Master Psychology, Social Psychology

THESIS

The Effects of the Activation of Differentiated Concepts of God on Social Behavior

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Abstract

God is a pervasive part of our everyday lives; even in secular societies people are often exposed to God-related stimuli in the form of popular media, art and allusions in everyday language. While the influences of religiosity on human behavior have been studied, the influence of representations of Godhave been rarely researched. The limited pool of research shows that reminders of God can lead to both an increase in resisting temptationsand reduced pursuit of goals, suggesting a divergent effect of God on behavior. The goal of this paper is to add to the limited pool of findings regarding the influence of exposures to God on behavior. In two studies previous research is expanded on;for the first time specific concepts of God (all-seeing, all-powerful and benevolent) are manipulatedand their influence on helping intentions and cheating are examined. Results show some differentiation in behavior based on the priming of specific concepts of God. The pattern though, of this differentiation, interestingly, was not that which was expected. Notably, an all-powerful God led to higher helping intentions among believers in Study 1, while a benevolent God led to more cheating in Study 2. Explanations for the unexpected findings are discussed and future directions for research are presented. The Effects of the Activation of Differentiated Concepts of Godon Social Behavior

According to Gallup International (2012) 60% of individuals worldwide believe in a God. While the existence of such an entity can be debated, the pervasiveness of its manifestations in nearly all cultures of the world cannot. As it is pointed out by Laurin, Kay and Fitzsimons (2011), representations of God are common in media, art, literature, as well as are allusions to him in everyday language (e.g., "Only God knows", "For the love of God", "God damn it").

Religion, broadly taken, has been shown to be related a broad spectrum of outcomes and behaviors, both positive and negative. Religious belief, it has been shown, is related to greater mental and physical health (Hill & Pargament, 2003), and is useful in coping with mortality (Vail et al., 2010), randomness, uncertainty and reduced control (Laurin, Kay, & Moscovitch, 2008). Religion as a moral institute also plays a role in facilitating cohesive communities (Graham & Haidt, 2010), being shown, for example, to promote prosocial behavior, driving individuals to behavior beneficial for others while costly to themselves (Radolph-Seng and Nielson, 2007; Shariff and Norenzayan, 2007). Next to these positive outcomes though, religion is also linked to less desirable tendencies in social behavior, such as prejudice and aggression (Roes & Raymond, 2003). The mechanisms influencing both positive and negative effects are still matter of debate; are positive outcomes, for example, a matter of inspiration or fear for retribution?

Little experimental research exists regarding the role of religion on behavior. Of the work that has been done up to this point, the gross focuses on the effect of religiosity, measured for instance by frequency of prayer, and not the exposure to religious concepts, such as God (Hackney & Sanders, 2003). Little is known, therefore, about the effect of exposure to concepts of God on behavior and the mechanisms mediating these effects.

In recent years though, a handful of researchers have begun exploring the influence of

exposure to concepts of God on behavior. These few findings show a complex relationship between concepts of Godand behavior, with God not leading simply to "good" behavior. Indeed, while Shariff and Norenzayan (2007) showed the priming of God leading to more sharing with strangers, another group of researchers (Dijksterhuis, Preston, Wegner, and Aarts, 2008) demonstrated that participants primed with the concept of God experienced a reduced sense of agency, this time showing that the priming of God negatively effecting behavior. More recently, in a series of experiments exploring the mediating effect of self-regulatory processes on the influence of exposures to reminders of God. Laurin, et al. (2011) showed both desirable and less desirable effects from reminders of God. These reminders resulted in better performance in subjects participating in three experiments containing tasks which involved inhibiting impulses, while reminders of God led to less goal pursuit in three other experiments in the same series.

Those authors did not manipulate the concept of God which was activated in the trails and instead propose that the divergent effected resulting from the priming of God was mediated by the relevant self-regulatory processes which were elicited by the task at hand. An all-seeing God, it is suggested, was activated, and led to a heighted degree of self-regulation in the temptation resistance tasks, this based on reputational concern activated by a perceived observer (God in this case). On the other hand, the authors suggest, the all-powerful nature of God led to a lack of willingness to self-regulate and ultimately to passivity. This passivity, it is suggested, stemming from a lack of agency experienced in the face of an all-powerful entity, this resulting in less goal pursuit in the trails.

The present study seeks to expand the pool of experimental research regarding the influence of exposure to concepts of God. Specifically, it is examined how the priming of specific aspects of God influencesboth the willingness to help others and cheating behavior. This study is unique in that, as opposed to previous studies which used generalized concepts

of God, three specific concepts of God will be manipulated to explore their expected, divergent influences on behavior. The two concepts of God suggested, but not manipulated by Laurin, et al. (2011), an all-seeing and an all-powerful God, as well that of the more traditional benevolent God will be explored. Below the three concepts of God explored in this study are discussed and expectations are outlined.

All-powerful God

An omnipotent God, one that is all-powerful, is common both across cultures and religions. An all-powerfulGod is seen to have created the world and, in varying degrees, to determine the events therein or at least be a major contributing factor to events (Kay, Gaucher, Napier, Callan & Laurin, 2008). Christian believers, for example, have been shown to endorse the idea that the events happening would have happened, no matter what events proceeded them (Norenzayan & Lee, 2010), regardless of human efforts, being the will of God. This belief suggesting that humans have little control of their fates or that their actions are less impactful than they are in reality.

The effect described in Lauren et al. (2012) in which reminders of God led to a decrease in goal pursuit, it is suggested, resulted from a decrease in a feeling of agency, activated by the all-powerfulGod concept. This reduced feeling of agency, it is supposed by the authors, stemmed from an attribution of their efforts as futile in the face of the will of God. God then, they suggest, in this case, promoted a "why bother" attitude, leading to passivity and thus in this decrease in goal pursuit.

The notion of that reducing people's sense of control over their outcomes can influence behavior is well established. Reducing the belief in one's power to influence one's outcomes, can lead to a decrease in willingness to help others and an increase in aggression (Baumister, Masicampoo and DeWall, 2010). Similarly, Vohs and Schooler (2008) showed

that priming participants with statements arguing a deterministic world-view led to an increased degree of cheating.

The results of the researchers cited above suggest that the experience of lacking control over our outcomes leads to not taking control of one's behavior and therefore a reliance on more automatic, often aggressive or anti-social tendencies. It is therefore suggested that in the current study, exposure to the concept of God as an all-powerful entity who determines our outcomeswill lead to reduction of the experience of control. This reduction in experience of control leading to less effortful self-regulation, resulting in behavior that is less socially desirable and less prosocial. In the case of the present research, priming participants with an all-powerful God is expected to lead to decreased helping and increased cheating.

All-seeingGod

The concept of God as an omniscient, all seeing, judging entity is part of most religions, across cultures. The motivation to maintain positive regard in the eyes of this all seeing Godis seen by many laypeople to result in more prosocial behavior, facilitating cohesive communities; this being one of the main features of religion according to Norenzayan & Shariff (2008).

Indeed, as social beings, people are sensitive to their reputations and are thus strongly motivated to actively control their behavior to maintain a positive regard in the eyes of others (Fehr & Fischbacher, 2003; Leary, 1995). As such, people misbehave less when they are aware of being observed; even imagined or invisible observers have been shown to lead to better behavior. Santa Claus even, for instance, imagined and invisible, has been shown to lead to more resisting of temptation among children (Bering, 2006), while adults are less likely to steal when exposed to an image of eyes (Bateson, Nettle & Roberts, 2006).

In Lauren et al. (2011), it is suggested that the all-seeing quality of God led to the

greater resisting of temptation after being reminded of God that was found in their study. God as a watcher then, gives people a sense of accountability and thus motivates them to spend more effort controlling their behavior in order to resist the temptation to misbehave and thus manage their impression.

Support for this theory is found in Shariff & Norenzayan (2007), where participants shared more money with anonymous strangers when primed with God, than a neutral prime. Notably, this greater giving was also a result of the priming of other moral institutes, such as the justice system. The authors suggest that priming with God leads to an experience of accountability based on reputational concerns, and therefore more socially desirable behavior. Therefore, in the current research, it is expected that exposure to the concept of an all-seeing God will lead to reputational concern being activated. This reputational concern, as is argued above, is expected to result in, in the case of the current research, in a higher degree of helping and a decreased degree of cheating.

Benevolent God

Next to the two concepts of God sketched above (all-seeing and all-powerful), the influence of a third concept of God will be explored in this study. Across religions and culture, God is associated with prosociality, altruism, love and "good" behavior. While some authors point to the positive influence of God and religion as being based on a concern for one's reputation instead of altruism (Batson, Anderson & Collins, 2005), other authors suggest that representations of God (and his goodness) lead people towards "good" behavior through that the conceptual representations being activated by Godincrease the likelihood of goals, plans and motor behavior associated with those representations (Bargh, Chen & Burrows, 1996; Pichon, Boccato & Saroglou, 2007). Just as in the way that the priming of "old" would lead someone to walk slower (Bargh, et al., 1996), or the priming the concept of a professor leads students to perform better at tasks in which they have to answer questions (Dijksterhuis & van

Kinppenberg, 1998). Indeed, it has been shown in Pichon et al. (2010), that participants primed with positive religious stimuliexhibited more prosocial behavior than participants in a neutral-prime condition. It is suggested therefore, that in the current paper, exposure to a benevolent God will lead to an increase in helping and a decrease in cheating behavior due to increased accessibility of prosocial-related schemata triggered by a the benevolent concept of God.

Belief in God as potential moderator

The concepts of God sketched above are common in our minds, albeit in varying degrees, even if we do not believe in a God. Indeed, the divergent effects of Godseen in Laurin, et al. (2011) were moderated by individual conceptualization of God, but not actual belief in God. This insofar as only participants whose concept of God includes him being all-seeing were motivated to inhibit themselves. Similarly, Radolph-Seng and Nielson (2007) showed that priming with religious stimulus resulted in less cheating, regardless of whether participants were believers or not. It is therefore expected that the different concepts of God will lead to divergent degrees of the behaviors examined in the present research, independent of whether or not participants belief in God.

The current research

In two experiments, participants will be exposed to one of the 3 concepts of God. After this exposure, participants then complete tasks resulting in measures of helping intentions (Study 1) and cheating behavior (Study 2). It is expected that all-seeing God prime will result in a higher degree of self-control, leading to a heighted intention to help in Study 1 and less cheating in Study 2. The all-powerfulGod prime, it is expected, will result in a decrease in experienced agency and therefore a decrease in willingness toself-regulate, resulting in lower helping intentions in Study 1 and more cheating in Study 2. The benevolent God prime is expected to result in the activation of schemas related to prosocial behavior, leading

toheightened helping intentions in Study 1 and a lower rate of cheating in Study 2.A neutral control condition was included in both experiments to serve as a baseline for comparisons. As explained above, the different aspects of God primed in the current research are expected to affect behavior independently of the status of participants as believers or non-believers.

STUDY 1

In Study 1 the hypothesis that activating specific conceptualizations of God (allseeing, all-powerful, benevolent) leads todifferentiations in helping is tested. Participants were given a questionnaire packet containing one of four versions of a fictional article supposedly from a popular science magazine and a series of questions to activate the relevant concepts of God. The article reported fictional scientific findings of the positive effects of religion on the mental health of elderly people, each attributing this positive effect to a specific aspect of God (all-seeing, all-powerful, benevolent). After reading the article, participants were asked to answer questions regarding the article that further stimulated the activation of the concept of God relevant to the condition. In the control condition participants were presented with an article reporting the mental health benefits for the elderly that are related to eating fatty fish. Following reading the fictional article and answering the questions pertaining to it, participants completed a supposedly independent task. This second task involved participants reporting how likely they would offer help to persons in need of help in an array of situations. These answers servedas measure of helping intentions.

Based on the mechanisms described above, it was expected that the priming of an all seeing-God would cause reputational concern and therefore lead to a higher degree of socially desirable behavior, resulting in a heightened degree of helping. Priming of the all-powerful God, it was expected, would lead to a lessened sense of agency resulting in a lack of effortful control of behavior and thus, by default, reliance on automatic, anti-social impulses. This, it was expected would lead to a lower degree of socially desirable behavior, in this case, helping. The benevolent God concept, it was expected, would result in activation of conceptual representations which would increase the likelihood of goals, plans and motor behavior consistent with those representations, in this case being good, being activated, resulting in more helping but not mediated by experienced agency. The effects of the concepts of God are expected to be evidenced irrespective of whether or not participants are believers or non-believers of God.

Method

Participants

Participants were 119 students of Utrecht University who participated on a voluntary basis. The data of 18 participants were excluded. Of these, six participants reported suspicion or knowledge of the purpose or setup of the study, five did not provide data regarding their religious beliefs, four did not participate in all parts of the task and three because of extreme values on the dependent variable in the form of Cook's distances (1977) scores more than 3 *SD* above the mean (Cohen, Cohen, West & Aiken, 2003). This exclusion left 101 participants, of which 37 (36.6%) were male, 64 (63.4%) were female. Participants' ages ranged from 18 to 30 years (M = 21.22, SD = 2.47). Of the participants, 33 (32.7%) reported believing in a God while 68 (67.3%) reported not believing in a God. Participants were randomly distributed across the four conditions, with 22 to 28 participants in each condition.

Procedure and materials

In the experimental conditions, participants were primed with one of the concepts of God by way of reading one of four fictional articles from a popular scientific magazine, each pertaining to one of the concepts of God described above. The versions of the article contained numerous statements regarding the particular concept of God, including a definition, quotes from supposedly interviewed elderly regarding their relation to God and conclusions made by a fictional researcher. To increase the activation of the relevant concepts, participants answered questions regarding the thoughts, feelings and behavior of the elderly they read about related to their relationship with God. Upon completing these questions participants in all four versions were instructed to continue to the next, supposedly independent task.

Secondly, participants' willingness to help others was measured. The procedure was adapted from Baumeister, Masicampo and DeWall (2009), and consisted of participants being presented with 10 hypothetical situations of others in need of help, in which they could be of direct assistance. Examples of these situations are giving money to a homeless person, housesitting for a friend on vacation and stopping to assist an injured person in need of help. For each situation, participants indicated how likely they would be to offer help, using a scale from 1 (not very likely) to 9 (very likely).

Lastly, demographic data and information pertaining to participants' religious beliefs was collected, as to investigate the role of the participants' status as believer or non-believer on the dependent variable. Upon completion participants were debriefed that the article that they had read in the questionnaire was not based on actual scientific findings and that it was written for the purposes of this study.

Results

Help Intentions

Participants' scores on the helping intention items were averaged to form an index of helping intentions (M = 6.54, SD = 0.73). The 4 (concept of God) x 2 (believer/non-believer) GLM on the helping intention index revealed, counter to expectations, no significant variation between the concepts of God, F(3, 93) = 0.87, p > .46, $\eta_p^2 = .03$. Further, the GLM did not reveal a significant a main effect for whether or not participants classified themselves as a believer in God (believer/non-believer) F(1, 93) = .61, p > .43, $\eta_p^2 = .01$.

An interaction effect was found between the concept of God primed and whether or not participants classified themselves as a believer, albeit marginally, F(3, 93) = 2.46, p < .07, $\eta_p^2 = .07$. This interaction is shown in Figure 1. Subsequent analyses showed that believers primed with an all-powerful God scored higher on the help intention index (M = 7.09, SD =0.87) than non-believers primed with an all-powerful God (M = 6.25, SD = 0.98), F(1, 93) =7.48, p < .01, $\eta_p^2 = .07$. Furthermore, and counter to expectations, believers in the all-powerful God condition scored higher (M = 7.09, SD = 0.87) than believers in the benevolent God condition (M = 6.35, SD = 0.74), p < .03, and believers in the control condition, (M = 6.34, SD =0.56), p < .02.

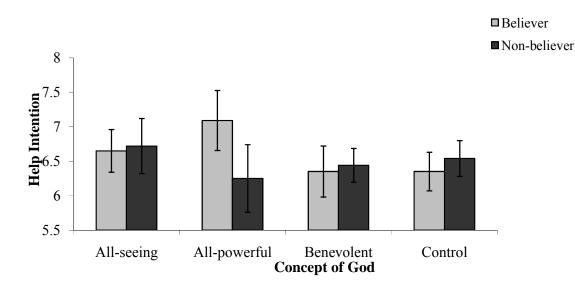


Figure 1: Helping intentions of believing and non-believing participants in the different conditions.

Discussion

In the study above, concepts of God (all-seeing, all-powerful and benevolent) were manipulated to examine their potential divergent influence on moral choices. This was done by using a fictitious article pertaining to the role the God in the mental health of elderly people. Each version of the article primed one of the concepts of God. Following the prime participants reported the likeliness that they would help others in fictitious scenarios. The results reported above suggest, that in the case of helping intentions, the priming of different concepts of God does not lead to the predicted pattern of behavior. An all-seeing God did not lead to a higher degree of helping, nor did the benevolent concept of God. Interestingly, the all-powerful God prime led to a higher, instead of the predicted lowered degree of helping intentions, at least in those who reported themselves to bebelievers in God. The partial interaction that was found between religiosity and the prime (that the all-powerful God led to more helping) suggests that, to at least some extent, one's status as a believerplays a role in the effect of concepts of God.Possible explanations for the inconstancies between expectations and results will be discussed in the general discussion.

In Study 1 the influence of differentiated concepts of God on helping intentions was examined. Study 2 expands the finding regarding the influence of God on behavior, shifts its focus to cheating and this time uses a measure of actual behavior as the dependent variable.

STUDY 2

In Study 2 the influence of the activation of specific conceptualizations of God (allseeing, all-powerful, benevolent) on cheating behavior was tested. In Study 2 participants completed a computerized version of the God priming procedure described in Study 1, reading an article and answering questions to call up the relevant concepts of God. Participants then completed a second task containing arithmetic and trivia questions, supposedly to earn money. Participants were given the chance to cheat at the task because of a supposed problem in the computer program. While in Study 1 the measure of helping was a self-reported intention to help, in Study 2 actual behavior is measured, strengthening the findings of the current research.

Similar to Study 1, it is expected that the all-seeingGod prime would result in a higher degree of self-control, leading in this case to a less cheating, while the priming of an all-powerfulGodwould again result in less agency and a "why bother" attitude, resulting here in

more cheating. The benevolent God prime is expected to result in the activation of schemas related to prosocial behavior, leading to a lower rate of cheating. Based on the literature, the effects of the God primes are expected to act similarly for both believer and non-believers.

Method

Participants

Participants students of Utrecht University and the Utrecht University of Applied Sciences who participated for a small monetary incentive or alternatively course credits. The data of 16 participants were excluded. Of these, five participants reported suspicion of or knowledge of the purpose of the study, five did not provide data regarding their religious beliefs, four did not actively participate in all parts of the task and two exhibited extreme values on the dependent variable in the form of Cook's distances (1977) scores more than 3 SD above the mean (Cohen et al., 2003). This exclusion left a total of 100 participants. Of these participants, 41 (41%) were male, 59 (59%) were female, with their age ranging from 17 to 46 years (M = 21.69, SD = 3.92). Of the participants, 41 (41%) reported believing in a God, while59 (59%) reported not believing in a God. Participants were distributed across the four experimental conditions, with between 20 to 29 participants in each condition.

Procedure and materials

The first task consisted of participants reading one of four fictional articles from a popular scientific magazine and answering questions pertaining to it; the same procedure as applied in Study 1. The purpose of this task was to activate one of the concepts of God being explored (All-seeing, all-powerful, benevolent, control). Upon completion of these questions, participants in all four versions were instructed to continue to the next, supposedly independent task.

In the second task participants were then given the chance to cheat while solving a

series of 20 mental arithmetic problems (as in von Hippel, Lakin, & Shakarchi, 2005; Vohs, & Schooler, 2008) (e.g., 53 - 7 + 66 - 9 - 26), and 10 trivia questions (e.g., "After which explorer is America named?"). Due to a programming error only 3 of the trivia questions were displayed. Participants had 15 seconds to solve each problem. Correctly solving problems led to a supposed €0.10 reward (in reality all participants were paid in full). The promise of a reward for each question functioned to increase participants' motivation to correctly answer the problems.

Participants were informed that, due to a programming error, the answer to the problems would appear on the screen shortly after each question being displayed. While the cause of the problem was supposedly not yet found and fixed, participants were informed that by pressing the "z" button on the keyboard within 2 seconds of the appearance of the question on the screen, they would be able to prevent the answer from being displayed. Participants were, falsely, informed that there was no way in which it would be known whether or not they had done so. In fact though, this prevention or lack thereof, of the appearance of the answer was measured and served as a dependent measure of cheating in this experiment. By making cheating appear anonymous, it was hoped that it would be more readily engaged in.

Lastly, participants were questioned regarding their religious views, as in Study 1, as to investigate the role of the participants' status as believer or non-believer on the dependent variable. Upon completion the participantswere then debriefed regarding the fictitious nature of the article they had read and to the nature of the cheating task.

Results

Cheating

The number of times that participants failed to prevent the displaying of the right answer to the problems they were to solve in the cheat task wasused as the dependent variable in the 4 (concept of God) x 2 (believer/non-believer) GLM. A higher score indicates less preventing

of the answer appearing on the screen and thus more cheating (M = 8.41, SD = 7.25).

A significant main effect was found for the influence of the concept of God which was primed on cheating, F(3, 92) = 2.74, p < .05, $\eta_p^2 = .08$. Specifically, subsequent analyses showedthat participants primed with a benevolent God cheating more (M = 11.28, SD = 8.00) than participants primed with the all-powerful God concept (M = 6.76, SD = 6.35) and those in the control condition (M = 7.20, SD = 7.30). See Figure 2 for a graphical representation of this effect.

The GLM also revealed a significant main effect on cheating for whether or not participants classified themselves as a believer in GodF(1, 92) = 7.12, p < .01, $\eta_p^2 = .07$. It was shown that believers cheated more (M = 10.54, SD = 7.83) than non-believers (M = 6.93, SD = 6.48) on the task.

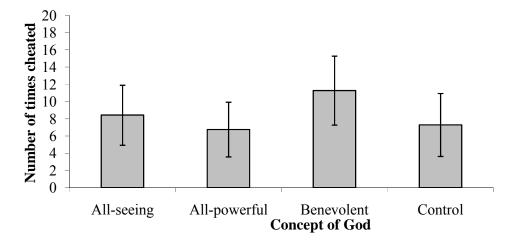


Figure 2: Mean number of times cheated by participants in different conditions

Discussion

In Study 2, similar to in the first study, concepts of God were manipulated to examine their potential divergent influence on behavior, in the case of Study 2, cheating. The results revealed, partially in any case, as expected, a differentiation in the extent of cheating partaken in by participants primed with different concepts of God. The pattern, though, of this

differentiation is inconsistent with what was expected. Priming participants with a benevolent God led to more cheating than the all-powerful God prime and the baseline (as measured in the control condition). Other differences resulting from the God primes (as outlined in the introduction) were not evidenced. As predicted, the effect of priming with God on cheating was not moderated by the status of participants as believers or non-believers. Finally, and surprisingly, believers were shown to cheat more than non-believers during the task.Possible explanations for the inconstancies between expectations and results will be discussed in the general discussion.

General Discussion

The goal of this study was to add to the limited pool of experimental research regarding the influence of the exposure to God on social behavior, such as that done by Laurin et al. (2011) and Dijksterhuis et al. (2008). This research expanded upon those mentioned studies, by splitting God as a concept up into distinct concepts, each potentially having an influence by way of a different mechanism and then testing their influence in two studies. Contrary to expectations, the primed concepts of God did not lead to participants behaving in the way that was predicted. An all-seeing God and benevolent God did not havea positive influence on behavior and an all-powerful God did not lead to passivity, resulting in undesirable behavior. Unexpectedly, in the first study, an all-powerful God led to higher helping intentions instead of lower helping intentions, in the case of believers. In the second study, theresults are also inconsistent with predictions, in that the benevolent concept of God led to an increase in cheating instead of a decrease in cheating. In the case of the second study, the effects were evidenced regardless of the status of participants as believers or not.

The marginal effect that was found in the first study, in the way of believers' help intentions increasing from the all-powerful God prime is surprising; this concept of God was predicted to be the very concept of God that would lead to a decrease in helping. What then is causing this increase in helping intentions? As was described in the introduction earlier in this paper, it has been shown that fear of retribution from God is a motivator to self-control, just as moral institutions such as the justice system are (Shariff & Norenzayan, 2007). One possibility is that the prime of the all-powerful God unintentionally activated this fear, instead of the predicted passivity. It could be that the all-powerful nature of God that was primed is strongly associated with concepts of authority among the participants, this in the way that a powerful king is also one with the power to judge and punish. This fear for a powerful authority, as a result of the prime, similarly to reminders of the justice system, could thus have led to more "good" behavior.

Counter to the expectations of a benevolent God leading to less cheating, in study 2, the benevolent God prime led here to a heightened degree of cheating. A possible explanation for this unexpected result is that the priming procedure had an effect other than that which was planned. The priming procedure for the benevolent God, with "goodness" stressed in the condition, could have, for example, have made achieving goals more salient. This salience of "goodness" could then have led to participants wanting to do well on the task, regardless of how that doing well was achieved. Indeed, Hill & Pargament (2003) suggest that by this mechanism, reminders of God, at least as shown for believers, could be working as an activator of goals, and not so much as a motivator to act well.

Another possible explanation is moral licencing. Moral behavior has been shown to be related to moral self-worth. People are intrinsically motivated to maintain a positive moral self-worth, with moral behavior leading to increases and amoral behavior leading to decreases. This mechanism, according to Sachdeva, Iliev and Douglas (2009), results in people behaving morally to maintain a positive moral self-worth. Paradoxically, individuals with an already heighted moral self-worth are less motivated to act morally and are thus shown to evidence lower degrees of moral behavior, such as donated money (Sachdeva, et al.,

2009) and higher degrees of cheating (Jordan, Mullen and Murnighan, 2010). Affirmation of moral identity, it was concluded by both groups of researchers, leads to people feeling licenced to act immorally. It is plausible that participants primed with the good, benevolent God were affirmed in their moral identity based on nature of this God. This affirmation could presumably then lead to moral licencing, or in other words, less motivation to act morally to maintain a positive moral self-worth and thus ultimately more cheating.

Next to exploring the influence of the concepts of God on social behavior, the moderating influence of religiosity among participants on the concepts of God was also examined. It was expected that the God primes would have the predicted effect, regardless of the status of participants as believer or not. The results of the first study show that, in some cases, this variable moderates the influence of God on behavior. This conflicts with the results of Laurin et al (2011), where the influence of reminders of God was not moderated by the religiosity. This can potentially be explained by cultural differences. Despite this commonness of representations of God in our everyday lives, the strength of these representations undoubtedly vary across cultures. It is plausible then, that these differences in the pervasiveness of God in the North American and the more secular European culture from which the participants of the current studies were drawn, resulted in different representations in believers who actively seek out God-related stimulus and non-believers that are less often exposed to such stimuli. Interestingly, in the face of the findings just discussed, the moderating effect of religiosity of participants was not evidenced in the second study. That lack of moderation is in line with what was expected based on the literature (Laurin, et al., 2011: Radolph-Seng and Nielson, 2007). As is pointed out in Norenzavan and Shariff (2008), the supposed differences between believers and non-believers often disappears when empirically investigated. Notably, the second study measured actual behavior while the first measured intentions. That believers, in some cases in the first study, reported a higher

willingness to help could be an artifact of the tendency towards socially desirable responses by the believer, which then have little relation with actual behavior.

Surprising was that in the second study, believers as a group, independent of which concept of God was primed, cheated more than non-believers. Seeing the sensitive nature of such a claim and its potential ramifications, care should be taken before concluding that such differences exist between believers and non-believers of for what reasons. Moral licencing, explained above potentially explains this surprising effect. It is plausible that the believers in the sample were affirmed in their moral identity based on their very status as believers. This affirmation could presumably then lead to moral licencing, or in other words, less motivation to act morally to maintain a positive moral self-worth and thus ultimately more cheating. While moral licensing is a possible explanation for the surprising findings of believers cheating more than non-believers, it remains a speculation. Seeing the potential implications of such finding, it is wondered whether future research would replicate these findings.

A potentially influential but unmeasured variable in both studies is participant's irritation based on, or resistance towards the prime. While not measured directly in a quantative manner, such reactions were expressed in several ways: verbally, during or after the completion of the experiment, in the comments section at the end of the experiment, in space given to answer questions that were meant for the manipulation or written in the margins of the questionnaire. The topics of religion, God and belief (even that of others) have led to (in some cases strong) emotional reactions in many of the participants. These reactions, unaccounted for, are potentially confounding. Had this been measured in a more quantitative method, it could have been taken into consideration during the analyses. It is suggested that future research measure the reaction to the prime or alternatively use a form of priming that leads to less emotional reactions.

Apossible explanation for the unexpected findings in both studies is that the priming

procedure did not function as intended. To the knowledge of the author of the present research, this is the first attempt to manipulate specific concepts of God and examine their influence on behavior. As such, validated methods for the activation of the specific conceptualizations of God examined in this research were lacking in the literature. Checks of the manipulation used in the present research were inconclusive. Regardless, the findings presented here, along with considerations both procedural and theoretical, can be seen as a step in the direction towards honing manipulations of differentiated conceptualizations of God and are never the less interesting, showing some divergence of the effect of God on behavior.

A Strength of this research is that in Study 2, the dependent variable used was a measure of actual behavior; this in contrast to a self-report measure, which isless indicative of actual behavior. Future research could add to the findings on the divergent effects of different concepts God by testing their influences on a range of social behaviors. Helping behavior, as opposed to helping intentions, as measured in the first study, is one example. Participants could be given the opportunity to donate a portion of their reward to a charitable cause after being presented with a manipulation, in this case one of the concepts of God. Aggressive tendencies and the willingness to control them is a further possible research project, testing more active forms of anti-social behavior.

The goal of this study was to add to and expand the as of yet limited pool of research regarding the influence of God on social behavior. This was set out upon bymanipulating and exploring, for the first time, the influence of several different and specific conceptualizations of God. The goal has been achieved in that the unexpected and in some cases surprising findings raise a number of questions as well as showing that the concepts of God effect their influence on behavior in ways that conflict with what was previously hypothesized. It is hoped that findings presented here can further the understanding of the complex influence of conceptualizations of varied aspects of God on behavior, this in the way of both theoretical and procedural insights gained from this research.

References

- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype priming on action. *Journal of Personality and Social Psychology*, 71, 230-244.
- Bateson, M., Nettle, D., & Roberts, G. (2006). Cues of being watched enhance cooperation in a real-world setting. *Biology Letters*, *2*, 412–414.
- Batson, C. D., Anderson, S. L., & Collins, E (2005). Personal, religion and prosocial motivation. In M. H. Maehr & S. A. Karabenick (Eds.), *Advances in motivation and achievement*, Vol. 14: Motivation and religion (pp. 151-185). Greenwich, CT: JAI Press.
- Batson, C. D., Oleson, K. C., Weeks, J. L., Healy, S. P., Reeves, P. J., Jennings, P., & Brown,
 T. (1989). Religious prosocial motivation: Is it altruistic or egoistic? *Journal of Personality and Social Psychology*, *57*, 873-884.
- Batson, C.D., Schoenrade, P. & Ventis. L.W. (1993). *Religion and the Individual*. New York: Cambridge University press.
- Baumeister, R.F., Masicampoo, E.J., & DeWall, C. N. (2009). Prosocial benefits of feeling free: Disbelief in free will increases aggression and reduces helpfulness. *Personality* and Social Psychology Bulletin, 35, 260–268.
- Bering, J. M. (2006). The folk psychology of souls. *Behavioral and Brain Sciences*, 29, 453–462.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/ correlation analysis for the behavioral sciences (3rd ed.). Hillsdale, NJ: Erlbaum.
- Cook, R. D. (1977). Detection of Influential Observations in Linear Regression. *Technometrics*, 19(1), 15-18.

- Dijksterhuis, A., & van Knippenberg, A. (1998). The relation between perception and behaviour or how to win a game of Trivial Pursuit. *Journal of Personality and Social Psychology*, 74, 865-877.
- Dijksterhuis, A., Preston, J., Wegner,&Aarts, H. (2008). Effects of subliminal priming of self and Godon self-attribution of authorship for events. *Journal of Experimental Social Psychology*, 44, 2-9.
- Fehr, E. & Fischbacher, U. (2003). The nature of human altruism. Nature, 425, 785-791.
- Gallup international. (2012). Globalindex of religiosity and atheism [Press release] Retrieved from: <u>http://www.wingia.com/web/files/news/14/file/14.pdf</u>
- Graham, J., & Haidt, J. (2010). Beyond beliefs: Religions bind individuals into moral communities. *Personality and Social Psychology Review*, *14*, 140–150.
- Hackney, C. H., & Sanders, G. S. (2003) Religiosity and mental health: A meta-analysis of recent studies. *Journal of the Scientific Study of Religion, 42,* 43-55.
- Hill, P. C., & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist*, 58, 64–74.
- Jordan, J., Mullen, E., & Murnighan, J. K. (2011). Striving for the moral self: Effects of recalling past moral actions of future moral behavior. *Personality and Social Psychology Bulletin*, 37(5), 701-713.
- Kay, A. C., Gaucher, D., Napier, J. L., Callan, M. J., & Laurin, K. (2008). God and the government: Testing a compensatory control mechanism for the support of external systems. *Journal of Personality and Social Psychology*, 95, 18–35.

- Laurin, K., Kay, A. C., & Fritzsimons, G., M. (2011). Divergent effects of activating thoughts of Godon self-regulation. *Journal of Personality and Social Psychology*, *102*(1), 4-21.
- Laurin, K., Kay, A. C., & Moscovitch, D. M. (2008). On the belief in God: Towards an understanding of the emotional substrates of compensatory control. *Journal of Experimental Social Psychology*, 44, 1559–1562.
- Leary, M. R. (1995). *Self-presentation: Impression management and interpersonal behavior.* Boulder, CO: Westview.
- Norenzayan, A., & Lee, A. (2010). It was meant to happen: Explaining cultural variations in fate attributions. *Journal of Personality and Social Psychology*, *98*, 702-720.
- Norenzayan, A., & Shariff, A. F. (2008). The origin and evolution of religious prosociality. *Science*, *322*, 58-62
- Pichon, I., Boccato, G., & Saroglou, V. (2007). Nonconscious influences of religion on prosociality: A priming study. *European Journal of Social Psychology*, 37, 1032-1045.
- Randolph-Seng, B., & Nielsen, M. E. (2007). Honesty: One effect of primed religious representations. *International Journal for the Psychology of Religion, 17*, 303–315.
- Roes, F. L., & Raymond, M. (2003). Belief in moralizing Gods. *Evolution and Human Behavior*, 24, 126-135.
- Sachdeva, S., Iliev, R., & Medin, D., L. (2009). Sinning saints and saintly sinners: The paradox of moral self-regulation. *Psychological Science*, *20*(4), 523-528.
- Shariff, A. F., & Norenzayan, A. (2007). God is watching you: Priming God concepts increases Prosocial behavior in an anonymous economic game. *Psychological Science*, 18(9), 803-809.
- Vail, K. E., Rothschild, Z. K., Weise, D. R., Solomon, S., Pyszczynski, T., & Greenberg, J.(2010). A terror management analysis of the psycho- logical functions of religion.

Personality and Social Psychology Review, 14, 84–94.

- Vohs, K. D., & Schooler, J. W. (2008). The value of believing in free will: encouraging a belief in determinism increase cheating. *Psychological Science*, *19*(1), 49-54.
- von Hippel, W., Lakin, J. L., & Shakarchi, R. J. (2005). Individual differences in motivated social cognition: The case of self-serving information processing. *Personality and Social Psychology Bulletin, 31*, 1347-1357.