) Power

Power—the ability to influence others' outcomes through the control of valuable resources (Galinsky, Magee, Inesi, & Gruenfeld, 2006)—is a fundamental aspect of hierarchically organized social groups. Power provides freedom of action to those who have it while denying it to those who do not (Keltner, Gruenfeld, & Anderson, 2003). When power is explored in the psychological literature, it is generally defined not as the actual objective possession of power over others, called structural power or social power (Neal & Neal, 2011), but rather the experience of feelings of power. These feelings of power, in turn, generate a host of cognitive, behavioral, and emotional processes. One way of evoking these responses is through priming, a method of nonconsciously activating a certain trait category within one situational context with the intention of changing or affecting decision making or judgements in another ostensibly unrelated situation (Bargh, 2006). Through priming, it is

possible to mimic the behavior and thought processes of those who are objectively powerful or powerless by using the prime to create an elevated or lowered sense of psychological power (see Galinsky et al., 2003; Smith & Trope, 2006; and Yang, Jin, He, Fan, & Zhu, 2015, for examples).

Because powerful individuals are free from the constraints that hold back the powerless, they tend to place more emphasis on pursuing and accomplishing their goals (Galinsky et al., 2003). Compared to the powerless, powerful individuals tend to choose the direct course of action (Guinote, 2007) and are able to sift through conflicting goals to efficiently select one to pursue (Schmid, Kleiman, & Amodio, 2015). This drive to achieve goals typically leads the powerful to prioritize their own goals at the expense of the goals of others. For example, when faced with a credible threat to their power, individuals in positions of authority will focus on the maintenance or increased acquisition of power at the expense of group success (Maner & Mead, 2010). This is accomplished through such actions as the withholding of valuable information from others, the exclusion of skilled individuals who could pose a threat to their authority, or outright deception (Maner & Mead, 2010). Those who experience heightened power are less likely to adopt another person's perspective, assume that other people possess the same privileged knowledge they do, and have greater difficulty experiencing emotional empathy (Galinsky et al., 2006). The powerful are also more likely to cheat to benefit themselves (Dubois, Rucker, Galinsky,

2015) and to objectify subordinates, seeing them as objects to be used for their own advancement (Gruenfeld, Inesi, Magee, & Galinsky, 2008). In sum, the experience of high power leads individuals to behave in predictably self-oriented ways.

Typically, the opposite holds for individuals without power. Experiencing lowered levels of power can cause individuals to seek out social affiliation with people around them, both through increased interest in joining a social club as well as sitting physically closer to others (Case et al., 2015). Experiencing low power is associated with an unavoidable dependence on others and diminished control over one's surroundings, resulting in a desire to regain a sense of control (Inesi, Botti, Dubois, Rucker, & Galinsky, 2011). As evidence of their increased desire for social closeness, those primed with low power are willing to pay more for an object when it is associated with status—a gauge of social acceptance—than when it is not (Rucker & Galinsky, 2008). The powerless are also more likely to lie or cheat, but only when it benefits others and not themselves (Dubois, Rucker, Galinsky, 2015). In sum, lacking power increases people's desire for social belongingness and motivates action designed to enhance social connection.

These effects of high and low power are consistent with the Social Distance Theory of Power (Magee & Smith, 2013). The theory states that powerful individuals possess the resources and agency that power provides,

which creates a sense of social distance between themselves and less powerful individuals on whom they need not depend. Powerless individuals, in contrast, possess a need to close the psychological distance between themselves and others as a way to accomplish their goals through mutual dependence. As a result, those who are powerful should display a decreased need for social affiliation and prefer independent activities that do not require them to rely on others. Those without power, on the other hand, should display an increased need for social affiliation and prefer group activities that create a sense of mutual interdependence (Magee & Smith, 2013).

Social Affiliation and Religion

The drive to socially affiliate is a powerful and complex human motivation. Social affiliation refers to the drive to establish and maintain positive social interactions with other individuals or groups (Van Cappellen, Fredrickson, Saroglou, & Corneille, 2017) through specific attitudes, emotions, and behaviors that promote closeness (Sasaki & Kim, 2011). This drive is primarily characterized by an innate desire to interact and take pleasure in being with fellow human beings and is generally considered one of the basic motivations which govern the species (McClelland, 1987). Not surprisingly, people generally affiliate with those who most resemble themselves (Côté, Kraus, Carpenter, Piff, Beermann, & Keltner, 2017).

One key way in which people affiliate with similar others is through organized religion. The word religion comes from the Latin word “religare,” which means “to bind” (Van Cappellen et al., 2017). Although the terms religion and religiosity are sometimes used interchangeably in the literature, they refer to slightly different concepts with nuanced and important differences (Gmel, Mohler-Kuo, Dermota, Gaume, Bertholet, Daeppen, & Studer, 2013). Indeed, definitions of religion and religiosity vary across academic fields. In psychology, religiosity is usually defined as the internal and external behaviors and beliefs that are practiced within a religion, while religion itself is defined as a unified system of beliefs and practices that revolve around the sacred (Graham & Haidt, 2010). Religion is further broken down into religious denominations (RDs), referring to the specific sect or belief system that the individual adheres to, such as an individual considering him or herself Jewish, Catholic, Muslim, Mormon, or Seventh-Day Adventist (Gmel et al., 2013).

Religion has been a prominent feature of many societies since ancient times, evolving as a vehicle for providing stability, order, and meaning to people’s lives. From this perspective, religion also serves as a vehicle for social affiliation through the binding of people together in a shared faith. Indeed, affiliation with those who share the same faith is a central aspect of most religions (Epley et al., 2008). Spending time with similar others and engaging in shared religious belief and practice fosters a strong sense of connection and shared purpose among

religious individuals. This sense of shared community may partly explain why individuals who self-identify as religious tend to be more altruistic, or at least are viewed as altruistic by their peers (Saroglou, Pichon, Trompette, Verschueren, & Dernelle, 2005). Despite fostering the bonds of social connection, evidence suggests that religiously motivated altruism is seemingly limited to an individual's religious ingroup. That is, religious individuals may display favoritism or bias towards those whom they believe share the same faith as they do while excluding those who do not (Galen, 2012).

Ingroup Preference

The inherent preference toward those who belong to an ingroup and exclusion of those who belong to an outgroup is a central aspect of human behavior. The division of the social world into "us" and "them" is a phenomenon that starts as early as 11 months in children and is culturally universal (Mahajan & Wynn, 2012). Human beings generally define themselves by the particular groups they belong to, such as a nation, political party, or religion (Balliet, Wu, & De Dreu, 2014). This labeling and belonging behavior stems from a drive to increase the success and functioning of an individual's particular group, which provides increased survivability, group cohesiveness, and other long-term benefits (Brewer, 1999; Van Vugt & Park, 2009).

The preference for one's ingroup is an ingrained aspect of human social behavior and is an especially powerful aspect inherent in religious belief. When

religious traditions speak of compassion for others and fair treatment, they typically limit these maxims to those who belong to the same religious tradition (Graham & Haidt, 2010). The Old Testament and the Qur'an specifically command that loyalty and self-sacrifice be focused primarily on the religious ingroup, thus creating trust and reciprocity within while excluding these benefits from those who do not belong (Graham & Haidt, 2010). Individuals tend to view members of their own religious ingroup more positively than members of religious outgroups (Galen, Williams, & Ver Wey, 2014). Although in modern times these moral commandments have been relaxed when it comes to members of religious outgroups (Ramsay, Tong, Pang, & Chowdhury, 2016), loyalty to the group remains a strong tenant of religion in general.

Shared religious belief is one of the strongest predictors of ingroup favoritism and outgroup exclusion across many diverse domains (Weeks & Vincent, 2007). People are more likely to give money to a stranger when they believe the individual belongs to their own religious group (Fitzgerald & Wickwire, 2012). In a similar vein, those high in religiosity view those who outwardly display signs of religiosity as more likeable than those who have no such outward displays—but only when that individual belongs to the same religion as they do (Bobkowski & Kalyanaraman, 2010). Religion, then, can serve as a vehicle for bringing people together, but it can also foster ingroup bias (Preston, Ritter, &

Hernandez, 2010) and create a clear division between those in the ingroup (“us”) and those in the outgroup (“them”).

Present Research

Although the desire to socially affiliate is a strong human motivator, research has shown that the desire for social affiliation depends on one’s level of power. In particular, when experiencing lowered levels of power, individuals express an increased desire to engage in social affiliation and seek out opportunities for social contact (Case et al., 2015). It is unknown, however, how power affects affiliative desire among religious individuals, especially when religious individuals tend to favor interacting with members of the ingroup over outgroups.

Social affiliation and religiosity are strongly related, indicating that religion is a vehicle through which human beings can fulfill their drive to socially affiliate with others (Strawbridge, Shema, Cohen, & Kaplan, 2001). However, the drive to socially affiliate diminishes when the target of affiliation is revealed to be a member of a religious outgroup who is different from that of the individual seeking to socially affiliate. For example, when the individual desiring to socially affiliate is a Christian and the target of affiliation is revealed as an atheist, the drive to socially affiliate diminishes significantly (Van Cappellen et al., 2017). Similar research has found that when faced with a resource allocation task,

Christians consistently favor those who share their religious beliefs while assigning fewer resources to atheists (Cowgill, Rios, & Simpson, 2017).

Building on these two findings—that low power increases the need for social affiliation and that religious outgroups are not preferable targets for social affiliation—the present research tested the hypothesis that priming low power will increase the need for social affiliation in a Christian individual, but only when the target of that affiliation is a Christian as well. When the Christian participant is informed that the only available target of social affiliation is a member of a religious outgroup (either an atheist or a Muslim), the need for social affiliation will decrease when compared to a member of the religious ingroup. Given existing evidence regarding the general level of animosity that exists towards Islam in the West (Shaver, Troughton, Sibley, & Bulbulia, 2016), it is predicted that Christian participants will display less of an inclination to socially affiliate with a Muslim than with an atheist.

In the current study, individuals who identified as belonging to Christian denominations were primed with low power using a dyadic task, and their drive to affiliate with members of a religious outgroup (atheist, Muslim) or ingroup (Christian) was assessed. It was hypothesized that when Christians faced the prospect of interacting with a fellow Christian, they would display an increased level of social affiliation, but when presented with an atheist or a Muslim, they would display a decreased desire for social affiliation. Specifically, I

hypothesized that when primed with low power and therefore seeking to socially affiliate, Christian participants would sit farther away from those who belonged to a religious outgroup (i.e., atheists and Muslims), although farther away from a Muslim than an atheist, while sitting closer to those who belonged to the same religious ingroup (Christian). These conditions were compared against a neutral control condition (i.e., partner with no religion mentioned) to establish a baseline of behavior. This desire to affiliate was measured on a scale from 1 to 4, with each number corresponding to the chairs available from left to right. For example, chair 1 was the chair right next to the ostensible partner's chair, while chair 4 was the farthest from the partner. In this way, physical closeness to the ostensible partner served as a measure of participants' affiliative motivation.

Method

Participants

Results of a power analysis using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) indicated that 120 participant responses were required in order to obtain sufficient power to test the hypotheses. Participants were undergraduate students enrolled in introductory psychology courses at Stephen F. Austin State University (SFA) who self-identified as belonging to a Christian denomination. This included those who identified as Catholic, Protestant (e.g., Baptist, Episcopalian, Presbyterian, Lutheran, Anglican, Evangelical), Eastern Orthodox, and the many other sects contained within Christianity. Consistent with previous research (see Burris & Petrican, 2011), participants who belonged to these and other similar denominations were included under the umbrella of Christianity for the sake of simplicity. Participants in this study earned partial credit toward a course requirement.

The initial sample contained a total of 129 participant responses. After conducting data cleanup, 16 participants were excluded as they did not self-identify as a Christian, resulting in a final sample of 113 participants (90 females, 23 males). More than half of the participants identified as White (63%). Other races in the sample included Black or African American (26%), unknown or not reported (5%), more than one race (4.5%), American Indian/Alaska Native

(1.8%), and Asian (0.9%). About a quarter of the sample (25.7%) identified as Hispanic or Latino. Socioeconomic status (SES) was measured by asking participants to estimate the SES of their parents. Most participants identified as middle class (49.6%).

Materials

Demographics. Demographic data included the participants' age, gender, race, ethnicity, academic standing, SES, and questions pertaining to participants' belief in God and religious denomination.

Ten Item Personality Inventory. The Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003) is a 10-item measure designed to examine five basic aspects of personality: extraversion, agreeableness, conscientiousness, emotional stability (neuroticism), and openness to experience. Participants were asked to rate themselves using a seven-point Likert scale ranging from 1 (*Disagree strongly*) to 7 (*Agree strongly*) on items such as "Extraverted, enthusiastic" and "Disorganized, careless." Items were reverse-scored and averaged to form a composite index for each of the five aspects of personality (alphas ranged from .46 to .77).

Dominance and Prestige Scales. Participant levels of dominance and prestige were measured with a 17-item self-report scale developed by Cheng, Tracy, and Henrich (2010). The scale is comprised of two subscales, one measuring dominance and the other measuring prestige. The Dominance

subscale includes items such as “I am willing to use aggressive tactics to get my way” and “Others know it is better to let me have my way,” while the Prestige subscale includes items such as “Others seek my advice on a variety of matters” and “Members of my peer group respect and admire me.” Responses were given using a seven-point Likert scale from 1 (*Not at all*) to 7 (*Very much*). Items were reverse-scored and averaged to form composite measures of dominance ($\alpha = .73$) and prestige ($\alpha = .71$), respectively.

Personal Sense of Power Scale. The individual experience of psychological power was measured using the eight-item Personal Sense of Power Scale (PSPS; Anderson, John, & Keltner, 2012). The measure includes questions such as “My ideas and opinions are often ignored” and “If I want to, I get to make the decisions” measured using a seven-point Likert scale ranging from 1 (*Disagree strongly*) to 7 (*Agree strongly*). Appropriate items were reverse-scored and averaged to form an overall measure of power ($\alpha = .82$), with higher scores indicating a greater personal sense of power.

Interaction Anxiousness Scale. The 15-item Interaction Anxiousness Scale (IAS; Leary, 1983) measures the extent to which a person worries about social interactions. This scale was included to control for participant levels of anxiousness regarding social interaction. The measure includes questions such as “I usually feel comfortable when I'm in a group of people I don't know” and “I usually feel relaxed around other people, even people who are quite different

from me.” Items were scored on a five-point Likert scale ranging from 1 (*Not at all characteristic of me*) to 5 (*Extremely characteristic of me*). Appropriate items were reverse-scored and summed to form an overall measure of interaction anxiousness ($\alpha = .83$), with higher scores indicating greater anxiousness.

Brief Mood Introspection Scale. The Brief Mood Introspection Scale (BMIS; Mayer & Gaschke, 1988) is a 16-item scale designed to assess participants’ mood and arousal. This measure was included to ensure that any differences in social affiliation following the power prime were due to the priming of low power and not fluctuations in mood or arousal. Responses were given using a four-point Likert scale from 1 (*Definitely do not feel*) to 4 (*Definitely feel*) and included questions aimed at determining mood (e.g., “content” and “happy”) and arousal (e.g., “lively” and “jittery”). Scoring depended on the particular subscale (Pleasant-Unpleasant Mood or Arousal-Calm Mood), whereby the appropriate questions were reverse-scored and then added onto the total of the regular scored responses ($\alpha = .82$ and $\alpha = .54$, respectively). At the end of the scale, participants were asked to rate their overall mood as well as to indicate how powerful they felt on a 1-7 scale.

Procedure

After the study was reviewed and approved by the SFA Institutional Review Board (IRB), participants were recruited and signed up through the SFA SONA Systems website. This was an in-person study. Participants arrived at

the lab room at the proscribed date and time and sat in front of a computer where they provided informed consent to participate in the research (see Appendix A). Participants were then informed that the study consisted of two phases, the first completed alone and the second completed with a partner. All scales were completed on a computer.

Next, participants completed the demographics (Appendix B), TIPI (Appendix C), the Dominance and Prestige Scales (Appendix D), PSPS (Appendix E), and the IAS (Appendix F). In keeping with previous research, participants were informed that their responses to these questionnaires would determine their role in the second phase of the experiment. This was done to legitimize participants' assignment to power condition, as previous research has shown that the effects of a power prime hold best when the prime is perceived as legitimate (Lammers, Galinsky, Gordijn, & Otten, 2008). After completing these measures, participants were primed with low power using instructions adapted from previous research. Participants were informed that, based on their responses to the scales, they had been assigned to the role of the builder on a dyadic task that involves building a structure (called a Tanagram) from a set of Legos with a partner. (In reality, there was no partner; this deception was used to increase participant confidence in the cover story.) Specifically, participants were told the following:

“As a builder, you will have the responsibility of carrying out the task of building a Tanagram according to instructions given to you by your partner (the manager). Your manager will call you in to give you instructions when ready. Your manager will decide how to structure the process for building the Tanagram and the standards by which the work is to be evaluated. Which tasks you complete will be decided by the manager. In addition, you will be evaluated by the manager at the end of the session. This evaluation will be private; that is, you will not see your manager’s evaluation of you. This evaluation will help determine how the experimental credits for being in this experiment will be divided between the manager and you. You will not have an opportunity to evaluate your manager. Only the manager will be in charge of directing production, evaluating your performance, and determining the rewards you will receive.”

This dyadic task has been used extensively in previous research (e.g., Case et al., 2015; Galinsky et al. 2003) as an effective means of priming the psychological experience of low power.

The participants (all of whom were primed with low power) were then instructed to build a Tanagram model (see Appendix G) exactly as instructed by their ostensible partner, whom they had yet to meet and had been “assigned” the role of manager. They were then informed that their partner was running late

and were asked to complete the BMIS (Appendix H), which was included to rule out the possibility that participants' response to the power prime was due to general changes in mood or affect.

Next, participants were told that the researcher needed to relocate them to a different lab room down the hall, ostensibly to allow the researcher enough time to set up the second phase of the experiment in the original lab room. The lab room contained a large straight table with five individual chairs, all in a linear row on the same side of the table, the leftmost of which had a backpack, notebook, and pen (adapted from van Cappellen et al., 2017) to indicate the presence of another individual. Depending on the condition to which the participant had been randomly assigned, the participant was told: "We actually share the lab room with another research assistant... [For **Christian condition**:] who is conducting a study on the psychology of Christianity with only Christian participants. It's an interesting study." [For **atheist condition**:] "who is conducting a study on the psychology of atheism with only atheist participants. It's an interesting study." [For **Muslim condition**:] "who is conducting a study on the psychology of Islam with only Muslim participants. It's an interesting study." Then, for all conditions, the researcher said: "Oh, it looks like their participant is already here and will be back. But it is fine for you to wait here. Just have a seat, and I'll be back shortly."

After closing the lab room door, the experimenter then recorded which of the four available chairs the participant chose to sit in (numbered 1 through 4, with “1” being closest to the ostensibly waiting individual and “4” being farthest; see Appendix I). This recording took place through a one-way mirror in the event that a participant changed seats after the researcher left the room. After waiting two minutes, the researcher returned to the lab room, explained that there was no partner or Tanagram task, and debriefed the participant on the true purpose of the study and the reason for deception to test the hypothesis. Participants were probed for suspicion regarding the hypothesis and thanked for their participation.

Results

Preliminary Analyses

Because all participants were primed with low power, a preliminary analysis was conducted before the main analysis to assess for pre-prime differences in feelings of power. A one way between-subjects ANOVA revealed no differences across conditions in personal sense of power, $F(3, 109) = 0.28, p = .84$, suggesting that all participants reported similar levels of power prior to the low power prime.

To ensure that any differences in social affiliative desire were not due simply to changes in mood or arousal, possible effects on current valence were assessed. No significant differences across religious conditions were found for either current mood valence ($F = 1.00, p = 0.39$) or current arousal ($F = 1.04, p = 0.38$).

Main Analysis

A one way analysis of covariance (ANCOVA) was conducted to test the hypothesis that Christian participants would choose to sit farther from an atheist or Muslim while sitting closer to a fellow Christian or a target for whom no religion was mentioned. The religious denomination of the individual in the waiting room (four levels: Christian, atheist, Muslim, and no religion control) was the independent variable, and social affiliative desire (as measured by chair

distance) was the dependent variable. Higher scores (on a 1 to 4 scale) indicated a desire for greater physical distance from the ostensible individual in the waiting room. Interaction anxiousness was included as a covariate to control for participants' general level of anxiousness when interacting with others.

There was a significant effect of condition on social affiliative desire after controlling for the effect of anxiety, $F(3, 108) = 8.57, p < .001, \eta^2 = .19$ (see Appendix J)¹. Planned contrasts revealed that Christian participants in the atheist condition ($n = 26, M = 3.27, SD = .92$), $p = .02, 95\% CI [.08, 1.04]$, and Muslim condition ($n = 30, M = 3.63, SD = .67$), $p < .001, 95\% CI [.46, 1.39]$, were significantly more likely to sit farther away from the ostensible individual in the waiting room compared to the Christians in the Christian condition ($n = 27, M = 2.70, SD = .87$). Christians in the Christian condition did not significantly differ from participants in the control condition ($n = 30, M = 2.63, SD = 1.03$), $p = .73, 95\% CI [-.38, .55]$. Christian participants in the atheist condition, $p = .007, 95\% CI [.18, 1.11]$, and Muslim condition, $p < .001, 95\% CI [.55, 1.46]$, were significantly more likely to sit farther away from the waiting individual compared to the control condition.

These results indicate that, as predicted, Christian participants increased social distance from a Muslim and an atheist whom they were told was ostensibly sitting at the far end of the table. Conversely, no such drive to increase social distance was observed when Christian participants were informed of the

¹ When the analysis was conducted with only female participants, the F value dropped to 5.8, but significance remained at $p < .001$.

presence of a fellow Christian or someone for whom no religion was mentioned (see Appendix K for a bar graph of the number of chair selections by religious condition). Social anxiety was included in the analysis as an a priori covariate. In supplemental analyses, race, socioeconomic status, sex, age, intensity of religious belief, and political beliefs were all examined as potential covariates, but none of these variables were significantly correlated with the dependent variable.

Discussion

Human beings are social creatures who organize themselves into groups, and within these groups, some individuals rise to positions of power and authority over others. Power affords these individuals control over valuable resources, whereas those with less power become dependent on others to achieve their goals. Previous research has established that experiencing low power increases people's desire for social affiliation. However, while social affiliation is a fundamental human motivation, religious individuals generally prefer to affiliate with members of their ingroup at the expense of interacting with religious outgroup members (Galen, 2012).

The goal of the present study was to explore how Christian participants experiencing lowered levels of psychological power would respond towards members of their religious ingroup as well as members of religious outgroups. To test this experimentally, Christian participants were placed in a situation where they had to choose where to sit relative to someone they were told was either a Christian, an atheist, a Muslim, or an individual for whom no religion was mentioned. It bears mentioning that power was not manipulated in this study, as all participants, regardless of condition, received a low power prime. Instead, the actual condition itself was manipulated, although no manipulation check was included to ensure that participants heard and processed the religious identity of

the individual with whom they ostensibly shared the waiting room. Nonetheless, results confirmed the hypothesis that Christian participants would sit closer to fellow Christians (members of their own religious ingroup) while sitting farther away from both atheists and Muslims. When Christians were compared against a neutral control condition, no such drive to increase distance was observed.

Together, these results suggest that the primed drive to affiliate in Christian individuals who lacked power was not enough to overcome the strong ingroup preferences members of this religious group held. As predicted, Christian participants sat furthest away from an ostensible Muslim individual, which may have resulted from current cultural attitudes towards Muslims (Shaver et al., 2016) or a clear ingroup/outgroup distinction between practitioners of the Christian and Islamic faiths. In any case, it appears that Christians drew a clear distinction between themselves and these two religious outgroups that even low power—and the theorized increase in affiliative desire that results—could not transcend.

Consistent with previous research on the perception of atheists and Muslims as value-threatening outgroups by Christian participants (see Van Cappellen et al., 2017; Van der Noll, Saroglou, Latour, & Dolezal, 2017), the present study found that both groups were shunned as targets of social affiliation, although atheists less so than Muslims. This indicates that although Christian participants were wary of socially affiliating with both groups, atheism was the

less threatening of the two. This finding can possibly be explained by the fact that the population from which the experimental sample was drawn were college students. Although previous research has found negative views towards atheists among Christian college students (Bowman, Rockenbach, Mayhew, Riggers-Piehl, & Hudson, 2017), it is possible that they do not find them necessarily threatening in the same way in which Islam is popularly perceived (Alexander, 2013). An atheist, while a member of a religious outgroup, is still perceived as belonging to the ingroup represented by the Western liberal and scientific tradition, while a Muslim (in popular perception), belongs to neither (Van der Noll et al., 2017). The present study also examined the desire of Christians to affiliate with both Muslims and atheists concurrently as opposed to in isolation, as in previous research, which may have forced Christians to sit closer to the lesser of two disliked outgroups.

It is perhaps not surprising, given the current socio-political climate in the United States, that a Muslim might represent the least favorable target for social affiliation. Anti-Muslim attitudes are pervasive in the United States and elsewhere in the West (Kalkan, Layman, & Uslaner, 2009). There is evidence from countries that have not been the direct target of terrorist attacks that there is still a conflation between Arab and Muslim as if one is naturally the other (Shaver et al., 2016). This implies that there may be several underlying reasons for anti-Muslim attitudes in the West, where personal religious differences (that

is, differing theological views) encompass only one of several possible explanations (Shaver et al., 2016). Despite the inclusion of all Christian sects under a single umbrella for the purposes of this study, researchers have found differences in attitudes towards Muslims among different Christian sects. For example, Catholics are among those who have the most positive view of Muslims while Mormons have the least positive views (Zainiddinov, 2013). It is also possible that this effect is less religiously motivated and instead the result of consistent media portrayal of Muslims as a threatening outgroup and the subsequent reactions of the majority ingroup (Cinnirella, Leman, Hastings, & Whitbread, 2009).

The findings of the present study are consistent with the Social Distance Theory of Power, which holds that the powerful will create social distance between themselves and the powerless (Magee & Smith, 2013). Christian participants, who belong to the majority faith in the United States (Pew Research Center, 2014), may experience a sense of elevated power over both atheists and Muslims. As a result, Christians may both prefer social distance from these groups as well as view them with distrust, paranoia, apprehension, and as intruders into an already established culture (Lopes & Jaspal, 2015). Indeed, research has found that majority native born populations typically view the acquisition of political power by Muslim immigrants as a threat to their existing power (Verkuyten, Hindriks, & Coenders, 2016). Because atheists and Muslims

are traditionally underrepresented groups in both business and political realms (Pew Research Center, 2017), perceived attempts to gain power or achieve egalitarian status by these groups may be met with suspicion or hostility by Christians.

Limitations and Future Directions

The current study had several limitations that should be considered when interpreting the results. The study lacked a true manipulation check to ascertain whether participants heard and were aware of the conditionally dependent dialogue. Although differences were observed between conditions, it is impossible to know whether the manipulation was successful. In addition, it is possible that the dependent variable (chair selection) is not as sensitive to variance as one that relies on measuring the physical distance between chairs, as was done in Case et al. (2015). The measurement of physical distance could reflect more nuanced preferences for social distance than what was captured by having participants select among numbered chairs.

Because of the lack of manipulation check data, the effect size reported in the current study must also be interpreted with caution. As with any controlled experiment conducted in a laboratory, it is difficult to predict how these findings would play out in the real world. For example, outside the lab, an individual's religious belief is rarely shared as explicitly as was done in the current study. For

example, physicians struggle with religious self-disclosure to patients even when directly asked (Canzona, Peterson, Villagran, & Seehusen, 2015). Even on social media, a medium which encourages self-disclosure, only 30% of individuals mention religious topics outside of the religion designated field in their profile (Bobkowski & Pearce, 2011).

In addition, unlike the controlled environment provided by a laboratory setting where individuals are aware they are being observed, in the outside world this is rarely a salient consideration for most individuals. In support of this notion, approximately 39% of participants in the current study expressed suspicion that their actions were being monitored or that the researchers were observing their behavior for some unknown purpose, which may have affected their responses. Despite the relatively high suspicion rate, only one individual (who did not identify as Christian and was therefore excluded from the analysis) correctly guessed the hypothesis². Another related limitation is that most of the data were collected at the end of the semester, a time when most participants have been exposed to the use of deception in psychological research. Another possible limitation is the time it took each individual to pick a seat. Due to the study design and the reliance on deception, the researcher was unable to observe the time it took for participants to decide on a seat. Future studies could include time to make a decision as a variable that could be included as a covariate, perhaps through the

² The data were re-analyzed excluding the roughly 39% of suspicious participants, but the results were unchanged.

use of video recording which would allow the researcher to record time to seat accurately and unobtrusively.

While the present study controlled for the social anxiety of participants, this is not the only possible confound present when researching how power affects social affiliative behavior. Future studies could include other variables as covariates, such as extant levels of individual power or religious fundamentalism. Power is not experienced in the same manner by all individuals, and future studies should attempt to further explore the relationship among psychological power, social affiliation, and related variables. Similarly, although those high in religious fundamentalism display high levels of religious belief, there is (in many cases) a difference in attitude and behavior towards dissimilar others (outgroups) when comparing religious fundamentalists and otherwise low fundamentalism-high religious belief individuals (Brandt & Van Tongeren, 2017).

One final consideration is that the sample was predominately female (80%). Of the final sample, fully 48% was female and white, a demographic breakdown which could inform the final results given that half the sample was demographically similar. Research has established that women experience already lowered levels of power in society compared to men, especially in the political, academic, and business worlds (see Dresden, Dresden, Ridge, & Yamawaki, 2018; Nelson, Bronstein, Shacham, & Ben-Ari, 2015). Therefore, it is possible that women enter situations such as the one encountered in the present

research with an already diminished level of power, which may have been lowered further by the power prime. Future research should consider potential pre-existing sex differences in feelings of power and their effect on outcomes related to power.

Conclusion

Lowered levels of psychological power increase the desire to socially affiliate, but no matter how universal the human drive for social affiliation might be, not all targets for social affiliation are perceived in the same manner. The current study suggests that Christian individuals will instinctively view Muslims and atheists as members of an outgroup, regardless of any increase in affiliative desire accompanied by lowered power and will consequently increase the social distance between them and these religious outgroup members. It would seem, then, that one major purpose of religion—to bind—extends primarily to members of religious ingroups, and that the experience of powerlessness is not enough to encourage bonds of social connection between members of religious outgroups.

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APPENDIX A

Stephen F. Austin State University Informed Consent Document

STUDY TITLE: Behavior in Partnership Tasks

PURPOSE: The current study is conducted by student researcher Hernan Escobar under the supervision of Dr. Kyle Conlon from the department of Psychology at Stephen F. Austin State University. The study will explore individual behavior in tasks that require partnership to complete.

DURATION: Participation in this study is expected to take approximately 30 minutes.

PROCEDURES: If you agree to participate in this study, you will be asked to complete several surveys, a demographics questionnaire, and participate in a goal-oriented task with a partner.

CONFIDENTIALITY: The records of this study will be kept private. Your name will not be attached to answers you provide. The researchers will have access to the raw data. In any resulting publication or presentation, we will not include any information that will make it possible to identify a participant. Once collected, all data will be kept in secured files, in accordance with the standards of SFASU and federal regulations. We will make every effort to protect your privacy.

VOLUNTARY NATURE OF THE STUDY: Your participation in this study is voluntary. In addition, you may choose not to respond to individual items in the surveys. Your decision whether to participate will not affect your current or future relations with SFASU or any of its faculty, staff, or representatives. If you decide to participate in this study, you are free to withdraw from the study at any time without affecting those relationships and without penalty or loss of benefits to which you are otherwise entitled.

POTENTIAL RISKS: The researcher anticipates no potential risks associated with your participation in this study, besides those inherent in any psychological evaluation. Mild boredom or fatigue is possible while completing surveys. If you experience negative affect as a result of participating in this study, you may

contact SFASU Counseling Services, located on the 3rd floor of the Rusk Building, or contact their office at (936) 468-2401 or counseling@sfasu.edu.

ANTICIPATED BENEFITS: The current study has the potential to inform your own and others' understanding of important variables related to how religious belief can influence goal-related tasks done conducted with the help of others.

COMPENSATION: In exchange for your participation, you will receive 1 credit for every 30 minutes of research participation or credit in an amount that is considered appropriate by your course instructor. This study is worth 1 credit.

CONTACT: If you have any questions or concerns about being in this study, you should contact Hernan Escobar at escobarha1@jacks.sfasu.edu or Dr. Kyle Conlon at conlonke@sfasu.edu or (936) 468-1572. Additionally, you may also contact the SFASU Office of Research and Sponsored Programs at osrp@sfasu.edu or (936) 468-6606 if you would like more information regarding your rights as a research participant.

STATEMENT OF CONSENT

The procedures of this study have been explained to me and my questions have been addressed. The information that I provide is confidential and will be used for research purposes only. I am at least 18 years of age. I understand that my participation is voluntary and that I may withdraw at any time without penalty. I have read the information in this consent form and I agree to be in the study. I will receive a copy of this consent form for my records upon my request.

Yes, I agree to participate
No, I do not agree to participate

APPENDIX C

Ten-Item Personality Inventory

(Gosling, Rentfrow, & Swann, 2003)

Instructions: Here are a number of personality traits that may or may not apply to you. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

1	2	3	4	5	6	7
Disagree strongly	Disagree moderately	Disagree a little	Neither agree nor disagree	Agree a little	Agree moderately	Agree strongly

I see myself as:

1. _____ Extraverted, enthusiastic.
2. _____ Critical, quarrelsome.
3. _____ Dependable, self-disciplined.
4. _____ Anxious, easily upset.
5. _____ Open to new experiences, complex.
6. _____ Reserved, quiet.
7. _____ Sympathetic, warm.
8. _____ Disorganized, careless.
9. _____ Calm, emotionally stable.
10. _____ Conventional, uncreative.

APPENDIX D

Dominance-Prestige Scales

(Cheng, Tracy, & Henrich, 2010)

Instructions: Please indicate the extent to which each statement accurately describes *you* by writing the appropriate number from the scale below in the space provided.

1 2 3 4 5 6 7
Not at all Somewhat Very
much

1. _____ Members of my peer group respect and admire me.
2. _____ Members of my peer group do NOT want to be like me.
3. _____ I enjoy having control over others.
4. _____ Others always expect me to be successful.
5. _____ I often try to get my own way regardless of what others may want.
6. _____ Others do NOT value my opinion.
7. _____ I am willing to use aggressive tactics to get my way.
8. _____ I am held in high esteem by those I know.
9. _____ I try to control others rather than permit them to control me.
10. _____ I do NOT have a forceful or dominant personality.
11. _____ Others know it is better to let me have my way.
12. _____ I do NOT enjoy having authority over other people.
13. _____ My unique talents and abilities are recognized by others.
14. _____ I am considered an expert on some matters by others.
15. _____ Others seek my advice on a variety of matters.
16. _____ Some people are afraid of me.
17. _____ Others do NOT enjoy hanging out with me.

APPENDIX E

Personal Sense of Power Scale

(Anderson, John, & Keltner, 2012)

In rating each of the items below, please use the following scale:

1	2	3	4	5	6	7
Disagree strongly	Disagree	Disagree a little	Neither agree nor disagree	Agree a little	Agree	Agree strongly

In my relationships with others...

1. _____ I can get them to listen to what I say.
2. _____ My wishes do not carry much weight. (r)
3. _____ I can get them to do what I want.
4. _____ Even if I voice them, my views have little sway. (r)
5. _____ I think I have a great deal of power.
6. _____ My ideas and opinions are often ignored. (r)
7. _____ Even when I try, I am not able to get my way. (r)
8. _____ If I want to, I get to make the decisions.

APPENDIX F

Interaction Anxiousness Scale

(Leary, 1983)

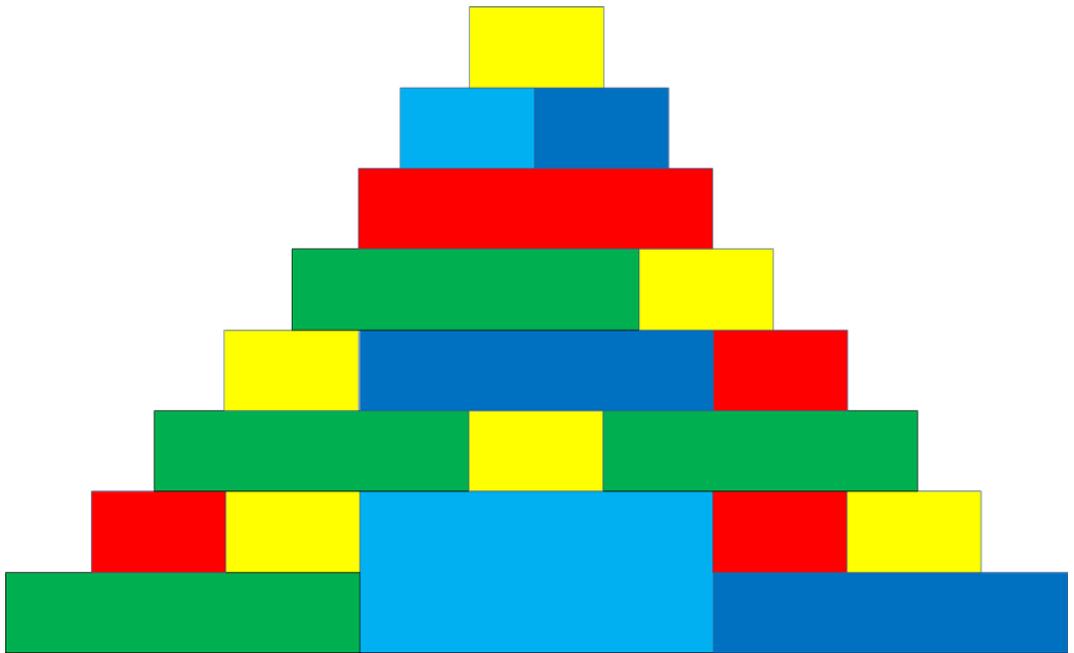
Indicate how characteristic each of the following statements is of you according to the following scale:

1	2	3	4	5
Not at all	Slightly	Moderately	Very	Extremely
characteristic of me				

- _____ 1. I often feel nervous even in casual get-togethers.
- _____ 2. I usually feel comfortable when I'm in a group of people I don't know.
- _____ 3. I am usually at ease when speaking to a member of the other sex.
- _____ 4. I get nervous when I must talk to a teacher or a boss.
- _____ 5. Parties often make me feel anxious and uncomfortable.
- _____ 6. I am probably less shy in social interactions than most people.
- _____ 7. I sometimes feel tense when talking to people of my own sex if I don't know them very well.
- _____ 8. I would be nervous if I was being interviewed for a job.
- _____ 9. I wish I had more confidence in social situations.
- _____ 10. I seldom feel anxious in social situations.
- _____ 11. In general, I am a shy person.

- _____ 12. I often feel nervous when talking to an attractive member of the opposite sex.
- _____ 13. I often feel nervous when calling someone I don't know very well on the telephone.
- _____ 14. I get nervous when I speak to someone in a position of authority.
- _____ 15. I usually feel relaxed around other people, even people who are quite different from me.

APPENDIX G



APPENDIX H

Brief Mood Introspection Scale

(Mayer & Gaschke, 1988)

Instructions: Circle the response on the scale below that indicates how well each adjective or phrase describes your *present* mood.

1	2	3	4
Definitely do not feel	Do not feel	Slightly feel	Definitely feel
_____ Lively		_____ Drowsy	
_____ Happy		_____ Grouchy	
_____ Sad		_____ Peppy	
_____ Tired		_____ Nervous	
_____ Caring		_____ Calm	
_____ Content		_____ Loving	
_____ Gloomy		_____ Fed up	
_____ Jittery		_____ Active	

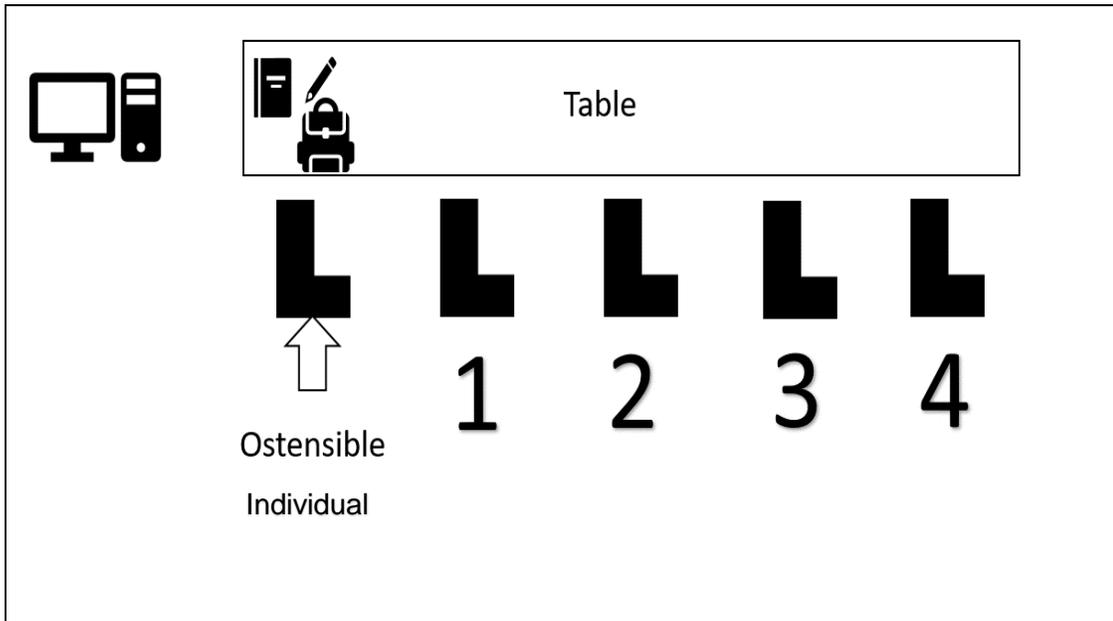
Overall, my mood is:

1	2	3	4	5	6	7	8	9	10
Very unpleasant									Very pleasant

How much power do you feel you have on the Tanagram task?

1	2	3	4	5	6	7
Very little						A great deal

APPENDIX I
Lab Room Diagram



APPENDIX J

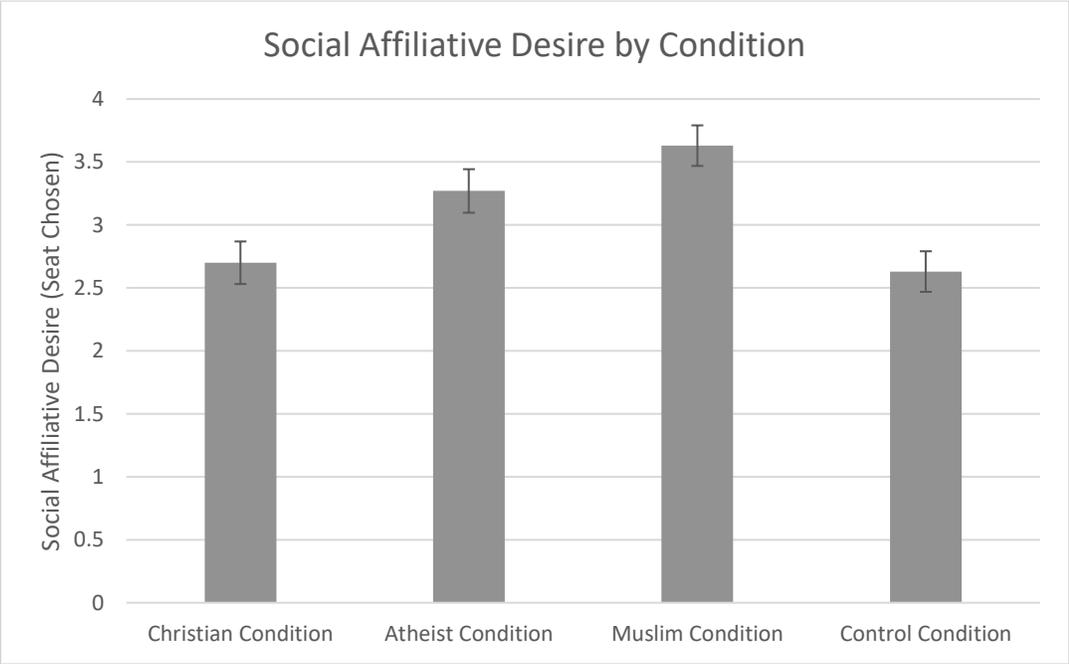


Figure 1. Chart displays social affiliative desire as measured by seat choice and organized by religious condition. Error bars represent 95% confidence intervals.

APPENDIX K

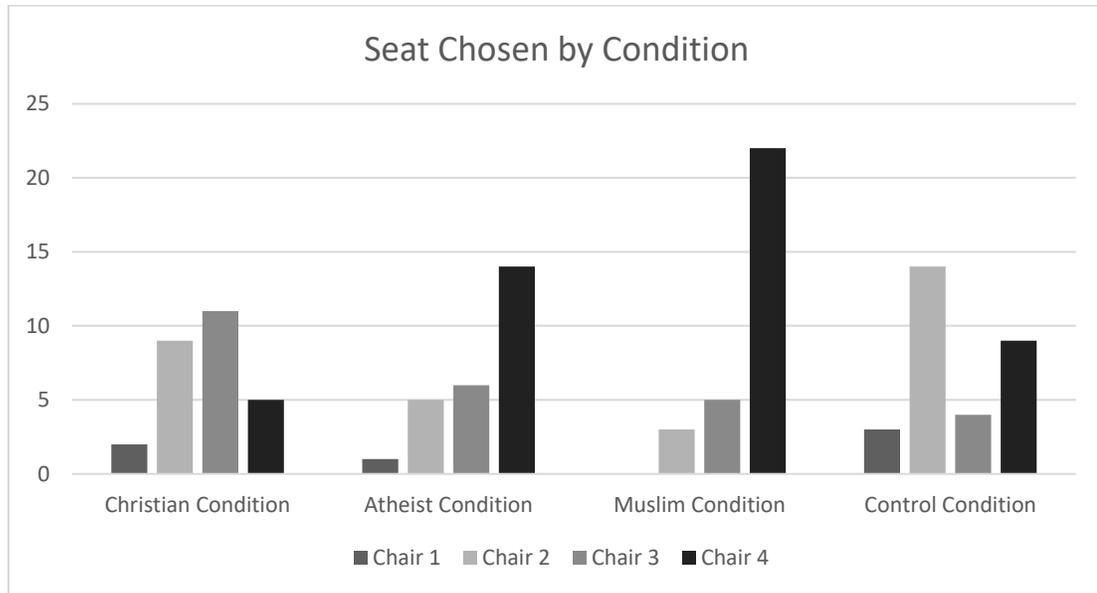


Figure 2. Bar graph of seat chosen by participants broken down by religious condition.

VITA

After completing high school at Cypress Falls High School in Houston, Texas, Hernan entered the University of Houston-Downtown. He received the degree of Bachelor of Science in Psychology from the University of Houston-Downtown in December 2015. In August 2016, Hernan went on to study at Stephen F. Austin State University where he received his Master of Arts in Psychology in August 2018.

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