

## *The Effect of Type of Self Perspective and God Prime on Prosociality*

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### **Abstract**

Frimer, Schaefer, and Oakes (2014) suggest that there are at least two distinct self-perspectives in every person: actor (tends to be prosocial) and agent (tends to be selfish), which mainly differentiated by the feeling of being watched. What if that feeling came from ideas about God? Priming God concept is known as activating factor to prosociality. We predicted that the activation of God concept can diminish prosociality gap between self-perspectives by increasing their prosociality. It means that there is an interaction effect between self-perspective and God prime.

A 2 (self-perspective: actor, agent) X 2 (prime: God, neutral) X 2 (recipient: self, others) mixed-design computer-based experiment (N = 124) was conducted to test them. The manipulations including the task to describe or rate the importance of two kinds of goals: selfish and prosocial (Frimer, Schaefer, & Oakes, 2014), and semantic prime (Shariff & Norenzayan, 2007). Prosociality is measured by comparing the importance of selfish and prosocial goals (Frimer, Schaefer, & Oakes, 2014). We found that God prime has divergent effects on prosociality: increases actor's prosociality, but decreases agent's prosociality. It suggests that effect of thought about God depends on how our self-perspective is. This finding is an important consideration in designing behavior intervention methods to promote prosocial behavior.

Keywords: actor, agent, god prime, prosociality, self-perspective

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## Introduction

Prosocial behavior, which is defined as the act of helping or giving benefit for other people or society in general (Twenge, Ciarocco, Baumeister, & Bartels, 2007), is one of the central feature of human life and major focus of research across the natural and social sciences (Zaki & Mitchell, 2013). Every single of us must have helped other people or have seen others doing that in some part of our life, making it an inseparable part of human interactions. The reasons to help others can emerge from the feelings of empathy and genuine desires to relieve others' difficulty; or from the idea that helping other people can benefit the helper because appearing to be prosocial builds a positive reputation, which eventually confers social and material gains (Frimer, Schaefer, & Oakes, 2014).

Most theoretical models of prosociality share a common assumption: Humans are instinctively selfish, and prosocial behavior requires exerting reflective control over these basic instincts (Zaki & Mitchell, 2013). Most of the determinants of prosocial behavior that have been identified as reliable factors of the situational type. Although there are a growing numbers of evidence which support the importance of personality and attitude variables (Bierhoff, 2005). From an evolutionary perspective, this duality of behavioral tendency (prosocial and selfish) is useful to solve an adaptive challenge. If individuals are faced with the social problem caused by limited resources, they have to choices: behaving selfishly to garner the maximum resources for oneself (Frimer, Schaefer & Oakes, 2014), or behaving morally so that the inclusion within groups are secured, making generosity worth its costs (Millet & DeWitte, 2007). Such process has shaped increasingly cooperative and prosocial human's behavior, by creating a condition where our most successful ancestors may have been among the most cooperative within their groups rather than the most competitive or selfish (Simpson & Beckes, 2010).

Frimer, Schaefer, and Oakes (2014) argue that the condition which determines how individuals behave based on that behavioral tendency is whether individuals feel observed. If individuals feel observed, they tend to be prosocial. If they do not, the tendency to act selfishly would be stronger. The theoretical framework we use to explain further about the phenomenon is McAdam's multilayered-self (actor-agent-author) framework (2013). It asserts that individual's psychological self consists of three developmental layers of self: actor, agent, and author, which characterized by different elements and attributes. Each layer of self represents unique characteristic on how individual perceive oneself and one's environment. Based on that framework, it's suggested that the duality of prosocial-selfish tendency is affected by the difference between the layers of self: self as actor and self as agent. Actor, which characterized by the feeling of being observed (viewing oneself from an outsider's perspective), tends to be prosocial. While agent, with the perspective of a first-person executor, tends to be selfish.

There are evidently various factors which affect individual's prosociality besides the self-perspective (e.g., Jonas, Schimel, Greenberg & Pyszczynski, 2002; Anderson & Bushman, 2001; Shariff & Norenzayan, 2007). One of the factors that have received enduring research attention in psychology is religious factors (Shariff, Willard, Andersen, & Norenzayan, 2015). Historically, religion and religious faith are believed

to be the source of human morality. Nearly all major world religions around the world explicitly encourage the faithful to be unconditionally prosocial and treat others as we would like to be treated (Preston, Ritter, & Ivan Hernandez, 2010; Norenzayan, & Shariff, 2008).

Religions generally present the idea and concept of God which are believed by their adherents. While specific depictions of God differ across religions, common to most depictions is that God is an omnipotent, controlling force; and an omniscient, all-knowing being (Laurin, Kay, & Fitzsimons, 2012). McCullough and Willoughby (2009) state that if individuals feel that they are being observed by such supernatural entity, they will experience the increase in self-monitoring and self-regulation which related to responsible actions. The same pattern is also found in Shariff and Norenzayan's studies (2007), which show that God concept, which activated through God prime—implicitly making individuals feel being observed by an omniscient entity, can increase prosocial behavior.

It can be concluded that prosocial behavior has a tendency to occur in certain situations, especially related to the fact that human behavior often changes from time to time and is determined significantly by situational factors. Moreover, there are various prosocial responses, which can occur at certain condition, but not in others (Eisenberg & Mussen, 1989). Therefore, it's important to investigate further about situational factors which are capable affecting the emergence of prosocial behavior so that we can optimize it to benefit the community. Religious factors are considered in this research because the religious ethics and belief play a significant role as the reference for its adherents to behave and act (McCullough & Willoughby, 2009), especially within Indonesian society in general, which puts religion and belief in God as an important thing in their life (Indonesia, Religion, and Social Profile, n.d.)

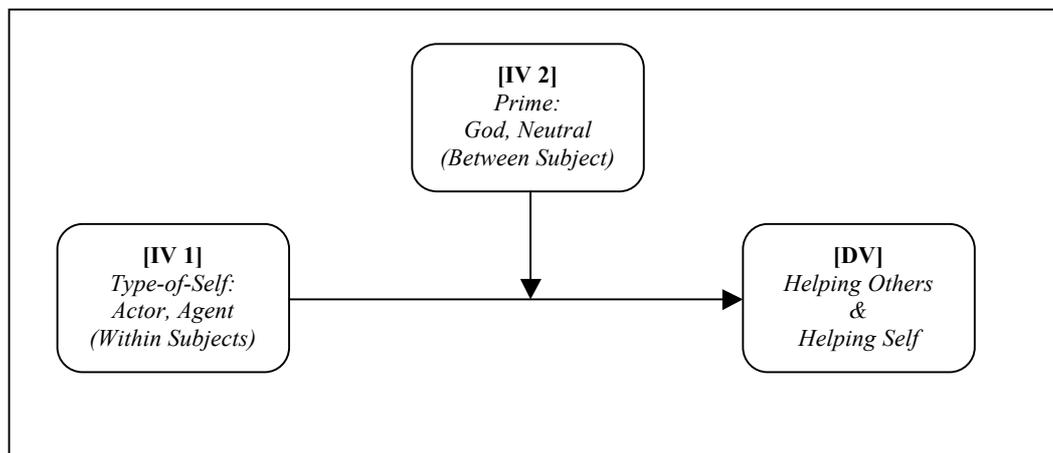


Figure 1: The hypothetical model which visualize the relations between variables

In this research, the author refers to McAdams' multilayer-self framework (2013) as the main theoretical framework to investigate the effect of dynamics within self to individual's behavior. The framework can give us a more comprehensive view regarding the interaction within self and stimulus or factors that can affect one's behavior. As for the linkage between self and prosociality—the spectrum of prosocial

and selfish, the author includes Frimer, Schaefer, and Oakes' experiments (2014) as the main methodological references in developing the experiment in this research.

We predicted that:

1. Actor with God prime is more prosocial than actor with neutral prime.
2. Agent with God prime is more prosocial than agent with neutral prime.
3. In God prime condition, actor be more prosocial than agent.
4. In neutral prime condition, actor is more prosocial than agent.
5. There is an interaction effect of type-of-self and God prime on prosociality.

## **Self**

Considerations of what individual feels and think about are inseparable from attempts to explain the complexity of individual behavior, based on the assumption that both cognitive and mental concepts are important aspects of the individual's experience and behavioral antecedents (Leary & Tangney, 2011). William James, the first person raised the topic of self in the field of psychology, formulated the concept of self by dividing it into I (self-as-knower) and me (self-as-known)—the two fundamental aspects of self that continue to interact and generate awareness of self (James, 1890). The concepts that explain the self as two interrelated aspects (as subjects and objects) are widely adopted by researchers and theorists after James (Leary & Tangney, 2011), including Dan P. McAdams in his theory of psychological self as actor, agent, and author (2013), which author uses as a reference in this study.

## **Actor, Agent, and Author**

In line with James' opinion, McAdams (2013) states that psychologically self can be described as a reflexive regulatory process between the subjective I and the me that is constructed by experience, whose mechanisms continue to grow and develop. McAdams (2013) also adds that the self is composed of at least three different types of psychological content or material, each of which regulates what can be seen and understood by "I" when "I" interacts with "me" reflectively. Allows individuals to understand himself from three psychological points of view, namely as actors, agents, and authors. These three self-perspectives are equivalent to the developmental layers of psychological selfhood, each of which is formed at different stages of development and follows the process of development as the individual lives (McAdams, 2013).

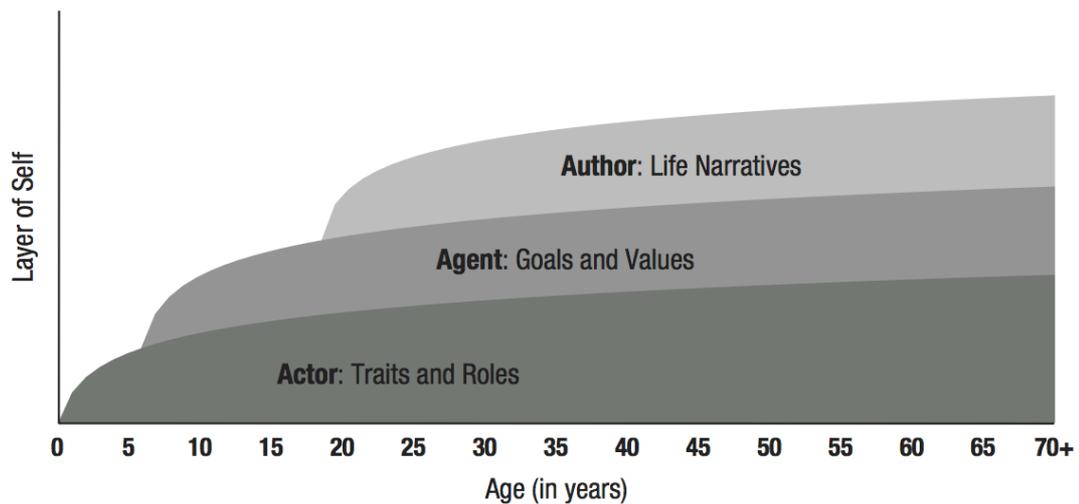


Figure 2: Three layers of self, developing over time (McAdams, 2013)

The actor's perspective comes along with the earliest stages of self formation. Actor performs a function of self-regulation and striving to meet the rules and social demands which are learned. By the middle or late childhood, the agent perspective is formed. The agent perspective allows individuals to act according to his personal motivation. While in adulthood, the author is formed and plays the role to synthesize episodic information about oneself into an integrative and coherent life story. The author reconstructs past experiences and builds a picture of the future, enabling the individual to explain his actions as an actor, the motivation in his perspective as agent, and the self-image of the past, the present, and the future as a whole unity produced by the process of individual development (McAdams, 2013).

McAdams (2013) emphasizes that these three layers are not autonomous or independent entities, nor are different roles played by an individual at different times—can be activated and deactivated just like a switch to adjust the circumstances. Rather it is the three ways for I to interact with me reflexively, without being fixated on when and how the process can occur. A psychologically mature individual can be present as an actor, agent, and author every time and everywhere.

### **Prosociality**

Prosocial behavior is a voluntary action aimed to help or provide benefits for an individual or a group of people (Eisenberg & Mussen, 1989). The main factor that distinguishes prosocial behavior to helping act in general is that prosocial behavior is motivated by the individual's desire to help, not out of necessity or coercion. Although all prosocial behavior has the same goal: providing positive consequences for others, prosocial behavior is motivated by various motivations (Eisenberg & Mussen, 1989). The motivation is not always sincere and fully based on the desire to improve the welfare of others or in other words: altruistic. Rather, it can also be based on a desire for personal gain or convenience, as well as a mixture of both (Batson, Duncan, Ackerman, Buckley, & Birch, 1981).

The latest empirical findings and the theoretical models show that prosocial behavior is often aimed to build an altruistic or positive reputation, allowing the helper to benefit from others (Simpson & Willer, 2008). So it can be concluded that individuals tend not to behave prosocially if they perceive no future benefits that can be obtained with such positive reputation. But according to Haidt (2007), although there is a personal interest behind the prosocial behavior which is displayed, individuals still have a concern for others' condition. Besides the selfish motivation, individuals still have a sincere desire to realize the harmony, decency, and cooperation in the group or community where they live. And eventually encourage individuals to internalize and display their conformity with the norms of society, especially in relation to achieve the harmony with others—which manifested in prosocial behavior (Frimer, Schaefer, & Oakes, 2014)

### **Prosociality and Self**

Self as an entity that serves to regulate individuals' behavior certainly has a major influence on how individuals behave, including prosocial behavior (Leary & Tangney, 2011). Referring to multilayered-self theoretical framework, Frimer, Schaefer, and Oakes (2014) examined the effect of different self-perspective on individual prosociality and showed that the effect does exist. The way individuals perceive or see themselves affects how they behave. When the individuals use actor's perspective, they tend to be more prosocial, while when the agent perspective is used, the individuals tend to be selfish.

Numerous studies show that self and its aspects play a role in regulating prosocial behavior or individuals' prosociality (Caprara & Steca, 2007; Caprara, Alessandri, & Eisenberg, 2012; Lindsay & Creswell, 2014). Although the factors tested are quite varied and have different mechanisms, there is important similarity which relates them: the effects involve an individuals' consciousness (thoughts and feelings). Further testing of the interaction between external stimulus and individuals' self-regulation and self-awareness process in influencing behavior is useful to explain the deeper cognitive processes behind the situational prosociality tendency.

### **Religion, God, and Prosociality**

Historically, religion and religious beliefs are often believed to be the source of human morality. All the major religions in the world explicitly teach prosocial behavior and unconditional kindness to others as a virtue (Preston, Ritter, & Ivan Hernandez, 2010; Norenzayan, & Shariff, 2008). For its adherents, religion itself becomes the source of individual values and social identity (Gaduh, 2012). So, it is reasonable that religious and religious beliefs are identified with prosocial behavior.

Numerous studies show that religious beliefs have positive correlations, or even causal relationships with prosocial behavior. Prosocial behaviors related to the religious aspects which are studied include the domains of charity, volunteering, morality, personality, and psychological well-being (Galen, 2012). In a study conducted by Saroglou (2006), it has been shown that religiosity is positively associated with the desire to help.

The cognitive beliefs and imaginations about the existence of God as a supernatural, omniscient, and omnipresent agent, accompanied by emotional rituals and strong commitments with religious groups, is predicted to encourage the genetically unrelated individuals to interact cooperatively (eg, Atran & Norenzayan, 2004; Irons, 1991; Sausage & Ruffle, 2004). The concept of God which is activated implicitly known to improve prosocial behavior in anonymous dictator games (Shariff & Norenzayan, 2007). Research on gene-environment (G x E) interactions also shows that individuals are more prosocial when primed with religion (Sasaki et al., 2011).

There has been plenty of empirical research that investigated the relationship between religious-related aspects with prosocial behavior. The literature on religion and prosocial behavior is not only characterized by empirical findings, but also the variety of methods used to answer the research questions. But in addition to the diversity, there are important criticisms of previous studies on religious topics and prosocial behavior: research using self-report in showing the correlation between religion and prosocial behavior is only able to assess the planned behavior. However, if the prosocial behavior assessed is in the context of unplanned and spontaneous situations (e.g., bystander helping); or when religious-related signs are irrelevant to the context, for example when the target of prosocial behavior is less familiar or the member of outgroup, then the correlation between religiosity and prosociality will essentially be zero, or even negative. The same results are also applied when the manipulation methods are priming or contextual reminders about religion (Galen, 2012).

The absence of the religious identity of prosocial behavioral targets is one of the main limitation in the studies that claim a causal relationship between religion and prosocial behavior. Therefore, prosocial behavior which is based on religious factor becomes difficult to distinguish from the form of in-group favoritism. In a study of the relationship between religiosity and the desire to help others, it is shown that strong correlations are only applicable if the assistance is provided to the members of individual's group, while there is no correlation if the assistance is provided to a stranger. Those results also confirm the argument that religion is related to the parochial altruism: the condition when altruism towards in-group members is combined with hatred against out-group members (Gaduh, 2012).

Preston and Ritter (2013) found that there were differences between the effect of religious prime and God prime. Religious prime only increases prosocial behavior towards members of in-group religions, while God prime also increases prosocial behavior which is aimed to people from the out-groups. Considering the difference effects between those form of prime, the author wants to restrict this research focus by only using God prime, based on the assumption that God prime affects a more general population compared to religious prime.

## **Methodology**

### **Participants**

Participants are students and alumni of Universitas Indonesia who are at least 18 years old. Participants come from a number of faculty in Universitas Indonesia which located in Depok, except from the Faculty of Psychology. A total of 124 participants were randomly divided into four experimental groups with the following distribution:

31 participants in actor-God prime group; 33 participants in actor-neutral prime group; 30 participants in agent-God prime group; and 30 participants in agent-neutral prime group. Participants ranged from age 18 to 24, with the mean age of 20 years (SD = 1.07); 59.7% were women and 40.3% were men. Most of the participants are Muslims (86.3%).

**Procedure**

In a 2 × 2 × 2 mixed-design experiment, participants are randomly assigned into two groups, which based on the type of self (actor and agent, between-subject) and type of prime (God prime and neutral prime, between-subject). The prosociality of participants in each group are measured by comparing the degree of benefit which is given to themselves and the degree of benefits which is given to other people (beneficiary for myself and beneficiary for others, within-subject). This experiment used a web-based form that were accessed online as the instrument.

Table 1: Experimental groups

Type-of-prime <i>(between-subjects)</i>	Type-of-self <i>(between-subjects)</i>	Recipient of Benefit <i>(within-subjects)</i>
God	Actor	Myself
		Others
	Agent	Myself
		Others
Neutral	Actor	Myself
		Others
	Agent	Myself
		Others

The form consists of these key contents: (1) Task to unscramble groups of word (each consist of five words) into grammatical four words sentences. This task served as type-of-prime manipulation (God or neutral prime) (Shariff & Norenzayan, 2007); (2) Task to rate the importance of a number of life goals which are displayed or task to describe most important life goals. This task served as the type-of-self manipulation (Frimer, Schaefer, & Oakes, 2014); (3) Task to rate the degree of benefit (for oneself or for others) of the most important life goals. This task serves as a measurement of prosociality (Frimer, Schaefer, & Oakes, 2014); and (4) Measurement of religious centrality (The Centrality of Religiosity Scale, Huber & Huber, 2012).

**Type-of-self manipulation**

In the actor group, participants get the task to rate the importance of the displayed life goals. The system will automatically sort those life goals, from the most important to least important. In agent group, the task is to describe four most important life goals. After the task are completed, participants are asked to rate how beneficial each of their life goals are for themselves and other people.

### Type-of-prime manipulation

Participants were asked to unscramble 10 word groups which consisting of 5 random words into a grammatical sentence that consists of 4 words (by eliminating one word). Participants do not know the actual purpose of this assignment. In the God prime group, there are words that related to the concept of God or religion within the group of words that must be unscrambled (e.g., creator, pray, and faith. While in the control group or neutral prime group, the group of words were not designed to activate specific concepts.

Religious centrality is measured using The Centrality of Religiosity Scale (CRS). Author include the religious centrality as one of the measured variable to test its relationship with both God prime and prosociality.

### Results

Table 2: The prosociality across groups

Groups	Degree of life goals benefit for	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	<i>Cohen's d</i>
<i>Actor - God prime</i>	Myself	87.53	9.00			
	Others	80.08	14.61	-2.34	.024	-0.61
<i>Actor - neutral prime</i>	Myself	93.54	6.89			
	Others	87.82	10.20	-2.70	.010	-0.65
<i>Agent - God prime</i>	Myself	91.90	7.51			
	Others	79.36	16.45	-3.53	.001	-0.98
<i>Agent - neutral prime</i>	Myself	92.41	8.09			
	Others	83.63	12.44	-3,08	.004	-0.84

Results in Table 1 indicate that all groups tend to behave selfishly (tend to benefit themselves rather than others). But in addition to this similarity, there are also differences if the groups are compared to each opposite group. Actors who with God prime behave more prosocial than those who get prime neutral, whereas agents with God prime is more selfish than agents with neutral prime. When compared based on the type-of-self, the actors tend to be more prosocial than the agent in both God and neutral prime condition.

## References

- Anderson, C. A. (2004). An update on the effects of playing violent video games. *Journal of Adolescence*, 27(1), 113-122.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469.
- Atran, S., & Norenzayan, A. (2004). Religion's evolutionary landscape: Counterintuition, commitment, compassion, communion. *Behavioral and Brain Sciences*, 27(06), 713-730.
- Baumeister, R. F. (1998). *The self* (4th ed., Vol. 2). New York: McGraw-Hill.
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology*, 71(2), 230.
- Batson, C. D., Duncan, B. D., Ackerman, P., Buckley, T., & Birch, K. (1981). Is empathic emotion a source of altruistic motivation?. *Journal of Personality and Social Psychology*, 40(2), 290.
- Bierhoff, H. W. (2005). *Prosocial behaviour*. Psychology Press.
- Caprara, G. V., Alessandri, G., & Eisenberg, N. (2012). Prosociality: the contribution of traits, values, and self-efficacy beliefs. *Journal of Personality and Social Psychology*, 102(6), 1289.
- Caprara, G. V., & Steca, P. (2007). Prosocial agency: The contribution of values and self-efficacy beliefs to prosocial behavior across ages. *Journal of Social and Clinical Psychology*, 26, 218–239. doi:10.1521/jscp.2007.26.2.218
- Coe, R. (2002). It's the effect size, stupid: What effect size is and why it is important.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Eisenberg, N., & Mussen, P. H. (1989). *The roots of prosocial behavior in children*. Cambridge University Press.
- Engel, C. (2011). Dictator games: a meta study. *Experimental Economics*, 14(4), 583-610.
- Explorable.com (May 7, 2010). Cronbach's Alpha. Retrieved Jun 22, 2015 from Explorable.com: <https://explorable.com/cronbachs-alpha>
- Field, A. (2009). *Discovering statistics using SPSS*. Sage publications.

- Frimer, J. A., Schaefer, N. K., & Oakes, H. (2014). Moral actor, selfish agent. *Journal of Personality and Social Psychology*, 106(5), 790.
- Gaduh, A. (2012). Religion, social interactions, and cooperative attitudes: Evidence from Indonesia. Unpublished doctoral dissertation, University of Southern California, Los Angeles, California.
- Galen, L. W. (2012). Does religious belief promote prosociality? A critical examination. *Psychological Bulletin*, 138(5), 876.
- Galen, L. W. & Beahan, J. (2013). A skeptical review of religious prosociality research. *Free Inquiry*.
- George, D., & Mallery, M. (2003). Using SPSS for Windows step by step: a simple guide and reference. *Boston, MA: Allyn y Bacon*.
- Gervais, W. M., & Norenzayan, A. (2012). Like a camera in the sky? Thinking about God increases public self-awareness and socially desirable responding. *Journal of Experimental Social Psychology*, 48(1), 298-302.
- Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.
- Gravetter, F. J., & Forzano, L. B. (2012). Research methods for the behavioral sciences. Wadsworth, Cengage Learning. *International Edition: ISBN-13, 978-1*.
- Haidt, J. (2007). The new synthesis in moral psychology. *Science*, 316(5827), 998-1002.
- Hill, P. C., Pargament, K. I., Hood, R. W., McCullough Jr, M. E., Swyers, J. P., Larson, D. B., & Zinnbauer, B. J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. *Journal for the Theory of Social Behaviour*, 30(1), 51-77.
- Hommel, B., & Colzato, L. S. (2010). Religion as a control guide: on the impact of religion on cognition. *Zygon®*, 45(3), 596-604.
- Huber, S., & Huber, O. W. (2012). The Centrality of Religiosity Scale (CRS). *Religions*, 3(3), 710-724.
- Indonesia, Religion, and Social Profile: Public Opinion. (n.d.). Retrieved June 7, 2015, from [http://www.thearda.com/internationalData/countries/Country\\_109\\_5.asp](http://www.thearda.com/internationalData/countries/Country_109_5.asp)
- Irons, W. (1996). Morality, religion and human evolution. *Religion and Science: History, Method and Dialogue*, 375-399.
- James, W. (1890). 1950. The principles of psychology.

- Jonas, E., Schimel, J., Greenberg, J., & Pyszczynski, T. (2002). The Scrooge effect: Evidence that mortality salience increases prosocial attitudes and behavior. *Personality and Social Psychology Bulletin*, 28(10), 1342-1353.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, (22), 280-287.
- Kumar, R. (2011) Research methodology: A step by step guide for beginners. Singapore: Sage Publication
- Laurin, K., Kay, A. C., & Fitzsimons, G. M. (2012). Divergent effects of activating thoughts of God on self-regulation. *Journal of Personality and Social Psychology*, 102(1), 4.
- Leary, M. R., & Tangney, J. P. (Eds.). (2011). Handbook of self and identity. Guilford Press.
- Lindsay, E. K., & Creswell, J. D. (2014). Helping the self help others: self-affirmation increases self-compassion and pro-social behaviors. *Frontiers in Psychology*, 5.
- McAdams, D. P. (2013). The psychological self as actor, agent, and author. *Perspectives on Psychological Science*, 8(3), 272-295.
- McCullough, M. E., & Willoughby, B. L. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. *Psychological Bulletin*, 135(1), 69.
- Millet, K., & Dewitte, S. (2007). Altruistic behavior as a costly signal of general intelligence. *Journal of Research in Personality*, 41, 316–326. doi:10.1016/j.jrp.2006.04.002
- Norenzayan, A., & Shariff, A. F. (2008). The origin and evolution of religious prosociality. *Science*, 322(5898), 58-62.
- Preston, J. L., Ritter, R. S., & Ivan Hernandez, J. (2010). Principles of religious prosociality: A review and reformulation. *Social and Personality Psychology Compass*, 4(8), 574-590.
- Preston, J. L., & Ritter, R. S. (2013). Different effects of religion and God on prosociality with the ingroup and outgroup. *Personality and Social Psychology Bulletin*, 0146167213499937.
- Rounding, K., Lee, A., Jacobson, J. A., & Ji, L. J. (2012). Religion replenishes self-control. *Psychological Science*, 23(6), 635-642.
- Saroglou, V. (2006). Religion's role in prosocial behavior: Myth or reality?. *Religion*, 31(2).

Sasaki, J. Y., Kim, H. S., Mojaverian, T., Kelley, L. D., Park, I. Y., & Janušonis, S. (2011). Religion priming differentially increases prosocial behavior among variants of the dopamine D4 receptor (DRD4) gene. *Social Cognitive and Affective Neuroscience*, nsr089.

Simpson, B., & Willer, R. (2008). Altruism and indirect reciprocity: The interaction of person and situation in prosocial behavior. *Social Psychology Quarterly*, 71(1), 37-52.

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.

Shariff, A. F., Willard, A., Andersen, T., & Norenzayan, A. (2014). Priming God: A meta-analysis of religious priming with a focus on religious prosociality. *Unpublished manuscript under peer review*.

Simpson, J. A., & Beckes, L. (2010). Evolutionary perspectives on prosocial behavior. *Prosocial motives, emotions, and behavior: The better angels of our nature*, 35-53.

Sosis, R., & Ruffle, B. J. (2004). Ideology, religion, and the evolution of cooperation: Field experiments on Israeli Kibbutzim. *Research in Economic Anthropology*, 23(89), 117.

Srull, T. K., & Wyer, R. S. (1979). The role of category accessibility in the interpretation of information about persons: Some determinants and implications. *Journal of Personality and Social Psychology*, 37(10), 1660.

Sullivan, G. M., & Feinn, R. (2012). Using effect size-or why the P value is not enough. *Journal of Graduate Medical Education*, 4(3), 279-282.

Twenge, J. M., Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Bartels, J. M. (2007). Social exclusion decreases prosocial behavior. *Journal of Personality and Social Psychology*, 92(1), 56.

Zaki, J., & Mitchell, J. P. (2013). Intuitive prosociality. *Current Directions in Psychological Science*, 22(6), 466-470.

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