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ON A(PE)THEISM: RELIGIOUS DEHUMANIZATION OF ATHEISTS AND OTHER OUTGROUPS

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ON A(PE)THEISM: RELIGIOUS DEHUMANIZATION
OF ATHEISTS AND OTHER OUTGROUPS

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Thesis

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A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science in the
College of Arts and Sciences at
the University of Kentucky

By

Ben Kok. Leong. Ng

Lexington, Kentucky

Director: Dr. Will Gervais, Professor of Psychology

Lexington, Kentucky

2015

ABSTRACT OF THESIS

ON A(PE)THEISM: RELIGIOUS DEHUMANIZATION
OF ATHEISTS AND OTHER OUTGROUPS

Research on the dark side of religion has recently found evidence that anti-atheist prejudice is embedded in distrust (Gervais et al, 2011). Anti-atheist prejudice though old in its form, has only been systemically researched on over the last couple of years. This study seeks to extend on research in anti-atheist prejudice by examining religious dehumanization of atheists in comparison with other religious outgroups − gays and Muslims. Study 1 utilized a two factor model of dehumanization (Haslam, 2006) to examine dehumanization. Study 2 serves as a conceptual replication and extension using two different measures of dehumanization. Study 1 failed to find support for religious dehumanization while study 2 found partial support.

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Ben K. L. Ng

June 1, 2015

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ON A(PE)THEISM: RELIGIOUS DEHUMANIZATION
OF ATHEISTS AND OTHER OUTGROUPS

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Chapter 1: Introduction

While the study of prejudice has historically been situated in the context of race and gender, empirical research on religious prejudice has gotten more attention in recent years. Specifically, recent research has examined religious prejudice directed toward outgroups such as African-American (Hall, Matz & Wood, 2010, Rowatt & Franklin, 2004), Muslims (Rowatt, Franklin & Cotton, 2005, Leak & Finken, 2011), homosexuals (Johnson, Rowatt & Labouff, 2012, Johnson, Rowatt, Barnard-Brak, Patock-Peckham, Labouff & Carlisle, 2011) and atheists (Gervais, Shariff & Norenzayan, 2011, Johnson et al, 2012). Central to this study is religious prejudice against atheists.

Anti-atheist prejudice is grounded in evidence showing that atheists are often being distrusted by religious people (Gervais et al, 2011). The underlying logic behind distrust as central to anti-prejudice is derived from an amalgamation of both evolutionary accounts of religion (Atran & Norenzayan, 2004; Norenzayan et al, 2014) and prejudice (Cottrell & Neuberg, 2005; Kurzban & Leary, 2001). However, because research on anti-atheist prejudice is still at its infancy, little else is known. Given that outgroup prejudice is often broadly associated with dehumanization, studying religious dehumanization, particularly one against atheist, can help shed light on the psychological consequences of religious conflict. This study is therefore an attempt at investigating the dehumanization of atheists especially as related to other religious outgroups. Because atheist seems to be a group that is perceived as highly immoral, comparable even to rapists (Gervais, 2013), it stands to reason that perhaps atheists will be dehumanized to a larger extent than other religious outgroups such as gays and Muslims.

Theories of Dehumanization

Although dehumanization has been shown to be a robust predictor of prejudice, it has rarely been studied outside of topics pertaining to ethnicity, race and genocide (Haslam, 2006). Occasional attempts have been made to incorporate dehumanization into domains such as disability (O'Brien, 1999), technology (Beckers & Schmidt, 2001) and medicine (Fink, 1982) in the past, but it has yet to be examined with respect to religion. Because dehumanization accounts in psychology can take on several forms, I will begin by giving a brief overview of the different accounts, starting from the early 1990s to the present.

Early research by Opotow (1990) positioned dehumanization as a "moral exclusion" model whereby outgroups are situated "outside the boundary in which moral values, rules and considerations of fairness apply" (p.1). While there can be milder forms of exclusion, dehumanization is taken to be an extreme form. Morally excluded groups are usually portrayed as enemies of the included because they are perceived to be a threat to the moral community and morally inferior to the ingroup. Bandura (1999) emphasized how dehumanization facilitates the disengagement of the aggressor's moral self-sanctions, enabling aggressive behaviors against the dehumanized. Struch & Schwartz (1989) proposed a values approach whereby outgroups who are identified as possessing a different set of values are seen as inhumane. Dissimilarity in values provides a justification for dehumanizing outgroup members without having to feel any sense of guilt. Together, these early accounts hint at a moral dimension to dehumanization by contending that dehumanized victims are seen as less morally worthy beings.

More recently, a dual factor model of dehumanization has been proposed to integrate older accounts (Haslam, 2006, Haslam & Loughnan, 2014). According to Haslam (2006), there are two distinct psychological pathways people can deny others of humanness. The first

approach is denying others Uniquely Human (UH) characteristics. The defining feature of UH is the human-animal divide. UH characteristics include attributes as such civility, moral sensibility and refinement (Leyens, Rodriguez, Rodriguez, Gaunt, Paladino & Vaes, 2001). People denied of UH characteristics are perceived as childlike, lacking in self-control, uncultured and ultimately indistinguishable from animals. The savage nature of animals is often considered an indicator that animals do not possess a moral compass to differentiate between right and wrong. Consequently, denying people of UH characteristics is akin to seeing victims as animals who are unable to regulate their moral behaviors. This approach is very much similar to early accounts of dehumanization mentioned previously. The second method of defining humanness is attributing Human Nature (HN) characteristics to others. These are features that are core to humans. The human-inanimate object divide is the defining feature of the second dimension (Haslam & Loughnan, 2014). People who are denied HN characteristics are seen as lacking in emotionality, warmth, and agency. The theme running through HN characteristics is that denial can lead to the dehumanized target being portrayed as mechanistic (Haslam, 2006).

Another account of dehumanization that emerged from research in mind perception deals with the attribution of mind to a variety of entities (Wayz, Gray, Epley & Wegner, 2010). According to Gray, Gray & Wegner (2007), mind perception consists of two dimensions; agency and experience. The agency dimension measures mental capabilities such as thinking while the experience dimension comprises of emotions and personality. The denial of mind to others is central to the mind perception framework of dehumanization (Kozak, Marsh & Wegner, 2006).

Last but not least, the stereotype content model (SCM) (Fiske, Cuddy, Glick, Xu, 2002) utilizes two dimensions – warmth and competence - to understand the contents of our stereotypes. SCM posits that different combinations of the two dimensions will produce distinct

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emotions associated with different stereotypes. By juxtaposing dehumanization onto SCM, Harris & Fiske (2006) found that only those in the low warmth and low competence quadrant, extreme outgroups who are the "lowest of the low" are dehumanized. Groups associated with this quadrant are the homeless and drug addicts.

Dehumanization of atheists

Accounts proposed by Opotow (1990), Bandura (1999) and the UH aspect of Haslam's model (2006) converge on the idea that there is a moral element to dehumanization. This is in line with recent empirical evidence on perception of atheists as immoral. Using the conjunction fallacy, atheists were found to be intuitively associated with a variety of immoral acts, such as murder, cannibalism and necrobestiality (Gervais, 2014). In a series of studies, comparison between atheists and other cultural groups consistently showed that immoral behaviors were judged to be more representative of atheists. Additionally, a recent sociological study examining membership acceptance in America found atheists to be the least likely accepted group (Edgell, Gerteis & Hartmann, 2006). Participants similarly judged atheists as the group least likely to have a compatible vision of America as them. The authors in their conclusion argued that cultural exclusion is likely due to the construction of atheists "as the symbolic representation of one who rejects the basis for moral solidarity…in American society". Although atheists do not constitute a cohesive or powerful group, they are consistently being singled out as a group whose values are in sharp contrast with America's value of what is good and just.

Accordingly, if people who are dehumanized are also morally excluded from the community, perceived as having divergent values and seen as morally insensible and misinformed, atheists seem to fit into this category based on their inextricable link with immorality. Brandt & Reyna (2011) provided a potential framework for explaining how

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dehumanization can come from perceptions of immorality by proposing a vertical hierarchy of morality that is embodied in people. Beings (humans or not) who are the quintessence of good (god in this case for religious people) are situated at the top of the chain while the bottom personifies evil and immorality. Their social cognitive chain of being (SCCB) framework goes further by describing how targets who move up the chain will be sanctified but targets who fall below will be dehumanized. Integrating this framework with previous work on atheist immorality (Gervais, 2014, Gervais et al, 2011), atheists should be positioned extremely low in the chain – comparable to rapists and serial murderers. Their lowly position on the chain should thus facilitate dehumanization.

However, the logic of SCM predicts that atheists will not be dehumanized as they do not fit into the low-low quadrant. Based on Fiske and colleagues' (2002) study, groups in the low warmth and low competent cluster have a mean warmth score of 2.66 and a mean competence score of 2.29 for the student sample (Study 2). In comparison, Gervais and colleagues' (2011) pilot study (Study 4) following the exact methodology saw atheist scoring 3.16 and 3.42 in the warmth and competence dimensions respectively. Ratings of atheists were similar to groups such as feminists and Jews who were categorized as high in competence and low in warmth in Fiske et al's (2002) study. Extending from the SCM framework of dehumanization, atheists should not be dehumanize. Although the SCM account of dehumanization would not predict atheists to be dehumanized, some clarification and evidence from research in person perception may help reconcile this inconsistency.

Firstly, our study is specific to the religious context while the SCM account is context neutral. In our study, the perceivers –the participants– are the religious ingroup while the perceived –the target– is the atheist outgroup. The competence dimension may become less

relevant while the warmth dimension takes precedence because religion has more to do with morality than competence. Because morality plays a role in the warmth dimension (Leach, Ellemers & Barreto, 2007; Wojciszke, Bazinska, & Jaworski, 1998), dehumanization may still occur regardless of atheists' competence level. Furthermore, evidence from recent research in person perception by Goodwin, Piazza & Rozin (2014) found that although warmth and moral character are usually seen as substitutes in the literature, they are in fact distinguishable (Study 1 & 2). Their primary proposition however was that moral character dominates in person perception when compared to the warmth dimension. Indeed this was tested and found across 5 studies. The importance of moral character information together with the atheist immorality link support the dehumanization account of atheists.

Chapter 2: Overview

To this end, two studies were conducted to examine the dehumanization of atheists with two other relevant religious outgroups – gays and Muslims. In study 1, I hypothesized that 1) dehumanization of atheists is characterized more by the denial of Uniquely Human (UH) characteristics than Human Nature (HN) characteristics, and 2) that this occurs more strongly for atheists than for other outgroups. Study 2 is both a conceptual replication and extension of study 1. Two measures of dehumanization are used. The first bears similarity with UH characteristics based on their association with morality. The second measure, conceptualizing dehumanization as denying others of a mind, permits a test of dehumanization in a different form by extending dehumanization of atheists via the denial of minds to them.

Chapter 3: Study 1

Study 1 was conducted to test two hypotheses. 1) Because atheists are often perceived as immoral (Gervais, 2014), they will be dehumanized via denial of Uniquely Human (UH) as

opposed to Human Nature (HN) characteristics. The UH route includes moral features that are lacking in HN traits which, I argue, plays a crucial role in dehumanizing atheists. 2) As atheists are associated with immorality much more than other religious outgroups, they should also be denied of UH characteristics more than other outgroups. In Study 1, gays and Muslims were included as the comparison outgroups. I am agnostic about the how the three groups might differ in the HN dimension.

Participants.

Participants were 100 undergraduates (73 females) who participated in the study for course credit. Age ranged from 17 to 28 years (M = 19.12, SD = 1.79). For our sample, 43.5% were Christians, 29.7% were Catholics, 3% were Hindus, 1% were Buddhists, 15.9% were atheists, agnostic or nones and the remaining 5.9% were of other religions.

Materials.

Dehumanization scale: To measure dehumanization, the scale from a previous study used by Bastian & Haslam (2010) was adopted. A list of 20 trait ratings were used to measure dehumanization. The 20 traits include 5 positive and 5 negative traits for each of the Uniquely Human and Human Nature dimension. A list of all 20 traits is shown in Appendix 1. These traits have previously been validated for being highly associated with their respective humanness dimension while being distinct from each other (Haslam, Bain, Douge, Lee & Bastian, 2005).

Procedure

Participants were first asked to rate atheists, gays and Muslims on both the UH and HN traits. For each outgroup, participants had to rate how much they think someone from that group possesses each trait shown on a 7 point Likert scale from 1- completely do not possess this trait

at all to 7- completely possess this trait. Participants rated each outgroup separately with each outgroup representing a block. In each block, the same 20 traits were presented to the participants. Presentation of all 20 traits were randomized within each block. Participants then completed demographic items before being debriefed.

Chapter 4: Results

Two sets of analyses are reported. The first set follows the original methods ascribed by Haslam and colleagues (2005) and the second set is a modification based on valence of traits. For both sets of analyses, higher scores indicate lesser dehumanization.

Method One

Scores for each dimension were first computed by averaging across all positive and negative traits. Averaging across both positive and negative traits accounts for valence when assessing perception of humanness (Haslam, personal communication).

UH vs HN for atheists: A paired sample t-test indicated no significant difference in dehumanization scores for atheists in the UH (M=3.99, SD=.67) and HN (M=3.95, SD=.81) dimensions, $t(100) = .75$, $p = .455$ (Figure 1). The hypothesis that atheists are being dehumanized via UH characteristics more so than HN characteristics was not supported.
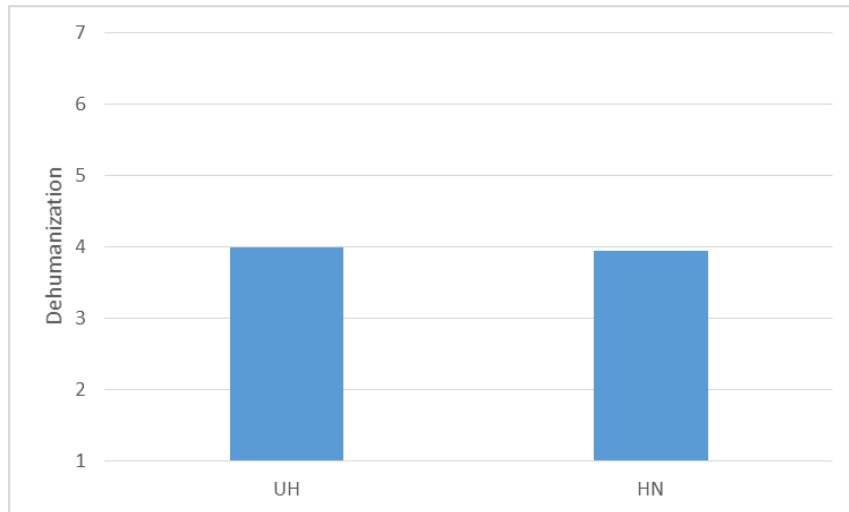
Figure 1: Dehumanization across UH and HN dimensions for atheists (Method 1)

UH traits across groups: A repeated measures ANOVA was conducted to compare the effects of different outgroups on the UH dimension of the dehumanization scale. Mauchly's test indicated that the assumption of sphericity had been violated for the UH dimension $X^2(2) = 13.41$, $p = .001$. Therefore, degrees of freedom was corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .902$). Contrary to my hypothesis, results showed that there was no significant effect of outgroup on UH scores, $F(1.8, 178.5) = .078$, $p = .908$. Results indicated that all three outgroups did not vary in their UH scores – all outgroups were equally dehumanized in an animalistic manner. The hypothesis that atheists are denied UH characteristics more than gays and Muslims was rejected in favor of the null.

HN traits across groups: As an exploratory analysis, a repeated measures ANOVA was conducted to compare the effects of different outgroups on the HN dimension of the dehumanization scale. Mauchly's test indicated that the assumption of sphericity had been violated for the HN dimension, $X^2(2) = 8.05$, $p = .018$. Therefore, degrees of freedom was corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .944$). For HN scores, there was a significant difference across outgroups, $F(1.9, 186.9) = 16.34$, $p = .00$. Pairwise comparison

indicated that there was a significant difference in HN scores for the atheist (M=3.94, SD=.81) and gay (M=3.50, SD=.66) conditions, t (100) = 4.83, p = .00. Additionally, there was a significant difference in HN scores between Muslims (M=3.87, SD=.68) and gays (M=3.50, SD=.66), t (99) = 4.86, p = .000. Gays had a lower HN score, suggesting that they were also mechanistically dehumanization more than Muslims. There was no significant difference between Muslims and atheists, t (99) = -.93, p = .35. Although not explicated hypothesized, gays were found to be mechanistically dehumanized more than atheists and Muslims.

Method two

For method two, both the positive and negative traits were analyzed separately. Because a case can be made that the way valence is accounted for based on the original method does not fit with current theories of intergroup conflict (more on this in the general discussion section), valence is separated instead of being combined into a single score for each dimension.

UH vs HN for atheists: Two paired sample t-tests were conducted, one comparing positive UH vs HN traits and another for the negative traits. For positive valence, there was a marginally significant difference between UH (M=4.10, SD=1.16) and HN (M=4.22, SD=1.11) traits, t (103) = -1.84, p =.069 (Figure 2). Atheists were attributed more positive HN than UH traits, suggesting a greater degree of dehumanization via the UH route, at least for positive traits, although the extent of dehumanization was not significantly different from each other.
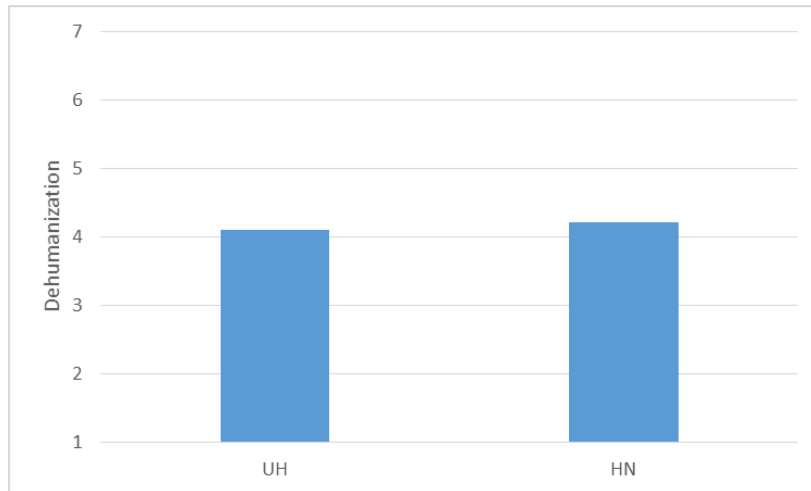
Figure 2: Dehumanization across UH and HN dimensions for atheists (Positive Valence)

For negative valence, there was no significant difference in dehumanization scores for both UH (M=3.88, SD=.99) and HN traits (M=3.86, SD=.92), t (103) = .220, p =.826 (Figure 3). Atheists were evaluated as possessing both negative UH and HN traits to an equal extent.
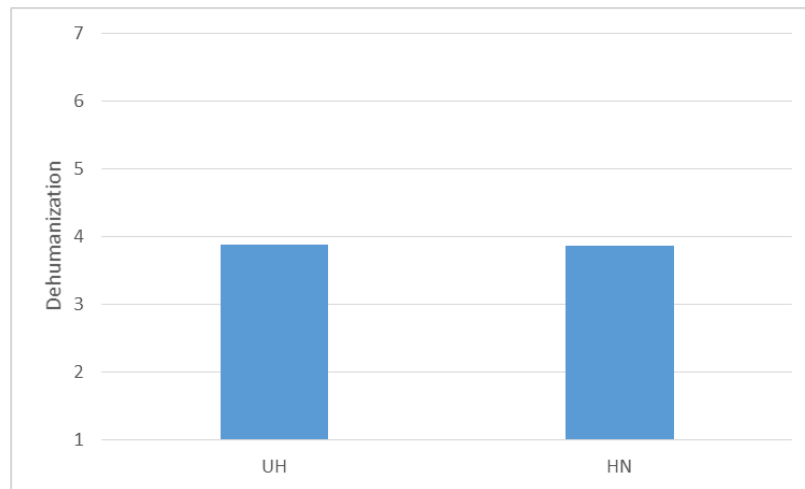
Figure 3: Dehumanization across UH and HN dimensions for atheists (Negative Valence)

UH traits across groups: Two repeated measures ANOVA were conducted to compare the effects of different outgroups on the positive and negative UH dimension of the dehumanization scale. Mauchly's test indicated that the assumption of sphericity was not violated, X^2 (2) = 3.65, p = .161. For positive UH scores, there was a significant difference across groups, F (2, 204) =

11.33, $p = .000$ (Figure 4). All pairwise comparisons were significant. Comparison between the atheist (M=4.10, SD=1.16) and gay (M=4.65, SD=.85) conditions, $t(103) = -4.44$, $p = .00$ suggests that atheists were rated as possessing less positive UH traits. Results were similar when atheists (M=4.10, SD=1.16) were compared to Muslims (M=4.39, SD=1.06), $t(102) = -2.55$, $p = .012$. Muslims also scored significantly lower (M=4.39, SD=1.06) compared to gays (M=4.65, SD=.85), $t(102) = 2.44$, $p = .016$. Overall, atheists had the lowest score for positive UH traits, followed by Muslims and then gays.
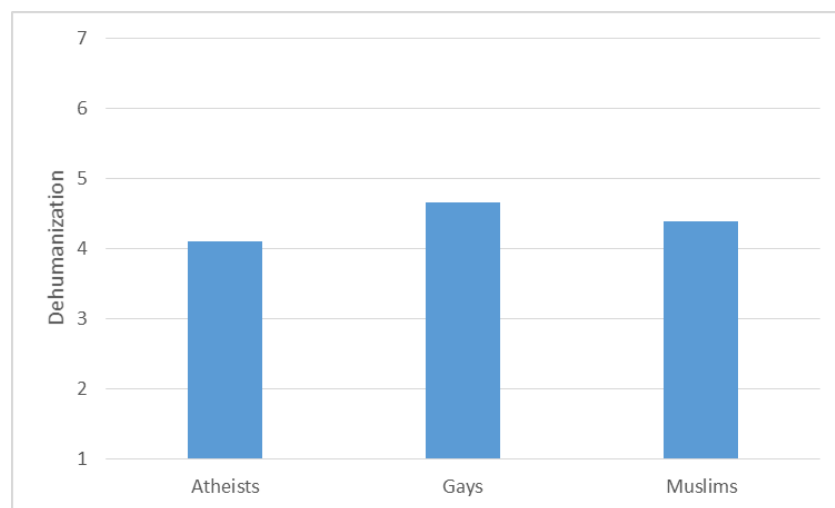
Figure 4: Dehumanization of UH traits across groups (Positive Valence)

For negative valence traits, sphericity was not violated $X^2(2) = 2.85$, p = .241 and there was a significant difference across groups, $F(2, 204) = 7.83$, $p = .001$ (Figure 5). Of the three pairwise comparisons conducted, two were significant. Atheists (M=3.88, SD=.99) scored higher on negative UH traits than gays (M=3.40, SD=1.08), $t(103) = 3.98$, $p = .000$ and Muslims (M=3.62, SD=1.19), $t(102) = 2.33$, $p = .022$. There was no significant difference between gays and Muslims, $t(102) = -1.70$, $p = .092$. Overall, atheists were dehumanized the least for negative UH traits.
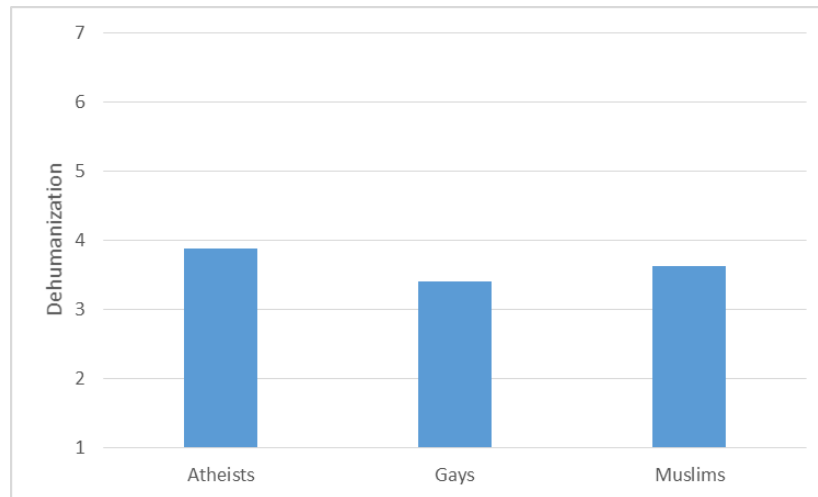
Figure 5: Dehumanization of UH traits across groups (Negative Valence)

HN traits across groups: Similar to the previous analyses, two repeated measures ANOVA were

conducted on both the positive and negative HN dimension of the dehumanization scale. For

positive valence, sphericity was not violated $X^2 (2) = 2.76$, p = .251 and there was a significant

overall difference across groups, $F (2, 204) = 25.41, p = .000$. Of the three pairwise comparisons

conducted, two were significant. Both atheists (M=4.22, SD=1.11) and Muslims (M=4.35,

SD=1.02) had a significantly lower positive HN score than gays (M=5.00, SD=.84): atheist vs

gays, $t (103) = -6.24, p = .000$, Muslims vs gays, $t (102) = 5.97, p = .000$. There was no

significant difference between atheists and Muslims. Gays were dehumanized the least compared

to atheists and Muslims.

For negative valence traits, sphericity was not violated, $X^2 (2) = 3.28$, p = .194. However,

ANOVA results suggest that there was no significant differences across all three groups for

negative HN traits, $F (2, 204) = 390, p = .678$.

Chapter 5: Discussion

Results for study 1 using the original method did not comport with any of our

hypotheses. Atheists were neither seen as more animalistic than mechanical nor were they denied

of UH traits any more than gays and Muslims. Based on preliminary exploratory analyses, there was a significant difference in HN scores across groups, with gays being mechanistically dehumanized more than atheists and Muslims. Method two however gives us a different set of answers. Although atheists were not denied of UH traits any more than HN traits, they were denied of positive UH traits more than the comparison outgroups. However, atheists were dehumanized the least when it comes to negative UH traits. For the exploratory analyses of HN traits, gays were found to be dehumanized the least for positive traits. Two different interpretations are possible. One could either conclude that atheists are perceived as less human only on positive traits and more human on negative or interpret current findings as atheists generally being seen in a less positive light for both positive and negative UH traits. The latter interpretation though different from Haslam's (2006) definition of dehumanization, is consistent with other accounts and corroborates with evidence from the prejudice literature.

Chapter 6: Study 2

Because study 1 did not comport with our hypotheses, study 2 was conducted as a conceptual replication and extension of study 1 with two different measures of dehumanization. The first is a 4-item measure that is a subscale of the 32-item moral disengagement scale (Bandura, Barbaranelli, Caprara & Pastorelli, 1996). The second is a 10-item mind attribution scale with three subscales measuring Emotion, Intention and Cognition (Kozak, Marsh & Wegner, 2006). The tendency to attribute a mind to others may be driven by the desire to humanize those we come to see as ingroup members (Cortes, Demoulin & Rodriguez, 2005), a trait that is unique to humans. Therefore, attributing less mind to others can be inferred as a form of dehumanization. Moreover, research in mind perception found evidence that animals are rated as lacking in agency (Gray et al, 2006), a dimension comparable in contents with the Human

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Uniqueness account (Haslam, 2006), hypothesized as central to the dehumanization of atheists. Because the mind attribution account of dehumanization is equally plausible, including the mind attribution scale makes it possible to ground and test the dehumanization of atheists within the morally relevant dimension in study 1 but in a different form.

Participants.

Participants were 113 undergraduates (96 females) who participated in the study for course credit. Their age ranged from 18 to 35 years (M = 19.66, SD = 2.53). For our sample, 49.6% were Christians, 31% were Catholics, 2.7% were Muslims, .9% were Buddhists, .9% were Hindus, 9.1% were atheists or agnostic and the remaining .9% were of other religions.

Materials.

Dehumanization scale (Bandura et al, 1996): This scale consists of 4 items as shown in Appendix II. Items in the scale include "Some people deserve to be treated like animals" and "Some people have to be treated roughly because they lack feelings that can be hurt". Modifications were made so that each statement represents the target outgroup.

Mind Attribution Scale (Kozak et al, 2006): There are 10 items in this scale consisting of 3 subscales (Appendix III). The Emotion subscale has 4 items, with questions such as "This person can experience pain". The Intention subscale has 3 items. An example question is as follows: "This person is capable of planned actions." Cognition is the last subscale, consisting of 3 items with questions such as "This person is highly conscious."

Procedure

Using a within-subjects design similar to study 1, participants had to rate members of all three outgroups on both the dehumanization and mind attribution scale using a 7 point Likert

scale. As in study 1, participants rated each outgroup separately with each outgroup representing

a block. In each block, both measures were randomly presented to the participants.

Chapter 7: Results

Dehumanization scale: The 4-item dehumanization scale (Bandura et al, 1996) formed a

reliable scale for all target outgroups, with Cronbach's αs ranging from .81 to .85. A repeated

measures ANOVA was conducted to compare the effects of different outgroups on ratings for the

dehumanization scale. Mauchly's test indicated that the assumption of sphericity had not been

violated X^2 (2) = 4.69, p = .096. Results showed that there was a significant difference between

outgroups in dehumanization scores, F (2, 224) = 4.32, p = .014 (Figure 6).
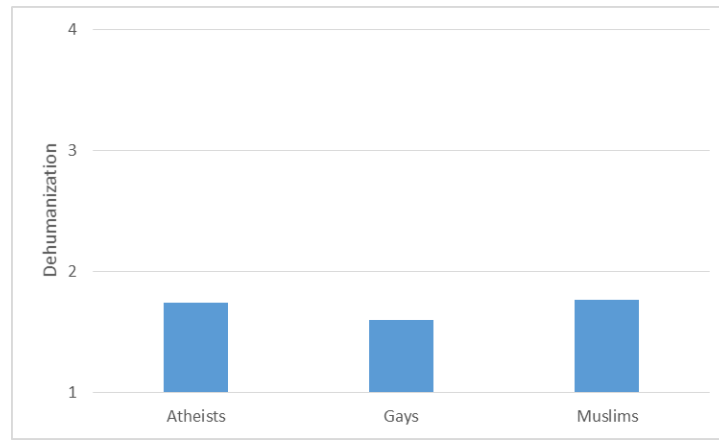
Figure 6: Dehumanization across groups (Bandura et al, 1996)

Three paired samples t-tests were conducted for comparison between conditions. The first

paired samples t-test indicated a significant difference in dehumanization scores between atheists

(M=1.74, SD=1.03) and gays (M=1.60, SD=.93), t (112) = 2.50, p =.014. Atheists were

dehumanized significantly more so than gays. A second paired sample t-test between Muslims

(M=1.77, SD=1.10) and gays (M=1.60, SD=.93) was also significant, t (112) = 2.75, p =.007.

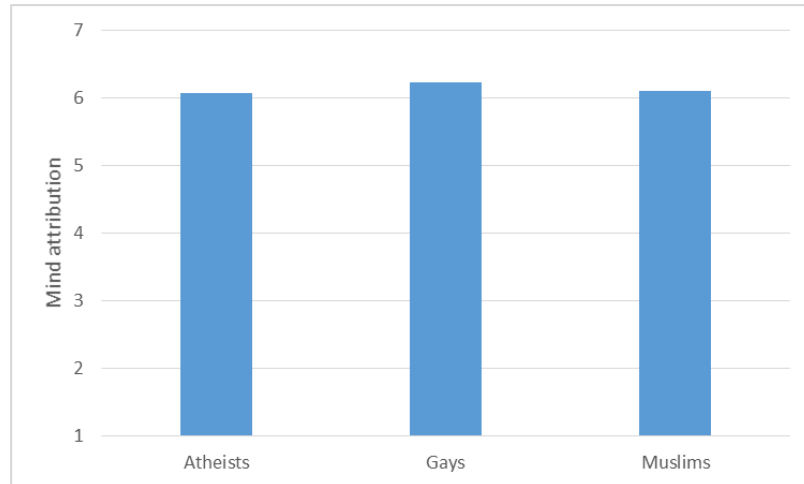Muslims were being dehumanized more than gays. The last paired sample t-test however did not

indicate any significant difference in dehumanization scores between atheists and Muslims, t (112) = .44, p =.658.

Mind Attribution Scale: As the mind attribution scale consists of three subscales, three exploratory factor analyses were conducted, one for each target outgroup, to test for three factors as reported in the original study. If three factors are extracted, subsequent ANOVAs will be conducted based on the three factors extracted. If factor analyses do not indicate that the items load onto three unique factors as suggested by Kozak and colleagues (2006), a composite score will be computed for further analyses.

A principal components extraction with varimax rotation was performed for each target outgroup. None of the factor analyses revealed three unique factors with eigenvalues more than 1. For atheists and Muslims, only one factor was extracted that had an eigenvalue greater than 1 while 2 factors with eigenvalues greater than 1 were extracted for the gay target. Because factor analyses were not consistent with the previous conceptual framework of mind attribution (Kozak et al, 2006), all items were averaged to generate a single mind attribution score to be used for repeated measures ANOVA. For all target outgroups, the mind attribution scale had adequate reliability, with Cronbach's αs ranging from .89 to .93.

A repeated measures ANOVA was conducted to compare the effects of different outgroups on mind attribution. Mauchly's test indicated that the assumption of sphericity had not been violated X^2 (2) = 4.97, p = .083. Results showed that there is a significant difference between outgroups in mind attribution scores, F (2, 224) = 8.24, p = .000 (Figure 7).

Figure 7: Mind Attribution across groups (Kozak et al, 2006)

Three paired sample t-tests were conducted for comparison between conditions. The first paired sample t-test indicated a significant difference in mind attribution scores between atheists (M=6.07, SD=.93) and gays (M=6.23, SD=.76), t (112) = -3.52, p =.001. Because a higher score in this case is interpreted as less dehumanization, atheists with a lower mean score are being dehumanized more than gays. A second paired sample t-test between Muslims (M=6.10, SD=.84) and gays (M=6.23, SD=.76) was also significant, t (112) = 3.44, p =.001. Muslims were attributed less mind than gays. The last paired sample t-test between atheists and Muslims did not find any significant difference, t (112) = -.71, p =.477.

Chapter 8: Discussion

A conceptual replication of religious dehumanization in study 2 partially confirms the hypothesis. Across two measures of dehumanization, results consistently imply that atheists were being dehumanized to a significantly greater extent than gays. However, neither the dehumanization scale nor the mind attribution scale indicated any mean difference between atheists and Muslims.

Chapter 9: General discussion

At the outset, I explicitly stated my hypotheses that 1) atheists will be denied of UH traits more than for HN traits and 2) the level of dehumanization toward atheists will be greater than gays and Muslims. Results of study 1 however, were contrary to the hypotheses. Atheists were dehumanized equally via the UH and HN dimensions. Furthermore, atheist targets did not differ from gay or Muslim targets on the UH dimension ratings. Although not central to the study, exploratory analyses in study 1 found that gays were being mechanistically dehumanized more than atheists and Muslims. A conceptual replication in study 2 however partially supported hypothesis two. Across two dehumanization scales, atheists were found to be dehumanized more than gays, but did not fare any worse than Muslims. In the following sections, possible causes of failure to find significant results are discussed.

Methodological Issue

With the different ways that dehumanization can be defined and measured, is the two factor framework, based on ratings of positive and negative traits, methodologically sound? While I agree that a dual factor model can be beneficial in its nuance, the logic of the scale may not be as intuitive and easily interpretable. According to Haslam (personal communication), "if you accept theoretically that hating someone and dehumanizing them aren't the same thing (i.e., that dehumanization isn't just negative evaluation) then you have to accept that people can be disliked but not dehumanized and that they can be liked (or at least not hated) and still be in some sense seen as lacking humanness." Therefore, both positive and negative traits were included to account for valence effect. The corollary based on his argument is this: an outgroup member with supposedly a high score for negative traits and a low score for positive traits might, with some combination of ratings, be seen as more human than an ingroup member with the

opposite ratings. If dehumanization is indeed intimately associated with prejudice, then this suggests the possibility that one can dehumanized and consequently be prejudice against one's ingroup more than an outgroup. It is hard, at least theoretically, to imagine how this outcome might fit into current theories of intergroup conflict and prejudice. Additionally, separate analyses excluding valence effects (method two of study 1) provided at least preliminary support for this argument when atheists were attributed less positive but more negative traits. This is consistent with the robust findings of prejudice against outgroups.

Lack of power?

Another possibility is the lack of power in study 1 to detect an effect. A post hoc analysis using Gpower revealed that the study had 50% power to detect a small effect size of Cohen's f = .1 (translates to a d of .2). A general rule of thumb in psychology is to have a sample size with at least power of 80% which the study did not meet.

Muslims vs atheists

Current events could also have contributed to an elevation in dehumanization of Muslims – which could partly explain why atheists and Muslims did not differ in dehumanization ratings in study 2. For the past year, news reports of killings by the Islamic State of Iraq and Syria (ISIS), an Islamic extremist rebel group have been spreading like wildfire. Participants with access to media platforms could have easily encountered many of these reports, exacerbating anti-Muslim prejudice, and possibly fueling the desire to dehumanized Muslims in order to condemn and react aggressively against them without feeling guilt or remorse. What is worth noting is that even when anti-Muslim prejudice is on the rise at the moment, atheists did not fare better and were dehumanized just as much.

Chapter 10: Future Directions

Belief vs Affiliation

Religion is not monolithic. Rather, it is derived from the coalescing of a constellation of features (Hill, 2005). Many psychologists and sociologists have sought to uncover these fundamental features that can serve as a starting point for religion research (Saroglou, 2011; Voas, 2007, Hill & Williamson, 2005). Although each framework differs in some ways, there is a general consensus that religion has a component related to belief and another with group affiliation (Preston, Ritter & Hernandez, 2010). The belief component is thought to underlie the unmaking of religious prejudice while affiliation intensifies prejudice by exaggerating group differences. Measures associated with belief are intrinsic and quest orientations, which have been found to predict less prejudice (Allport & Ross, 1967; Batson & Schoenrade, 1991; Donahue, 1985). Conversely, measures such as fundamentalism and right wing authoritarianism, commonly associated with higher prejudice (Altermeyer & Hunsberger, 1992; Laythe, Finkel, Bringle & Kirkpatrick, 2002) tend to be proxies for affiliation rather than belief.

Therefore, perhaps it is not religion per se but specifically identification with one's religious group that promotes dehumanization. Future studies could either measure these constructs or prime participants with concepts associated with each component (Preston & Ritter, 2013), providing a more nuance picture of religious dehumanization.

Religious aggression

Bandura's model of moral disengagement (1999) proposed that dehumanization facilitates aggression because it relieves one of the guilt from engaging in a negative behavior. In support of his theory Bandura, Underwood & Fromson (1975) found that victim dehumanization led to higher aggression via an increase in shock intensity administered to targets. Similarly, self-

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humanizing and others dehumanizing (average student at participant's university) was associated

with more aggression (Locke, 2009). When applied to the religious context, dehumanization of

atheists should predict increase aggression by religious members toward atheists.

Chapter 11: Conclusion

Religion is two-faced. One preaches love and tolerance, the other exhorts hate and

revenge. It is my hope that introducing the theory of dehumanization into this dark side of

religion research not only adds to the current religion literature but could pave a new road for the

study of religious dehumanization alongside religious prejudice.

Appendix I

Positive UH: Broadminded, Conscientious, Humble, Polite, Thorough.

Negative UH: Disorganized, Hard-hearted, Ignorant, Rude, Stingy

Positive HN: Active, Curious, Friendly, Helpful, Fun-Loving

Negative HN: Impatient, Impulsive, Jealous, Nervous, Shy

Appendix II

1. "Some people deserve to be treated like animals

2. "It is okay to treat badly somebody who behaved like a 'worm

3. "Someone who is obnoxious does not deserve to be treated like a human being"

4. "Some people have to be treated roughly because they lack feelings that can be hurt"

Appendix III

1. This person has complex feeling (E)

2. This person can experience pain (E)

3. This person is capable of emotion (E)

4. This person can experience pleasure (E)

5. This person is capable of doing things on purpose (I)

6. This person is capable of planned actions (I)

7. This person has goals (I)

8. This person is highly conscious (C)

9. This person has a good memory (C)

10. This person can engage in a great deal of thought (C)

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