

ANGELS AND DEMONS ARE STILL AMONG US: FURTHER VALIDATION OF THE  
BELIEF IN PURE EVIL AND BELIEF IN PURE GOOD SCALES

by

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B.A., North Central College, 2003  
M.A., Ball State University, 2006

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

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Department of Psychology  
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## **Abstract**

Three studies were conducted to further validate the belief in pure evil (BPE) and belief in pure good (BPG) scales (Webster & Saucier, 2012). Study 1 assessed the relationships between BPE, BPG, and sociopolitical ideology, while Study 2 assessed the relationships between BPE, BPG, and various forms of religiosity. Study 1 and Study 2 also tested whether BPE and BPG predicted aggression and helping via support for relevant foreign (Study 1) or domestic (Study 2) policy issues above and beyond sociopolitical attitudes and religiosity, respectively. Study 3 tested whether BPE and BPG predicted evaluations of a prototypically (vs. non-prototypically) evil perpetrator and a prototypically (vs. non-prototypically) good apprehender. Together, these three studies showed that BPE consistently related to greater aggression and less helping, while greater BPG consistently related to less aggression and more helping, while demonstrating convergence but not redundancy with variables known to justify/suppress aggression or helping. In sum, these studies further demonstrate the reliability and validity of the BPE and BPG scales as well as provide solid groundwork for future correlational and experimental research on these constructs.

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Approved by:

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## **Dedication**

I dedicate this dissertation to the memory of my Grandmother, Shirley Miklian, who has been one of my greatest inspirations in my educational pursuits.

## Chapter 1 - Introduction

“If only there were evil people somewhere insidiously committing evil deeds and it were necessary only to separate them from the rest of us and destroy them. But the line dividing good and evil cuts through the heart of every human being. And who is willing to destroy a piece of his own heart?”

-Alexander Solzhenitsyn (b. 1918 - d. 2008), novelist and Nobel laureate

The question of why people help or hurt others is perhaps one of humanity’s oldest and most urgent questions. Diverse scholars from different disciplines have argued that it is because some individuals just epitomize *pure good* (“angels”) or *pure evil* (“demons”) (Baumeister, 1999; for an interdisciplinary bibliography on pure evil, see Hedgehog Review, 2000). Whether or not pure evil or pure good empirically exists is actually irrelevant to the current studies (for relevant discussions, see Baumeister, 1999; Batson, 1991; Cialdini, Baumann, & Kenrick, 1981; Darley, 1992). Instead, the proposed studies focus on whether people’s *perceptions of* pure evil and pure good affect their own decisions about how to treat others.

### What Is “Pure Evil”?

Human beings are naturally inclined to explain the behavior of other people (Ross, 1977), although some individuals are more motivated to do this and produce more sophisticated and accurate explanations of human behavior (see Fletcher, Danilovics, Fernandez, Peterson, & Reeder, 1986; Fletcher, Reeder, & Bull, 1990; Fletcher, Rosanowski, Rhodes, & Lange, 1992). Because many of us think we are worthy individuals who deserve good things to happen to us, when bad things happen to us (or to those similar to us) we seek quick, comforting explanations so that our perception of a just, fair world remains intact (see Lerner, 1980). This may be especially true when harm is perceived as consciously deliberate and not commensurate with the provocation (if any provocation), which is the most common definition of “evil”<sup>1</sup> (Baumeister, 1999; Darley, 1992; Miller, 2004; Staub, 1992). Because we are already naturally inclined to

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<sup>1</sup> In this paper, the term “evil” used alone refers to this definition. Evildoer refers to a person who has engaged in evil.

attribute anti-social behavior to internal factors<sup>2</sup> (i.e., an example of the fundamental attribution error or correspondence bias; see Gilbert & Malone, 1995), it appears people are predisposed to think that bad things happen because of bad people—because of *evil* people. Thus, evil appears to be a characteristic predominantly used to describe a person or group of people (Baumeister, 1999; see also Darley, 1992). Following this logic, the word “evil” as an adjective is searched significantly more often than “evil” as a noun via Merriam-Webster online searches (<http://www.merriam-webster.com/dictionary/evil>).

This person-centered explanation of harmful behavior, or personal archetype of evil, is not new to the twentieth century (Baumeister, 1999). Recorded history shows that cultures all over the world developed remarkably similar perceptions of evil (see, e.g., Russell, 1977), such that “the same version of evil was invented several different times, in different parts of the world, independently” (Baumeister, 1999, p. 66)<sup>3</sup>. Thus, the notion of evil is fairly universal, and perhaps evidences a common underlying psychological process. Regardless, the personal archetype of evil has thrived throughout recorded history, and continues to be relevant today. Baumeister (1999) discusses how Western thought and culture has continued to propagate what he refers to as “the myth of pure evil” (p. 62)<sup>4</sup>. He searched for converging evidence of “the myth” primarily in reviewing popular media (television and movies) and religious texts. Baumeister (1999) initially discussed at length how horror movies have particularly personified evil via a very consistent narrative (Baumeister, 1999, p. 63).

Horror movies typically begin with innocent people leading happy and peaceful lives until their world is throw into turmoil by the invasion of chaos, of “the abnormal into the world of normal” (Twitchell, 1985, p. 10). Pre-1960, this evil was typically supernatural in nature (e.g.,

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<sup>2</sup> People also tend to attribute others’ positive outcomes to internal factors as well (e.g., Anderson, 1983).

<sup>3</sup> The word “evil” is derived from the Old English (c. 450-1100 AD) word *yfel* and, before that, from the proto-Germanic word *ubilaz*. *Yfel* and *ubilaz* are thought to roughly translate as “over and up”, intimating an act of transgression (Harper, 2010). In Old English, this word was the most comprehensive adjectival description of disapproval, dislike, or disparagement. The more common usage of evil meaning a bad, cruel, or morally wicked person did not become widespread until the eighteenth century (Harper, 2010).

<sup>4</sup> This paper eliminates the reference to “the myth” in “the belief in *the myth* of pure evil/pure good” for two reasons. First, it is shorter and less awkward to say and read. Second, as previously mentioned, the focus of this paper is not to determine whether pure evil or pure good exists, but to assess whether people’s perceptions of their existence can be measured and are valuable to measure.

vampires, witches, aliens); interestingly, historians believe that such supernatural killers were created to explain medieval serial killers (Schlesinger, 2000). After Hitchcock's *Psycho*, a second era of horror movies began in which human villains engaged in serial killings or mass murder. In the 1970s, Hitchcock's approach evolved (or devolved depending on one's tastes) into a bloodier, more graphically violent interpretation of the Hitchcock genus: the "slasher" film. The stalwarts of the slasher subgenre include *The Texas Chainsaw Massacre*, *Halloween*, and *Friday the 13th*. These classic and contemporary horror films portray evil as person-centered, as unexplainable, and as almost unstoppable (especially given the endless sequels in horror movie franchises).

Of course, action films also personify evil, but such films typically give evildoers more purpose to their evil acts (Baumeister, 1999). The evil can be instrumental (e.g., to gain money, power), egotistical (e.g., for revenge), or for pleasure (i.e., sadism); however, Gene Siskel and Roger Ebert, prominent movie critics in their time, commented during a special episode on villains: "Enjoying being evil is key to any successful villain...this is the most important feature" (Siskel & Ebert, 1995). In addition to action films, horror films also do portray villains as sadistic. For example, Freddy Krueger, from the *Nightmare on Elm Street* horror franchise, seemed to reap pleasure from toying with his victims before ultimately killing them in their dreams. Moreover, Hesse and Mack (1991) analyzed and coded children's cartoons and found that villains were routinely portrayed as prototypically sadistic and motivated by greed and power—even though many times the villains already possessed plenty of power and money. Thus, the personal archetype of evil seems to be cultivated from an early age through cartoons and maintained through adulthood by television, movies, and other popular mediums. Religious texts, which parallel television and movies in personifying evil (Baumeister, 1999), are included as one of these popular mediums (see Study 3).

Ultimately, Baumeister (1999) identified a constellation of eight different perceptions that he believed coalesced into the belief (in the myth of) of pure evil (pp. 72-75). Please note that the hypothesized components of BPE do overlap with the scientific consensus of the definition of evil—that is, deliberate and unprovoked harmful behavior (Baumeister, 1999; Darley, 1992; Miller, 2004); however, the belief in *pure* evil comprises other attributes about the agent of harm and the agent's motivations for harm.

**1. Pure evil involves the intentional infliction of harm.** According to BPE, and following the correspondence bias, bad things happen because of bad people. Thus, evil is not accidental or unintended, but is a willful and conscious action by an agent of destruction. If people more often considered circumstantial reasons for evil, the world would seem like a more unpredictable place given that people are not generally good at discerning situational causes to others' behaviors (Gilbert & Malone, 1995). That is, people higher in BPE likely maintain that bad things happen because of bad people to help maintain a belief in a just, orderly, and predictable world.

**2. The evildoer is driven primarily by the wish to inflict harm merely for the pleasure of doing so.** Accordingly to BPE, bad things not only happen because of bad people, these bad people harm for the mere pleasure of it. In cases where power and money seem to be motives, such material pursuits are typically seen only as the means to further an evil agenda. Indeed, victims of deliberate harm often describe their attackers as having no coherent reasons for harming them, except out of sheer malice (see Baumeister, 1999, ch. 2 for a review).

**3. The victim of pure evil is innocent and good.** According to BPE, bad things happen because of bad people who harm for the pleasure of it; however, we need to add an additional clause: bad things happen *to good, innocent people* because of bad people. To elucidate, people who believe in pure evil think that if another person harms them, it is because the *perpetrator* was evil, not because of something they—the victims—did to provoke the evildoer's wrath. If people who believe in pure evil acknowledge that they did something to provoke harm, then they must admit *they* did something wrong and are partially responsible for the harm. Typically, people do not like to admit wrongdoing to preserve a positive view of themselves (see Baumeister, 1997, ch. 2). Seeing victims of evil, including ourselves and those similar to us, as good and innocent helps preserve the belief in a just world. Moreover, given their sadistic nature, evildoers should enjoy hurting those who are less capable of protecting themselves (e.g., “helpless” women, the elderly, or children).

**4. Evil represents the antithesis of order, peace, and stability.** Because most people like to preserve a predictable, peaceful, and just world (see Lerner, 1980), the injection of pure evil—of chaos and the abnormal—disrupts people's quiet and orderly daily lives. It is likely not a coincidence that throughout history (and even today), natural disasters (e.g., earthquakes, volcano eruptions) were deemed evil (Russell, 1977). As discussed, horror films adeptly

exemplify and exploit this component of the BPE; the juxtaposition of an orderly world and chaos likely makes a story all the more frightening and suspenseful.

**5. Pure evil comes from the outside.** According to BPE, evildoers purposefully disturb good and innocent people's orderly lives; people who would do intentional harm to such good people could not possibly be part of the ingroup. Indeed, in popular fiction, bad boys often both look and speak differently than the targeted victim (and audience). Thus, evildoers are often outsiders, outgroup members. However, many action and horror movies portray evil as coming from the "inside", that is, from people that both look and sound like ingroup members (e.g., *Arlington Road*, *Red Eye*), which likely heightens the suspense and exacerbates the terror. In the real world, the rise of "homegrown" militantism/terrorism in the U.S. (e.g., the 1995 Oklahoma City bombings; see Masters, 2011) also calls into question the idea that evil consistently arises from the "outside". Ultimately, even if evildoers look and sound like ingroup members, they are likely perceived as psychologically different.

**6. Pure evil is stable in the person.** According to BPE, evil does not arise from ordinary, well-meaning people under difficult conditions. Instead, people are born evil or forever corrupted by evil; that is, evil can be dispositional or can forever corrupt someone's thoughts and behavior. Thus, one cannot reason with evil and it is futile to try to understand it; therefore, the only choice we have is to permanently incapacitate or annihilate evildoers from this world.

**7. Pure evil is marked by egotism.** Further, accordingly to BPE, evildoers have big egos. That is, evildoers do not usually suffer from low self-esteem, but from exaggerated high self-esteem. To be more scientifically precise, evildoers likely suffer from high, defensive (i.e., unstable) self-esteem, which is more akin to narcissism or self-love (see Baumeister, Smart, & Boden, 1996; Jordan, Spencer, Zanna, Hoshino-Brown, & Correl, 2003). Because of this egotism, evildoers lack empathy for others and are oversensitive to interpersonal threats; thus, even a little provocation can propel evildoers to harm *without* compunction. Knowing that one will not be distressed by guilt makes hurting others that much easier (Baumeister, 1999).

**8. Pure evil is associated with difficulty in maintaining control over emotions, especially anger and rage.** Along with exhibiting greater egotism, BPE portrays evildoers as having very low self-restraint or self-regulation over their emotions. That is, accordingly to BPE, evildoers are likely to randomly lash out toward other people who anger them because of low self-restraint. However, out of all eight components, Baumeister states that the last two BPE

components (egotism and poor emotion regulation) are likely not as reliable or consistent with evil behavior, especially given the prototype of the cold, calculating (vs. out-of-control) villain who enacts harm in a systematic, controlled manner (e.g., Hannibal Lector in *Silence of the Lambs*). Nonetheless, cold, calculating evildoers are still likely perceived as being egotistic in that they are self-loving and lack empathy for others. It is also somewhat ironic that these last two components are likely the most “true” about violent offenders; that is, considering all known proximal causes, egotism and low self-regulation appear to be the two best predictors of violent offending (Baumeister, 1999).

In sum then, pure evil:

“[S]eeks relentlessly to inflict harm with no positive or comprehensible motive, deriving enjoyment from the suffering of others...It maliciously and gratuitously seeks out unsuspecting, innocent victims from among the good people of the world. It is the eternal other, the enemy, the outsider who despises the orderly and peaceful world of the good and seeks to throw it into chaos.” (Baumeister, 1999, p. 75)

### **The Value of Assessing People’s Beliefs in Pure Evil**

Human beings are strongly predisposed to categorize other people into groups, especially in terms of sex, race/ethnicity, and age. We identify and affiliate with those that are similar to us (Mullen, Brown, & Smith, 1992), and because we automatically think positively of ourselves, we think positively of those similar to us as well. Meanwhile we are suspicious of or hostile toward those who are different than us because they look and/or think differently than we do (Allport, 1954/1979).

“But if *we* are good, and *you* are our opponents, and evil is the opposite of good, then *you* must be evil” (Baumeister, 1999, p. 68). Indeed, people are naturally inclined to blame outgroups for bad things that happen to the ingroup (Mullen & Johnson, 1990). It would seem, then, as the tendency to identify with the ingroup grows stronger, so does the tendency to see oneself as good and rivals/enemies as evil, especially when trying to explain why bad things have occurred. Such polarized views are likely used to justify the mistreatment of outgroups; to stomp out evil you must get rid of the evil people. “There is no point in being patient, tolerant, and understanding when one is dealing with evil” (Baumeister, 1999, p. 69).



Indeed, throughout history, people have justified mistreatment of outgroups by accusing them of being in league with the Devil (e.g., the Jews; Russell, 1988). As with horror or action movie villains, the Devil represents an evildoer driven by sadistic impulses; the Devil is motivated to do harm for harm's sake. It is probably not a coincidence that evildoers in popular media often typify outgroup characteristics (e.g., foreign accents and ethnicities), which likely makes categorizing them as evil—and harming them—that much easier (Baumeister, 1999).

Assessing BPE appears valuable, then, because of its potential to justify intergroup (or interpersonal) aggression as well as its potential to suppress inclinations to help. People higher in BPE should be more likely to perceive worldview-threatening groups as evil in order to justify aggression or withholding of help because (accordingly to BPE) evildoers cannot be reasoned with. People higher in BPE also may be more likely to notice perpetrators' behaviors that are consistent with BPE, which should exacerbate their aggression toward perpetrators. The only option then is to summarily punish or destroy evildoers. Eliminating evildoers eliminates the possibility that the evildoers will propagate their dissonant, dangerous worldviews and behavior. Accordingly, accusations of evil on both sides of a conflict can foreseeably create a reciprocal and escalating pattern of violence (Baumeister, 1999).

In sum, BPE is theorized to predict higher rates of aggression toward (perceived) evildoers, or more broadly, perceived evildoing groups; yet, BPE would also likely be associated with less helping toward perpetrators as well. Nonetheless, endorsing harsher punishments (e.g., capital punishment) may be perceived as more effective in eliminating worldview threats when compared to withholding help (e.g., supporting rehabilitation efforts; c.f. Krueger, Hicks, & McGue, 2001). Further, it may be that the more people higher in BPE perceive a target to be evil (e.g., by experimentally imbuing a perpetrator with prototypically evil characteristics), the severity of punishment will increase or, alternatively, intentions to help should decrease. As Becker (1985) sagely stated, "In seeking to avoid evil, man is responsible for bringing more evil into the world than organisms could ever do merely by exercising their digestive tracts. It is man's ingenuity, rather than his animal nature, that has given his fellow creatures such a bitter earthly fate" (p. 5). However, until recently, no researchers had attempted to empirically confirm the multitude of theorizing on BPE.

## Preliminary Studies Examining Belief in Pure Evil

A search of the literature only revealed four extant papers (of which only two have been published in peer-reviewed journals) that empirically examined some aspect of BPE. Some of these studies directly aimed to develop and validate individual difference measures of BPE, while others have taken more of an experimental approach in exploring how evil “cues” affect perceptions of violent offenders.

First, via two conference presentations, Wetering (2005; Wetering, Svekla, Hiebert, Olvera, & Dehghan, 2007) described his attempts to construct an individual difference measure of BPE based upon Baumeister’s (1999) and Darley’s (1992) theoretical frameworks<sup>5</sup>. Wetering (2005) first piloted a 22-item measure with eight protrait and contrait items for each of Baumeister’s pure evil components as well as six other items (three portrait and three contrait) tapping other “ideas espoused” by Baumeister and Darley that did not specifically address one of Baumeister’s BPE components; however Wetering did not delineate which items referenced the eight evil components vs. the six additional items.

Overall, the psychometric properties of Wetering’s (2005) myth of pure evil scale were less than desirable. First, the scale exhibited low internal consistency ( $\alpha = .68$ ). Second, exploratory factor analysis results indicated eight theoretically inconsonant factors. Third, the scale exhibited low or non-significant inter-correlations between other attitudinal variables previously shown to predict intergroup aggression (e.g., the scale moderately correlated with a measure of right-wing authoritarianism, but did not correlate with just-world beliefs or support for criminal punitiveness). Moreover, the scale was tested using a fairly small sample ( $N = 121$ ).

Wetering et al. (2007) conducted a second study to improve upon his original scale ( $N = 54$ ). Wetering et al. developed a sample pool of 56 potential items that was then subjected to exploratory factor analysis; however, the conference paper provided few details on how these items were created (e.g., whether and how many of these items reflected each of Baumeister’s eight components of pure evil). Wetering et al. ultimately retained the top ten loading contrait and protrait items (presumably on the first factor) to create a reliable ( $\alpha = .93$ ) 20-item measure. This revised scale did positively correlate with an ad-hoc measure of criminal punitiveness, but did not correlate with other variables that have been shown to justify intergroup

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<sup>5</sup> I would like to thank Wetering for so readily providing materials from his conference presentations.

aggression (social dominance orientation, right-wing authoritarianism, or just-world beliefs). Wetering and colleagues should be lauded for being the first to attempt to construct and validate a measure assessing belief in pure evil; however, it appears—and Wetering has relented (personal communication, February 15, 2011)—that his attempts were not as “fruitful” or successful as one could hope.

Next, Burris and Rempel (2011, Study 1) created a nine-item myth in pure evil scale based upon Baumeister’s (1999) BPE components ( $N = 148$ ), seemingly without knowledge of Wetering’s (2005, 2007) earlier attempts. However, in validating the scale, they only tested the scale’s internal consistency ( $\alpha = .77$ ), noting that every item “contributed to the scale’s internal validity” without providing any specific item-total correlations (p. 71). Burris and Rempel then assessed whether they could actually increase people’s perceptions of pure evil via three symbol matching tasks. In the “evil” condition, participants had to match evil symbols to their infamous users (e.g., swastika/Nazi, Zodiac sign/serial killer). The other two tasks were religious (e.g., menorah/Judiasm, Alam al-Shalada/Islam) or scientific (Jupiter/astronomy, water/chemistry) in nature (note that Burris and Rempel referred to latter conditions as “neutral”). Priming evil symbols did increase scores on their myth in pure evil scale compared to the other two control conditions combined (via a planned contrast). That is, priming evil cues increased perceptions of pure evil, which may infer that BPE may be more of an attitudinal rather than trait-like construct.

Burris and Rempel (2011) reported two more studies in which they assessed participants’ reactions (the tendency to perceive perpetrators as evil and the level of aggression or “nihilistic hate” toward perpetrator) to perpetrators with and without evil cues present. The perpetrators were a child molester (Study 2) and a group home employee engaging in ambiguous sexually harassing behavior (Study 3). Similar to their first study, the vignettes manipulated the presence (vs. absence) of evil symbols: the child molester read occult literature in Study 2 and the group home employee appeared “Goth” in dress and interests in Study 3.

Instead of using their myth in pure evil scale as a potential predictor of perceptions of evilness and aggression, Burris and Rempel theorized a two-dimensional (Virulent vs. Engagement) “Responses to Evil” construct to test as a moderator of participants’ evaluations of the perpetrators. The Virulent dimension reflected “individual differences in the extent to which people construe evil as a threat”, while the Engagement dimension reflected “individual

differences in the extent to which people either prefer to directly confront or to distance themselves from evil” (p. 70). Burriss and Rempel (2011) crossed the virulence and engagement dimensions to identify four distinct patterns of responses, each measured by its own scale: “chronic tendencies to *attack* (high virulence, high engagement), *avoid* (high virulence, low engagement), *embrace* (low virulence, high engagement), or *ignore* (low virulence, low engagement) evil” (p. 72). In Study 3, they conducted an exploratory factor analysis to support the validity of their Responses to Evil; specifically, the factor analysis showed four relatively clean factors, with items mapping onto their respective subscale. *Alphas* for these scales varied from Study 1 (*alphas* = .69 to .72) to Study 2 (*alphas* = .71 to .86).

Burriss and Rempel (2011) hypothesized that people’s perception of evil as a threat would only relate to perceptions of the perpetrator as evil when evil cues were present in the vignettes. In support of this, they found that the attack, avoid, and ignore components only positively correlated with participants’ perception of the target as evil when the vignettes contained evil cues; however, it was not clear why the ignore component was positively correlated with participants’ tendency to see the target as evil given that the subscale reflected the tendency to discredit evil as a meaningful label. To more thoroughly test the ostensible interaction between their Responses to Evil Scale and presence (vs. absence) of evil symbolism, they created one “evil as virulent” main effect score by collapsing across the engagement dimensions; that is, they subtracted the mean of the embrace and ignore scale scores from the mean of the attack and avoid scale scores. In both Study 2 and Study 3, they found a positive relationship between “evil as virulent” and the perception of the perpetrator as evil only when evil symbolism was present in the vignette. Perceptions of the target as evil were then positively associated with nihilistic hate (i.e., aggressive responses) toward the target whether or not evil symbolism was present in both studies. However, it is unclear whether the Responses to Evil Scale predicted aggression toward the targets.

Nonetheless, Burriss and Rempel’s (2011) studies, like all others, have limitations. First, the development and validity testing of their myth in pure evil scale was limited. It is also uncertain whether individual differences in their myth of pure evil scale would have helped predict perceptions of the targets as evil or aggression toward the perpetrators. Further, it is unclear how their myth in pure evil scale would relate to their Response to Evil Scale; that is, does BPE predict (or even overlap) with the tendency to see evil as a threat or the tendency to

avoid evil? The Responses to Evil Scale may also be redundant with hypothesized components of BPE (e.g., people summarily “attack” evil because evil cannot change). Nevertheless, Burris and Rempel (2011) overall showed that priming evil symbolism increased people’s BPE; that people’s perception of evil as a potent threat positively predicted labeling targets as evil only when evil cues were present; and that labeling targets as evil positively predicted aggression toward targets whether or not evil symbolism was present. Burris and Rempel’s studies are seminal in demonstrating the effects of evil cues on individuals’ reactions to perpetrators.

Similarly, the fourth and last paper that has empirically addressed evil assessed the “demonizing” of perpetrators after manipulating both the “prototypical evilness” of a violent crime and participants’ cognitive load via vignettes (Prooijen & de Veer, 2010). People are less likely to thoughtfully process perceptual information—including information concerning impression formation—and rely on stereotypes when they do not have the time or energy to do so, that is, during high cognitive load (e.g., McCrae, Milne, & Bodenhausen, 1994). Thus, Prooijen and de Veer predicted that high cognitive load would make participants more prone to “demonize” a prototypically evil perpetrator.

Prooijen and de Veer (2010) randomly assigned participants to either memorize a difficult- (high cognitive load) or easy-to-remember (low cognitive load) telephone number. Prooijen and de Veer then varied the description of the perpetrator of a violent crime—murder in Study 1 ( $N = 80$ ) and kidnapping in Study 2 ( $N = 84$ )—via vignettes. In the prototypically evil condition, the vignette described the perpetrator (“Marco G.”) as “exceptionally calm” during his arrest and as a “socially isolated individual”. The vignette continued, stating that the neighborhood children “were terrified of him. Recently, one of the children’s football accidentally ended up in Marco G.’s garden. When the child tried to get the ball back, Marco G. scared the living daylight out of the child by sneaking up on him from behind, and then chasing the child away from his garden while swearing, with a huge smile on his face” (p. 263). Thus, Prooijen and de Veer imbued Marco with prototypically evil characteristics based on BPE, particularly sadistic pleasure.

In the non-prototypically evil condition, the perpetrator was described as “exceptionally upset” during his arrest and a “quiet person and a real family man” (Prooijen & de Veer, 2010, p. 264). In lieu of the dramatic episode of Marco G. scaring a child, the vignette read: “Many people from the neighborhood attended [his wedding anniversary party], and expressed how

enjoyable this event had been. His neighbors said that, the day before the murder, they had talked to Marco G. in his garden. Marco G. had said how much he was looking forward to...camping outside during the weekends” (p. 264).

In both studies, Prooijen and de Veer (2010) assessed the extent to which participants demonized the perpetrator via an ad-hoc five-item measure (*alphas* = .90 and .83 for Study 1 and 2, respectively): “*This crime was caused entirely by the offender’s evilness*”, “*The offender is only motivated to destroy everything that is benevolent*”, “*The offender seems to enjoy hurting others*”, “*The offender is immoral*”, and “*When thinking of the offender, I can only imagine how mean he is*”. Prooijen and de Veer’s (2010) “demonizing” scale thus appeared to assess belief in pure evil on a person level (i.e., as applicable to the perpetrator only) by addressing some of Baumeister’s (1999) pure evil components as applied to the perpetrator only, including the degree to which participants thought that the perpetrator was evil, that the perpetrator enjoyed hurting others, and that the perpetrator wanted to destroy everything that is benevolent in this world. Their results confirmed their hypotheses that, although demonizing scores were overall higher in the prototypically evil (vs. non-prototypically evil) conditions, high cognitive load increased demonizing when the perpetrator was portrayed as prototypically evil. So, when people are robbed of time and energy to think about perpetrators, people seemingly are more likely to rely on cultural stereotypes about evildoers.

In sum, the prior studies are seminal in that they are the first to empirically test previous theorizing on BPE. Specifically, both Wetering (2005, 2007) and Burris and Rempel (2011) attempted to create and validate a myth in pure evil scale. Burris and Rempel (2011) and Prooijen and de Veer (2010) further showed that imbuing perpetrators with evil characteristics (either by associating the perpetrator with evil symbols or giving the perpetrator “evil” mannerisms) increased aggressive reactions (either nihilistic hate or demonizing) toward perpetrators. However, none of these studies attempted to comprehensively develop and validate a BPE scale. Given the depth of theorizing on BPE (Baumeister, 1999; see also Darley, 1992), a more in-depth approach to measuring BPE, its possible correlates, and its predictive utility (above and beyond other known predictors) is warranted.

First, in reviewing the prior studies, several improvements can be made in developing a BPE scale. First, given the limited sample sizes in these past studies, an adequate sample size needs to be obtained to satisfactorily test the scales’ psychometric properties. Compromising

between the most liberal and most conservative recommendations for scale development (e.g., reliability, factor analysis), researchers recommend at least 200 participants (Fabrigar, Wegener, MacCullum, & Strahn, 1999) per study. Second, in lieu of using a specific number of items as a cutoff point (e.g., Wetering, 2005, 2007), it is likely more prudent to use a statistical cutoff point (e.g., loadings or total item-scale correlations  $> .30$ ; Everitt, 2002; Field, 2005; Nunnally, 1967). Using the number of items as a cutoff point could eliminate important items or dimensions that contribute to a scale; that is, if we use a specific number of items as a cutoff point, we may disregard items pertaining to key BPE dimensions, which is especially relevant to our investigation given that *eight* different dimensions of BPE are hypothesized. Third, a more detailed and sophisticated list of potential BPE items is needed (see Churchill, 1979). A closer examination of previous BPE items (e.g., Wetering, 2005, 2007) revealed complicated phrasing (e.g., “*Evil people just are also selfish people. If they were not so, they would understand that other people are hurt by what they do*”) and confounding attitudes about good and evil (e.g., “*Bad people were born that way; good people were born good*”).

We (Webster & Saucier, 2012) aimed to resolve these issues in constructing an improved BPE scale. Accordingly, first, a large pool of potential items—at least four to six items for each hypothesized BPE dimension—was required. These items needed to be prudently and simply worded, especially as not to confound attitudes about good and evil. These items would then be subjected to a reliability analysis using a large sample of (at least 200) participants. Ideally, two sets of participants would complete the potential BPE items. Then, reliability analyses for each participant sample would be compared and the items with the highest item-total correlations across *both* participant samples would be retained for the final scale. Further, the final scale would need to evidence convergent, discriminant, and predictive validity. That is, the final scale should correlate but not be redundant with relevant previously-established constructs and predict relevant criteria above and beyond other known predictors (Whitley, 2002). Thus, this is exactly what we set out to do in constructing and validating an improved BPE scale as well as in constructing, for the first time, a scale assessing perceptions of pure good. Yet, what are the components of belief in pure good (BPG)?

## What is “Pure Good”?

Good and evil have been consistently been proposed as opposite ends of the same spectrum (Baumeister, 1999); but, evil has received much more attention by scholars even though helping others is a universally recognized virtue (Schroeder, Penner, Dovidio, & Piliavin, 2005). That is not to say that scholars across both the biological and social sciences have debated whether pure good—in essence, pure altruism or selfless helping—exists (Batson, 1991; Cialdini, Baumann, & Kenrick, 1981; Wilson, 2005); but, again, whether pure good and pure evil exist is not pertinent to the current investigation.

More critical to this research is that, to our knowledge, few scholars have discussed whether people’s perceptions of whether pure good exists affects people’s attitudinal or behavioral tendencies about whether to harm or help (for an exception, Lichtenberg [2010] wrote a popular media article that partly discussed this issue). A search of the psychological literature revealed only two books chapters that addressed the issue of “pure good”, and these did so only tangentially: the first addressed appealing aspects of evildoers in the *Harry Potter* series (Bousquet, 2009), while the second addressed conditions for terrorism (With, 2004). Moreover, even Wikipedia does not have a page on “pure good”—but it does have one on “evil” (<http://en.wikipedia.org/wiki/Evil>) and on the comparison of “good and evil” ([http://en.wikipedia.org/wiki/Good\\_and\\_evil](http://en.wikipedia.org/wiki/Good_and_evil)).

Given that “good” is often perceived to be the opposite of “evil”, can we simply infer that the components of BPG are simply the converse of the components of BPE? It seems that in some cases we could extract parallel BPG components from the BPE components; however, at times, we would be hard-pressed to find a direct opposite. In cases where there appeared to be no direct opposite, we (Webster & Saucier, 2012) perused the altruism and volunteerism literature (e.g., Batson, 1991; Cialdini et al., 1981; Snyder, Omoto, & Lindsay, 2004) for other qualities that may exemplify pure good. Thus, the hypothesized BPG components should somewhat overlap with the scientific definition of altruism, as the hypothesized BPE components overlapped with the scientific definition of “evil”; however, belief in *pure* good comprises other attributes about the agent of help and his/her motivations for helping. Ultimately, we hypothesized eight different BPG components, discussed below.

**1. Pure good is about intentional help.** At its core, from a behavioral science perspective, pure good—like pure altruism—is about intentionally helping for help’s sake



(Batson, 1991; Cialdini et al., 1981; Snyder, Omoto, & Lindsay, 2004). Thus, as BPE perceives that evildoers' harm is intentional and conscious, BPG perceives that do-gooders' helping is equally *intentional* and *conscious*.

**2. Pure good is about selfless help.** Further, according to pure altruism, people do not only intentionally and consciously help, they *selflessly* help as well; that is, some people help others without expectation of intrinsic (to feel good) or extrinsic (to look good to others) rewards (Batson, 1991). Thus, while BPE perceives that evildoers harm for the mere pleasure of it, BPG holds that do-gooders help without expectation of (intrinsic or extrinsic) reward.

**3. Pure good is about helping anyone in need.** Next, if evildoers are perceived to target certain people (i.e., good and innocent victims), do do-gooders target certain individuals as well? We reasoned that people higher in BPG believe that *anyone who needs help will receive help*, whether they are friends or enemies; if someone is in need of aid, he or she will receive it without judgment. Mother Theresa particularly demonstrated this BPG component; as she was attributed to having said, "If you judge people, you have no time to love them." Thus, while people who believe in pure good perceive perpetrators as egotistical, people who believe in pure good see do-gooders as humble and self-sacrificing.

**4. Pure good is about helping without hurting others.** According to BPG, people can willfully and selflessly help anyone in need; however, we also likely need to qualify that pure good is about helping without resorting to aggression or violence in order to help. Harming others, whatever justifications people may provide to help, only nullifies the benefits of the intended help; violence conducted in the name of achieving peace still means people are being hurt. As Henry Adams sardonically stated, "It's always the 'good men' who do the most harm in the world" (see Baumeister, 1999, ch. 6). Indeed, Ghandi, Martin Luther King, and Mother Theresa all stressed non-violent means to help the plight of disadvantaged groups (e.g., Brown, 1989; Spink, 1997).

**5. Pure good cannot be corrupted.** We reasoned that pure good cannot be corrupted by the forces of evil; that is, do-gooders can resist the temptations (i.e., the possible abstract or material rewards) to joining the "dark side" (using *Star Wars* nomenclature). Sages and leaders both in fiction (e.g., Yoda from *Star Wars*, Gandalf from *The Lord of the Rings*) and non-fiction (e.g., Mother Theresa, Ghandi) were not viewed as perfect beings; however, they knew what was "the right to do" and continually resisted the pleasurable temptations of darker forces (e.g.,

Gandalf being resistant to taking the one ring of power; Mother Theresa doubting her faith only seemed to solidify her faith in good).

**6. Pure good is a stable influence in people.** Implicated in the previous BPG axiom is the issue of the stability of pure good. According to BPE, evil is a stable trait: people are either born evil or forever corrupted by evil. Does pure good parallel evil in that pure good is also a stable trait? Are people either born good or become forever good once they “see the error of their ways”? We were unsure as to how people who believe in pure good would think about the stability and malleability of goodness. It could be that people who believe in pure good believe that do-gooders like Mother Theresa were born purely good; however, people who believe in pure good might also feel that people can see “the error of their ways” and strive to be selfless, impartial ambassadors of aid. We ensured that we developed and tested items addressing the stability of pure good to see if such perceptions were reliably part of the BPG construct.

**7. Pure good is synonymous with peace, order, and stability.** People who believe in pure good likely want to believe that pure good exists because pure good helps foster a more peaceful and orderly society. If more people selflessly helped anyone in need—without thinking about themselves and without the use of violence—it does appear that the world would be a more peaceful place. Thus, this is one case where a BPE component (i.e., pure evil is the antithesis of peace and order) is the direct opposite of a BPG component.

**8. Pure good is rare in the world.** People higher in BPG have to grapple with the fact that although pure good helps facilitate a more peaceful society, it appears that history has been perpetually plagued with human violence. Accordingly, people higher in BPG may perceive that pure good is *too* rare in this world. Indeed, examples of purely good people seem hard to come by. Thus, accordingly to BPG, if there were more pure good in this world, then we would achieve a more peaceful and orderly society.

In sum, BPG is about intentionally and impartially helping any person in need without the use of violence, the expectation of reward, or concern for their own welfare; therefore, pure good cannot be tempted by the rewards to join the “dark side”. Pure good is seen as necessary to help maintain an orderly and peaceful society, and if there was more pure good in this world (i.e., pure good is rare), that we would have a more peaceful society. We also considered whether pure good was a dispositional or stable personal characteristic given that pure good cannot be corrupted by the forces of evil.

As we compare BPG and BPE, we again notice that many of the BPG components do not entirely parallel the theorized BPE components, which may impact our hypotheses about how BPE and BPG are (or are not) related. The popular view is that people concurrently believe in both good and evil (i.e., where there is evil, there needs to be pure good; Baumeister, 1999), so it is possible that BPE and BPG scores could be positively related; that is, as BPE increases, so does BPG. Conversely, one can make a competing hypothesis that BPE and BPG could be negatively related given that some BPG components appear to challenge some BPE components; for example, people who score higher in BPG believe that doing good means not harming others, while people higher in BPE likely feel that violence and aggression are justified to root out “evildoers”.

Despite the competing hypotheses regarding the nature of relationship between BPG and BPE, we can make clear predictions in how BPG would relate to intergroup aggression and helping responses. People higher in BPG perceive that selfless, impartial, non-violent help does exist and more of it would make the world a more peaceful place. Ultimately, then, people higher in BPG would be more likely to suppress outright aggressive responses toward perpetrators, and more importantly, promote more empathic, indiscriminate helping in general as well. In fact, denying pure good exists may actually also serve to justify people’s prosocial apathy: if individuals think that no one can act altruistically, then there is no pressure on themselves to selflessly and impartially help others. Overall, the hypothesized effects of BPG parallel the hypothesized effects of BPE, just in the other direction. Accordingly, to test the hypothesized effects of BPE and BPG on intergroup aggression and helping responses, we of course needed to create and validate separate BPG and BPE scales.

### **Initial Development and Validation of the BPE and the BPG Scales**

“Many that live deserve death. And some that die deserve life. Can you give it to them? Then do not be too eager to deal out death in judgement. For even the very wise cannot see all ends.”

-J.R.R. Tolkien (b. 1892 - d. 1973), *The Fellowship of the Ring*

To reiterate, in improving upon the very limited research on BPE (and the non-existent literature examining people’s BPG), we formulated a specific methodological and analytic plan to create the BPE and BPG scales. First, we created four to six (protrait and contrait) items for

each of the BPE and BPG components (Webster & Saucier, 2012); therefore, we started with quite a large pool of potential items (65 and 53 items for BPE and BPG, respectively). We did postulate four additional theorized components to the myth of pure evil that were not explicitly listed by Baumeister (1999), but were developed out of his and others' works (e.g., Baumeister, 1999; Darley, 1992; Miller, 2004; Miller, Gordon, & Buddie, 1999): *Futile to Understand Evil*, *Too Much Evil*, *Discounting Situations*, and *General Endorsement*.

*Futile to Understand* refers to the extent to which people believe that we should not try to understand evil, because this will foster greater empathizing with perpetrators and condoning of their harmful behavior; several theorists have commented on this very issue in studying evil (see, e.g., Baumeister, 1999; Darley, 1992; Miller et al., 1999). *Too Much Evil* reflects the possibility that some people believe that there is too much evil in the world right now. *Discounting Situations* reflect the idea that mitigating circumstances play a small or no role at all in facilitating evil behavior (see Baumeister, 1999; Darley, 1992). *General Endorsement* solely concerns people's general willingness to say that they believe in pure evil. On a theoretical level, we wanted to assess whether people's general agreement of the existence of pure evil was reliably related to the more specified hypothesized components. Accordingly, we generated parallel general attitudinal (i.e., *General Endorsement*) items for BPG as well.

Nonetheless, in constructing items, we were careful not to include overtly religious content so that belief in neither pure good nor pure evil would be confounded with religious dogma about good and evil. Further, we were cautious not to confound belief in good and evil within the same item so that we get a clearer delineation between these two constructs.

Two groups of introductory psychology students completed all potential BPE and BPG items in separate semesters (Spring/Summer 2011 and Fall 2011). For Spring/Summer 2011, 255 undergraduates (102 women, 130 men; due to an administration error, the sex of 23 participants was not recorded) participated. They were primarily White (69.4%) and tended to be slightly older than an average introductory psychology sample ( $M_{\text{age}} = 20.02$ ,  $SD_{\text{age}} = 2.85$ ). For Fall 2011, 286 (190 women, 96 men) primarily White (87.4%) students ( $M_{\text{age}} = 18.84$ ,  $SD_{\text{age}} = 2.20$ ) participated. We conducted reliability analyses on the BPE and BPG items for the Summer/Spring and Fall datasets separately and retained items that exhibited item-total correlations  $\geq .30$  in *both* datasets (Nunnally, 1967; for recent use of parallel statistical approaches, see Fletcher et al., 1986; Saucier & Webster, 2010). We used this statistical

approach for a number of reasons. First, BPE and BPG are theorized to be unidimensional constructs comprised of several interdependent underlying beliefs; indeed, one of the main draws of the construct is its unitary construction, both theoretically and grammatically (“belief in pure evil” vs. “beliefs in pure evil”). If these constructs do represent one reliable index, a reliability analysis of all the items should show high internal consistency.

A reliability analysis also allows some BPE and BPG components to be represented more just by the sheer number of items that contribute to the averaged BPE and BPG scores. We expected that the results would exhibit a pattern in which the items reflecting the “core” components of BPE (e.g., Intentional Harm and Joy of Harm) and BPG (e.g., Intentional Help and Helping Without Reward) to exhibit some of the highest item-total correlations; meanwhile, items reflecting components that we and previous theorists were less confident about (e.g., the perceptions that evildoers have low self-control) would likely be more sporadically retained or may be eliminated altogether. We selected .30 as the cutoff item-total correlation because this value served as a compromise between more liberal (e.g., .20) and more conservative (e.g., .40) cutoff recommendations (Everitt, 2002; Field, 2005; Nunnally, 1967).

The final BPE (22 items) and BPG (28 items) scale items are in Tables 1 and 2, respectively. Both the BPE (*alphas* = .88 and .89, for the Summer/Spring and Fall samples, respectively) and BPG (*alphas* = .91 for both samples) scales exhibited excellent reliability across both datasets. It is interesting to note that only eight of the proposed 12 BPE components (including the General Endorsement dimension) were represented in the final set of BPE items; items addressing the BPE components of Victim as Innocent, Evil as Outsider, Too Much Evil, and Discounting Situations were not included in the final scale. Thus, perceptions that victims are always good and innocent, that evil comes from the outside, that there is too much evil in the world, and that there are not situational explanations for evil do not appear to be reliably part of the BPE construct. Meanwhile, items reflecting eight of the nine (including the General Endorsement dimension) hypothesized BPG components were ultimately included in the final scale; the only dimension not represented by the final scale items addressed whether pure good was dispositional.

We aimed to replicate BPE and BPG effects on intergroup aggression and helping across both participants samples; thus, we included identical sets of measures (including all the potential BPE and BPG items) in both studies. We used criminals as the primary group of

interest because it allowed us to examine the extent to which people would both aggress (via support for severe punishments) and help (via support for rehabilitation efforts) criminal perpetrators; specifically, we assessed participants' support for the death penalty and criminal rehabilitation, respectively (see Sessar, 1999). Participants' also provided their recommended jail sentences (on a progressive scale from less than one year to the death penalty) for different crimes that were reliably grouped into three main categories: stealing (i.e., income tax fraud, money laundering, shop lifting, and embezzlement), assault (i.e., physical child abuse, child kidnapping, and raping a woman), and murder (i.e., intentional and accidental murder)<sup>6</sup>. We predicted that people higher in BPE would report greater intergroup harm (e.g., greater support for severe criminal punitiveness) and less intergroup help (e.g., less support for criminal rehabilitation), while people higher in BPG would report greater support for intergroup help (e.g., more support for criminal rehabilitation) and less support for intergroup harm (e.g., less support for severe criminal punitiveness).

We also included other relevant measures that have been shown to be related to levels of criminal punitiveness (and thus would be important to statistically control for) and that were hypothesized to be related to BPE and BPG: attributional complexity, just-world beliefs, and pessimism (Butler & Moran, 2007; Tam, Au, & Leung, 2008; Sargent, 2004). First, given that people higher in BPE perceive that bad things happen predominantly because of bad people, people higher in BPE are likely not as motivated to think very deeply about other people's harmful behavior and therefore do not consider other possible causes, particularly immediate or distal situational factors; that is, people higher in BPE would likely score lower on attributional complexity (see Fletcher et al., 1986, 1990, 1992). Concurrently, because we reason that people higher in BPE formulate their perceptions of others' harm-doing to partly help maintain the view of an orderly and just world (e.g., evil only happens to good and innocent people), we also reasoned that people higher in BPE would be related to greater belief in a just world. We also reasoned that people higher in BPE may be more pessimistic about the world in general given their overall negative outlook on human nature.

Meanwhile, we reasoned that people higher in BPG probably think more deeply about the causes of people's behavior, especially situational circumstances that can contribute to one's

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<sup>6</sup> An exploratory factor analysis was conducted to form the categories.

harmful behaviors. To elucidate, people higher in BPG believe that selfless, impartial, and non-violent helping can improve the world; thus, it would seem that people higher in BPG perceive that even people who do bad things can change—that evildoing individuals can be *reformed*, because there are other factors contributing to their bad behavior (aside from potential inclinations to do bad things). Thus, people higher in BPG would likely score higher on attributional complexity. We also reasoned that people higher in BPG may also be more optimistic in general given their belief in reforming people.

Results first showed that BPE and BPG scores were completely uncorrelated in both participant samples<sup>7</sup>. Second, results confirmed the predicted relationships between BPE/BPG and attributional complexity, just-world beliefs, and pessimism. People who scored higher in BPE also scored higher in just-world beliefs and lower in attributional complexity, while people higher in BPG scored lower in pessimism and higher on attributional complexity. Most importantly, in line with predictions, BPE and BPG differentially and uniquely predicted intergroup aggression (i.e., support for the death penalty) and helping (i.e., support for rehabilitation) with regards to criminal offenders above and beyond other predictors (i.e., attributional complexity, pessimism, and just-world beliefs). Specifically, people higher in BPE reported greater support for the death penalty, but greater opposition to criminal rehabilitation; meanwhile, people higher in BPG reported greater opposition to the death penalty but greater support for criminal rehabilitation<sup>8</sup>.

Further, recall that participants also provided their recommendations for punishing perpetrators for different types of reasonably severe crimes: stealing (income tax fraud, money laundering, shop lifting, and embezzlement), assault (physical child abuse, child kidnapping, and raping a woman), and murder (intentional and accidental murder). Across both of our samples,

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<sup>7</sup> One may wonder why BPE and BPG scores were completely uncorrelated. We speculate that higher BPE necessitates greater belief in *heroism* (violence done in the name of good and peace; see, e.g., Becker, 1973, 1985), but not necessarily greater BPG. This is only speculation, though, and will need to be more thoroughly examined in future programmatic research.

<sup>8</sup> One may ponder why BPE and BPG showed opposite effects even though BPE and BPG are uncorrelated. However, although it seems rare, it is statistically and theoretically possible that two uncorrelated variables can still predict the same criterion. For example, even though right-wing authoritarianism and social dominance orientation are sometimes not significantly correlated, their positive effects on generalized intergroup bias appear to remain consistent (e.g., Duckitt & Sibley, 2007).

BPE uniquely and positively predicted harsher punishment for stealing and assault crimes; only in the Spring/Summer 2011 dataset did BPG uniquely predict more lenient punishment, but only for stealing crimes. We expected more severe sentences from people higher in BPE across both types of crimes given their predilection for severe punishment. Meanwhile, we predicted more lenient punishments for stealing among people higher in BPG given that there are likely more extraneous circumstances that would facilitate a person stealing vs. assaulting women or children. Neither BPE nor BPG predicted sentences for murder, a point I hoped to resolve in Study 3.

In sum, the results from our first two studies converged to indicate that BPE and BPG are indeed reliable and valid psychological constructs. People higher in BPE were less attributionally complex and reported greater just-world beliefs, while people higher in BPG were more attributionally complex and less pessimistic. Further, BPE and BPG differentially and uniquely predicted intergroup aggression (criminal punitiveness) and helping (criminal rehabilitation efforts) after controlling for other known predictors (attributional complexity, just-world beliefs, and pessimism).

### **Further Validation of BPE and BPG: Overview of Current Studies**

Three additional studies were conducted to further validate the BPE and BPG scales by assessing more possible correlates of BPE and BPG as well as testing their predictive utility across more diverse operational definitions of aggression and helping. As for potential correlates, these studies assessed the relationship between BPE/BPG and factors related to the justification and suppression of aggression and helping responses (see Crandall & Eshleman, 2003). Broadly, the first study examined the relationship between BPE/BPG and sociopolitical perception (e.g., perception of a dangerous world) and ideology (e.g., right-wing authoritarianism, social dominance orientation, militant thinking). The dependent variables in Study 1 focused on foreign policy issues (e.g., support for militarism and peacemaking). Study 2 concentrate on the relationship between BPE/BPG and various forms of religiosity (e.g., fundamentalism, internal/external/quest religiosity) given the long history of religious philosophizing on good and evil. The dependent variables in Study 2 focused on American social policies targeted to help underrepresented or severely disparaged populations (e.g., support for Affirmative Action or needle-exchange programs). The third and final proposed study took an experimental approach



in assessing how BPE and BPG predict reactions to a prototypically (vs. non-prototypically) evil perpetrator who confesses to murder and a prototypically (vs. non-prototypically) good apprehender who helps capture the perpetrator.

Overall, along with the two extant BPE/BPG studies discussed above (Webster & Saucier, 2012), the three studies herein aimed to show that perceptions of pure evil and pure good uniquely and differentially predict a range of aggression and helping responses. These results would further confirm our overall supposition that that how people view others' harmful or hurtful behavior has important implications for people's own decisions about whether to harm or hurt their fellow human beings (or other living beings).

## Figures and Tables

**Table 1.1 Belief in Pure Evil Scale Items**

Item	Component
1. Some people are just pure evil.	General
2. People who commit evil acts often dedicate their entire lives plotting ways to intentionally hurt good people.	Intentional Harm
3. People who commit evil acts always mean to harm innocent people.	Intentional Harm
4. Evil people take every opportunity to make other people's live a living hell.	Intentional Harm
5. The evildoer's goal is simply to harm other people.	Intentional Harm
6. Evil people hurt others because they enjoy inflicting pain and suffering.	Joy of Harm
7. Evil people harm others for the joy of it.	Joy of Harm
8. Evil people make me sick because they get such pleasure out of harming other people.	Joy of Harm
9. We should stop trying to understand evil people and spend more time getting rid of them from this world.	Understanding Evil
10. Evil people "get off" by being violent and abusive to other human beings.	Joy of Harm
11. Evil people are just compelled to harm others.	Low Self-Control
12. Evildoers are actually proud and smug about having harmed other human beings.	Egotism
13. Evil people are selfish and only think about themselves.	Egotism
14. Evil people have an evil essence, like a stain on their souls, which is almost impossible to get rid of.	Eternal/Disposition
15. We could obtain a more peaceful society by simply wiping out all the evildoers.	Antithesis of Peace
16. Evildoers want to destroy all that is good in this world.	Antithesis of Peace
17. If we catch an evildoer, we should just lock them up and ensure they never get out.	Eternal/Disposition
18. Even the forces of good cannot change an evildoer's heart.	Eternal/Disposition
19. There is no point in trying to reform evil people.	Antithesis of Peace
20. There is no point in trying to reform evil people.	Eternal/Disposition
21. Evil people intend to disrupt our peaceful society with their harmful acts.	Antithesis of Peace
22. Evil people are so narcissistic and full of themselves.	Egotism

*Note* : Items presented in the order participants viewed them.

**Table 1.2 Belief in Pure Good Scale Items**

Item	Component
1. There IS such a thing as a truly selfless/altruistic person.	General
2. I do believe in "pure good."	General
3. In essence, "pure good" is selflessly helping other people in need.	Intentional Help
4. People have to believe in "pure good" to have a peaceful and orderly society.	Facilitates Peace
5. Purely good people are so selfless that they would endanger themselves to help their enemies.	Impartial Help
6. More selfless helping would produce a more orderly and peaceful society.	Facilitates Peace
7. Selfless people help anyone in need, even their rivals.	Impartial Help
8. People who commit noble, selfless acts often dedicate their entire lives pondering ways to help people.	Intentional Help
9. People only help others because they expect to be rewarded.*	Without Reward
10. We DO NOT need more "purely good" people in this world.*	Rare in World
11. Purely good people always try to avoid hurting others, even when it means helping those in need.	Avoids Aggression
12. People only help those in need because they want to look good to themselves and impress others.*	Without Reward
13. "Pure good" only exists in fictional stories.*	General
14. There are some people who selflessly help others and expect nothing in return.	Without Reward
15. Purely good people do not matter in this world because human societies will always have conflict and chaos.*	Facilitates Peace
16. Purely good people can resist the temptation to do evil things.	Defies Corruption
17. Even selfless people hate helping enemies.*	Impartial Help
18. Purely good people do what is right and good for others without expecting anything in return.	Without Reward
19. "Pure good" is all about doing what is good and right in this world just for the betterment of others.	Intentional Help
20. The forces of good will always prevail in the end.	Defies Corruption
21. The forces of good will always prevail in the end.	Facilitates Peace
22. Pure good does not extend to helping wounded enemies.*	Impartial Help
23. Purely good people are too foolish to realize that the world will always be a violent place, and they will eventually	Facilitates Peace
24. "Pure good" is doing unselfish, heroic things for others in need.	Intentional Help
25. Even selfless people enjoy using violence sometimes.*	Avoids Aggression
26. People <i>never</i> intentionally and selflessly help people.*	Intentional Help
27. Pure-hearted people respect all life and therefore believe anyone is worthy of being helped and cared for.	Impartial Help
28. There are selfless people in this world that help others without any expectation of being rewarded for their heroic	Without Reward

Note: \*Reverse-coded items. Items presented in the order participants viewed them.

## Chapter 2 - Study 1

Various sociopolitical ideological variables appear to justify intergroup aggression and suppress helping responses (Crandall & Eshleman, 2003). In particular, Duckitt's (2001, 2006; Duckitt & Sibley, 2008, 2010; Sibley, Wilson, & Duckitt, 2007) dual process model of ideology and prejudice holds that perceptions of the world help shape sociopolitical beliefs, which in turn influence levels of prejudice. Specifically, in one causal path, greater perceptions of a dangerous world increase right-wing authoritarian beliefs (greater support for traditional beliefs, submission to authority, and aggression toward those who threaten that authority or beliefs; Altemeyer, 1998; Funke, 2005), which in turn increase prejudice toward those groups threatening traditional social values. Meanwhile, in the second causal path, greater perceptions of a competitive world increase social dominance orientation (support for social inequality and group-based dominance to enforce inequality or the status quo; Pratto, Sidanius, Stallworth, & Malle, 1994; Jost & Thompson, 2000), which then increases prejudice toward socioeconomically competitive or disadvantaged groups. Both right-wing authoritarianism and social dominance orientation are also related to other forms of intergroup aggression and helping, including increased support for the death penalty (Pratto et al., 1994; McCann, 2008) and decreased support for affirmative action (Altemeyer, 1998; Pratto et al., 1994; see also Mirels & Dean, 2006).

Overall, then, right-wing authoritarianism and social dominance orientation appear to justify intergroup aggression and suppress helping toward socially deviant (in right-wing authoritarianism's case) or economically competitive/disadvantaged (in social dominance orientation's case) groups. Similarly, BPE is theorized to justify aggression and suppress helping toward perceived perpetrators of harm. Thus, those higher in BPE may endorse some of the same types of sociopolitical statements to help bolster their rationalizations for aggressing against (or not helping) perceived harm-doing groups. Those higher in right-wing authoritarianism or social dominance orientation may also advocate more aggression toward and less helping of some of the same groups as those targeted by people higher in BPE. Indeed, people higher in BPE likely exhibit greater scores on the components of right-wing authoritarianism and social dominance orientation that focus on justifying aggression (i.e., aggression toward those who threaten that authority or beliefs and group-based dominance to enforce inequality/status quo). Meanwhile,

BPG is theorized to suppress aggression toward and promote indiscriminate helping for disadvantaged groups; such individuals should report greater opposition to any ideology that justifies, in whatever way, greater aggression or less helping. Thus, higher BPG should be related to lower right-wing authoritarianism and social dominance orientation.

Further, given that people higher in BPE have a penchant for seeing lots of evil in the world, BPE should positively correlate with the perception of a dangerous world and, quite possibly, the perception of a competitive world (an “it’s either us or them” mentality). However, people higher in BPG might also perceive the world as dangerous or competitive right now, but have a more optimistic outlook about the future.

Study 1 also assessed whether BPE or BPG are differentially related to self-identified political orientation. Political conservatives (vs. liberals) appear to use right-wing authoritarian beliefs (and social dominance attitudes to a lesser extent) to justify more prejudicial responding toward both socially deviant and economically competitive outgroups (Webster, Burns, Pickering, & Saucier, 2012). Political conservatives are also less likely to support various social equity policies, such as affirmative action (e.g., Sidanius, Pratto, & Bobo, 1996). I reason that political conservatives would more likely endorse BPE to similarly justify intergroup aggression and suppress intergroup helping, while concurrently being less likely to endorse BPG, which is theorized to suppress intergroup aggression and increase indiscriminate helping.

Study 1 also assessed individuals’ levels of militant-extremist attitudes. After qualitatively analyzing the most salient values and beliefs among a representative sample ( $n = 13$ ) of extremist/terrorist groups (Saucier, Akers, Shen-Miller, Knežević, & Stankov, 2009), Stankov, Saucier, and Knežević (2010) developed an individual differences scale of militant-extremist thinking composed of three distinct dimensions: pro-violence (toward enemies), a perception of a vile and miserable world, and perception of divine power (i.e., God is all-powerful and reward those most loyal to him). Study 1 focused on the first two of these scales, while Study 2 focused on the divine power scale given that Study 2’s focus was on the relationship between religiosity and BPE/BPG. Militant-extremist thinking is another sociopolitical belief system that likely justifies intergroup aggression and suppresses helping responses; if people believe the world is vile because of specific groups of people, eliminating those groups of people should produce a more peaceful society. This logic is part of BPE theorizing. Thus, the vile world and pro-violence scales are likely positively related to, but not

redundant with, BPE. People higher in BPG likely score lower on pro-violence given their support for selfless, indiscriminate helping, and also may score lower on the vile world scale given their more optimistic view of life.

Next to right-wing authoritarianism and social dominance orientation, empathy has shown to be the third strongest predictor of intergroup bias (McFarland & Adelson, 1996; Whitley & Kite, 2006). Thus, Study 1 also tested whether BPE and BPG differentially correlated with the primary components of empathy (Davis, 1994, pp. 55-57): *perspective taking* (“the tendency to spontaneously adopt the psychological view of others in everyday life”) and *empathic concern* (“the tendency to experience feelings of sympathy or compassion for unfortunate others”). I expected people higher in BPE to report less perspective taking ability given their lack of motivation to look very deeply into the causes for others’ (bad) behaviors, while people higher in BPG likely report more perspective taking because of their motivation to look more deeply into the causes for others’ behaviors (Webster & Saucier, 2012). Because of BPG’s emphasis on selfless, indiscriminate helping, people higher in BPG also likely feel greater compassion for those in need (i.e., score higher in empathic concern for others). People higher in BPE likely experience empathic concern, but probably in specific cases (e.g., when a “good and innocent” ingroup member needs help; c.f. Saroglou, 2006); thus, we would not find consistent or reliable relationships between empathic concern and BPE.

Given that previous BPE and BPG studies have focused on criminal punitiveness variables as dependent variables, to help demonstrate the broader applicability of BPE and BPG, Study 1 focused on different operational definitions of intergroup aggression and helping, in this case, foreign policy issues. Specifically, the dependent variables of interest included support for militarism, for torture, for diplomacy/peacemaking, and for humanitarian wars as well as included measures of prejudice toward outgroups targeted in these measures, in this case, Muslims and Iranians. Participants also participated in a raffle in which they could have donated all or part of their winnings to one of two randomly presented non-profit organizations that either supported or opposed pre-emptive war. Higher BPE should be related to greater support for more aggressive and less diplomatic policy solutions, whereas higher BPG should be related to support for more diplomatic and less aggressive policy solutions.

In sum, I hypothesized that BPE should positively relate to sociopolitical perceptions and ideology that have been shown to justify aggression and suppress helping, while BPG should

negatively relate to these variables. Further, after controlling for relevant variables, BPE should uniquely predict more support for aggressive solutions to foreign policy issues and less support for diplomatic solutions to foreign policy issues, whereas BPG should show opposite effects, despite the fact that BPE and BPG are not significantly correlated.

## Method

### *Participants and Procedure*

In total, 150 introductory psychology students completed the following materials online (via Sona Systems) to partially fulfill a course requirement. Seven participants were first removed because they had egregious amounts of missing data (> 5.0% of total items); thus the final sample included 143 primarily White (71.3%) participants (56 men, 76 women, with 11 not reporting their gender;  $M$  age = 19.15,  $SD$  = 1.42).

### *Materials*

Materials (other than the BPE and BPG scales) for Study 1 are included in Appendix A. Unless noted, participants responded to items on a 1 (*disagree very strongly*) to 9 (*agree very strongly*) Likert-type scale, and all measures were scored as the average response per item with higher mean values reflecting higher levels of the construct of interest.

**Empathy.** Dispositional empathy was assessed using Davis's (1983) well-established Interpersonal Reactivity Index, which contains seven-item subscales, each tapping a separate facet of empathy: empathic concern (e.g., "*I often have tender, concerned feelings for people less fortunate than me*";  $\alpha$  = .82); perspective taking (e.g., "*I sometimes try to understand my friends better by imagining how things look from their perspective*";  $\alpha$  = .76).

**Political orientation.** It is prudent to distinguish self-identification of political orientation (as liberal, moderate/middle-of-the-road, or conservative) from self-reporting support or opposition to specific policy attitudes (e.g., affirmative action, military spending, same-sex marriage; for a review, see Knight, 1999; for empirical examples, see Pratto et al., 1994; Webster, Burns, Pickering, & Saucier, 2012). After reading the prompt, "Although it is often difficult to summarize one's political, economic, and social views in a single word or phrase, please indicate which of the following positions best represents your viewpoint," participants self-identified as 1 = "*liberal*" ( $n$  = 25), 2 = "*middle-of-the-road/moderate*" ( $n$  = 66), or 3 =

“*conservative*” ( $n = 35$ ), which approximated a normal distribution ( $M = 2.08$ ,  $SD = 0.69$ , Skewness =  $-0.10$ ).

**BPE and BPG scales.** Belief in pure evil and belief in pure good were assessed using Webster and Saucier’s (2012) BPE and BPG scales (see Tables 1 and 2 for BPE and BPG items); each scale exhibited excellent reliability, with  $alphas = .94$  and  $.92$ , respectively. Participants responded on a (*disagree very strongly*) to 7 (*agree very strongly*) scale to keep response scales parallel to the prior BPE/BPG studies.

**Perception of dangerous and competitive worldviews.** Participants completed Duckitt’s (2001) dangerous-world (e.g., “*Any day now chaos and anarchy could erupt around us*”;  $alpha = .74$ ) and competitive-jungle world (e.g., “*Winning is not the first thing; it’s the only thing that matters*”;  $alpha = .83$ ) measures, composed of 11 and 13 items, respectively.

**Right-wing authoritarianism.** Participants complete Funke’s (2005) 12-item right-wing authoritarianism scale, which assesses each of right-wing authoritarianism’s three components (aggression, conventionalism, and submission to authority) using two protrait and two contrait items (for a total of 12 items). Examples of aggression, conventionalism, and submission items are, respectively, “*What our country really needs is a strong determined leader who crush evil, and take us back to our true path,*” “*The withdrawal from tradition turn out to be a fatal fault one day,*” and “*Obedience and respect for authority are the most important virtues children should learn.*” Please note that one of the items on Funke’s aggression component referred to the German “Chancellor,” was replaced with “President” for the current American sample (see Webster et al., 2012).

Reliabilities for the entire scale are typically above  $> .70$  (e.g., Webster et al., 2011). However, the RWA subscales in the current sample did not exhibit even close to acceptable internal consistency, with  $alphas = .16$ ,  $.52$ , and  $.13$  for the aggression, conventionalism, and submission scales, respectively. The total scale did exhibit mediocre reliability,  $alpha = .63$ . Nonetheless, due to the extremely low and suspicious reliabilities for the subscales, we lamentably did not conduct any analyses using RWA scores. (Note that our recent papers that have used the RWA scales have exhibited similar problems with internal consistency, but not to the extent seen here; Webster et al., 2012; Webster & Saucier, 2012)

**Social dominance orientation.** Participants completed Jost et al.’s revised (“balanced”) version of Pratto et al.’s (1994) social dominance orientation scale, which has eight items to

assess each of social dominance orientation's two components: opposition to equality (e.g., "*It would be good if all groups could be equal*" [reverse-scored];  $\alpha = .79$ ) and group-based dominance ("*If certain groups stayed in their place, we would have fewer problems*";  $\alpha = .82$ ). Because the two SDO subscales were so highly correlated ( $r = .79$ ) and exhibited virtually analogous correlations with other variables, we created an aggregated SDO composite score ( $\alpha = .89$ ). Indeed, the only variable that opposition to equality ( $r = .11$ , ns) and group-based dominance ( $r = .23$ ,  $p < .01$ ) differentially correlated with was BPE—in the predicted direction.

**Militant-extremist attitudes.** Participants completed the pro-violence and vile world subscales (Stankov et al., 2010), composed of 10 (e.g., "*The only way to teach a lesson to our enemies is to threaten their lives and make them suffer*";  $\alpha = .85$ ) and six ("*War is the beginning of salvation*";  $\alpha = .85$ ) items, respectively.

**Support for militarism.** Participants completed two measures of support for military action tapping either provoked or pre-emptive/unbridled aggression. First, participants completed a measure specifically addressing foreign policy attitudes toward Iran (Rothschild, 2008; Vail & Moytl, 2010). Specifically, participants rated the extent to which they agreed with using armed force against Iran given 11 different scenarios of provocation (e.g., "*If Iran is found to be providing a safe haven for terrorists who want to attack the United States*";  $\alpha = .89$ ). Second, participants completed a more general nine-item measure assessing support for extreme/pre-emptive military force by the US against other countries (Weise et al., 2008, e.g., "*If we could capture or kill top terrorist group leaders we should do it, even if thousands of civilians are injured or killed in the process*";  $\alpha = .88$ ).

**Prejudice.** Prejudice toward Muslim and Iranians was assessed given that both of the scales assessing support for US militarism focused on aggression toward Iran or other Muslim countries. Specifically, participants rated how they felt toward Muslims and Iranians on three positive affective descriptors (e.g., *warm and friendly, positive, good*) and three negative descriptors (e.g., *cold and distant, negative, bad*) (Whitley, 1999; Webster et al., 2011). The scores on the positively-worded items were reverse-scored and then averaged together with scores on the negatively-worded items to create one affective prejudice mean score ( $\alpha$ s = .82 and .84, respectively). Participants' general affectivity was measured given that affect/emotion is generally considered the defining characteristic ("core") of prejudice (Whitley & Kite, 2006, p. 7). Further, given that prejudice toward Muslims and Iranians correlated at .86, I formed a



composite variable of these two variables. The high correlation was not unexpected given that Americans' have trouble differentiating Arabs and Muslims as well (Ernst, Bornstein, & Venable, 2003; Rowatt, Franklin, & Cotton, 2005; Whitley & Webster, 2005).

**Support for torture.** To measure participants' level of agreement with torture practice by the U.S., participants completed the attitudes toward torture scale (Crandall, Eidelman, Skitka, & Morgan, 2008), composed of seven items (e.g., "*Torture techniques must be used when people refuse to talk*";  $\alpha = .88$ ).

**Support for peacemaking/diplomacy.** To assess participants' general preference for diplomatic or peaceful solutions to foreign policy issues, participants completed Vail and Motyl's (2010) 12-item support for diplomacy scale (e.g., "*Leaders of the U.S. should actively engage in diplomatic efforts with the leaders of states who sponsor terrorism*";  $\alpha = .87$ ).

**Support for humanitarian wars.** In a humanitarian war, warring sides attempt to minimize the suffering or death of innocent civilians. Pratto et al. (1994) developed a support for humanitarian war scale consisting of six items, but their scale only exhibited an acceptable level of reliability ( $\alpha = .73$ ). This is likely because only three of the six items addressed the use of humanitarian ideals in war (e.g., "*ensure that human rights are respected in countries we go to war with*"), while the other three items addressed the use of diplomacy in general (e.g., "*Ultimatums usually lead to war, rather than diplomatic solutions*"). Thus, I modified Pratto et al.'s (1994) scale first by eliminating the items referencing diplomacy to avoid being redundant with Vail and Motyl's (2010) support for diplomacy scale. Second, I added the main clause "*When fighting wars in foreign countries, the priority of the U.S. should be to*" and also augmented the scale with three additional items: "*minimize the suffering of unarmed civilians*", "*impartially and fairly treat any prisoners of war, especially if they are wounded in battle*", and "*to respect and uphold the region's customs and culture*" (see Fourth Geneva Convention, 1949) (final  $\alpha = .92$ ).

**Raffle allocation.** I also included a behavioral measure to assess participants' general tendency to help non-profit organizations that either supported aggressive or diplomatic solutions to foreign policy issues (see Webster, Whitley, & Saucier, 2010). Participants were informed that they had a chance to win \$25 for participating in the study, and if they won "you can keep all the money yourself or you may donate some or all of your winnings to the sponsored non-profit described below. Please read the mission statement for the non-profit organization then decide

how you allocate your winnings between yourself and the non-profit below”. Participants actually were randomly assigned to donate to only one of two non-profit organizations: The “Pre-Emptive War Coalition” or the “Pre-Emptive Love Coalition”. The Pre-Emptive Love Coalition is a real non-profit organization that is dedicated to improving access to healthcare for Iraqi children. However, I modified the mission statements for each of the non-profit organizations—based on real arguments by government officials and legal scholars (ProCon.org, 2009)—to emphasize support or opposition to pre-emptive force against other countries. These mission statements were created to be as equivalent and parallel as possible, in framing and length (100 vs. 103 words).

The Pre-Emptive War Coalition statement read:

“Diplomacy only works up to a certain point; the use of force is sometimes necessary to protect United States (U.S.) interests. International law, which at times mirrors U.S. criminal law on using self-defense, allows the justification of war when an attack on U.S. interests is imminent. Thus, the Pre-Emptive War Coalition is a non-profit organization dedicated to supporting the U.S.’s inherent right to protect her interests by the use of preventative or pre-emptive force against an enemy when diplomacy has evidently failed. This includes the possibility of using of conventional and nuclear weapons as well as torturing prisoners of war.”

In contrast, the Pre-Emptive Love Coalition’s statement read:

“Diplomacy can and has worked to protect United States (U.S.) interests, while avoiding violent and unnecessary conflict with other nations; indeed, the use of pre-emptive force (i.e., attacking another country before it presumably can attack us) should *never* be necessary to protect our interests. Further, nothing in international law authorizes a pre-emptive war to overthrow and disarm a foreign government. Thus, The Pre-Emptive Love Coalition is a non-profit organization dedicated to protecting U.S. interests by peaceful and non-violent means (diplomacy and negotiation) instead of relying on pre-emptive force, including the prohibition of conventional and nuclear warfare as well as torturing prisoners of war.”

Participants allocated their potential winnings by selecting one of six options: 1 = “\$25 to [non-profit], and \$0 to me”, 2 = “\$20 to [non-profit], and \$5 to me”, 3 = “\$15 to [non-profit], and \$10 to me”, 4 = “\$10 to [non-profit], and \$25 to me”, 5 = “\$5 to [non-profit], and \$20 to me”, and 6 = “\$0 to [non-profit], and \$25 to me”.

## Results

Table 3 provides means, standard deviation, and inter-correlations for variables of interest. All scales approximated normal distributions, with Skewness levels all  $< |1.0|$ .

### *Correlations with BPE and BPG*

First, as in our previous studies, BPE and BPG were not significantly correlated ( $r = .06$ ,  $p = .50$ ). More importantly, inter-correlations confirmed the overall hypothesized pattern that BPE and BPG would differentially relate to variables that are associated with intergroup aggression and helping. First, higher BPE related to greater perceptions of a dangerous world, SDO, pro-violence, perceptions of a vile world, provoked militarily aggression, pre-emptive military aggression, prejudice toward Muslims and Iranians, and support for torture; however, greater BPE did not relate to the more peaceful/diplomatic foreign policies (support for peacemaking and humanitarian wars). Meanwhile, higher BPG related to greater empathic concern, perspective taking, support for peacemaking, and support for humanitarian wars. Higher BPG also related to *lower* perceptions of a competitive-jungle world, SDO, pro-violence, and support for torture. Neither BPE nor BPG correlated with political orientation (which I will discuss in the General Discussion section) or raffle donations (at least, on a bivariate level collapsing across the different non-profit organizations).

Intriguingly, BPG also predicted greater support for provoked military aggression (i.e., military action in response to Iranian provocation). To probe this relationship further, I conducted an exploratory factor analysis (PCA with varimax rotation) on this measure to assess whether the responses to the 11 scenarios about Iranian provocations represented different factors. Indeed, the factor analysis revealed three factors that explained 58.1% of the variance (after rotation). All items loaded  $> .49$  on their own factors and  $< .40$  on all other factors, except Item #9 (“*If Iran blatantly disregards the international community*”), which loaded equally on Factors 2 and 3 (loadings = .46 and .49). The first six items (#s 2, 8, 6, 4, 5, and 1) on Factor 1 appeared to concern whether participants would approve of military aggression by the U.S. against Iran if Iran directly threatened the U.S. (e.g., “*If Iran threatens to attack the United States*”, “*If hard evidence is found that the Iranian Revolutionary Guard is training and supplying the insurgents in Iraq with weapons to use against American soldiers*”). Two items cleanly loaded on Factor 2 (#s 7 and 3), which concerned approval of military aggression by the

U.S. against Iran if Iran threatened its neighboring countries (e.g., “*If Iran threatens to attack one of its neighboring countries*”). Two items (#s 11 and 10) cleanly loaded on Factor 3, but did not coherently go together. Thus, I assessed how BPE and BPG correlated with Factors 1 and 2 ( $\alpha$ s = .91 and .64, respectively). Both greater BPE and BPG correlated with greater approved provoked aggression when the U.S. was directly threatened ( $r$ s = .22 and .40,  $p$ s < .01, respectively); however, higher BPG ( $r = .25, p < .01$ )—but not higher BPE ( $r = .16, p = .07$ )—was related to sanctioned aggression when neighboring countries were attacked. I discuss these results further in the General Discussion section.

### ***Regression Analyses Predicting Aggressive Foreign Policies***

To assess the predictive/incremental validity of the BPE and BPG scales, hierarchical regression analyses tested the unique, differential effects of BPE and BPG scores on the aggressive foreign policy variables (support for provoked militarism and pre-emptive militarism, prejudice toward Muslims and Iranians, and support for torture) after controlling for any other correlated predictors (e.g., empathic concern, SDO). For each regression analysis, I reviewed multicollinearity (Tolerance or VIF values) and outlier (Cook’s  $D$ ) statistics to help ensure that the regression models were stable. Please note that the high correlation between SDO and pro-violence did produce multicollinearity (VIFs > 3.0) and problems with suppression (reversing signs of other predictors); thus, when SDO and pro-violence both predicted the criterion, the variable that correlated most highly with the criterion was entered. Given the number of analyses, I set the critical  $\alpha$  level at .01. Note that degrees of freedom slightly varied in the regression models due to missing data.

In Step 1, any significant correlates of the criterion were entered. In Step 2, BPE and BPG scale scores were entered (if the BPE and/or BPG scales significantly correlated with the criterion). If Step 2 showed a significant improvement in the regression model—that is, if Step 2 significantly increased the model’s  $R$ -square value—for a given aggression criterion, then BPE/BPG added predictive utility to the model<sup>9</sup>. The individual BPE and BPG regression coefficients informed whether BPE, BPG, or both variables uniquely predicted the criterion.

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<sup>9</sup> The interaction term between BPE and BPG was not examined given that (a) I did not make specific predictions with regards to these interactions; (b) such interactions potentially add more error (vs. explained) variance thereby

**Provoked aggression (direct threat against U.S.).** Given that there were no other significant correlates of provoked military aggression (when the U.S. was threatened directly) besides BPE and BPG, BPE and BPG were the only scores entered into the regression analysis. Higher BPG ( $\beta = .41, p < .001$ ), but not BPE ( $\beta = .16, p = .038$ ), uniquely predicted provoked aggression in the model,  $R^2 = .21, F(2, 132) = 17.53, p < .001$ ; that is, people higher in BPG (but not those higher in BPE) supported U.S. military action when provoked by Iran.

**Pre-emptive aggression.** Scores for participant sex (dummy-coded variable), empathic concern, perceptions of a dangerous world, perceptions of a competitive-jungle world, pro-violence, and perceptions of a vile world correlated with pre-emptive aggression scores and were entered in Step 1 of the regression model. These predictors accounted for a significant amount of variance,  $R^2 = .255, F(5, 124) = 8.48, p < .001$ ; however, only pro-violence was a unique predictor,  $\beta = .40, p < .001$  (all other  $\beta$ s  $< |.17|, ps > .07$ ), such that higher pro-violence predicted greater support for pre-emptive military aggression.

BPE, but not BPG, correlated with pre-emptive aggression; thus, only BPE scores were added in Step 2. The addition of BPE scores in Step 2 did account for a significant amount of additional variance,  $\Delta R^2 = .086, F(1, 123) = 16.07, p < .001$ ; thus, BPE uniquely predicted pre-emptive aggression,  $\beta = .35, p < .001$ , such that people higher in BPE more greatly supported pre-emptive aggression even after controlling for a host of other predictors.

**Prejudice.** Scores for empathic concern, perspective taking, competitive-jungle world, and SDO correlated with prejudice scores and were thus entered in Step 1, which accounted for a significant amount of variance,  $R^2 = .19, F(5, 125) = 5.82, p < .001$ ; however, SDO was the only significant predictor,  $\beta = .35, p < .001$  (all other  $\beta$ s  $= |.18|, ps > .066$ ); that is, higher SDO predicted higher levels of prejudice.

Next, because BPE (but not BPG) correlated with prejudice, only BPE scores were entered in Step 2. Step 2, though, did not reach significance,  $\Delta R^2 = .017, F(1, 124) = 2.70, p = .10$ ; thus, BPE did not predict prejudice above and beyond the other correlates in Step 1.

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decreasing the likelihood of finding our hypothesized effects; and (c) in our previous two studies BPE and BPG did not consistently or meaningfully interact with each other (i.e., only one interaction out of 10 possible analyses was significant).

**Support for torture.** Given that participant sex (dummy-coded variable), empathic concern, perspective taking, competitive-jungle world, and pro-violence correlated with support for torture, these scores were entered in Step 1. These variables accounted for a significant amount of variance,  $R^2 = .19$ ,  $F(5, 125) = 5.82$ ,  $p < .001$ ; as for unique predictors, pro-violence ( $\beta = .30$ ,  $p = .002$ ) and sex ( $\beta = -.22$ ,  $p = .005$ ) reached the critical alpha level, while perceptions of a competitive-jungle world approached the critical alpha level,  $\beta = .25$ ,  $p = .015$  (all other  $\beta$ s =  $|.02|$ ,  $ps > .85$ ). Thus, men, people higher in pro-violence, and people who perceive a competitive-jungle world more greatly supported torture.

Next, because BPE and BPG both correlated with support for torture, both BPE and BPG scores were entered in Step 2. Step 2 closely approached our significance level,  $\Delta R^2 = .042$ ,  $F(2, 122) = 4.46$ ,  $p = .014$ , with BPE approaching the critical alpha level,  $\beta = .16$ ,  $p = .036$ , while BPG did not,  $\beta = .13$ ,  $p = .19$ .

### ***Regression Analyses Predicting Peaceful/Diplomatic Foreign Policies***

I used the same analytic approach above to assess the unique effects of BPE and BPG on support for peaceful/diplomatic foreign policy positions.

**Support for peacemaking.** Scores for participant sex (dummy-coded variable), political orientation, empathic concern, perspective taking, competitive-jungle world, and SDO correlated with support for peacemaking and were entered in Step 1, which accounted for a significant amount of variance,  $R^2 = .35$ ,  $F(6, 116) = 10.58$ ,  $p < .001$ ; however, SDO was the only unique predictor,  $\beta = -.32$ ,  $p = .002$  (all other  $\beta$ s =  $|.18|$ ,  $ps > .08$ ). Thus, higher SDO predicted lower support for peacemaking.

Next, BPG scores (but not BPE scores) correlated with support for peacemaking and were entered in Step 2, although Step 2 did not account for a significant amount of variance,  $\Delta R^2 = .01$ ,  $F(1, 115) < 1.0$ ,  $p = .34$ .

**Support for humanitarian wars.** Scores for participant sex (dummy-coded variable), empathic concern, perspective taking, competitive-jungle world, and SDO correlated with support for humanitarian wars and were entered in Step 1, which accounted for a significant amount of variance,  $R^2 = .36$ ,  $F(4, 125) = 17.51$ ,  $p < .001$ . As for unique predictors, both empathic concern ( $\beta = .39$ ,  $p = .002$ ) and SDO ( $\beta = -.30$ ,  $p = .002$ ) reached significance (all other

$\beta$ s = .07],  $p$ s > .42), with higher empathic concern and lower SDO predicting support for humanitarian wars.

BPG scores (but not BPE scores) correlated with support for humanitarian wars and were entered in Step 2. Step 2 did account for a significant amount of variance,  $\Delta R^2 = .056$ ,  $F(1, 124) = 11.79$ ,  $p = .001$ ; thus, BPG scores uniquely and positively predicted support for humanitarian wars,  $\beta = .33$ ,  $p = .001$ , which also rendered the prediction of SDO non-significant ( $p = .09$ ).

### **Preference for Aggressive or Peaceful Foreign Policies**

Nonetheless, what Study 1 has not yet directly shown is whether people higher in BPE prefer more aggressive policy positions, while people higher in BPG prefer more peaceful policy positions. Thus, after ensuring that the aggressive (provoked military intervention, pre-emptive military intervention, and support for torture) and diplomatic/peaceful (support for peacemaking and support for humanitarian wars) scale scores loaded onto separate factors via exploratory factor analysis, I created two composite mean scores of the aggressive ( $\alpha = .70$ ) and diplomatic/peaceful ( $\alpha = .75$ ) foreign policy variables. Then, I created a difference score, subtracting the mean support for peaceful policies from the mean support for aggressive policies; thus, higher mean scores indicated greater preference for aggressive solutions. Results showed that people higher in BPE preferred more aggressive solutions,  $r = .21$ ,  $p < .01$ , while people higher in BPG preferred more diplomatic solutions,  $r = -.34$ ,  $p < .01$ . When considering the composite scores separately, BPE scores ( $r = .40$ ,  $p < .01$ )—but not BPG scores ( $r = -.04$ ,  $p = .67$ )—significantly and positively correlated with support for aggressive foreign policies, while BPG scores ( $r = .50$ ,  $p < .01$ )—but not BPE scores ( $r = .04$ ,  $p = .61$ )—significantly and positively correlated with support for peaceful/diplomatic foreign policies.

### ***Regression Analysis Predicting Raffle Donations***

Hierarchical regression analysis was used again to test the unique effects of BPE and BPG on raffle donations as a function of the non-profit organization to which participants donated (Pre-Emptive Love vs. Pre-Emptive War Coalition). First, sex and political orientation correlated on a bivariate level with donations and were entered in Step 1. Standardized BPE and BPG scores were entered in Step 2. A dummy-coded variable representing the different non-profits (0 = “Pre-Emptive Love Coalition”, 1 = “Pre-Emptive War Coalition”) was entered in Step 3, followed by the two-way interaction terms between the dummy-coded non-profit variable, BPE

scores, and BPG scores (Non-Profit x BPE; Non-Profit x BPG) in Step 4. Recall that higher donation scores indicated more greed (participants kept more money for themselves).

Step 1 did account for a significant amount of variance,  $R^2 = .15$ ,  $F(2, 113) = 9.95$ ,  $p = .002$ . Both sex ( $\beta = -.31$ ,  $p = .001$ ) and political orientation ( $\beta = -.26$ ,  $p = .003$ ) uniquely predicted raffle donations, with men and more conservative individuals donating less money overall.

Next, the addition of the BPE and BPG scores in Step 2 did not significantly account for variance,  $\Delta R^2 < 1.0$ ,  $F(2, 111) < 1.0$ ,  $p = .68$ ; however, the addition of the type of non-profit in Step 3 did explain a significant amount of variance,  $\Delta R^2 = .056$ ,  $F(1, 110) = 7.76$ ,  $p = .006$ ; participants were less greedy (kept less money for themselves) when donating to the Pre-Emptive Love Coalition,  $\beta = .24$ ,  $p = .006$ . Nonetheless, this main effect was qualified by an interaction; Step 4 explained a significant amount of variance,  $\Delta R^2 = .044$ ,  $F(2, 108) = 3.17$ ,  $p = .046$ , with only the BPG x Non-Profit interaction term being significant,  $\beta = .30$ ,  $p = .015$ . Simple slopes showed that people higher in BPG were more greedy (kept more money for themselves) when donating to the Pre-Emptive War Coalition,  $B = 0.58$  ( $SE = 0.24$ ),  $p = .015$ ; however, this pattern was reversed—but not significantly so—when donating to the Pre-Emptive Love Coalition,  $B = -0.23$  ( $SE = 0.24$ ),  $p = .34$ .

## Discussion

In sum, Study 1 further demonstrated the value of lay people's beliefs in pure evil (broadly, the tendency to think that people hurt others because of malevolent intentions) and pure good (broadly, the tendency to think that people help because of selfless intentions) in explaining aggression and helping responses; in this case, participants rated their support for various aggressive and peaceful foreign policies as well as sociopolitical perceptions and ideology previously known to predict support for (or opposition to) such policies.

Specifically, on a bivariate level, results first showed that people higher in BPE more strongly endorsed ideological perceptions and attitudes known to help justify intergroup aggression and to suppress helping, including greater: perceptions of a dangerous world, perceptions of a vile world, SDO, and pro-violence solutions. Further, BPE also related to actual aggression in that people higher in BPE supported provoked militarily aggression (only when Iran threatened the security of the U.S., but not its neighbors), pre-emptive military aggression,



prejudice toward Muslims and Iranians, and support for torture. Although greater BPE did not relate to more peaceful/diplomatic foreign policy positions (support for peacemaking and humanitarian wars), the relationships between BPE and the aggression variables provide convergent validity for the BPE scale.

Meanwhile, people higher in BPG scored higher on empathic concern and perspective taking, two variables previously associated with greater rates of prosocial actions. Moreover, people higher in BPG also more greatly opposed ideological attitudes known to help justify aggression and suppress helping, including *lower* perceptions of a competitive-jungle world, SDO, and pro-violence. Indeed, it seems that higher empathy and lower SDO/pro-violence—that is, the tendencies to feel compassion for others and to oppose dominance/violence to solve problems—are strongly associated with BPG given the robust correlations<sup>10</sup>. Accordingly, people higher in BPG more greatly supported more peaceful policy positions (support for peacemaking and humanitarian wars), although such individuals more greatly approved of military intervention against Iran when the U.S. or neighbors are directly threatened; it may be that people higher in BPG were spurred to take military action when a belligerent country threatened to attack their own country or other nations, but not to take pre-emptive or extreme military action, especially when innocent lives are at stake. Ultimately, the pattern of correlations between BPG and both the aggression and helping variables in Study 1 provide convergent validity for the BPG scale.

Finally, aggregating support for more aggressive and peaceful foreign policies, people higher in BPE preferred more aggressive foreign policies, while people higher in BPG preferred more peaceful policy solutions. This pattern of effects fits our overall hypothesis that people higher in BPE would take a more belligerent stance in foreign relations, while people higher in BPG would advocate a more diplomatic route.

As for establishing predictive validity for BPE and BPG, BPE uniquely predicted pre-emptive military aggression and torture, while BPG uniquely predicted provoked military intervention and support for humanitarian wars above and beyond other correlates of the criteria.

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<sup>10</sup> It is important to note that these high correlations did not indicate redundancy. Even though BPG highly correlated with empathic concern, SDO, and pro-violence, (a) BPG predicted criteria that empathic concern, SDO, and pro-violence did not; and (b) when empathic concern, SDO, and/or pro-violence correlated with criteria, BPG uniquely predicted criteria above and beyond these other variables.

Moreover, BPG uniquely predicted raffle donations, but only for the Pre-Emptive War Coalition; specifically, people higher in BPG kept more money for themselves thereby depriving money from the Pre-Emptive War Coalition. Although BPE and BPG only uniquely predicted a handful of criteria, this is still a respectable showing given that BPE and BPG were being put in a statistical cage match with some of the best known individual difference predictors of aggression and helping.

In sum, Study 1 results showed that higher BPE related to greater intergroup aggression and greater endorsement of ideological stances known to justify aggression/suppress helping; concurrently, higher BPG related to greater support for more peaceful and diplomatic foreign policies, greater opposition to ideological stances known to justify aggression/suppress helping, and greater endorsement of general traits known to suppress aggression/increase helping. Ultimately, Study 1 further demonstrates that perceptions of others' motivations for harmdoing and helping partially explain their own choices about whether to harm or help others.

## Figures and Tables

**Table 2.1 Descriptives and Intercorrelations for Variables of Interest (Study 1)**

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. BPE	3.93	1.05	-																	
2. BPG	5.04	0.88	.10	-																
3. Sex	-	-	-.05	.11	-															
4. Pol Orien	2.08	0.69	.02	.08	-.06	-														
5. Empathy: EC	6.31	1.37	-.02	<b>.55</b>	<b>.34</b>	-.05	-													
6. Empathy: PT	5.66	1.21	-.02	<b>.36</b>	.10	-.02	<b>.54</b>	-												
7. Dang World	5.08	0.99	<b>.43</b>	.06	.08	.08	<b>.20</b>	-.07	-											
8. Comp World	3.77	1.17	.13	<b>-.57</b>	<b>-.35</b>	-.03	<b>-.61</b>	<b>-.37</b>	-.09	-										
9. SDO	3.85	1.34	<b>.18</b>	<b>-.58</b>	<b>-.25</b>	.08	<b>-.51</b>	<b>-.25</b>	-.05	<b>.61</b>	-									
10. Pro-violence	4.02	1.38	<b>.27</b>	<b>-.56</b>	<b>-.32</b>	-.01	<b>-.57</b>	<b>-.34</b>	-.01	<b>.59</b>	<b>.76</b>	-								
11. Vile World	3.94	1.29	<b>.37</b>	-.11	-.10	.03	-.03	-.13	<b>.50</b>	<b>.20</b>	<b>.24</b>	<b>.25</b>	-							
12. Provoked Agg	3.53	1.35	<b>.28</b>	<b>.32</b>	-.07	-.06	.12	.05	.16	.00	-.02	-.01	.11	-						
13. Pre-empt Agg	4.42	1.44	<b>.42</b>	-.10	<b>-.19</b>	.06	<b>-.22</b>	-.05	<b>.18</b>	<b>.39</b>	<b>.39</b>	<b>.45</b>	<b>.29</b>	<b>.51</b>	-					
14. Muslim Prej	6.11	1.39	<b>.18</b>	-.16	-.17	.12	<b>-.24</b>	<b>-.27</b>	.07	<b>.28</b>	<b>.37</b>	<b>.29</b>	.12	<b>.25</b>	<b>.27</b>	-				
15. Iranian Prej	4.73	1.53	<b>.21</b>	-.04	-.12	.11	-.13	<b>-.23</b>	<b>.21</b>	<b>.20</b>	<b>.30</b>	<b>.22</b>	.11	<b>.33</b>	<b>.31</b>	<b>.86</b>	-			
16. Torture	5.21	1.52	<b>.25</b>	<b>-.25</b>	<b>-.42</b>	.03	<b>-.41</b>	<b>-.20</b>	.04	<b>.53</b>	<b>.43</b>	<b>.51</b>	.16	<b>.28</b>	<b>.22</b>	<b>.22</b>	<b>.22</b>	-		
17. Peacemaking	5.56	1.55	-.05	<b>.40</b>	<b>.24</b>	<b>-.18</b>	<b>.44</b>	<b>.25</b>	.14	<b>-.50</b>	<b>-.52</b>	<b>-.49</b>	.03	-.03	<b>-.34</b>	<b>-.31</b>	<b>-.31</b>	<b>-.44</b>	-	
18. Humani War	4.13	1.70	.10	<b>.50</b>	<b>.23</b>	-.10	<b>.50</b>	<b>.21</b>	.16	<b>-.49</b>	<b>-.51</b>	<b>-.47</b>	.04	<b>.23</b>	<b>-.19</b>	<b>-.18</b>	-.12	<b>-.30</b>	<b>.63</b>	-
19. Donations	5.71	1.16	-.08	-.03	<b>-.28</b>	<b>-.20</b>	-.17	-.04	-.15	.04	.00	.08	-.06	.11	-.04	-.04	-.03	.17	-.06	.04

*Note:* Correlations significant at  $p < .05$  ( $r_s > |.17|$ ) are bolded. BPE = Belief in Pure Evil; BPG = Belief in Pure Good; Pol Orien = Political Orientation; Empathy: EC = Empathic Concern; Empathy: PT = Perspective Taking; Dang World = Dangerous World; Comp World = Competitive World; SDO = Social Dominance Orientation; Provoked Agg = Iran Provoke U.S. Aggression; Pre-empt Agg = Pre-Emptive U.S. Militarism; Muslim Prej = Muslim Prejudice; Iranian Prej = Iranian Prejudice; Torture = Support for Torture; Peacemaking = Support for Peacemaking; Humani War = Humanitarian War; Donations = Non-Profit Donations (collapsed across non-profits). Scores ranged from 1 to 9, except for (a) BPE and BPG scores, which ranged from 1 to 7; and (b) Donations, which ranged from 1 (*more money to non-profit*) to 6 (*more money to themselves*). Higher scores indicate greater levels of the construct. Sex coded as 0 = “Male”, 1 = “Female”; Political Orientation coded as 1 = “Liberal”, 2 = “Moderate”, and 3 = “Conservative”.

## Chapter 3 - Study 2

While Study 1 examined the relationships between BPE/BPG and sociopolitical attitudes, Study 2 assessed the relationships between BPE/BPG and religiosity. Baumeister (1999) argued that “probably the best place to learn how people think of evil is in religion, which often provides explicit, vivid explanations of evil” (p. 66). In fact, religions across time and space have developed remarkably similar perceptions of good and evil. First and foremost, “evil” and “good” are posited as complete opposites: “Evil does not exist by itself—there must be some positive forces of good, some conceptions of what is right and desirable” (Baumeister, 1999, p. 67). The forces of good are then needed to combat the forces of evil, and it is usually believed that the forces of good ultimately be victorious.

For example, in Christian thought, the general notion is that God is all powerful and will eventually crush the forces of evil, personified by Satan or the Devil (Russell, 1977). Very similar dogma is echoed by Judaist and Hindu (their concept of Dharma) traditions. Meanwhile, Buddhists believe evil means “harmful”, resulting from three selfish emotions: desire, hate, and delusion. Although we (Webster & Saucier, 2012) were careful to exclude any religious content in our BPE and BPG items, we still expect some forms of religiosity to be related to perceptions of pure evil and pure good given the prominence of good and evil in religious thought.

Religiosity can be operationally defined in three primary ways (see, e.g., Whitley, 2009). First, researchers can assess individuals’ frequency of religious behaviors, such as how often one attends religious services, how often one prays, or how often one volunteers for or donates money to religious organizations. Second, researchers can assess the content of people’s religious beliefs. In U.S. studies, given the prevalence of Christianity (78.5% identified as “Christian” in a 2004 Pew poll; see <http://religions.pewforum.org/affiliations>), the primary measures of religious content are fundamentalism (adhering to a “literal” interpretation of the Bible; Altemeyer & Hunsberger, 1992) and Christian orthodoxy (adhering to the prevailing principles of Christianity; Fullerton & Hunsberger, 1982).

Third, researchers can assess individuals’ functional beliefs regarding religion, that is, what people perceive the role of religion to be in their lives (see Greer, Berman, Varan, Bobrycki, & Watson, 2005; Leach, Berman, & Eubanks, 2008). Previous research has identified

three major dimensions of functional religion beliefs: *intrinsic/internal* (adhering to religious dogma for intrinsic rewards, such as relief, comfort, and protection from the vicissitudes of life; Allport & Ross, 1967), *external/extrinsic* (adhering to religious dogma for the social or extrinsic benefits; Allport & Ross, 1967), and *quest* (religion as a lifelong pursuit of an eternal truth; Batson, 1976). Extant research investigating the relationship between religiosity and aggression/helping is not clear-cut given the complexity of religiosity as a construct. However, recent research has begun to address this relationship on a more detailed level by teasing apart the effects of the three different types of religiosity on relevant aggression and helping variables.

With regards to prejudice, a recent meta-analysis showed that some forms of religiosity (higher fundamentalism, Christian orthodoxy, and internality) were associated with higher anti-gay prejudice, but less racism (Whitley, 2009); meanwhile, higher quest was negatively associated with both forms of prejudice. Further, with regards to aggression, internally religious people may self-report that they are less aggressive, but do not act more or less aggressive; however, questing individuals appear more modest in that they do not report being less *or* more aggressive, but behave less aggressively (Greer, Berman, Varan, Bobrycki, & Watson, 2005; Leach, Berman, & Eubanks, 2008). Nonetheless, when God sanctions violence in a secular or Biblical context, aggression increases among those who believe in God (Bushman, Ridge, Das, Key, & Busath, 2007). Overall, then, it appears religion can both facilitate and inhibit aggression depending on form of religiosity as well as based on the situational context; at times, too, it appears some religious individuals desire to be less aggressive, but do not exhibit more or less aggression via behavioral measures. Nonetheless, people scoring higher in quest seem to be more consistent in reporting less prejudice and behaving less aggressively.

With regards to helping, a recent review of the literature (Saroglou, 2006) revealed that religious people tend to endorse prosocial values and behavior, as evidenced by reports of volunteering, agreeableness, forgiveness, and a sense of generativity (i.e., giving back to the community in middle or old age). However, Saroglou elucidates several problems in interpreting these results. First, the higher rates of volunteering among religious people may simply be an artifact of being involved in religious services and programs. Second, the size of the associations between religiosity and self-reported prosociality is relatively smaller in nature (correlations around .20). Third, as described above, certain forms of religiosity are related to prejudice and discrimination toward specific social groups. Fourth, and most importantly, when assessing

prosociality using behavioral measures (vs. attitudes), religiosity (those internally religious or those espousing Christian beliefs) does not predict helping as well because, as Saroglou solemnly speculates, it appears that religious people are more motivated to be perceived by others as prosocial than actually acting prosocially; this is in line with the findings on religiosity and aggression described above.

Given these findings, Saroglou (2006) suggested that the relationship between religiosity and helping is likely “restricted to a minimal prosociality”, that is, “limited to some targets and some conditions” (p. 2; see also Saroglou, Delpierre, & Dernelle, 2004). Indeed, a series of studies (Saroglou, Pichon, Trompette, Verscheuren, & Dernelle, 2005; Blogowska & Saroglou, 2011) showed that self-reported religiosity best predicted intentions to help when the targets of aid share their worldviews, that is, when the targets were family or friends (vs. unknown persons). Moreover, the relationship between religiosity and helping held when religiosity and helping was measured using peer ratings of friends, but *not* when using peer ratings of work colleagues. Thus, overall, the relationship between religiosity and helping appears limited in scope. Nonetheless, preliminary evidence indicates that priming the concept of “God” can overall increase people’s prosocial tendencies (Pichon, Boccato, & Saroglou, 2010; Shariff & Norenzayan, 2007), but the limits of this prosociality have not been investigated as thoroughly as self-report, non-priming studies. Further, feeling that one has been ostracized by God can diminish prosocial tendencies, especially for more intrinsically religious individuals (van Beest & Williams, 2011).

Ultimately, though, what is the predicted relationship between BPE, BPG, and the various forms of religiosity? I reasoned that people’s rate of volunteering for church activities should positively correlate with BPG given that volunteerism is an extreme form of helping—that is, more of a selfless, reliable form of helping in that people consistently take time out of their lives to help others (Snyder et al., 2004). As for actual religious content, I expected Christian orthodoxy and fundamentalism to correlate positively with BPE given Christianity’s moral absolutism on perceiving and combating evil; however, I predicted no reliable relationship between BPG and religious content given the “minimal” relationship between religiosity and helping. As for functional beliefs, given quest’s negative relationship with aggression and positive relationship with helping, I predicted quest to negatively relate to BPE and positively

relate to BPG. No other predictions were made given the inconsistent relationships between internality, externality, and aggression/helping variables.

In Study 2, I also assessed individuals' scores on the "divine power" subscale from the militant-extremist thinking measure (Stankov et al., 2010). Although the authors assumed that the scores of divine power were redundant with fundamentalist thinking, they did not include a conventional measure of fundamentalism. But, like fundamentalism, divine power should be positively correlated with BPE, but likely not reliably related to BPG.

Lastly, the dependent variables for Study 2 focus on support or opposition to various American social policy issues that help disadvantaged or severely disparaged groups, including policies designed to help equalize opportunity between social groups (e.g., affirmative action, increased taxation of the rich) as well as policies targeting groups that receive government or private assistance in order to meet basic survival needs. Some of these latter groups include the "lowest of the low": groups perceived as low in warmth and low in competence (disliked, disrespected groups; see Fiske, 2004), including the homeless and drug addicts. Participants also completed a raffle measure similar to Study 1, except that the two targeted non-profits focus on support or opposition to needle-exchange programs. BPG should uniquely predict indiscriminate prosociality, that is, support for racial and others social programs benefiting the disadvantaged and disparaged. BPE would likely only negatively predict support for such programs when the target is engaging in some type of harmful behavior, which can include perceived criminally deviant behavior (e.g., drug addicts may be perceived as breaking the law because they are addicted to illegal drugs) or socially deviant behavior or nuisances (e.g., homeless people begging). Thus, I reasoned that BPE should predict, for example, greater opposition to needle-exchange programs more than opposition to affirmative action.

Given the nature of the dependent variables, I also included a measure of humanitarian-egalitarian attitudes, which assesses the degree to which people endorse "the democratic ideals of equality, social justice, and concern for the others' well-being" (Katz & Hass, 1988, p. 894). It was important to control for humanitarian-egalitarian beliefs before assessing the unique effects of BPG and BPE on Study 2 criteria; nonetheless, humanitarian-egalitarian beliefs should also positively correlate with BPG, but not likely correlate with BPE given the expected "limited prosociality" of BPE; that is, people higher in BPE likely hold more egalitarian and humanitarian attitudes toward specific groups that align with their worldviews, but not in general.

In sum, Study 2 assessed the relationships between BPE, BPG, and various forms of religiosity as well as other relevant attitudinal (humanitarianism-egalitarianism) correlates. I hypothesized that among the forms of religiosity that fundamentalism and quest would likely most reliably correlate with BPE and BPG given fundamentalism's focus on combating evil and quest's flexible approach to religion as a lifelong pursuit of an eternal truth. Further, egalitarian-humanitarian beliefs should positively relate to BPG. Finally, I expected BPG to positively and uniquely predict support for racial and social programs benefiting disadvantaged groups, while BPE would uniquely predict opposition to programs that aim to help people who engage in harmful behavior.

## Method

### *Participants and Procedure*

In total, 113 introductory psychology students completed the following materials online (via Sona Systems) to partially fulfill a course requirement; however, 12 participants were removed from the data set due to missing data (> 5.0% of the total items). Thus, the final sample included 101 (54 men, 47 women;  $M$  age = 19.46,  $SD$  = 2.50) primarily White (86.1%) and Christian (79.2%) participants.

### *Materials*

Materials (other than the BPE and BPG scales) for Study 2 are included in Appendix B. Unless noted, participants responded to items on a 1 (*disagree very strongly*) to 9 (*agree very strongly*) Likert-type scale, and all measures were scored as the average response per item with higher mean values reflecting higher levels of the construct of interest.

**Political orientation.** Using the same measure as in Study 1, participants self-identified as 1 = “*liberal*” ( $n$  = 15), 2 = “*middle-of-the-road/moderate*” ( $n$  = 45) or 3 = “*conservative*” ( $n$  = 39), which approximated a normal distribution ( $M$  = 2.24,  $SD$  = 0.70, Skewness = -0.38).

**BPE and BPG scales.** Belief in pure evil and belief in pure good were assessed using Webster and Saucier's (2012) BPE and BPG scales (see Tables 1 and 2 for BPE and BPG items); each scale exhibited excellent reliability, with  $alphas$  = .95 and .92, respectively. Participants responded on a (*disagree very strongly*) to 7 (*agree very strongly*) scale to keep response scales consistent with the prior BPE/BPG studies.



**Frequency of Religious Behavior.** Participants self-reported how often they attend religious services, how often they pray, and how often they volunteer for religious *and* non-secular organizations on the same response scale to keep responses parallel (1 = “More than once a week”, 2 = “Once a week”, 3= “Every other week”, 4 = “About once a month”, 5 = “Every other month”, 6 = “A few times a year” 7 = “Once a Year” and 8 = “Never”). The frequencies of religious behavior (religious services, praying, religious volunteering) all highly intercorrelated ( $r_s = .43$  to  $.70$ ) and showed consistent correlations with the other variables in Study 2; thus, I formed a reliable composite of these three behaviors ( $\alpha = .80$ ).

**Fundamentalism.** To assess Christian fundamentalism, participants completed Altemeyer and Hunsberger’s (2004) “short-form” of their original religious fundamentalism instrument (Altemeyer & Hunsberger, 1992), which is composed of 12 items (e.g., “*God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed*”;  $\alpha = .92$ ).

**Christian Orthodoxy.** Participants completed Hunsberger’s (1989) Christian orthodoxy scale—short form, composed of six items (e.g., “*Jesus was crucified, died, and was buried but on the third day He arose from the dead*”), half of which are protrait (see Fullerton & Hunsberger, 1982). The items address issues of the divinity of Christ, inspiration of the Bible, the concept of God as superstition, forgiveness of sin, God’s awareness of human actions, and the resurrection ( $\alpha = .93$  in this sample).

**Divine power.** Participants completed Stankov et al.’s (2009) eight-item divine power scale, which is the last dimension in their militant-extremist mind set measure (e.g., “*All suffering in this life is small in comparison to the eternal pleasures one receive after death*”;  $\alpha = .84$ ).

**Functional religious beliefs.** To assess the perceived role of religion in participants’ lives, they completed the internal/intrinsic, external/extrinsic, and quest religiosity scales (Batson, 1976; Batson & Ventis, 1982). The intrinsic scale is composed of 9 items (e.g., “*My religious beliefs are what really lie behind my whole approach to life*”;  $\alpha = .94$ ), the extrinsic scale 11 items (e.g., “*A primary reason for my interest in religion is that my church is a congenial social activity*”;  $\alpha = .83$ ), and the quest scale 12 items (e.g., “*Questions are far more central to my religious experience than are answers*”;  $\alpha = .81$ ). All scales have been

extensively used in the literature and have excellent psychometric properties (Batson, 1976; Batson & Ventis, 1982).

Here, I would like to note that religious behaviors, religious fundamentalism, divine power, Christian orthodoxy, and intrinsic religiosity all intercorrelated very highly ( $r$ s ranged from .61 to .81). These variables would likely create some egregious multicollinearity, so I formed a very reliable composite of these religiosity variables ( $\alpha = .93$ ), henceforth referred to as Christian beliefs/practices.

**Humanitarianism-Egalitarianism.** To assess humanitarian-egalitarian attitudes, participants completed Katz and Hass's (1988) well-established 10-item humanitarianism-egalitarianism scale (e.g., "*One should find ways to help others less fortunate than oneself*";  $\alpha = .88$ ).

**Support for racial policies.** To assess the general tendency to support racial equity policies, participants completed Pratto et al.'s (1994) racial policy scale, composed of seven items addressing issues related to housing, busing, jobs, and education; the initial reliability was low ( $\alpha = .62$ ), but after dropping the items related to racial quotas and desegregated school busing, which demonstrated very low item-total  $r$ s (-.13 and -.01, respectively), the  $\alpha$  increased to .85.

A separate set of six items addressed support for affirmative action (e.g., "*Government has a social responsibility to recruit members of minority groups*"; Davis & West, 1984; Swim & Miller, 1999), which is likely one of the most controversial racial equity policies in recent American history (Davis & West, 1984). Two items regarding hiring (#1, #3) exhibited item-total correlations below .30 ( $r$ s = .21 and .25, respectively); indeed, an exploratory factor analysis showed that these items loaded separately on a second factor, yet they did not form a reliable composite ( $\alpha = .37$ ). Thus, these items were entirely dropped, while retaining the other four items, which formed a reliable composite ( $\alpha = .80$ ).

**Prejudice.** Given that Study 2 assessed support for racial policy, I also measured participants' racism using Saucier and Miller's (2003) Racial Argument Scale (RAS)—Short Form. Specifically, participants read five racial arguments and their respective conclusions (all negative in orientation), then reported how well each argument supported the conclusion made (e.g., "*Whites are more intelligent than African-Americans*";  $\alpha = .55$ ) in lieu of actually specifying their attitudes toward Blacks, per se. Their scale was selected because racial argument

scale scores were reliable and predicted racist behavior above other well-known measures of subtle or modern racism (Saucier & Miller, 2003).

**Support for social programs.** To assess general support for social programs, participants completed an adapted version of Pratto et al.'s (1994) social program scale. Specifically, participants rated their support for 22 different social policies or programs designed to benefit the public, especially poor or disadvantaged groups (e.g., increased taxation of the rich, government sponsored healthcare, low income housing). Pratto et al.'s scale (which only measured attitudes toward 10 social programs) exhibited good internal consistency, with *alphas* ranging from .77 to .86 across four samples (Pratto et al., 1994). However, a factor analysis was conducted to assess whether ratings of social programs could be differently grouped (e.g., social policies targeting economically disadvantaged grouped separately from those targeting truly maligned groups). The factor analysis revealed seven factors with eigenvalues > 1.0. Only one or two items loaded onto Factors 4 to 7. Among the items loading on factors one to three, these did not form very reliable composites (*alphas* = .77, .63, and .58) and did not hold together strong theoretically. Thus, I conducted a second factor analysis in which I forced one factor; five items loaded poorly (< |.25|, with all other items loading > .41). After disregarding these five items (#s 15 to 20), a highly reliable composite was formed of the remaining 17 items (*alpha* = .88).

Additionally, one set of items focused more in detail on needle exchange programs because the public likely has attributions for the programs' targeted audience: a stigmatized and criminally deviant population of intravenous drug users. Although such programs are controversial (MacNeil & Pauly, 2010), they are designed to reduce crime and transmitted disease, counter negative stigma, and provide access to clean supplies and to mental health services (MacNeil & Pauly, 2011). The set of nine items, adapted from a household survey completed by Jones, Case, and Meehan (1998), addressed perceptions about needle exchange programs (e.g., "*Needle exchange programs help reduce diseases transmitted diseases*") as well as general support for needle exchange programs/policies (e.g., "*Pharmacies should allow anyone to buy clean needles*"); the final *alpha* for the scale was adequate at .71.

**Raffle allocation.** The general procedure for the raffle paralleled that of Study 1. However, in Study 2, participants read mission statements for "LifePoint: Supporting Needle Exchange" or "DeathPoint: Opposing Needle Exchange". LifePoint is a real non-profit organization based in Milwaukee, Wisconsin (<http://www.facebook.com/pages/LifePoint->

[Needle-Exchange/136458519749799](#)), and the mission statements for both groups were adapted from their website.

The LifePoint mission statement (78 words long) read:

“LifePoint is a non-profit organization dedicated to funding needle exchange programs operating throughout the state of Kansas. Needle exchange programs like ours offer drug users free, clean needles in exchange for their dirty, used needles. Needle exchange programs also provide much-needed health and mental counseling for drug users. We also advocate that all pharmacies should sell clean needles to anyone. Needle exchange programs in the long run help reduce crime, transmitted diseases, and stigma towards drug users.”

The DeathPoint mission statement (79 words long) read:

“DeathPoint is a non-profit organization dedicated to eliminating needle exchange programs operating throughout the state of Kansas. Needle exchange programs offer drug users free, clean needles in exchange for their dirty, used needles. Needle exchange programs also provide so-called health and mental counseling for drug users. Needle exchange programs, as well as letting pharmacies sell clean needles to anyone, in the long run only encourage drug addiction and increase crime associated with drug use.”

## **Results**

Table 4 provides means, standard deviation, and inter-correlations for variables of interest. All scales approximated normal distributions, with all Skewness levels  $< |1.00|$ .

### ***Correlations with BPE and BPG***

First, BPE and BPG were again not significantly correlated ( $r = .05, p = .59$ ). Surprisingly, BPG—but not BPE—correlated with several religiosity variables. People scoring higher in Christian beliefs/practices (again, a combination of religious behaviors, religious fundamentalism, divine power, Christian orthodoxy, and intrinsic religiosity) as well as those reporting more secular volunteering more strongly endorsed BPG. Quest and extrinsic religiosity did not correlate significantly with either BPE or BPG. Nonetheless, BPG correlated positively with humanitarian-egalitarian beliefs, as predicted.

Looking at our criteria for Study 2, people higher in BPE reported more opposition to supportive racial policies, supportive social policies, and needle-exchange programs while concurrently reporting more racial prejudice via the RAS. Meanwhile, BPG did not significantly

correlate with any of our criteria, despite the positive relationship between humanitarianism-egalitarianism (which positively correlated with helpful social policies and programs). This pattern was puzzling, given I predicted BPG to correlate more positively to helping variables. Thus, I reviewed the correlations between BPG and all of the social programs/policies. BPG only significantly correlated ( $r_s = .24, p < .01$ ) with two items that related to helping children: “*Free school lunches for low-income children*” and “*Free healthcare for children in low-income households*”. For exploratory reasons, I created a composite variable of these two items ( $\alpha = .74$ ). Thus, people higher in BPG only reported wanting to help what is likely the most helpless population—children, in that children consistently depend on adults to support them (note that the correlation between helping children and BPE was marginally *negatively* significant at  $r = -.19, p = .056$ ).

Lastly, neither BPE nor BPG significantly correlated with attitudes toward needle-exchange programs or raffle donations (at least on a bivariate level collapsing across the different non-profit organizations).

### ***Regression Analyses Predicting Racism Variables***

To assess the predictive/incremental validity of BPE and BPG, hierarchical regression analyses tested the unique, differential effects of BPE and BPG on the racism variables (supportive racial policies, support for affirmative action, and RAS) after controlling for other correlated predictors. For each regression analysis, I reviewed multicollinearity (Tolerance or VIF values) and outlier (Cook’s *D*) statistics to help ensure that the regression models were stable.

In Step 1, any significant correlates of the criterion were entered. In Step 2, BPE and BPG scale scores were entered if the BPE and/or BPG scales significantly correlated with the criterion. If Step 2 showed a significant improvement in the regression model—that is, if Step 2 significantly increased the model’s R-square value—for a given criterion, then BPE/BPG added predictive utility to the model. The individual BPE and BPG regression coefficients informed whether BPE, BPG, or both variables uniquely predicted the criterion.

**Supportive racial policies.** Scores for political orientation, Christian beliefs/practices, and humanitarianism-egalitarianism correlated with supportive racial policies and were entered in Step 1, which explained a significant and appreciable amount of variance,  $R^2 = .41, F(3, 93) =$

21.75,  $p < .001$ . As for individual predictors, only humanitarianism-egalitarianism uniquely and positively predicted supportive racial policies,  $\beta = .45$ ,  $p < .001$  (all other  $\beta$ s  $< -.13$ ,  $p$ s  $> .17$ ).

BPE, but not BPG, correlated with supportive racial policies; thus, only BPE was entered in Step 2, which also explained a significant amount of variance above any beyond Step 1,  $\Delta R^2 = .049$ ,  $F(1, 92) = 8.33$ ,  $p = .005$ ; thus, BPE uniquely and negatively predicted support for racial policies,  $\beta = -.23$ ,  $p = .005$ . Thus, people higher in BPE reported greater opposition to supportive racial policies, even after controlling for political orientation, Christian beliefs/practices, and humanitarianism-egalitarianism.

**Support for affirmative action.** Given that neither BPE nor BPG correlated with support for affirmative action, no regression analysis was conducted.

**Anti-Black prejudice (RAS).** Scores for political orientation correlated with RAS scores and were entered in Step 1, which explained a significant amount of variance,  $R^2 = .065$ ,  $F(1, 93) = 6.45$ ,  $p = .012$ ; thus, political orientation uniquely predicted RAS scores, such that more conservative individuals reported more prejudice,  $\beta = .24$ ,  $p = .012$ .

Next, because BPE—but not BPG—scores correlated with RAS scores, only BPE scores were entered in Step 2, which also explained a significant amount of variance,  $\Delta R^2 = .075$ ,  $F(1, 92) = 8.04$ ,  $p = .006$ ; thus, BPE scores uniquely predicted RAS scores above and beyond political orientation, such that people higher in BPE reported more prejudice,  $\beta = .28$ ,  $p = .006$ .

### ***Regression Analyses Predicting Domestic Policies***

I used the same analytic approach above to assess the unique effects of BPE and BPG on support for social programs/policies.

**Support for social programs/policies.** Scores for participant sex, political orientation, Christian beliefs/practices, quest, and humanitarianism-egalitarianism correlated with support for social programs/policies and were entered in Step 1, which explained a significant and appreciable amount of variance,  $R^2 = .57$ ,  $F(5, 91) = 24.02$ ,  $p < .01$ . As for individual predictors, participant sex, ( $\beta = .16$ ,  $p = .03$ ), political orientation ( $\beta = -.29$ ,  $p = .001$ ) and humanitarianism-egalitarianism ( $\beta = .52$ ,  $p < .001$ ) were unique predictors; thus, more conservatives individuals more greatly opposed social programs, while women and people higher in humanitarianism-egalitarianism more greatly supported such programs.

Only BPE correlated with support for social programs, so only BPE was entered in Step 2, which also explained a significant amount of additional variance,  $\Delta R^2 = .042$ ,  $F(1, 90) = 9.82$ ,  $p = .002$ ; thus, BPE uniquely predicted support for social programs above and beyond a host of other predictors, such that people higher in BPE more greatly opposed such social programs,  $\beta = -.22$ ,  $p = .002$ . In total, predictors explained a whopping 61.2% of the variance in support for helpful social programs/policies.

**Support for social programs/policies: Helping children.** Scores for political orientation (negatively) and humanitarian-egalitarian beliefs (positively) correlated with policies designed to help children and were entered in Step 1, which explained a significant amount of variance,  $R^2 = .327$ ,  $F(1, 90) = 23.32$ ,  $p < .01$ . As for individual predictors, only humanitarianism-egalitarianism uniquely and positively predicted support for helping children,  $\beta = .52$ ,  $p < .01$ .

BPG, but not BPE, correlated with supporting children and was entered in Step 2. Step 2 did not explain a significant amount of variance above and beyond Step 1,  $\Delta R^2 = .011$ ,  $F(1, 95) = 1.59$ ,  $p = .21$ . Thus, BPG did not add any unique variance in predicting support for policies designed to help children.

**Attitudes toward needle-exchange programs.** Neither BPE nor BPG significantly correlated with attitudes toward needle-exchange programs; thus, no regression analysis was performed.

### *Regression Analyses Predicting Raffle Donations*

I changed the regression analysis for the non-profit donation (raffle) scores given that participants were randomly assigned to donate to one of two non-profits. Extrinsic religiosity scores correlated with donations on a bivariate level and were entered in Step 1. In Step 2, (standardized) BPE and BPG scores were entered. In Step 3, a dummy-coded variable representing the different non-profits (0 = LifePoint, 1 = DeathPoint) was entered. In Step 4, the two-way interaction terms between the dummy-coded non-profit variable, BPE scores, and BPG scores (Non-Profit x BPE; Non-Profit x BPG) were entered. Again, I predicted that BPE and BPG should differentially predict non-profit donations depending on the presented non-profit, such that BPE should predict smaller donations to LifePoint and greater donations to DeathPoint, whereas BPG should show opposite effects.

Step 1 explained a significant amount of variance,  $R^2 = .042$ ,  $F(1, 98) = 4.24$ ,  $p = .042$ ; thus, extrinsic religiosity positively predicted raffle donations across conditions,  $\beta = .20$ ,  $p = .042$ . However, Steps 2, 3, and 4 did not predict significant amounts of additional variance,  $\Delta R^2 s < .015$ ,  $F_s < 1.00$ . Thus, BPE or BPG did not alone predict or interact with the type of non-profit to predict raffle donation scores; perhaps these null results may have been due to participants' limited knowledge of needle-exchange programs ( $M$  of two knowledge questions = 2.94,  $SD = 2.14$ ).

## Discussion

In sum, Study 2 further demonstrated the value of BPE and (to a lesser extent) BPG in explaining aggression and helping responses; in this case, participants rated their support for various supportive domestic policies (in addition to anti-Black prejudice) as well as various forms of religiosity and humanitarian-egalitarian attitudes.

Specifically, on a bivariate level, BPG—but not BPE—correlated with religiosity, such that as people's Christian beliefs/practices (a composite variable of religious behaviors, religious fundamentalism, divine power, Christian orthodoxy, and intrinsic religiosity) increased, so did their endorsement of BPG. However, people scoring higher in Christian beliefs/practices did not report more prosocial or helpful responses; indeed, such individuals reported more opposition to social programs in general and more negative attitudes about needle exchange programs. Thus, it appears that *some* religious individuals strongly believe in pure good, but this does not seem to facilitate helping responses in general. This finding does confirm Saroglou's (2003) "limited prosociality" hypothesis about the relationship between religiosity and helping (i.e., religious individuals tend to help only closer ingroup members). Nonetheless, we (Webster & Saucier, 2012) aimed to scrub any religious content from the BPE and BPG scales, and the pattern of correlations support that BPE and BPG can be differentiated from religious beliefs.

Additionally, people higher in BPG reported more secular volunteering and endorsed greater humanitarian-egalitarian beliefs thereby providing convergent validity for the BPG scale. However, despite people scoring higher on greater volunteerism and humanitarianism-egalitarianism, people higher in BPG did not indiscriminately respond more prosocially (note that people higher in BPE did report lower marginally lower humanitarian-egalitarian beliefs); such individuals only supported policies aimed to help needy children. However, humanitarian-



egalitarian beliefs rendered the relationship between BPG and support for helping needy children non-significant. In fact, BPG did not uniquely predict any of our criteria in Study 2. I will discuss possible explanations for these effects (or more precisely, lack thereof) in the broader context of the BPE/BPG studies overall in the General Discussion section.

Study 2, though, strongly demonstrated the predictive validity of BPE; higher BPE uniquely predicted greater aggression and less helpful responding (specifically, greater opposition to supportive racial policies, greater racism via the RAS, and greater opposition to helpful domestic policies in general) above and beyond other predictors (e.g., political orientation, Christian beliefs/practices, humanitarianism-egalitarianism).

So far Studies 1 and 2 converge with our previous studies to support the reliability, convergent validity, discriminant validity, and predictive validity of the BPE and BPG scales. In general, BPE has consistently related to greater aggression and less helping, while greater BPG has consistently related to less aggression and more helping (though to a lesser extent in Study 2), while demonstrating convergence but not redundancy with variables known to justify/suppress aggression or helping.

## Tables and Figures

**Table 3.1 Descriptives and Intercorrelations for Variables of Interest (Study 2)**

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Belief in Pure Evil	3.60	1.06	-														
2. Belief in Pure Good	5.05	0.79	.05	-													
3. Sex	-	-	-.13	.06	-												
4. Political Orientation	2.24	0.70	.13	.14	<b>-.21</b>	-											
5. Secular Volunteerism	3.45	1.83	-.01	<b>.28</b>	.16	.16	-										
6. Christian beliefs/practices	5.49	1.65	.05	<b>.44</b>	-.04	<b>.47</b>	<b>.33</b>	-									
7. Extrinsic Religiosity	4.28	1.34	.06	-.06	-.03	-.04	.08	-.13	-								
8. Quest	4.75	1.32	-.16	-.04	.09	<b>-.23</b>	.12	<b>-.26</b>	<b>.33</b>	-							
9. Human-Egalitarianism	6.72	1.37	-.18	<b>.38</b>	.12	<b>-.27</b>	.10	.12	-.04	.15	-						
10. Supportive Racial Policies	6.89	1.66	<b>-.29</b>	.16	.14	<b>-.32</b>	-.01	-.07	-.03	.13	<b>.59</b>	-					
11. Support Affirmative Action	3.51	1.77	-.01	-.18	.13	<b>-.29</b>	.14	-.18	.14	.15	-.06	.15	-				
12. Racial Attitude Scale	4.78	1.31	<b>.29</b>	.09	-.07	<b>.25</b>	.12	.09	.00	.02	-.10	<b>-.29</b>	-.15	-			
13. Support Social Policies	6.03	1.34	<b>-.30</b>	.09	<b>.26</b>	<b>-.53</b>	-.02	<b>-.23</b>	.05	<b>.23</b>	<b>.58</b>	<b>.75</b>	<b>.29</b>	<b>-.24</b>	-		
14. Support needy children	6.95	1.83	-.19	<b>.27</b>	.11	<b>-.28</b>	.00	-.09	-.05	.14	<b>.56</b>	<b>.21</b>	-.17	<b>.77</b>			
15. Support Needle Exchange	4.48	1.20	-.14	-.17	-.05	<b>-.24</b>	-.03	<b>-.38</b>	.13	.12	.06	.18	<b>.23</b>	-.09	<b>.26</b>	.16	-
16. Raffle Donations	3.99	2.04	.04	.02	-.06	.07	.07	-.01	<b>.20</b>	.07	-.02	<b>-.21</b>	-.14	.14	-.18	<b>-.12</b>	<b>-.21</b>

*Note:* Correlations significant at  $p < .05$  ( $r_s > |.19|$ ) are bolded. Scores ranged from 1 to 9, except for (a) BPE and BPG scores, which ranged from 1 to 7; and (b) Donations, which ranged from 1 (*more money to non-profit*) to 6 (*more money to themselves*). Higher scores indicate greater levels of the construct. Sex coded as 0 = “Male”, 1 = “Female”; Political Orientation coded as 1 = “Liberal”, 2 = “Moderate”, and 3 = “Conservative”. Raffle donations are collapsed across the two different non-profit organizations.

## Chapter 4 - Study 3

The purpose of Study 3 was to assess whether BPE and BPG predict participants' reactions to a perpetrator and his apprehender in an individual criminal incident. Specifically, participants were randomly assigned to evaluate a perpetrator and his apprehender via scenarios in which the perpetrator and apprehender are imbued (or not imbued) with stereotypically evil or good characteristics, respectively (see Prooijen & de Veer, 2010); thus, the study comprised a 2 (Prototypically vs. Non-Prototypically Evil Murderer) x 2 (Prototypically vs. Non-Prototypically Good Apprehender) between-subjects design. Participants then completed several measures assessing their reactions to the perpetrator and apprehender. For the perpetrator, I measured participants' level of demonization (i.e., perceptions of evilness) and nihilistic hate (i.e., motivations to rid the world of the perpetrator) as well as their recommendations for bail and punishment if convicted. I also assessed more specific attitudes about the death penalty (its function and humaneness), about retribution, and about fears of being murdered. For the apprehender, I measured how much participants' deified (saw him as good/moral) and effusively praised the apprehender as well as recommendations for rewarding his actions. Study 3 also assessed perceptions of how rewards increase or decrease helping behavior in general.

Neither BPE nor BPG reliably predicted the level of punishment for murders in our previous BPE/BPG studies (Webster & Saucier, 2012). There may be several reasons for these non-significant findings, and Study 3 aimed to investigate these possibilities. First, in our previous BPE/BPG studies, we did not discriminate between "life in prison" and "the death penalty" in the response options for punishment; people higher in BPG (or higher in BPE) may discriminate more greatly between life in prison vs. the death penalty in recommending punishment. Second, it may be that people are generally harsher on murderers unless there are mitigating details, such as evil cues (e.g., Prooijen & de Veer, 2010); thus, Study 3 assessed how participants punished a murderer with and without such evil cues. Scenario-based methodological paradigms, like the ones used in other seminal research on pure evil (Burris & Rempel, 2011; Prooijen & de Veer, 2010), provide an excellent means to manipulate a perpetrator's evil and an apprehender's good characteristics. Such manipulations help clarify the predictive limits of BPE and BPG on aggression and prosocial action as well as confirm that

BPE and BPG predict responses to specific criminal incidents in addition to more generalized attitudes regarding criminal punitiveness.

## **Hypotheses**

One could argue for competing hypotheses here about the effects of BPE and BPG in the different experimental conditions. First, BPE may be pervasiveness enough to influence people's perceptions whether or not there are mitigating details about the perpetrator, that is, whether there are behavioral indicators of pure evil. BPE did predict criminal punitiveness across different types of crimes in previous research regardless of mitigating details; however, given that BPE did not reliably predict criminal punishment for murderers in past studies (Webster & Saucier, 2012), it may be that BPE only would predict evaluations of the perpetrator in the prototypically evil scenario. Specifically, in the prototypically evil scenario, higher BPE may have been related to greater perceptions of the perpetrator as evil, more severe bail sentences and punishment of the perpetrator, greater retribution and instrumentality (but not likely lesser humanitarian) motives for punishment, and greater concern about murder in general. Thus, overall, BPE should be related to greater aggressive thoughts and attitudes toward murderers, but only when evil cues are present. Further, BPE would not likely be reliably related to evaluations of the apprehender given that BPE addresses perceptions of bad behavior, not perceptions of good behavior.

BPG, though, should predict greater positive evaluations of the apprehender in the prototypically good scenario. That is, in the prototypically good scenario, higher BPG should predict greater perceptions of the apprehender as good, higher agreement that they would have replicated the apprehender's actions, greater recommendations for commendations (but not monetary rewards), and greater perception that providing monetary awards likely lead to less helping long-term. Remember that BPG reflects help for the sake of helping without expectation of reward, and providing monetary awards is likely seen as more detrimental because such awards may be perceived as making helping contingent upon extrinsic rewards. In the non-prototypically good scenario, one could reason that BPG would actually predict less positive reactions to the apprehender given the apprehender's arrogance, fondness for violence, and focus on material rewards for helping. Thus, overall, higher BPG should be related to more favorable evaluations of the apprehender when "pure good" cues are present. Lastly, BPG may also predict

less severe evaluations to the perpetrator, in particular concerning punishment. People higher in BPG should likely find the death penalty more inhumane and opt for life in prison over the death penalty regardless of whether evil cues are present.

## **Method**

### ***Participants***

In total, 227 introductory psychology students completed the following materials online (via Sona Systems) to partially fulfill a course requirement. These participants completed the BPE and BPG scales earlier in the semester via a short online Sona survey and were recruited for the current study starting approximately 30 days later. Seven participants completed less than 5% of the items and were removed from the final data set. Further, three participants did not correctly complete the manipulation check (which was to correctly identify the names of the perpetrator and apprehender) and were removed. Lastly, four participants did not complete the BPE and BPG scales in the mass screening earlier in the semester and were also removed from the final data set.

The final sample thus included 212 primarily White (88.7%) participants (84 men and 128 women;  $M$  age = 20.01,  $SD$  = 4.23), who were randomly distributed throughout the four possible experimental conditions ( $n$ s ranged from 46-56 in each cell).

### ***Materials and Procedure***

As mentioned above, participants first completed the BPE ( $\alpha$  = .92) and BPG ( $\alpha$  = .89) measures in the beginning of the Spring 2012 semester to help eliminate any demand characteristics, that is, in having participants link their responses on the BPE and BPG scales to their perceptions of a perpetrator as being pure evil or an apprehender being perceived as pure good<sup>11</sup>. Later in the semester, participants who participated in the mass screening were allowed to participate in an ostensibly separate study. Specifically, in this second study, participants were randomly assigned to read scenarios in which the perpetrator and apprehender are imbued (or not imbued) with stereotypical evil and good characteristics, respectively; thus, participants were randomly assigned in a 2 (Prototypically vs. Non-Prototypically Evil Murderer) x 2

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<sup>11</sup> Please note that Sona allowed participants to complete only one of the three proposed dissertation studies.

(Prototypically vs. Non-Prototypically Good Apprehender) between-subjects design. The scenarios were predominantly adapted from Prooijen and de Veer's (2010) prototypical and non-prototypical evil scenarios (see also Rosenblatt et al., 1989).

Participants read an ostensibly real newspaper article from the Kansas City Star (<http://www.kansascity.com/>) about a murder that occurred in the past two weeks in Kansas City (the closest major city to Manhattan):

“Two weeks ago, an unidentified woman was found dead in the alley behind the Dillon’s grocery store in Shawnee Mission (13214 West 62nd)<sup>12</sup>. Police determined that she died of blunt force trauma to the head. From a credible witness, a police sketch artist was able to draw a facial composite of a suspicious person seen the night before the victim was found dead. Mr. Jacob Carter, a resident of Overland Park, saw the police artist sketch on the local news and thought he recognized the suspect as his neighbor, now identified as Mr. Mark Beatty. Mr. Carter immediately called the police. But, before the police could arrive, Mr. Beatty appeared to be preparing to flee area. Despite the obvious personal risk, Mr. Carter decided to try to delay the suspect’s attempt to flee by going outside and trying to nonchalantly ‘chat up’ the suspect until police could arrive. When the police pulled up the street, Mr. Beatty started to run and Mr. Carter prevented the suspect from escaping the scene by tackling him to the ground.”

The prototypically good scenario at this point highlighted two dimensions of the belief in pure good: helping without expectation for intrinsic or extrinsic motivation as well as not avoiding, if at all possible, violence to help.

“Mr. Carter stated that he tried to convince Mr. Beatty to not flee and to submit to arrest, but that he did not want to hurt the suspect: ‘I do not like hurting people, even when it means helping others. But I felt I had no other choice at that point than to physically stop [Mr. Beatty]...without seriously injuring him.’ Some of Mr. Carter’s neighbors have called him a hero for helping subdue the suspect. To that Mr. Carter said, ‘I am not a hero. I am just guy who felt compelled to help. I don’t expect anything in return, and I do not expect to be treated differently. I help for the sake of helping.’ Other neighbors agreed that Mr. Carter is generally a modest man who consistently volunteers to help elderly or otherwise handicapped neighbors around the area.”

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<sup>12</sup> This store and location are real.

In the non-prototypically good scenario,

“Mr. Carter stated that he tried to convince the suspect to not flee and submit to arrest, but that he enjoyed being able to tackle the suspect himself: ‘It felt good to tackle that guy; I even kicked him for good measure. I felt I had no other choice at that point than to physically stop [Mr. Beatty].’ Some of Mr. Carter’s neighbors have called him a hero for helping subdue the suspect. To that Mr. Carter said, ‘Well, I do not mean to gloat, but I do feel a sense of pride for taking the guy down—Bam! It was awesome. Anyhow, neighbors have also bought me drinks out at the bar, and I am getting more attention from the ladies around town now, too!’ Mr. Carter’s neighbors stated that Mr. Carter has not done a lot of volunteering around town, but is an otherwise friendly neighbor.”

The overall scenario continued,

“As for the suspect, Mr. Beatty confessed to the murder after being presented with forensic evidence linking him to the murder. The suspect refrained from commenting on his motives to commit the crime at this time. Mr. Beatty has no previous criminal record. He is 40 years-old and worked long hours as a truck driver.”

Following Prooijen and de Veer (2010), the prototypically evil scenario then read:

“Mr. Beatty did not resist police officers after being subdued by Mr. Carter, and seemed exceptionally calm during his arrest. However, Mr. Beatty was described by other people from his neighborhood as a socially isolated individual who rarely left the house. Occasionally, children from the neighborhood who came too close to him were yelled at, and as a result, children were terrified of him. Recently, one of the children’s footballs accidentally ended up in the Mr. Beatty’s garden. When the child tried to get the ball back, Mr. Beatty scared the living daylight out of the child by sneaking up on him from behind, and then chasing the child away from his garden while yelling obscenities with a huge smile on his face.”

The non-prototypically evil scenario read:

“Mr. Beatty did not resist police officers after being subdued by Mr. Carter, but seemed exceptionally distraught during his arrest. However, Mr. Beatty was described by people from his neighborhood as a quiet person and a family man. He and his wife also recently celebrated their 10-year wedding anniversary. Many people from the neighborhood attended the celebration, and expressed how enjoyable this event had been. Mr. Beatty’s neighbors said that they had talked to Mr. Beatty in his garden the day before the murder. Mr. Beatty had reportedly

talked about how much he was looking forward to camping outside when the weather got warmer.”

Participants then provided their reactions and perceptions of the perpetrator (Mr. Beatty) and his apprehender (Mr. Carter). Questionnaires (other than the BPE and BPG scales) for Study 3 are included in Appendix C. Unless noted, participants responded to items on a 1 (*disagree very strongly*) to 9 (*agree very strongly*) Likert-type scale, and all measures were scored as the average response per item with higher mean values reflecting higher levels of the construct of interest.

**Perceptions of the perpetrator (Mr. Beatty).** Participants first completed Prooijen and de Veer’s (2010) demonizing scale (5 items;  $\alpha = .87$ ) as well as Burriss and Rempel’s (2011) nihilistic hate scale, which is composed of four items: “*Very simply, I can see nothing good in Mr. Beatty. He seems like a waste of space*”; “*I feel that everything would be better if Mr. Beatty simply ceased to exist, but not before he suffers a lot*”; “*The worst harm I could possibly imagine still seems too good for him*”; and “*If every reminder that Mr. Beatty ever existed were destroyed, the world would be a better place*” ( $\alpha = .85$ ). These two scales were highly correlated ( $r = .66, p < .01$ ) and thus were aggregated into a single composite, “Perpetrator as Evil” ( $\alpha = .80$ ).

Participants also completed three exploratory items inquiring about how the role of mitigating circumstances in Mr. Beatty’s murder of the woman: “*I cannot really think of any situation that would justify Mr. Beatty’s murder of the young woman*”; “*I think there may be circumstances that we are not yet aware of that would help explain why Mr. Beatty murdered the young woman*”; “*There might be circumstances that we don’t know about that would influence my judgment of Mr. Beatty in this crime*” ( $\alpha = .76$ ).

**Bail recommendations for perpetrator.** Participants also provided their recommendations for bail. First, participants were informed about what “posting bail” is: “Allowing Mr. Beatty to post bail means that he deposit money so he can be released from jail on the understanding that he would return for his criminal trial; however, some courts deny suspects bail because there is too much risk that the suspect would harm themselves or others, or flee from the area”. Participants then rated their agreement with statements about the acute risk posed by the perpetrator if released on bail: “*If the suspect (Mr. Beatty) was released from jail on bail, I would fear that he would harm himself or other people*”; “*If the suspect (Mr. Beatty) was*

*released from jail on bail, I would bet that he would try to flee the area”* ( $\alpha = .75$ ).

Participants then were asked whether they would allow Mr. Beatty to post bail (0 = “Yes” vs. 1 = “No”). Participants were then asked if Mr. Beatty was allowed to post bail, what dollar amount would they recommend. Participants were asked to provide a numerical dollar amount between \$25,000 and \$1,000,000 (based on assumptive rates for manslaughter and murder via <http://bailbonds.com/penalcodes.htm>). One participant provided a response out of range (“8,000”) and his/her response was removed from the data.

**Punishment of perpetrator.** Next, participants were asked “If Mr. Beatty is convicted in a court of law for murder, what punishment would you recommend as a juror?” Participants decided the punishment in terms of community service, probation, jail time, and the death penalty; each of these terms was defined for participants (e.g., “Probation: A freed convicted criminal that must meet conditions set forth by the court and regularly meet with a probation officer. Typically, offenders are required to refrain from possession of firearms, ordered to remain employed, abide to a curfew, live at a directed place, participate in criminal rehabilitation programs, and not leave the immediate area”). Participants then selected, 1 = “*Jail time with opportunity for parole but NO community service*” ( $n = 26$ ); 2 = “*Jail time with opportunity for parole PLUS community service*” ( $n = 72$ ); 3 = “*Jail time with NO opportunity for parole/probation*” ( $n = 100$ ); or 4 = “*The death penalty*” ( $n = 14$ ). Participants also rated how much they supported each of the four different punishments separately (e.g., “*If convicted, I would recommend the **death penalty** for Mr. Beatty*”) using a Likert-type scale with 1 = “*Strongly Disagree*” and 9 = “*Strongly Agree*”.

Participants also provided their recommendations for imprisonment, probation, and community service separately. Participants were asked to provide a numerical number of years for imprisonment (1 to 60) and probation (1 to 30); one value for probation was out of range (“55”) and deleted. For hours of community service, participants responded on an 11-point scale from 1 = “*8 hours = 1 day*” to 11 = “*More than 2 years/5376 hours*”. I thought it was most prudent to provide participants with specific response options for community service and to present the options in two different numerical formats (hours and days/years) to maximize understandability (Brase, 2002).

For reasons of parsimony, I investigated whether items addressing punishment could be reliably grouped together (after standardizing all variables), except that I analyzed support for the



death penalty separately because BPG (and possibly BPE) may differentially predict support for sentencing (jail time, probation, and community service) vs. support for the death penalty. An exploratory factor analysis revealed that support for the different punishments (jail time with no community service, jail time with community service, and jail time with no probation), actual recommendations for punishment (for jail time, probation, and community service), and the final forced-choice recommendation for punishment (choosing one of the four punishment options) all loaded on one factor (loadings ranged from  $|.56|$  to  $|.85|$ ) that explained 55.46% of the variance. The items regarding support for jail time with parole (with and without community service) loaded negatively and were reverse-coded before computing an aggregated “sentencing” score for each participant ( $\alpha = .86$ ), with higher scores then representing harsher sentencing.

**Attitudes toward the death penalty.** Participants also completed additional items assessing attitudes toward the death penalty. Previous research has identified three primary motives in supporting or opposing severe (e.g., capital) punishments (see Tyler & Weber, 1982): *retribution* (i.e., supporting the death penalty for revenge; 5 items, e.g., “*Society does not have the right to get revenge for murder*” [reverse-coded]), *humanitarianism* (i.e., opposition based on cruel and unusual punishment; 5 items, e.g., “*No matter what crime a person has committed, executing the person is too cruel a punishment*”), and *instrumentality* (i.e., to deter others from committing crimes in the future; 4 items, e.g., “*Executing a person for murder discourages others from committing murder in future*”). These scales exhibited adequate reliability (alphas = .77, .93, and .77, respectively). For consistency, higher scores all reflected greater supportive attitudes for the death penalty.

**Concerns about murder.** Participants also completed items regarding murder in general (Tyler & Weber, 1982). Participants were asked how much they worried about being victims of murder (“*I often worry about being murdered*”, “*I do not really dwell on the possibility that I will be a victim of murder*”) as well as the likelihood of being a victim of murder (“*I think my chances of being murdered are really low*”; “*I believe that there is a high probability that I will be murdered*”). Participants’ were also asked about the perceived seriousness (“*Murder is a serious threat in the greater Kansas City area*”; “*The Kansas City area should concern itself about other more relevant crimes besides murder*”) and pervasiveness (by asking participants to estimate the number of murders that occur in Manhattan, Lawrence, and Kansas City metropolitan area from 2009-2010) of murder in greater Kansas City area.

A factor analysis of these items revealed that the four items addressing fears about one's own murder loaded with the item "*Murder is a serious threat in the greater Kansas City area*"; thus, these five items were aggregated to form a reliable "fear of murder" index ( $\alpha = .81$ ). The other two items loaded on separate factors and did not correlate with any of the variables in the study; thus, they were disregarded.

**Perceptions of the apprehender (Mr. Carter).** Participants first completed an adapted version of Prooijen and de Veer's (2010) demonizing scale, such that the scale reflected aspects of pure good not pure evil (i.e., deification in lieu of demonization): "*The apprehender's (Mr. Carter's) actions were caused entirely by his goodness*", "*Mr. Carter was only motivated to protect everything that is kind*", "*Mr. Carter seems to enjoy helping others*", "*Mr. Carter is a moral man*", and "*When thinking of Mr. Carter, I can only imagine how compassionate he is*" ( $\alpha = .90$ ). Burris and Rempel's (2011) nihilistic hate scale was similarly adapted to reflect effusive praise for the apprehender: "*Very simply, I can see nothing but good in Mr. Carter*"; "*I feel that the world would be worse off if Mr. Carter simply ceased to exist*"; "*I could not give enough praise for Mr. Carter's actions*"; and "*If every reminder that Mr. Carter ever existed were destroyed, the world would be a worse place*" ( $\alpha = .76$ ).

Next, I asked participants about the perceived motivation behind Mr. Carter's actions: "*Mr. Carter helped stop Mr. Beatty for the glory of it*"; "*Mr. Carter had no ulterior motive in helping capture Mr. Beatty*"; "*Mr. Carter helped apprehend the bad guy just because Mr. Carter was truly a good guy*"; "*Mr. Carter was arrogant in boasting about apprehending the suspect, Mr. Beatty*"; "*Mr. Carter's actions to apprehend the suspect were not heroic*" ( $\alpha = .79$ ). A set of exploratory items then asked participants about whether they would have intervened as Mr. Carter's had ("*If I had been in Mr. Carter's place, I would have done the same thing he did*"; "*I think I would have acted differently if I had been in Mr. Carter's place*"; "*I would encourage all people to act as Mr. Carter did*"); the last of these three items was ultimately dropped because the  $\alpha$  improved dramatically without it (from .69 to .81). Participants also reported on the perceived amount of danger Mr. Carter was in by confronting the perpetrator: "*Mr. Carter put himself at much risk by confronting Mr. Beatty*"; "*Mr. Carter was NOT really in a lot of danger when he tried to stop Mr. Beatty from fleeing the area*" ( $\alpha = .74$ ).

The deifying, effusive praise, and perceived motivation scales for the apprehender were highly correlated ( $r$ s ranged from .57 to .73); thus, a composite—"Apprehender as Good"—of

these scales was formed ( $\alpha = .84$ ). The “apprehender in danger” and “intentions to intervene” scales correlated at low enough levels with each other and the other scales ( $r$ s ranged from .16 to .44) to make it appropriate to treat them as separate variables.

**Rewarding apprehender.** Next, participants provided their agreement with possible recommendations for rewarding Mr. Carter for his actions: “*I would recommend Mr. Carter for an official mayoral award from Kansas City*”; “*I would recommend Mr. Carter for Kansas’s statewide Good Samaritan Award*”; “*I would recommend Mr. Carter for the National (U.S.) Good Samaritan Award*”; “*I would recommend a monetary award*”. The first three items correlated highly with each other ( $r$ s ranged from .53 to .75) and were aggregated to form a composite, “Recommendation for Award” ( $\alpha = .84$ ). These three items correlated lower with the monetary reward recommendation item (all  $r$ s < .27); thus, I treated this latter item as a separate variable.

Participants next were asked, “If Mr. Carter does receive a monetary award from authorities, how much money do you think Mr. Carter should receive? Monetary awards in such cases typically range from \$500 to \$5,000” (see Rosenblatt et al., 1989). All participants’ values fell within this range.

Participants also provided their opinions on the function of providing such rewards via six items. An exploratory factor analysis of these six items indicated a two-factor solution. First, four items (“*Giving money to people for helping sets a bad example because people will not help in the future unless they expect money in return*”; “*Giving awards to people for helping sets a bad example because people will not help in the future unless they expect an award*”; “*We should give commendations, not monetary awards, to people who help*”; “*There is nothing much we can do to make people be more helpful and altruistic*”) cleanly loaded (all items loaded > .49 on the first factor and < .40 on the second) on the first factor. Second, two items loaded cleanly (all items loaded > .82 on the second factor and < .40 on the first) on the second factor (“*Giving awards to people who help increases people’s motivation to help long-term*”; “*Giving money to people for helping increases people’s motivations to help long-term*”). These items formed moderately reliable composites: “Rewards set bad example” ( $\alpha = .66$ ) and “Rewards Increase Help” ( $\alpha = .67$ ).

Lastly, participants were fully debriefed as to the true nature of the study, with special emphasis placed on the fact that the events and persons depicted were completely fictitious.

## Results

### *Intercorrelations Between BPE, BPG, and Experimental Conditions*

First, BPE and BPG were again non-significantly correlated ( $r = .13, p = .06$ ). Second, BPE and BPG did not vary according to experimental condition (all  $r$ s  $< .06, p$ s  $> .40$ ); thus, it appears BPE and BPG scores were randomly spread across both experimental manipulations.

Below, I first discuss results for perpetrator-related variables, and then I discuss results for apprehender-related variables.

### *Intercorrelations Between BPE, BPG, and Perpetrator Variables*

Intercorrelations between BPE, BPG, and the perpetrator items are located in Table 5 (along with relevant  $M$ s and  $SD$ s). Regardless of experimental condition, people higher in BPE perceived the perpetrator as more evil, reported more fear about granting him bail, and more harshly punished the perpetrator across all criteria (recommended higher bail amounts, more greatly supported the death penalty, and harsher sentencing overall). People higher in BPE also more strongly believed in retribution, that the death penalty deters crime, and that the death penalty is humane. People higher in BPE also worried about getting murdered, although the correlation was fairly small ( $r = .14$ ).

BPG was related to fewer variables across experimental conditions; specifically, people higher in BPG reported greater fears about granting the perpetrator bail and more strongly believed that the death penalty deters crime, although such individuals also concurrently thought that the death penalty was more inhumane.

Further, correlations indicate that the prototypical (vs. non-prototypical) evil condition increased perceptions of the perpetrator as evil as well as increased participants' support for the death penalty for the perpetrator and harsher punishment overall. Lastly, the prototypical good condition did not increase or decrease scores on the perpetrator items.

### *Regression Analyses for Perpetrator Variables*

The basic research question here is whether BPE and BPG predict perceptions of the perpetrator differently based upon whether the perpetrator or his apprehender were portrayed as prototypically evil or good, respectively. To answer this question, hierarchical multiple regression analyses tested the main effects of and interactions between our independent variables

in predicting evaluations of the perpetrator (Mr. Beatty) and his apprehender (Mr. Carter) in the prototypical (vs. non-prototypical) scenarios. For every dependent variable, BPE and BPG (centered) scores were entered in Step 1. If Step 1 of the regression analysis is significant, then the individual BPE and BPG regression coefficients inform us as to whether BPE and/or BPG uniquely predicted the criterion. In Step 2, two dummy-coded variables representing the prototypically (vs. non-prototypically) evil and prototypically (vs. non-prototypically) good manipulations were entered in Step 2.

In Step 3, product terms representing the two-way interactions between the experimental manipulations and individual differences were entered: Prototypical Evil  $\times$  Prototypical Good, Prototypical Evil  $\times$  BPE, Prototypical Evil  $\times$  BPG, Prototypical Good  $\times$  BPE, and Prototypical Good  $\times$  BPG. If any of these interaction terms were significant, then simple effects or simple slopes analyses were conducted to probe the interactions. Further, significant interaction terms indicated that BPE or BPG scores differentially predicted criterion depending on the presence of evil or good cues, which was hypothesized. Alternatively, any significant main effects of BPE and BPG in absence of significant interactions would indicate that BPE and BPG predicted criteria regardless of whether evil or good cues are present.

Because of the number of criteria, the critical alpha was set at  $p = .01$ .

**Perpetrator as Evil.** Step 1 contributed a significant amount of variance,  $R^2 = .18$ ,  $F(2, 206) = 22.17$ ,  $p < .001$ ; BPE ( $\beta = .42$ ,  $p < .001$ )—but not BPG ( $\beta = -.02$ ,  $p = .73$ )—uniquely predicted perceptions of the perpetrator as evil. That is, as BPE increased, so did perceptions of the perpetrator as evil.

Second, Step 2 also contributed a significant amount of variance,  $\Delta R^2 = .09$ ,  $F(2, 204) = 12.61$ ,  $p < .001$ ; the Evilness manipulation ( $\beta = .30$ ,  $p < .001$ ), but not the Goodness manipulation ( $\beta = .04$ ,  $p = .55$ ), uniquely predicted perceptions of evil, such that participants saw the perpetrator as more evil in the prototypically ( $M = 4.27$ ,  $SD = 1.32$ ) evil vs. non-prototypical ( $M = 3.33$ ,  $SD = 1.24$ ) evil condition,  $d = 0.69$ .

Finally, Step 3 did not contribute a significant amount of variance,  $\Delta R^2 = .034$ ,  $F(5, 199) = 1.94$ ,  $p = .089$ . Thus, BPE and the prototypical evil condition were associated with higher perceptions of evil. However, BPE and the Evilness manipulation did not interact to predict these perceptions; that is, BPE predicted greater perceptions of evil regardless of whether the perpetrator displayed prototypically evil characteristics.

**Mitigating circumstances.** Step 1 contributed a marginal amount of variance,  $R^2 = .034$ ,  $F(2, 208) = 3.63$ ,  $p = .028$ ; BPE ( $\beta = -.17$ ,  $p = .021$ )—but not BPG ( $\beta = .09$ ,  $p = .21$ )—marginally predicted perceptions of mitigating circumstances. That is, people higher in BPE were marginally less likely to believe that there were mitigating circumstances to help explain why the perpetrator murdered the young woman.

Next, Step 2 did not contribute a significant amount of variance,  $\Delta R^2 = .01$ ,  $F(2, 206) < 1.0$ ,  $p = .44$ ; thus, the experimental manipulations did not affect perceptions of mitigating circumstances. However, Step 3 was significant,  $\Delta R^2 = .068$ ,  $F(5, 201) = 3.09$ ,  $p = .01$ . Looking at individual interaction terms, only the Prototypical Evil  $\times$  BPE term reached significance,  $\beta = -.28$ ,  $p = .007$  (all other  $\beta$ s  $< |.14|$ ,  $p$ s  $> .15$ ). Simple slopes analyses showed that the relationship between BPE and perceptions of mitigating circumstances was significant in the prototypically evil condition ( $B = -0.74$ ,  $p < .001$ ), but not in the non-prototypically evil condition ( $B = 0.16$ ,  $p = .31$ ). Thus, only in the prototypically evil condition were people higher in BPE less likely to perceive mitigating circumstances in the perpetrator's murder of the young woman.

**Fears about granting bail.** Step 1 explained a significant amount of variance,  $R^2 = .11$ ,  $F(2, 207) = 12.82$ ,  $p < .001$ . Looking at individual coefficients, BPG uniquely predicted fears about granting bail ( $\beta = .29$ ,  $p < .001$ ), while BPE was a marginal predictor ( $\beta = .14$ ,  $p = .036$ ). Thus, people higher in BPG (and marginally for those higher in BPE) reported more concerns about releasing the murderer on bail.

Neither Step 2 nor Step 3 explained a significant amount of variance,  $R^2$ s  $< .012$ ,  $F$ s  $< 1.0$ . Thus, neither did the experimental manipulations alone or together with BPE/BPG predict fears about bail.

**Grant Bail: No vs. Yes.** Given that the granting bail was forced-choice/dichotomous, a logistical regression analysis was conducted. None of the Steps/Blocks were significant, though,  $\chi^2$ s  $< 3.56$ ,  $p$ s  $> .17$ . This is not that unexpected given that only 28 (13.2%) of participants said that they would allow the murderer to post bail, thus presenting problems with restriction in variance.

**Recommended bail amount (\$).** Step 1 explained a significant amount of variance,  $R^2 = .047$ ,  $F(2, 198) = 4.86$ ,  $p = .009$ ; BPE ( $\beta = .18$ ,  $p = .01$ ), but not BPG ( $\beta = .11$ ,  $p = .12$ ), uniquely predicted bail amounts, such that people higher in BPE recommended higher bail.

Neither Step 2 nor Step 3 predicted bail amounts, though,  $R^2$ 's < .016,  $F$ 's < 1.70. Thus, the effect of BPE on bail amounts was consistent across experimental manipulations, and the experimental conditions did not alone or with BPE/BPG predict recommended bail amounts.

**Overall sentencing (composite variable).** Step 1 explained a significant amount of variance,  $R^2 = .11$ ,  $F(2, 207) = 12.47$ ,  $p < .001$ ; BPE ( $\beta = .32$ ,  $p < .001$ ), but not BPG ( $\beta = .05$ ,  $p = .45$ ), uniquely predicted punishment, such that people higher in BPE recommended harsher sentencing of the perpetrator.

Neither Step 2,  $\Delta R^2 = .022$ ,  $F(2, 205) = 2.57$ ,  $p = .079$ , nor Step 3,  $\Delta R^2 = .041$ ,  $F(5, 200) = 1.98$ ,  $p = .084$ , approached our critical alpha level. Thus, the effect of BPE on punishment was consistent across experimental manipulations, and the experimental manipulations alone or with BPE/BPG did not predict punishment.

**Support for death penalty.** Step 1 explained a significant amount of variance,  $R^2 = .16$ ,  $F(2, 206) = 19.89$ ,  $p < .001$ ; BPE ( $\beta = .40$ ,  $p < .001$ ) uniquely predicted support for the death penalty for the murderer, such that people higher in BPE more greatly supported the death penalty. BPG was a marginal unique predictor,  $\beta = -.14$ ,  $p < .036$ , such that people higher in BPE marginally opposed the death penalty. Given that the zero-order correlation between BPG and support for the death penalty was non-significant and low ( $r = -.08$ ), BPE's variance is likely inflating the relationship, although this is strange given the low correlation between BPE and BPG.

Step 2 approached the critical alpha level,  $\Delta R^2 = .025$ ,  $F(2, 204) = 3.14$ ,  $p = .045$ , with the Evilness manipulation ( $\beta = .15$ ,  $p = .019$ ), but not Goodness manipulation ( $\beta = -.04$ ,  $p = .50$ ), being a marginal predictor. Looking at means, participants in the prototypically evil condition ( $M = 3.63$ ,  $SD = 2.28$ ) marginally supported the death penalty more than those in the non-prototypically evil condition ( $M = 2.84$ ,  $SD = 2.27$ ),  $d = 0.35$ .

Step 3 did not explain a significant amount of variance,  $\Delta R^2 = .026$ ,  $F(5, 199) = 1.30$ ,  $p = .27$ ; thus, BPE and the Evilness Manipulation did not interact to predict support for the death penalty.

**Death penalty deters crime.** Step 1 explained a significant amount of variance,  $R^2 = .089$ ,  $F(2, 206) = 10.14$ ,  $p < .001$ . BPE ( $\beta = .23$ ,  $p = .001$ ) was a unique predictor, such that people higher in BPE more strongly believed that the death penalty helps deter crime. BPG was also a unique predictor,  $\beta = .17$ ,  $p = .021$ , such that people higher in BPG also more strongly

thought that the death penalty helps deter crimes. These effects were consistent across condition given that both Step 2,  $\Delta R^2 = .015$ ,  $F(2, 206) = 1.30$ ,  $p = .19$ , and Step 3,  $\Delta R^2 = .018$ ,  $F(5, 201) < 1.0$ ,  $p = .53$ , were non-significant.

**Death penalty is humane.** Step 1 explained a significant amount of variance,  $R^2 = .10$ ,  $F(2, 208) = 11.58$ ,  $p < .001$ . Both BPE ( $\beta = .22$ ,  $p = .001$ ) and BPG ( $\beta = -.25$ ,  $p < .001$ ) were unique but differential predictors, such that people higher in BPE more strongly believed that the death penalty is humane, while people higher in BPG more strongly believed that the death penalty is inhumane. These effects were significant above and beyond as well as across experimental conditions given that both Steps 2 and 3 were non-significant,  $\Delta R^2$ s  $< 1.0$ ,  $F$ s  $< 1.0$ .

**Belief in retribution.** Step 1 explained a significant amount of variance,  $R^2 = .187$ ,  $F(2, 208) = 24.00$ ,  $p < .001$ ; BPE ( $\beta = .43$ ,  $p < .001$ ) but not BPG ( $\beta < .01$ ,  $p = .98$ ) uniquely predicted belief in retribution, such that people higher in BPE more strongly believed in retribution. These effects were significant across experimental conditions given that both Steps 2 and 3 were non-significant,  $\Delta R^2$ s  $< 1.0$ ,  $F$ s  $< 1.0$ .

**Worry about being murdered.** Step 1 explained a marginal amount of variance,  $R^2 = .037$ ,  $F(2, 208) = 3.97$ ,  $p = .02$ . Both BPE ( $\beta = .14$ ,  $p = .046$ ) and BPG ( $\beta < -.15$ ,  $p = .03$ ) approached the critical alpha level, with people higher in BPE marginally more worried about being murdered, and people lower in BPG marginally worrying less.

Step 2 did not explain a significant amount of variance,  $\Delta R^2 < 1.0$ ,  $F < 1.0$ ; however, Step 3 did,  $\Delta R^2 = .07$ ,  $F(5, 201) = 3.17$ ,  $p = .009$ . Only the BPG x Goodness manipulation interaction term reached significance,  $\beta = -.36$ ,  $p < .001$  (all other  $\beta$ s  $< |.13|$ ,  $p$ s  $> .28$ ). Simple slope analyses showed that the relationship between BPG and worry about murder was significant in the prototypically good condition ( $B = -0.49$ ,  $p < .001$ ), but not in the non-prototypically good condition ( $B = 0.15$ ,  $p = 0.31$ ). Thus, only when the apprehender portrayed “purely good” characteristics did people higher in BPG report worrying less about being murdered. It appears the presence of a prototypical good guy helped alleviate distress related to being murdered, at least for those higher in BPG.



### *Mediational Analyses for BPE and Perpetrator Punishment*

Regardless of experimental condition, people higher in BPE more greatly perceived the perpetrator as more evil and more greatly supported harsher punishment—both in terms of overall sentencing (jail time, probation, community service) and the death penalty. Further, regardless of experimental condition, people higher in BPE more strongly believed that the death penalty deters crime and is humane as well as more strongly believed in retribution. Meanwhile, perceptions of the perpetrator's evilness and belief in retribution both correlated with harsher sentencing (both overall sentencing and the death penalty). However, perpetrator's evilness, belief in retribution, *and* attitudes about the death penalty (belief that the death penalty deters crime and is just) all correlated with support for the death penalty. Thus, I conducted two mediational analyses (using Preacher & Hayes [2008] multiple mediation analysis script): the first assessed whether perceptions of the perpetrator as evil and belief in retribution mediated (i.e., explained) the relationship between BPE and overall harsher sentencing, while the second assessed whether perceptions of the perpetrator as evil, belief in retribution, and attitudes about the death penalty mediated (i.e., explained) the relationship between BPE and support for the murderer's capital execution.

**BPE → Harsher sentencing.** First, higher BPE predicted both perceptions of the perpetrator as more evil,  $B = 0.62$  ( $SE = 0.10$ ),  $p < .001$ , and greater belief in retribution,  $B = 0.52$  ( $SE = 0.08$ ),  $p < .001$ . Second, BPE predicted harsher sentencing, as was found in the regression analysis above,  $B = 0.25$  ( $SE = 0.05$ ),  $p < .001$ . Meanwhile, both perceptions of the perpetrator as more evil,  $B = 0.19$  ( $SE = 0.03$ ),  $p < .001$ , and greater belief in retribution,  $B = 0.11$  ( $SE = 0.04$ ),  $p = .008$ , predicted harsher sentencing.

Importantly, after controlling for perceptions of the perpetrator as evil and belief in retribution, the relationship between BPE and sentencing was rendered non-significant,  $c'$  path  $B = 0.07$  ( $SE = 0.05$ ),  $p = .17$ . Bootstrap confidence intervals (CIs) for the indirect effects indicated that both greater perceptions of the perpetrator as evil (CI = 0.08, 0.18) and greater belief in retribution (CI = 0.02, 0.11) had significant indirect effects (because the CIs did not include zero); that is, both variables helped fully explain the relationship between BPE and sentencing. Additionally, the mediational model explained a total of 27.7% of the variance in sentencing.

This pattern of effects slightly changed in the prototypically evil condition, though. Recall the people higher in BPE were less likely to believe that there were mitigating

circumstances in the perpetrator's murder of the young woman, but only in the prototypically evil condition; thus, it was reasonable to assess whether the perception of mitigating circumstances helped mediate the relationship between BPE and overall sentencing in the prototypically evil condition. In fact, beliefs about mitigating circumstances had a significant indirect effect in the prototypically evil condition (bootstrap CIs = 0.03, 0.18); the mediating effects of perceptions of the perpetrator as evil (bootstrap CIs = 0.01, 0.18) and of belief in retribution (bootstrap CIs = 0.02, 0.14) also remained significant.

Thus, people higher in BPE sentenced the perpetrator more harshly because they saw the perpetrator as more evil and because they more strongly believed in retribution; and, in the prototypically evil condition, the perception of fewer mitigating circumstances also helped explain why people higher in BPE sentenced the perpetrator more harshly. Thus, results indicate that both perceptions of the situation (i.e., the criminal himself) and dispositional beliefs (i.e., about retribution) fueled harsher sentencing by people higher in BPE.

**BPE → Support for the death penalty.** First, higher BPE predicted greater perceptions of the perpetrator as evil,  $B = 0.61$  ( $SE = 0.10$ ),  $p < .001$ ; stronger beliefs that the death penalty deters crime,  $B = 0.49$  ( $SE = 0.14$ ),  $p < .001$ ; stronger beliefs that the death penalty is just/humane,  $B = 0.28$  ( $SE = 0.11$ ),  $p = .014$ ; and stronger belief in retribution,  $B = 0.48$  ( $SE = 0.07$ ),  $p < .001$ . Second, as the hierarchical regression analyses showed above, BPE also predicted greater support for the death penalty,  $B = 0.75$  ( $SE = 0.15$ ),  $p < .001$ . Meanwhile, greater perceptions of the perpetrator as evil,  $B = 0.40$  ( $SE = 0.09$ ),  $p < .001$ , stronger beliefs that the death penalty deters crime,  $B = 0.18$  ( $SE = 0.06$ ),  $p = .007$ , stronger beliefs that the death penalty is just/humane,  $B = 0.43$  ( $SE = 0.09$ ),  $p < .001$ , and stronger belief in retribution,  $B = 0.31$  ( $SE = 0.15$ ),  $p = .028$ , all predicted greater support for the death penalty.

Importantly, after controlling for perceptions of the perpetrator as evil, attitudes toward the death penalty, and belief in retribution, the relationship between BPE and support for the death penalty was rendered non-significant,  $c'$  path  $B = 0.15$  ( $SE = 0.15$ ),  $p = .30$ . Bootstrap CIs for the indirect effects indicated that greater perceptions of the perpetrator as evil (CI = 0.12, 0.40), belief that death penalty deters crime (CI = 0.02, 0.22), belief that the death penalty is just (CI = 0.03, 0.24), and greater belief in retribution (CI = 0.03, 0.29) all had significant indirect effects (because the CIs did not include zero); that is, all four variables helped fully explain the

relationship between BPE and sentencing<sup>13</sup>. Additionally, the mediational model explained a total of 40.0% of the variance in support for the death penalty.

Thus, people higher in BPE reported greater support for the murderer's capital execution because they saw the perpetrator as more evil; because they believed that the death penalty helps deter crime and is humane; and because they more strongly believed in retribution. Thus, results indicate that both perceptions of the situation (i.e., the criminal himself) and dispositional beliefs (i.e., about the death penalty and retribution) fueled greater support for the murderer's execution by people higher in BPE.

### **Intercorrelations Between BPE, BPG, and Apprehender Variables**

Intercorrelations between BPE, BPG, and the apprehender items are located in Table 6 (along with relevant *M*s and *SD*s). First, and interestingly, BPE significantly correlated with several of the variables regarding the apprehender regardless of the experimental conditions. People higher in BPE reported that they would have been more likely to intervene as the apprehender had and more greatly supported rewards for the apprehender (support for awards/commendations, support for a monetary reward, and a higher monetary reward amount). People higher in BPE also more greatly felt that rewards promote helping in general. Meanwhile, across experimental conditions, people higher in BPG perceived the apprehender as more good, perceived the apprehender to be in more danger, and more strongly recommended awards (but not a monetary award) for the apprehender.

Further, intercorrelations indicated that the Goodness manipulation appreciably affected participants' perceptions about the apprehender: The prototypical good condition appeared to increase perceptions of the apprehender as good, perceptions that the apprehender was in greater danger, and the belief that participants would have intervened as the apprehender had. The prototypical good conditions also appeared to increase participants' recommendation for awards—but not monetary rewards. Lastly, the prototypical evil condition seemed to decrease participants' willingness to act as the same as the apprehender did, which is not that unexpected given the increased perceived evilness of the perpetrator in this condition.

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<sup>13</sup> Beliefs in mitigating circumstances did not help mediate the relationship between BPE and support for the death penalty in the prototypically evil condition.

### *Regression Analyses for Apprehender Variables*

As I did for the perpetrator-related criteria, I ran hierarchical regression analyses examining the effects of BPE, BPG, and the experimental conditions on criteria related to the apprehender. To refresh, in Step 1 BPE and BPG (centered) scores were entered; in Step 2, the dummy-coded variables for the Evilness and Goodness manipulations were entered; in Step 3, three-way interaction terms were entered: Prototypical Evil x Prototypical Good, Prototypical Evil x BPE, Prototypical Evil x BPG, Prototypical Good x BPE, and Prototypical Good x BPG. If any of these interaction terms were significant, then simple effects or simple slopes analyses were conducted to probe the interactions. Further, significant interaction terms indicated that BPE or BPG scores differentially predicted criterion depending on the presence of evil or good cues. Alternatively, any significant main effects of BPE and BPG in absence of significant interactions would indicate that BPE and BPG predicted criteria regardless of whether evil or good cues are present.

Because of the number of criteria, the critical alpha was set at  $p = .01$ .

**Apprehender as good.** Step 1 explained a significant amount of variance,  $R^2 = .044$ ,  $F(2, 206) = 4.74$ ,  $p = .01$ . BPG ( $\beta = .17$ ,  $p = .017$ ), but not BPE ( $\beta = .11$ ,  $p = .12$ ), closely approached the critical alpha level; thus, people higher in BPG saw the apprehender as marginally more good.

Step 2 also explained a significant amount of variance,  $\Delta R^2 = .37$ ,  $F(2, 204) = 63.31$ ,  $p < .001$ . The Goodness manipulation ( $\beta = .61$ ,  $p < .001$ ), but not the Evilness manipulation ( $\beta = -.01$ ,  $p = .92$ ), uniquely predicted perceptions of the apprehender as good. Participants in the prototypically good condition ( $M = 6.14$ ,  $SD = 1.10$ ) rated the apprehender as considerably more good than those participants in the non-prototypically good scenario ( $M = 4.41$ ,  $SD = 1.18$ ),  $d = 1.52$ .

However, Step 3 explained a significant amount of variance as well,  $\Delta R^2 = .040$ ,  $F(5, 199) = 2.92$ ,  $p = .014$ . Only the BPG x Goodness interaction term was significant,  $\beta = .61$ ,  $p < .001$  (all other  $\beta$ s  $< |.07|$ ,  $ps > .46$ ). Simple slope analyses showed that the relationship between BPG and perceptions of the apprehender as good was significant in the prototypically good condition ( $B = 0.54$ ,  $p < .001$ ), but not in the non-prototypically good condition ( $B = -0.02$ ,  $p = .86$ ).

Thus, overall, participants perceived the apprehender who portrayed “pure good” characteristics as more good and moral. People higher in BPG also saw the apprehender as more good as well, but only in the prototypically good condition.

**Apprehender in danger.** Step 1 explained a marginal amount of variance,  $R^2 = .03$ ,  $F(2, 207) = 3.25$ ,  $p = .04$ . BPG ( $\beta = .17$ ,  $p = .012$ ), but not BPE ( $\beta = .01$ ,  $p = .90$ ), uniquely predicted the perception that the apprehender was in danger, such that people higher in BPG saw the apprehender as somewhat more in danger.

Step 2 also explained a significant amount of variance,  $\Delta R^2 = .063$ ,  $F(2, 205) = 7.09$ ,  $p = .001$ . The Goodness manipulation ( $\beta = .25$ ,  $p < .001$ ), but not the Evilness manipulation ( $\beta = .05$ ,  $p = .48$ ), uniquely predicted the perception that the apprehender was in danger. Participants in the prototypically good condition ( $M = 7.04$ ,  $SD = 1.39$ ) rated the apprehender as more in danger than those participants in the non-prototypically good scenario ( $M = 6.25$ ,  $SD = 1.70$ ),  $d = 0.51$ .

Step 3, though, did not explain a significant amount of variance,  $\Delta R^2 = .026$ ,  $F(5, 200) = 1.17$ ,  $p = .33$ .

**Intentions to intervene.** Step 1 explained a marginal amount of variance,  $R^2 = .038$ ,  $F(2, 208) = 4.09$ ,  $p = .018$ . BPE ( $\beta = .19$ ,  $p = .005$ ), but not BPG ( $\beta = -.05$ ,  $p = .49$ ), uniquely predicted participants’ belief that they would have acted the same, such that people higher in BPE believe that they would have acted the same as the apprehender.

Step 2 also explained a significant amount of variance,  $\Delta R^2 = .09$ ,  $F(2, 206) = 10.64$ ,  $p < .001$ . Both the Goodness ( $\beta = .22$ ,  $p = .001$ ) and Evilness ( $\beta = -.20$ ,  $p = .003$ ) conditions uniquely predicted participants’ belief that they would have intervened. Participants in the prototypically good condition ( $M = 5.77$ ,  $SD = 1.60$ ) more greatly reported that they would have intervened as the apprehender had when compared to those participants in the non-prototypically good scenario ( $M = 4.91$ ,  $SD = 1.93$ ),  $d = 0.49$ . Meanwhile, this pattern of results was reversed in the Evilness conditions; participants in the prototypically evil condition ( $M = 5.04$ ,  $SD = 1.67$ ) reported that they would be *less* likely to intervene than those in the non-prototypically evil condition ( $M = 5.71$ ,  $SD = 1.91$ ),  $d = -0.37$ . Step 3, though, did not explain a significant amount of variance,  $\Delta R^2 < 1.0$ ,  $F < 1.0$ .

To recap, the prototypically (vs. non-prototypically) good condition increased participants’ intentions to intervene; however, this pattern was reversed in the Evilness

conditions, such that the prototypically evil condition decreased participants' belief that they would have intervene when compared to those in the non-prototypically evil condition. That is, being confronted with a really good guy made people want to emulate his valiant behavior, while being confronted with a really bad guy seemed to suppress intentions to intervene, likely because of the perpetrators' increased evilness. But for people higher in BPE, reading about a good guy or bad guy did not matter; regardless of experimental conditions, people higher in BPE more strongly believed that they would have intervened.

**Support for awards/commendations.** Step 1 explained a significant amount of variance,  $R^2 = .055$ ,  $F(2, 203) = 5.96$ ,  $p = .003$ . BPE ( $\beta = .17$ ,  $p = .013$ ) uniquely predicted award recommendations, such that people higher in BPE more strongly supported the apprehender being awarded. BPG was a marginal predictor ( $\beta = .15$ ,  $p = .034$ ), such that people higher in BPG also marginally supported the apprehender getting awards.

Step 2 also explained a significant amount of variance,  $\Delta R^2 = .20$ ,  $F(2, 201) = 26.81$ ,  $p < .001$ . The Goodness ( $\beta = .44$ ,  $p < .001$ ) manipulation, but not the Evilness manipulation ( $\beta = .09$ ,  $p = .17$ ), predicted award recommendations. Participants in the prototypically good condition ( $M = 5.19$ ,  $SD = 1.67$ ) more greatly supported award recommendations compared to those in the non-prototypically good scenario ( $M = 3.56$ ,  $SD = 1.60$ ),  $d = .99$ .

Step 3, though, did not explain a significant amount of variance,  $\Delta R^2 = .02$ ,  $F(5, 196) = 1.07$ ,  $p = .38$ . Thus, both people higher in BPE and BPG felt that the apprehender deserved some type of award for capturing the perpetrator; however, being presented with a prototypical "good guy" (vs. non-prototypically good guy) appeared to have a stronger effect in increasing participants' award recommendations.

**Support for monetary reward.** Step 1 explained a significant amount of variance,  $R^2 = .053$ ,  $F(2, 208) = 5.82$ ,  $p = .003$ . BPE ( $\beta = .28$ ,  $p < .001$ ) uniquely predicted support for a monetary award, such that people higher in BPE more strongly supported the apprehender being rewarded with money. BPG was not a significant predictor ( $\beta = -.08$ ,  $p = .22$ ).

Neither Step 2,  $\Delta R^2 = .02$ ,  $F(2, 206) = 2.41$ ,  $p = .09$ , nor Step 3,  $\Delta R^2 = .01$ ,  $F(5, 201) < 1.0$ ,  $p = .78$ , explained a significant amount of variation in monetary reward recommendations. Thus, only BPE predicted support for a monetary reward for the apprehender.

**Recommended \$ reward amount.** Step 1 explained a significant amount of variance,  $R^2 = .079$ ,  $F(2, 197) = 8.44$ ,  $p < .001$ . BPE ( $\beta = .23$ ,  $p = .001$ ) uniquely predicted monetary reward

amounts, such that people higher in BPE recommended higher reward amounts. BPG was not a significant predictor ( $\beta = .02, p = .83$ ).

Neither Step 2,  $\Delta R^2 = .02, F(2, 195) = 2.20, p = .11$ , nor Step 3,  $\Delta R^2 = .02, F(5, 190) < 1.0, p = .66$ , explained a significant amount of variation in monetary award recommendations. Thus, only BPE predicted actual monetary reward recommendations.

**Rewards increase help.** Step 1 explained a significant amount of variance,  $R^2 = .063, F(2, 209) = 7.05, p = .001$ . BPE ( $\beta = .24, p < .001$ ) uniquely predicted the belief that rewards increase help, such that people higher in BPE more strongly believed that rewards increase help. BPG was not a significant predictor ( $\beta = .04, p = .57$ ).

Neither Step 2,  $\Delta R^2 = .017, F(2, 209) = 1.90, p = .15$ , nor Step 3,  $\Delta R^2 = .04, F(5, 202) = 1.82, p = .11$ , explained a significant amount of variation in monetary award recommendations. Thus, only BPE predicted beliefs that rewards increase help.

**Rewards set bad example.** Unfortunately, none of the regression model steps reached significance in predicting the belief that rewards set a bad example, all  $R^2$ s  $< .02, F$ s  $< 1.0$ .

### *Mediational Analyses for Apprehender Award/Reward*

**Goodness manipulation → Award recommendations.** When the apprehender was portrayed as prototypically “good”, recommendations for awards increased. This may have been because participants’ in the prototypically good condition perceived the apprehender to be more good and moral, perceived the apprehender to be more in danger, or felt that they would have also intervened; importantly, all three of these variables correlated with award recommendations, so all three are possible mediators. Thus, using Preacher and Hayes (2008) multiple mediation analysis, I tested whether perceptions of the apprehender as good and moral, perceptions of the apprehender in danger, and the belief that participants would have also intervened mediated the relationship between the Goodness manipulation and award recommendations.

First, as regression analyses showed above, the Goodness manipulation predicted perceptions of the apprehender as good and moral ( $B = 1.76, SE = 0.17, p < .001$ ), perceptions of the apprehender in danger ( $B = 0.78, SE = 0.21, p < .001$ ), and the belief that participants would have acted similarly to the apprehender ( $B = 0.79, SE = 0.25, p = .002$ ). Additionally, the Goodness manipulation also predicted award recommendations ( $B = 1.52, SE = 0.23, p < .001$ ). Meanwhile, of the potential mediators, only perceptions of the apprehender as good uniquely

predicted award recommendations ( $B = 0.69, SE = 0.10, p < .001$ ); thus, perceptions of the apprehender in danger ( $B = 0.09, SE = 0.07, p = .23$ ) and the belief that participants would have also intervened ( $B = 0.01, SE = 0.06, p = .98$ ) did not uniquely predict award recommendations.

Importantly, though, the relationship between the Goodness manipulation and award recommendations was rendered non-significant after controlling for the perceptions of the apprehender as good,  $c'$  path  $B = 0.24, SE = 0.25, p = .34$ . Thus, the prototypically (vs. non-prototypically) good condition increased participants' award recommendations entirely because they saw the apprehender as more good and moral. Lastly, the mediation model explained 38.0% of the variance in award recommendations.

**BPG → Award recommendations.** People higher in BPG more greatly supported award recommendations for the apprehender regardless of experimental condition; however, I was most interested in whether their increased perceptions of the apprehender as good (and perceptions of the apprehender in danger) mediated the relationship between BPG and award recommendations in the prototypically good condition.

First, as in the regression analyses above, higher BPG predicted greater perceptions of the apprehender as good ( $B = 0.53, SE = 0.10, p < .001$ ) and an in danger ( $B = 0.38, SE = 0.13, p = .005$ ). Second, higher BPG predicted greater award recommendations,  $B = 0.38 (SE = 0.16), p = .02$ . Meanwhile, perceptions of the apprehender as good ( $B = 0.68, SE = 0.16, p < .001$ ), but not perceptions of the apprehender in danger ( $B = 0.05, SE = 0.17, p = .65$ ), uniquely predicted award recommendations (mirroring the mediation analysis above). Importantly, though, the relationship between BPG and award recommendations was rendered non-significant after controlling for perceptions of the apprehender as good,  $c'$  path  $B < 0.01, SE = 0.17, p = .99$ . Thus, people higher in BPG recommended higher awards to the prototypically good apprehender entirely because of increased perceptions of the apprehender as good and moral.

**BPE → Rewarding apprehender.** The case of BPE and rewards for the apprehender is a little different. Across experimental conditions people higher in BPE more strongly supported awards and a monetary reward as well as suggested higher monetary reward amounts. However, people higher in BPE did not see the apprehender as more or less good depending on the experimental condition; thus, perceptions of the apprehender as good could not have mediated the relationship between BPE and rewards for the apprehender. Across experimental conditions though, people higher in BPE more strongly believed they would have intervened as the



apprehender did and believed that rewards in general increase helping; given that these two variables also related to greater rewards for the apprehender, these may have acted as mediators. In lieu of conducting three mediation analyses predicting three different criteria (support for awards, support for a monetary recommendation, and actual monetary amounts), I formed a composite of these variables ( $\alpha = .74$ ) for reasons of parsimony.

First, in the mediational model, higher BPE predicted the belief that participants would have also intervened ( $B = 0.30, SE = 0.13, p = .018$ ) and the belief that rewards increase helping ( $B = 0.38, SE = 0.10, p < .001$ ). Second, higher BPE also predicted greater rewards for the apprehender in general,  $B = 0.19 (SE = 0.05), p < .001$ . Meanwhile, beliefs about intervening ( $B = 0.07, SE = 0.03, p = .006$ ) and about rewards increasing helping ( $B = 0.13, SE = 0.03, p < .001$ ) both uniquely predicted greater rewards for the apprehender. After controlling for beliefs about intervening and about rewards increasing helping, the relationship between BPE and rewards for the apprehender was significantly decreased (total indirect effect bootstrap CI = 0.03, 0.12) but was still significant,  $c'$  path  $B = 0.12, SE = 0.05, p = .016$ .

I then reviewed the correlations between variables related to perceptions of the perpetrator and reward amounts; in fact, perceptions of the perpetrator as evil and worries about being murdered both more greatly related to BPE *and* greater support for awards, support for a monetary reward, and actual recommended monetary reward amounts. It is reasonable then that greater perceptions of the perpetrator as evil and worries about being murdered also pressed people higher in BPE to reward the apprehender more. Adding perceptions of the perpetrator as evil and worries about murder to the mediation model rendered the relationship between BPE and apprehender rewards non-significant,  $c'$  path  $B = 0.07, SE = 0.05, p = .17$ . Both perceptions of the perpetrator as evil ( $B = 0.07, SE = 0.04, p = .05$ ) and worries about murder ( $B = 0.07, SE = 0.03, p < .025$ ) predicted apprehender rewards; however, only worries about murder (bootstrap CI = 0.01, 0.04), beliefs about intervening (bootstrap CI = 0.01, 0.06), and beliefs about rewards increasing helping (bootstrap CI = 0.02, 0.09) had significant indirect effects. Thus, people higher in BPE more greatly wanted to reward the apprehender because they were more concerned about being murdered, believed that they would have intervened as the apprehender did, and also believed that rewards in general increase helping. Lastly, the final mediation model explained 21.2% of the variance in reward recommendations.

## Discussion

Study 3 assessed how BPE and BPG differentially related to perceptions of a stereotypically (vs. non-stereotypically) evil perpetrator who confessed to a murder and a stereotypically (vs. non-stereotypically) good apprehender who helped capture the perpetrator.

Overall, higher BPE predicted more negative perceptions and evaluations of the perpetrator regardless of whether or not the perpetrator displayed prototypically evil characteristics. Specifically, regardless of experimental condition, people higher in BPE more greatly supported harsher sentencing because of greater perceptions of the perpetrator as evil and because of a greater belief in retribution. Further, people higher in BPE more greatly supported the perpetrator's execution because of greater perceptions of the perpetrator as evil, because of a stronger belief in retribution, and because of more positive attitudes about the death penalty (they viewed the death penalty as more useful and more humane). Again, the effects of BPE held across experimental conditions, likely because the situational constraints were not strong enough to overpower the individual contribution of BPE; this is not to say that the prototypical evil manipulation was entirely ineffective given that the prototypically evil perpetrator increased perceptions of the perpetrator's evilness and (marginally) support for the death penalty.

In addition, higher BPE also predicted greater rewards (both commendations *and* monetary rewards) to the apprehender; however, this was not because of their perceptions of the apprehender as more or less good, but because they more strongly believed that they would have intervened as the apprehender did, because they reported greater concerns about being murdered, and because they thought that rewards generally increase helping.

Meanwhile, BPG did not consistently predict perceptions and evaluations of the perpetrator. Interestingly, people higher in BPG were more worried about granting the perpetrator bail and more strongly believed that the death penalty deters crime (these peculiarities are addressed in the broader context of all three studies in the General Discussion section); however, this did not lead people higher in BPE to more or less harshly punish the perpetrator, perhaps because they also more strongly believed the death penalty to be inhumane. Conversely, higher BPG did strongly predict perceptions of the apprehender as good when the apprehender displayed prototypically good characteristics, which then increased their support for awards/commendations (but *not* monetary rewards). It is important to note that the differences in

responses to the prototypically and non-prototypically good apprehenders was striking: The prototypically good condition appreciably increased participants' perceptions of the apprehender as good and moral, which also increased support for awards/commendations (but *not* monetary rewards).

In sum, Study 3 confirmed that even with a crime as grave as murder, BPE and BPG still predicted reactions to a perpetrator who commits it and to the apprehender who helps capture the perpetrator. Importantly, the effects of BPE were powerful enough that the situational constraints did not moderate them, while it seems that people higher in BPG are more susceptible to the situational context. Further, this study showed that BPE and BPG can predict reactions to a particular criminal target in addition to predicting more generalized attitudes regarding criminal punitiveness (Webster & Saucier, 2012).

## Tables and Figures

**Table 4.1 Descriptives for and Intercorrelations between BPE, BPG, and Perpetrator Items (Study 3)**

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Predictors																	
1. BPE	3.67	0.91	-														
2. BPG	5.08	0.74	.13	-													
3. Sex	-	-	-.04	.08	-												
4. Goodness manipulation	-	-	.01	.00	-.05	-											
5. Evilness manipulation	-	-	.06	.01	-.03	-.06	-										
Criteria/Potential Mediators																	
6. Perpetrator as evil	3.88	1.52	<b>.42</b>	.04	.05	.02	<b>.33</b>	-									
7. Mitigating circumstances	6.07	1.76	-.12	.10	.02	-.09	-.02	<b>-.37</b>	-								
8. Fears about granting bail	6.30	1.74	<b>.14</b>	<b>.24</b>	<b>.23</b>	.04	.12	<b>.39</b>	<b>-.18</b>	-							
9. Grant Bail: No vs. Yes.	0.13	0.34	-.01	-.10	<b>-.17</b>	-.01	-.13	<b>-.18</b>	.01	<b>-.39</b>	-						
10. Bail amount (\$)	402229.85	389718.00	<b>.19</b>	.12	.07	.12	.06	<b>.27</b>	-.11	<b>.33</b>	<b>-.21</b>	-					
11. Support for death penalty	3.32	2.36	<b>.38</b>	-.08	-.11	-.06	<b>.17</b>	<b>.37</b>	<b>-.15</b>	<b>.20</b>	<b>-.16</b>	<b>.24</b>	-				
12. Sentencing (Composite)	0.00	0.74	<b>.32</b>	.05	.08	.00	<b>.17</b>	<b>.48</b>	<b>-.34</b>	<b>.37</b>	<b>-.25</b>	<b>.47</b>	<b>.45</b>	-			
13. Death penalty deters crime	4.58	2.08	<b>.23</b>	<b>.19</b>	<b>-.22</b>	-.08	.11	<b>.22</b>	-.04	.07	-.02	.05	<b>.37</b>	.14	-		
14. Death penalty is humane	4.00	1.63	<b>.17</b>	<b>-.23</b>	<b>-.17</b>	.08	.01	<b>.16</b>	-.12	-.06	.08	.13	<b>.48</b>	<b>.16</b>	<b>.28</b>	-	
15. Belief in retribution	4.43	1.17	<b>.43</b>	.04	-.06	.04	.06	<b>.28</b>	-.03	<b>.16</b>	.00	<b>.26</b>	<b>.46</b>	<b>.33</b>	<b>.33</b>	<b>.51</b>	-
16. Worry about murder	3.53	1.53	<b>.14</b>	<b>-.14</b>	<b>.18</b>	.01	.03	<b>.24</b>	-.06	.07	-.09	.00	<b>.18</b>	.10	.02	.05	.00

*Note:* Correlations significant at  $p < .05$  ( $r_s > |.13|$ ) are bolded.

Scores ranged from 1 to 9, except for BPE and BPG scores, which ranged from 1 to 7.

Higher scores indicate greater levels of the construct. Sex coded as 0 = "Male", 1 =

"Female"; Goodness and Evilness manipulations coded as 0 = "Non-Prototypical" and 1 =

"Prototypical".

**Table 4.2 Descriptives for and Intercorrelations between BPE, BPG, and Apprehender Items (Study 3)**

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
<b>Predictors</b>														
1. BPE	3.67	0.91	-											
2. BPG	5.08	0.74	.13	-										
3. Sex	-	-	-.04	.08	-									
4. Goodness manipulation	-	-	.01	.00	-.05	-								
5. Evilness manipulation	-	-	.06	.01	-.03	-.06	-							
<b>Criteria/Potential Mediators</b>														
6. Apprehender as good	5.30	1.46	.11	<b>.21</b>	-.01	<b>.60</b>	-.02	-						
7. Apprehender in danger	6.68	1.60	.02	<b>.16</b>	.11	<b>.24</b>	.02	<b>.43</b>	-					
8. Would have intervened	5.40	1.84	<b>.16</b>	-.03	<b>-.24</b>	<b>.22</b>	<b>-.18</b>	<b>.28</b>	.06	-				
9. Support for awards	4.43	1.86	<b>.19</b>	<b>.16</b>	-.09	<b>.45</b>	.03	<b>.62</b>	<b>.32</b>	<b>.17</b>	-			
10. Support for monetary reward	4.15	2.14	<b>.21</b>	-.06	.04	.13	-.06	<b>.30</b>	.05	<b>.21</b>	<b>.30</b>	-		
11. Reward amount (\$)	1131.31	1059.33	<b>.23</b>	.05	.00	<b>.17</b>	.03	<b>.29</b>	.05	<b>.15</b>	<b>.33</b>	<b>.45</b>	-	
12. Rewards increase help	5.35	1.54	<b>.25</b>	.07	.00	-.13	.00	.10	.02	<b>.14</b>	<b>.19</b>	<b>.37</b>	<b>.19</b>	-
13. Rewards set bad example	5.50	1.37	.01	.08	.10	-.09	.02	<b>-.14</b>	.13	-.12	-.10	<b>-.19</b>	<b>-.15</b>	<b>-.22</b>

*Note:* Correlations significant at  $p < .05$  ( $r_s > |.13|$ ) are bolded.

## Chapter 5 - General Discussion

The three current studies provide strong support for the reliability and validity of BPE and BPG scales. First, these studies further confirm that we can reliably measure BPE (broadly, broadly, the tendency to think that people hurt others because of malevolent intentions) and BPG (broadly, the tendency to think that people help because of selfless intentions). Specifically, the BPE and BPG scales exhibited high reliability across all studies (*alphas* ranged from .89 to .95). Such high and consistent reliability confirms that BPE's and BPG's different component beliefs do successfully coalesce into their respective unitary constructs. One of the main attractions of these constructs is their singularity—both theoretically and grammatically; we can assuredly and parsimoniously say that we are measuring belief (not beliefs) in pure evil and in pure good.

Second, the three studies demonstrated convergent and discriminant validity for the scales. Table 7 presents an overview of BPE and BPG effects from the three current studies. People higher in BPE consistently scored higher on perceptions and attitudes that foster greater antisocial and less prosocial responding (e.g., greater perceptions of vile world, pro-violence, and belief in retribution); meanwhile people higher in BPG in large part opposed attitudes that foster greater antisocial and less prosocial responding (e.g., greater empathy and humanitarianism, lower pro-violence). Moreover, people higher in BPE consistently scored higher on actual measures of aggression (e.g., anti-Black and anti-Muslim/Iranian prejudice, support for extreme military action, support for torture) and lower in measures of prosociality (lower support for beneficial racial and social policies); meanwhile, people higher in BPG scored lower on measures of aggression (e.g., support for torture) and higher in measures of prosociality (e.g., support for peacemaking, for humanitarian wars, for programs benefiting needy children). We find these effects despite non-significant correlations between BPE and BPG.

Based upon the patterns of relationships, it appears that BPG more strongly correlated with aggression- ( $n = 19$ ) vs. helping- ( $n = 7$ ) related variables, whereas BPE appeared to equally correlate with the aggression- ( $n = 10$ ) and helping- ( $n = 10$ ) related variables. Nonetheless, BPG exhibited a couple of seemingly paradoxical effects, particularly in how BPG uniquely predicted support for military aggression when the U.S. is hypothetically provoked by Iran. In stereotypic extremity, based upon the pattern of effects, people may ultimately ask: Are people higher in

BPE belligerent bullies with no room for compromise, and are people higher in BPG hypocritical pacifists?

At first glance, people higher in BPG may come across as principally pacifistic given (a) their strong opposition to pro-violence, SDO, competitive-jungle world beliefs, and pre-emptive military force; and (b) their strong support for empathy, peacemaking, and humanitarianism. However, people higher in BPG remained neutral on (i.e., showed no greater or lesser tendency to endorse) many aggression variables (see Table 7) and actually favored military aggression when the U.S. is provoked by Iran. Thus, it appears that for people higher in BPG, peacemaking and diplomacy are the best courses to stable intergroup relations and will only aggress reactively when it means protecting Americans, other peaceful nations, or innocent people. And when we aggressively act, people higher in BPG support humanitarian ideals in armed conflict.

Meanwhile, people higher in BPE do seem to consistently favor aggression to solve intergroup problems, from crime to war; however, while people higher in BPE seem to prefer aggressive solutions, this does not mean that they necessarily discount more peaceful routes to solving problems (i.e., BPE did not significantly correlate with support for peacemaking). Perhaps people higher in BPE are more proactive in applying aggression partly because of their greater perceptions of a dangerous and vile world—“better safe than sorry”. It would be interesting to assess how people higher in BPE (as well as higher in BPG) act in situations that require compromise and negotiation, including peace processes after transgressions (i.e., forgiveness and reconciliation), both on an intergroup and interpersonal level. While people higher in BPE may not completely rule out diplomacy, they may be hard pressed to forgive and reconcile with people who have, at least in their own perceptions, harmed them or others close to them, unless circumstances force them into arbitration (e.g., by allies). Regardless, people higher in BPE thought that extrinsic incentives were the best way to increase helping; thus, such individuals may also respond better to such incentives as well.

Regardless, it appears that the effects of BPE (vs. BPG) were more consistent across studies and under the situational constraints imposed in Study 3 (i.e., whether or not perpetrators were stereotypically evil or apprehenders were stereotypically good), despite having moderately lower test-retest reliability ( $r = .68$ ) compared to BPG ( $r = .80$ ) in a previous study (Webster & Saucier, 2012). People higher in BPG seemed to endorse broader generalizations about how we should treat each other (e.g., greater empathy, humanitarianism-egalitarianism, and support for

non-violent solutions), but seemed to withhold judgments about particular issues or people without substantive information (perhaps because of their greater attributional complexity). For example, people higher in BPG more strongly advocated that people should be treated humanely and equally, but such individuals seemed to be more reticent in applying those principles in specific situations (e.g., support for affirmative action), except when it is egregiously justified (e.g., when it benefits children, a very needy population). It may be that people higher in BPG do not more greatly support (or oppose) programs and policies if any such policies and programs benefit particular populations of people unless there is an appreciably strong need.

Study 3 also revealed some other peculiarities with BPG. First, BPG was related to greater fears of the perpetrator posting bail. It is likely that people higher in BPG were more concerned with innocent people that the perpetrator might harm rather than the perpetrator himself. After all, the perpetrator *did* confess to the murder in the newspaper article, but the perpetrator or article did not articulate on specific details why; so, people higher in BPG might have been justly concerned about the murderer trying to flee or hurt other innocent people. Second, people higher in BPG reported that the death penalty helps deter crime, yet also that the death penalty is inhumane. Perhaps people higher in BPG believe that the *threat* of capital punishment may help deter some crimes, but overall may have greater reservations about the use of the capital punishment in general (Webster & Saucier, 2012). Indeed, after subtracting support for the death penalty from support for harsher sentencing (so that higher scores reflect greater preference for the death penalty), people higher in BPG did prefer harsher sentencing over the death penalty ( $r = -.15, p = .036$ ). Regardless of these peculiarities, the pattern of BPG effects in Study 3 (as well as in Studies 1 and 2) is consistent with our underlying theoretical framework.

It is important to note here that I think the small inconsistencies in the data are likely *not* due to imprecise measurement of BPE and BPG, but due to the nature of the constructs themselves. The BPE and BPG scales were theoretically and carefully crafted and have unwaveringly exhibited high internal consistency; but, BPE and BPG are still inherently complex belief systems about how we interpret others' harmful and helpful behaviors; indeed, a constellation of seven interdependent dimensions (not counting the general endorsement items) each coalesce into BPE and BPG. Also, given the novelty of these variables, we will no doubt refine the theoretical framework underlying these constructs as more research is conducted.

Regardless, we have now conducted eight (including the current three) BPE and BPG studies, which constitute the first systematic examinations of BPE and BPG. All eight studies consistently supported our general premise that higher BPE relates to greater aggression/antisocial and lesser helping/prosocial attitudes and behavior, while higher BPG relates to lower aggression/antisocial and greater helping/prosocial attitudes and behavior. While these studies have helped validate the BPE and BPG scales, these studies also set the foundation for future correlational and experimental work on these constructs.

### **Future Research Prospects**

First, the methodological paradigm (adapted from Prooijen & de Veer, 2010) in Study 3 is extremely flexible for accommodating further experimental manipulations, from changing the race and sex of the targets (in-text or via pictures) to altering the details of the aftermath of the crime (e.g., having the perpetrator apologize or not apologize for his actions). Such experimental manipulations would likely change responses toward the targets and further test the contribution of BPE and BPG across different experimental constraints, as well as augment other psychological theories of helping (e.g., cost-reward model; see Dovidio, Piliavin, Schroeder, & Penner, 2006), prejudice (justification-suppression model of prejudice; Crandall & Eshleman, 2003), and aggression (general aggression model; Anderson & Carnagey, 2004). For example, given the still pervasive effects of racism in the U.S. court system (Rosich, 2007), would BPE still predict punishment of a Black (vs. White) perpetrator above and beyond the effects of individuals' level of racism? It is also easy to change the dependent variables (e.g., include items about forgiveness and reconciliation) completed by participants after reading the allegedly real newspaper article. Changing the dependent variables will provide insight into how BPE and BPG affect other critical responses to perpetrators and apprehenders not considered in Study 3.

Further, one of the more intriguing findings from these studies is that participants higher in BPG were less worried about being murdered after reading about a prototypical "good guy" who helped capture a perpetrator (in Study 3). That is, when people higher in BPG were reminded that there is good in this world, people higher in BPG felt safer. The alleviation of distress in emergency situations is important; at times, people likely do not help because they are too stressed and hence too cognitively busy to notice an emergency, take responsibility for the event, or feel confident in knowing how to handle such an event (see Darley & Batson, 1973).



Perhaps because people higher in BPG feel greater equanimity after reading about a really good guy, such individuals would be cognitively be more ready to deal with an emergency. However, in Study 3, people higher in BPG did not report that they would have been more *or* less likely to intervene as the apprehender did to capture the perpetrator; thus, higher BPG and priming good role models may serve solely to alleviate anxiety, but not promote prosocial responding. Nevertheless, future research should more fully investigate this speculation.

Moreover, BPE and BPG were unilaterally treated as predictors in the current set of studies; thus, future research needs to assess whether people's level of BPE and BPG may change depending on the situational context. Burris and Rempel (2011) increased participants' levels of BPE by explicitly priming evil symbols. Thus, I suggest similar studies investigate whether priming well-known "purely evil" and "purely good" non-fictional (e.g., Adolph Hitler and Mother Theresa, respectively) and fictional (e.g., Lord Voldemort and Albus Dumbledore, respectively, from the *Harry Potter* series) persons can affect levels of BPE and BPG, which then may affect endorsement of various antisocial and prosocial beliefs and behaviors. Such studies could not only demonstrate that situational constraints can affect levels of BPE and BPG (and consequently alter other attitudes and behaviors), but such studies can also help show how societies help transmit and maintain beliefs about good and evil.

Given that children are bombarded with social media, it would be also be interesting to asses at what age children start developing beliefs about good and evil as well as when they start applying such beliefs to interpret others' behavior and to make decisions on how to treat others. Subsequently, how do beliefs about good and evil change over the course of adulthood? One of our previous BPE and BPG studies using a public sample showed that as age increased, BPE *and* BPG also increased (Webster & Saucier, 2012). Moreover, two separate samples of adults ( $Ns = 157$  and  $812$ ) have shown that conservatives score appreciably higher on BPE than liberals (Webster & Saucier, 2012; [http://www.yourmorals.org/bpebpg\\_process.php](http://www.yourmorals.org/bpebpg_process.php), respectively); however, we did not find such correlations in Studies 1 and 2. Thus, the moderating effects of age need to be more fully investigated in future research.

## **Limitations**

The current studies do have specific limitations that must be outlined (some of which were alluded to in the previous section). First, the participants were all general psychology

students; although we are currently assessing whether the overarching hypotheses apply to other samples, the studies herein are inherently limited in their generalizability beyond a student sample. Further, generalizability is also limited by location; the samples from the current studies were all drawn from one Midwestern university, which is located relatively close (within 20 minutes) to a large military base; meaning, students may have themselves or have many friends or family that actively or have previously served in the military. Midwestern and military culture thus may have contributed meaningful variance to the studies' results; for example, the positive relationship between BPG and support for military action when provoked (in Study 1) may have been partly explained by participants' associations with military culture. Accordingly, it would be interesting to assess how levels and the effects of BPE and BPG change in cultures, especially given the culture of honor (how threats to reputation egregiously spur aggression; Nisbett & Cohen, 1996) that is so prevalent in the Southern U.S. and other parts of the world.

Moreover, all measures in the current studies were self-report. Given that attitudes and behavior do not always correlate (e.g., Weigel, Vernon, & Tognacci, 1974), it would be prudent to assess the effects of BPG and BPE on actual behavioral measures of aggression (e.g., allocating hot sauce to worldview deviants; McGregor et al., 1998) and prosociality (e.g., donating to charity; e.g., Jonas, Schimel, Greenberg, & Pyszczynski, 2002). It was rather unfortunate, too, that some measures did not exhibit good reliability, including the measure of right-wing authoritarianism in Study 1 and the RAS in Study 2. Future research should ensure that more reliable scales are used.

### **Concluding Remarks**

Does “pure evil” or “pure good” exist? This is a timeless question, and the current studies do not answer (and essentially are not concerned about answering) it specifically. Rather, this line of research aimed to assess whether (a) there are individual differences in how people answer this timeless question, and (b) whether such differences are worth measuring. Our data affirmatively answer both of these questions. First, we can reliably measure people's beliefs about good and evil; and second, our data show a consistent pattern of effects: people higher in BPE endorse perceptions and attitudes that help rationalize greater antisocial behavior and also act more antisocially, while people higher in BPG endorse perceptions and attitudes that help promote prosocial behavior and also act more prosocially.

Behavioral scientists have long theorized on and empirically examined some of the most fundamental questions of human behavior, including why people choose to harm or help others. Now, we have now shown that individuals’ *perceptions of* why others choose to harm or help their fellow human beings—that is, people’s beliefs in pure evil and pure good—partially answer this pertinent scholarly question. Perceiving more pure good or more pure evil in the world does meaningfully impact how people treat their fellow human beings, for good or ill.

## Tables and Figures

**Table 5.1 Overview of BPE and BPG Effects from Studies 1-3**

STUDY 1			STUDY 2			STUDY 3		
	BPE	BPG		BPE	BPG		BPE	BPG
<u>Aggression/Anti-Social</u>			<u>Aggression/Anti-Social</u>			<u>Perpetrator Items</u>		
Predictors			Predictors			Predictors		
Dangerous world	+		Christian beliefs/practices		+	Perpetrator as evil	+*	
Competitive-jungle world		-	Extrinsic religiosity			Mitigating circumstances	- PE	
Social dominance orientation	+	-				Death penalty deters crime	+*	+*
Pro-violence solutions	+	-				Death penalty is humane	+*	-*
Perception of vile world	+					Belief in retribution	+*	
						Worry about being murdered	+	- PG
Criteria			Criteria			Criteria		
Provoked military action	+	+*	Anti-black prejudice	+*		Fears About Granting Bail	+	+*
Pre-emptive military action	+*					Grant Bail: No vs. Yes.		
Anti-Muslim/Iran prejudice	+					Recommended bail amount	+*	
Torture	+*	-				Support for death penalty	+*	
						Overall sentencing	+*	
<u>Helping/Prosocial</u>			<u>Helping/Prosocial</u>			<u>Apprehender Items</u>		
Predictors			Predictors			Predictors		
Empathic concern		+	Secular volunteering		+	Apprehender as good		+ PG
Perspective taking		+	Quest			Apprehender in danger		+*
			Human-Egalitarianism		+	Acted same as apprehender	+*	
Criteria			Criteria			Criteria		
Peacemaking/Diplomacy		+	Supportive racial policies	-*		Support for awards	+	+
Humanitarian wars		+*	Affirmative action			Support for monetary reward	+	
			Supportive social policies	-*		Recommended \$ reward amount	+	
			Support needy children		+	Rewards increase help	+	
			Support needle exchange			Rewards set bad example		

Note: + = Positive relationship; - = Negative relationship. \* = Unique predictor. PE = Prototypically Evil condition only; PG = Prototypically Good condition only.

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## Appendix A - Study 1 Materials

\*Participants will complete all measures below on a 1 = “Strongly Disagree” to 9 = “Strongly Agree” response scale.

Empathy: Empathic Concern and Perspective Taking (Interpersonal Reactivity Index; Davis, 1983)

1. I often have tender, concerned feelings for people less fortunate than me.
2. I sometimes find it difficult to see things from the "other guy's" point of view.
3. Sometimes I don't feel very sorry for other people when they are having problems.
4. I try to look at everybody's side of a disagreement before I make a decision.
5. When I see someone being taken advantage of, I feel kind of protective towards them.
6. I sometimes try to understand my friends better by imagining how things look from their perspective.
7. Other people's misfortunes do not usually disturb me a great deal.
8. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.
9. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.
10. I am often quite touched by things that I see happen.
11. I believe that there are two sides to every question and try to look at them both.
12. I would describe myself as a pretty softhearted person.
13. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.
14. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

Perception of a Dangerous World (Duckitt, 2001)

1. Although it may appear that things are constantly getting more dangerous and chaotic, it really isn't so.
2. Every era has its problems, and a person's chances of living a safe, untroubled life are better today than ever before.

3. Any day now chaos and anarchy could erupt around us. All signs are pointing to it.
4. There are many dangerous people in our society who will attack someone out of pure meanness, for no reason at all.
5. Despite what one hears about “crime on the street”, there probably isn’t any more now than there ever has been.
6. If a person takes a few sensible precautions, nothing bad is likely to happen to him or her; we do not live in a dangerous world.
7. Every day as society becomes more lawless and bestial; a person’s chances of being robbed, assaulted, and even murdered go up and up.
8. My knowledge and experiences tell me that the social world we live in is basically a safe, stable, and secure place in which most people are fundamentally good.
9. It seems that every year there are fewer and fewer truly respectable people, and more and more persons with no morals at all who threaten everyone else.
10. The “end” is not near. People who think that earthquakes, wars, and famines mean God might be about to destroy the world are being foolish.
11. My knowledge and experience tell me that the social world we live in is basically a dangerous and unpredictable place, in which good, decent, and moral people’s values and way of life are threatened and disrupted by bad people.

#### Perception of a Competitive-Jungle World (Duckitt, 2001)

1. Winning is not the first thing; it’s the only thing.
2. The best way to lead a group under one’s supervision is to show them kindness, consideration, and treat them as fellow workers, not as inferiors.
3. If it’s necessary to be cold blooded and vengeful to reach one’s goals, then one should do it.
4. Life is not governed by the “survival of the fittest.” We should let compassion and moral laws be our guide.
5. Money, wealth, and luxury are what really count in life.
6. It is much more important in life to have integrity in your dealings with others than to have money and power.
7. It’s a dog eat dog world where you have to be ruthless at all times.

8. You know that most people are out to “screw” you; so you have to get them first when you get a chance.
9. My knowledge and experience tells me that the social world we live in is basically a “competitive jungle” in which the fittest survive and succeed; power, wealth, and winning are everything; and might is right.
10. One should give others the benefit of the doubt. Most people are trustworthy if you have faith in them.
11. We can make a society based on unselfish cooperation, sharing, and people generously helping each other, and *not* on competition and acquisitiveness.
12. If you have power in a situation, you should use it however you have to get your way.
13. It is better to be loved than to be feared.

#### Right-Wing Authoritarianism (Funke, 2005)

1. What our country really needs instead of more “civil rights” is a good stiff dose of law and order.
2. It is important to protect the rights of radicals and deviants in all ways.
3. The real keys to the “good life” are obedience, discipline, and sticking to the straight and narrow.
4. Homosexual long-term relationships should be treated as equivalent to marriage.
5. A “woman’s place” should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly to the past.
6. It is good that nowadays young people have greater freedom "to make their own rules" and to protest against things they don't like.
7. The withdrawal from tradition will turn out to be a fatal fault one day.
8. Obedience and respect for authority are the most important virtues children should learn.
9. Being virtuous and law-abiding is in the long run better for us than permanently challenging the foundation of our society.
10. What our country really needs is a strong determined leader who will crush evil, and take us back to our true path.
11. There is no such crime to justify capital punishment.

12. People should develop their own personal standards about good and evil and pay less attention to the Bible and other old, traditional forms of religious guidance.

Social Dominance Orientation (Jost & Thompson, 2000)

1. Group equality is not a worthwhile ideal.
2. Increased social equality would be a bad thing.
3. It would be good if all groups could be equal.
4. Superior groups should not seek to dominate inferior groups.
5. Treating different groups more equally would create more problems that it would solve.
6. No one group should dominate in society.
7. There is no point in trying to make incomes more equal.
8. All groups should be given an equal chance in life.
9. If certain groups stayed in their place, we would have fewer problems.
10. Inferior groups should stay in their place.
11. It's a real problem that certain groups are at the top and other groups are at the bottom.
12. No group of people is more worthy than any other.
13. In getting what your own group wants, it should never be necessary to use force against other groups.
14. Sometimes other groups must be kept in their place.
15. We should do what we can to equalize conditions for different groups.
16. To get ahead in life, it is sometimes necessary to step on other groups.

Militant-Extremist Mindset: Pro-Violence and Vile World Scales (Stankov et al., 2010)

1. We should never use violence as a way to try to save the world.
2. Armed struggle is the only way that youths can redeem themselves and their society.
3. All problems can be solved through negotiations and compromise.
4. Killing is justified when it is an act of revenge.
5. If violence does not solve problems, it is because there was not enough of it.
6. The only way to teach a lesson to our enemies is to threaten their lives and make them suffer.



7. Our enemy's children are like scorpions; they need to be squashed before they grow up.
8. War is the beginning of salvation.
9. Those who claim to be against the use of any form of force are on their way to becoming slaves.
10. A good person has a duty to avoid killing any living human being.
11. Today the human race is on the edge of an enormous calamity.
12. Modern governments have overstepped moral bounds and no longer have a right to rule.
13. Evil has been re-incarnated in the cult of markets and the rule of multinational companies.
14. The world is headed for destruction.
15. Our people are in danger, everybody is trying to divide us and hurt us.
16. The present-day world is vile and miserable.

Support for Militarism: Iran Provocations (Rothschild, 2008; Vail & Moytl, 2010)

Imagine that you are the President of the United States and Commander-in-Chief of the Armed forces. As the President it is your job to decide when to use your national armed forces (army, navy, marines and air force) knowing that as a result some innocent civilians are likely to be killed.

Please respond to the following statements by indicating the degree to which you agree or disagree that you would use military force in the given scenarios.

*"I would support using our armed forces against Iran..."*

1. If hard evidence is found that the Iranian Revolutionary Guard is training and supplying the insurgents in Iraq with weapons to use against American soldiers.
2. If clear evidence indicated that Iran was developing a nuclear weapon.
3. If Iran threatens to attack one of its neighboring countries.
4. If Iran is found to be providing a safe haven for terrorists who want to attack the United States.
5. If Iran takes Americans hostage again.

6. If Iran is found to be giving nuclear weapons technology to enemies of the United States.
7. If Iran tries to topple neighboring regimes and install Iran like Islamic governments.
8. If Iran threatens to attack the United States.
9. If Iran blatantly disregards the international community.
10. If any American is killed by an Iranian soldier.
11. If Iran cuts off oil supplies to the United States and tries to compel other oil producing nations to halt the sale of oil to the United States.

#### Support for Extreme/Pre-Emptive Militarism (Weise et al., 2008)

1. It is entirely appropriate to engage in preemptive attacks on countries (e.g., Iran, Syria, North Korea, etc.) that may pose a threat to the United States in the future, even if there is no evidence they are planning to attack us right now.
2. To address the problem of terrorism, the United States' best choice is to use military intervention.
3. If we could capture or kill Osama bin Laden we should do it, even if thousands of civilians are injured or killed in the process.
4. The best way for the United States to address the problem of terrorism involves increasing U.S. military presence in troubled areas around the world (e.g., Middle East).
5. If necessary, the United States should use nuclear weapons to defend our interests at home and abroad.
6. In order to improve security within the United States, the United States must use its superior military might to destroy terrorists throughout the world.
7. If necessary, the United States should use chemical weapons to defend our interests at home and abroad.
8. The only chance we have to stop international terrorism is if the United States follows a strict warlike and uncompromising approach to this problem.
9. To address the problem of terrorism, the United States' best option is to use its military to destroy as many terrorist cells as possible all over the world.

#### Prejudice: Negative Group Affect (Whitley, 1999)

1. Generally speaking, thinking about Muslims makes me feel bad.

2. Generally speaking, thinking about Muslims makes me feel negative.
3. Generally speaking, thinking about Muslims makes me feel angry.
4. Generally speaking, thinking about Muslims makes me feel relaxed.
5. Generally speaking, thinking about Muslims makes me feel good.
6. Generally speaking, thinking about Muslims makes me feel positive.
  
7. Generally speaking, thinking about Iranians (people from Iran) makes me feel bad.
8. Generally speaking, thinking about Iranians makes me feel negative.
9. Generally speaking, thinking about Iranians makes me feel angry.
10. Generally speaking, thinking about Iranians makes me feel relaxed.
11. Generally speaking, thinking about Iranians makes me feel good.
12. Generally speaking, thinking about Iranians makes me feel positive.

#### Support for Torture (Crandall et al., 2008)

1. I support the use of torture methods.
2. Torture methods are effective ways of getting information.
3. Torture techniques must be used when otherwise people refuse to talk.
4. Use of torture techniques says a lot about the need of U.S. forces to adapt to difficult circumstances in interrogations.
5. I consider the use of torture techniques to be un-American.
6. I think that torture techniques are inhumane.
7. Use of torture techniques says a lot about the character of U.S. forces who are involved in interrogations.

#### Support for Peacemaking (Vail & Motyl, 2010)

1. Fewer people will suffer if the United States pursued peaceful diplomacy instead of aggressively using its military.
2. Frequency communication between countries is the best way to resolve conflicts.
3. The United States should follow international agreements banning torture, even if it makes collecting intelligence more difficult.

4. The best way for the United States to address the problem of terrorism involves increasing cultural sensitivity in troubled areas around the world (e.g., the Middle East, Africa).
5. Leaders of the United States should actively engage in diplomatic efforts with the leaders of states who sponsor terrorism.
6. In order to improve security within the US, the US must improve its image throughout the world.
7. To address the problem of terrorism, the US best choice is to use diplomacy.
8. If the US wants peace, it must set a peaceful example.
9. The best way for America to improve its image is to use its technological and economic advantages rather than its military might.
10. If our leaders advocate violence solutions, they can only expect more violence in return.
11. Diplomatically addressing the reasons that terrorists attack America is more urgent than militarily fighting them.
12. America's strong military showing undermines its peaceful goals.

Support for Humanitarian Wars (Pratto et al., 1994)

*When fighting wars in foreign countries, the priority of the U.S. should be to...*

1. Ensure that human rights were respected in that country.
2. Ensure that emergency food supplies could reach civilians.
3. Protect unarmed civilians from battles.
4. Minimize the suffering of unarmed civilians.
5. Impartially and fairly treat any prisoners of war, especially if they are wounded in battle.
6. Respect and uphold the region's customs and culture.

## Appendix B - Study 2 Materials

\*Participants will complete all measures below on a 1 = “Strongly Disagree” to 9 = “Strongly Agree” response scale, unless otherwise noted.

### Frequency of Religious Behavior

(1 = “More than once a week”, 2 = “Once a week”, 3 = “Every other week”, 4 = “About once a month”, 5 = “Every other month”, 6 = “A few times a year” 7 = “Once a Year” and 8 = “Never”)

1. How often do you attend religious services?
2. How often to you pray?
3. How often do you volunteer for *religious* organizations?
4. How often do you volunteer for *secular* organizations?

### Religious (Christian) Fundamentalism (Altemeyer & Hunsberger, 2004)

1. God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed.
2. No single book of religious teachings contains all the intrinsic, fundamental truths about life.
3. The basic cause of evil in this world is Satan, who is still constantly and ferociously fighting against God.
4. It is more important to be a good person than to believe in God and the right religion.
5. There is a particular set of religious teachings in this world that are so true, you cannot go any “deeper” because they are the basic, bedrock message that God has given humanity.
6. When you get right down to it, there are basically only two kinds of people in the world: the Righteous, who will be rewarded by God; and the rest, who will not.
7. Scriptures may contain general truths, but they should Not be considered completely, literally true from beginning to end.
8. To lead the best, most meaningful life, one must belong to the one, fundamentally true religion.

9. “Satan” is just the name people give to their own bad impulses; there really is no such thing as a diabolical “Prince of Darkness” who tempts us.
10. Whenever science and sacred scripture conflict, *science* is probably right.
11. The fundamentals of God’s religion should never be tampered with or compromised with others’ beliefs.
12. All of the world’s religions have flaws and wrong teachings; there is no perfectly true, right religion.

#### Christian Orthodoxy (Hunsberger, 1989)

1. Jesus Christ was the divine Son of God.
2. The Bible may be an important book of moral teachings, but it was no more inspired by God than were many other such books in human history.
3. The concept of God is an old superstition that is no longer needed to explain things in the modern era.
4. Through the life, death, and resurrection of Jesus, God provided a way for the forgiveness of people's sins.
5. Despite what many people believe, there is no such thing as a God who is aware of our actions.
6. Jesus was crucified, died, and was buried but on the third day He arose from the dead.

#### Militant-Extremist Thinking: Divine Power Scale (Stankov et al., 2010)

1. Only an idiot would go into a challenging situation expecting help from a divine power.
2. Those who obey heaven will receive beautiful rewards.
3. I do not believe in life after death.
4. Martyrdom is an act of a true believer in the cause, not an act of terrorism.
5. All suffering in this life is small in comparison to the eternal pleasures one will receive after death.
6. Our leaders are decent people.
7. If you believe you have received commands from God, you are certainly crazy.
8. At a critical moment, a divine power will step in to help our people.

### Humanitarianism-Egalitarianism (Katz & Hass, 1989)

1. One should be kind to all people.
2. One should find ways to help others less fortunate than oneself.
3. A person should be concerned about the well-being of others.
4. There should be equality for everyone—because we are all human beings.
5. Those who are unable to provide for their basic needs should be helped by others.
6. A good society is one in which people feel responsible for one another.
7. Everyone should have an equal chance and an equal say in most things.
8. Acting to protect the rights and interests of other members of the community is a major obligation for all persons.
9. In dealing with criminals the courts should recognize that many are victims of circumstances.
10. Prosperous nations have a moral obligation to share some of their wealth with poor nations.

### Intrinsic, Extrinsic, and Quest Religiosity (Batson, 1976; Batson & Ventis, 1982)

1. It is important for me to spend periods of time in private religious thoughts and meditation.
2. If not prevented by unavoidable circumstances, I attend church.
3. I try hard to carry my religion over into my other dealings in life.
4. The prayers I say when I am alone carry as much meaning and personal emotion as those said by me during services.
5. Quite often I have been keenly aware of the presence of God or the Divine Being.
6. I read literature about my faith (or church).
7. If I were to join a church group I would prefer to join a Bible study group rather than a social fellowship.
8. My religious beliefs are what really lie behind my whole approach to life.
9. Religion is especially important to me because it answers many questions about the meaning of life.
1. Although I believe in my religion, I feel there are many more important things in my life.
2. It doesn't matter so much what I believe so long as I lead a moral life.

3. The primary purpose of prayer is to gain relief and protection.
  4. The church is most important as a place to formulate good social relationships.
  5. What religion offers me most is comfort when sorrows or misfortune strike.
  6. I pray chiefly because I have been taught to pray.
  7. Although I am a religious person I refuse to let religious considerations influence my everyday affairs.
  8. A primary reason for my interest in religion is that my church is a congenial social activity.
  9. Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well-being.
  10. One reason for my being a church member is that such membership helps to establish a person in the community.
  11. The purpose of prayer is to secure a happy and peaceful life.
- 
1. As I grow and change I expect my religion also to grow and change.
  2. I am constantly questioning my religious beliefs.
  3. I might be said that I value my religious doubts and uncertainties.
  4. I was not very interested in religion until I began to ask questions about the meaning and purpose of my life.
  5. For me, doubting is an important part of what it means to be religious. I do not expect my religious convictions to change in the next few years.
  6. I find religious doubts upsetting.
  7. I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to my world.
  8. My life experiences have lead me to rethink my religious convictions.
  9. There are many religious issues on which my views are still changing.
  10. God wasn't very important for me until I began to ask questions about the meaning of my own life.
  11. Questions are far more central to my religious experience than are answers.

Support for Racial Policy Scale (Pratto et al., 1994)

(1 = "Very Negative" to 9 = "Very Positive" response scale)



“Which of the following objects, events, or statements do you have a positive or negative feeling towards? Please indicate your feelings by circling the appropriate number alongside each item. Use one of the following responses. Remember, your first reaction is best.”

1. Racial quotas.
2. School busing.
3. Civil rights for ethnic minorities.
4. Equal pay for ethnic minorities.
5. Helping minorities get a better education.
6. Government helping minorities get better housing.
7. Government helping minorities in the job market.

Support for Affirmative Action (Davis & West, 1984; Swim & Miller, 1999)

1. Achieving numerical representativeness (considering race and sex in hiring and promotion decisions) is as important as insuring that there are competent people in those positions.
2. A certain quota of Blacks, even if not all of them are fully qualified, should be admitted to colleges and universities.
3. If I were an employer, and two equally qualified applicants—one Black and one White—applied for the same job, I would be more likely to hire the Black applicant.
4. Blacks should receive racial entitlement such as affirmative action and other forms of compensation due to the past injustices of White America.
5. To compensate for racial injustices, I feel that universities should create special entitlement for Black students including Black dorms or Black student unions.
6. After years of discrimination, it is only fair to set up special programs to make sure that Blacks are given every chance to have equal opportunities in employment and education.

Racial Argument Scale (Saucier & Miller, 2003)

“Please read each of the following arguments and rate how well the argument supports the conclusion offered. Please answer honestly, and circle an answer for each argument. Remember that by indicating that an argument supports a conclusion, it does not

necessarily indicate that you personally endorse the argument or its conclusion. Please keep in mind that these are ‘arguments’ and are not necessarily facts.

1. Rodney King was the African-American motorist who was beaten by police officers in Los Angeles in an incident captured on video. The incident was broadcast as an unmotivated racial assault on King by the police, but this may not be entirely accurate. King was beaten following a long car chase and resisted arrest upon his capture, and the physical response by the police may have been somewhat warranted.

Conclusion: Rodney King may have at least partially provoked the beating he received from the Los Angeles police officers.

**How much does the argument support the conclusion?** \_\_\_\_\_

2. It has been argued that welfare programs are too often exploited by African-Americans in this country. Welfare offices in every state appear packed with African-Americans applying for and collecting welfare benefits. These high numbers of African-American welfare recipients are disproportionate for their numbers in the general population, and other racial groups are suffering because they can not receive benefits.

Conclusion: The numbers of African-Americans receiving welfare should be limited to provide benefits for others.

**How much does the argument support the conclusion?** \_\_\_\_\_

3. President Bill Clinton issued an apology to African-Americans for the institution of slavery that existed in this country over 130 years ago. Clinton’s apology was inappropriate because he and the present government have no connection with the long-abolished practice of slavery, and the apology may instead incite current tension in race relations.

Conclusion: President Clinton should not have apologized to African-Americans for slavery.

**How much does the argument support the conclusion?** \_\_\_\_\_

4. Christians celebrate Christmas, the Jewish celebrate Chanukah, and some African-Americans celebrate Kwanzaa, a holiday originating from African culture, during the winter “holiday season”. Many people had never heard about Kwanzaa until recently and suggest that, since it appears to be a

“new” holiday, it must be a second-tier holiday seeking to emulate Christmas without much inherent significance.

Conclusion: Kwanzaa is not a holiday on the same level of importance as Christmas.

**How much does the argument support the conclusion?** \_\_\_\_\_

5. It has been shown that White Americans score 15 points higher on IQ tests than African-Americans. This difference in IQ scores has even been shown when other variables such as education levels and socioeconomic status are taken into account.

Conclusion: Whites are more intelligent than African-Americans.

**How much does the argument support the conclusion?** \_\_\_\_\_

#### Support for Social Programs (Pratto et al., 1994)

(1 = “Very Negative” to 9 = “Very Positive” response scale)

“Which of the following objects, events, or statements do you have a positive or negative feeling towards? Please indicate your feelings by circling the appropriate number alongside each item. Use one of the following responses. Remember, your first reaction is best.”

1. Government sponsored, universal health care.
2. Building more homeless shelters.
3. Building more clinics for those needing psychological help.
4. More support for early education programs (e.g., Head Start)
5. Free school lunches for low-income children.
6. Integration of low-income and high-income housing.
7. Arresting or busing out homeless people.
8. Guaranteed jobs for all.
9. Reducing benefits for the unemployed.
10. Free healthcare for children in low-income households.
11. Increased taxation of the very rich (i.e., the top 1% of households making \$200,000/year or more).
12. Equalizing salaries (based on sex, ethnicity, etc.).
13. Legalizing same-sex marriage.

14. Decreased funding for family planning organizations, such as Planned Parenthood.
15. Defunding the Arts (music, art, etc.).
16. Legalizing or deregulating illegal drugs in general.
17. Increasing the age at which one is eligible for Social Security benefits.
18. The ability to create and pass legislation favoring one religion over another.
19. Corporate industry
20. A totally free market/unbridled capitalism
21. Corporate regulation by national government
22. Environmental rules and regulations by national government

Attitudes toward Needle Exchange Programs (Jones et al., 1998)

“Needle-exchange programs allow intravenous (i.e., drugs administered by needles) drug users to exchange their used, dirty needles for clean needles for free, usually at public clinics. Often laws are simultaneously established to allow pharmacies to sell clean needles to anyone. Please provide your thoughts on needle-exchange programs by responding to the items below.”

1. I am quite familiar with how needle-exchange programs work.
2. Needle-exchange programs help reduce diseases transmitted diseases.
3. If needle-exchange programs reduce stigma or negative attitudes toward drug users, it is a good thing.
4. Pharmacies should allow anyone to buy clean needles.
5. Needle-exchange programs only encourage addicts to continue abusing drugs.
6. Needle-exchange programs probably have no effect on rates of diseases (e.g., HIV/AIDS) contracted through intravenous drug use.
7. Needle-exchange programs would only increase the number of drug addicts in the area.
8. I have never really heard of needle-exchange programs before.

## Appendix C - Study 3 Materials

\*Participants will complete all measures below on a 1 = “Strongly Disagree” to 9 = “Strongly Agree” response scale, unless otherwise noted.

### Items Concerning the Perpetrator, Mr. Beatty

“Below are questions concerning the perpetrator in the newspaper article, Mr. Beatty. Please respond to them using the scale provided.”

1. Very simply, I can see nothing good in Mr. Beatty. He seems like a waste of space.
2. I feel that everything would be better if Mr. Beatty simply ceased to exist, but not before he suffers a lot.
3. The worst harm I could possibly imagine still seems too good for him.
4. If every reminder that Mr. Beatty ever existed were destroyed, the world would be a better place.
5. This crime was caused entirely by the Mr. Beatty’s evilness.
6. Mr. Beatty is only motivated to destroy everything that is benevolent.
7. Mr. Beatty seems to enjoy hurting others.
8. Mr. Beatty is immoral.
9. When thinking of Mr. Beatty, I can only imagine how mean he is.
10. I cannot really think of any situation that would justify Mr. Beatty’s murder of the young woman.
11. I think there may be circumstances that we are not yet aware of that would help explain why Mr. Beatty murdered the young woman.
12. There might be circumstances that we don’t know about that would influence my judgment of Mr. Beatty in this crime.
13. There must be some logical reason for Mr. Beatty murdering his victim.

“We would like you to provide your recommendations for bail and punishment for the perpetrator, Mr. Beatty.

First, allowing Mr. Beatty to ‘post bail’ means that he will deposit money so he can be released from jail on the understanding that he would return for his criminal trial; however, some courts deny suspects bail because there is too much risk that the suspect would harm themselves or others, or flee from the area.”

1. If the suspect (Mr. Beatty) was released from jail on bail, I would fear that he would harm himself or other people.
2. If the suspect (Mr. Beatty) was released from jail on bail, I would bet that he would try to flee the area.
3. Would you recommend allowing Mr. Beatty to post bail? (0 = Yes, 1 = No)
4. If Mr. Beatty was allowed to post bail, what dollar (\$) amount would you recommend for his bail? Keep in mind that in cases similar to this one, the bail amount typically ranges from \$25,000 to \$1,000,000. (open-ended, numerical)

“If Mr. Beatty is convicted in a court of law for murder, what punishment would you recommend as a juror? You can decide the punishment in terms of community service, probation, jail time, and the death penalty.

Community service is when perpetrators must participate in some activity that benefits the community as a whole (e.g., picking up garbage, working at homeless shelters or retirement homes).

Probation means that a convicted criminal is freed from jail but still must meet conditions set forth by the court and regularly meet with a probation officer. Typically, offenders are required to refrain from possession of firearms, ordered to remain employed, abide to a curfew, live at a directed place, participate in rehabilitation programs, and not leave the immediate area.

Jail time is the time that the perpetrator must serve “behind bars” in jail.

Death penalty means that the perpetrator will be put to death for his crime.

Your options for Mr. Beatty’s punishment are below:”

1. Community service only (no probation, no jail time)
2. Probation with community service (no jail time)

3. Imprisonment followed by probation and community service
4. Imprisonment with NO opportunity for parole (i.e., life in prison)
5. The death penalty
6. If Mr. Beatty was sentenced to jail time, how many years should Mr. Beatty serve?  
(open-ended, numerical)
7. If Mr. Beatty was released from jail on probation, how many years should Mr. Beatty be on probation? (open-ended, numerical)
8. If Mr. Beatty was released from jail and had to do community service, how many hours should Mr. Beatty serve? (open-ended, numerical)

#### Items about Criminal Punishment/Murder in General

“Please respond to the following items concerning crime, the death penalty, and murder.”

1. Cruel and unusual punishment, like the death penalty, is the just way to compensate victims or their family in the case of murder
2. The death penalty is necessary to maintain beliefs in justice.
3. Those who kill deserve to be killed in return.
4. There is a moral obligation to severely punish lawbreakers.
5. Execution discourages others from committing the crime.
6. Death penalty laws make criminals think twice before committing capital crimes.
7. Executing a person for murder discourages others from committing murder in future.
8. The death penalty helps decrease crime.
9. Execution is a cruel punishment.
10. No matter what crime a person has committed, executing the person is too cruel a punishment.
11. Life in prison is more humane than death.
12. With the death penalty, innocent people may be killed.
13. There are good moral reasons for opposing death penalty.
14. It is important to have the death penalty to save the price of life in prison.
15. I often worry about being murdered.
16. I do *not* really dwell on the possibility that I will be a victim of murder.

17. I think my chances of being murdered are really low.
18. I believe that there is a high probability that I will be murdered.
19. Murder is a serious threat in the greater Kansas City area.
20. The Kansas City area should concern itself about other more relevant crimes besides murder.
21. Lastly, could you please estimate the number of murders you think occurred in the Kansas City metro area, including Manhattan and Lawrence, in the year 2010? (open-ended, numerical)

#### Items Concerning Mr. Beatty's Apprehender, Mr. Carter

"Below are questions concerning Mr. Carter, the person who helped apprehend the murder suspect (Mr. Beatty) in the newspaper article. Please respond to them using the scale provided."

1. The apprehender's (Mr. Carter's) actions were caused entirely by his goodness.
2. Mr. Carter was only motivated to protect everything that is kind.
3. Mr. Carter seems to enjoy helping others", "Mr. Carter is a moral man.
4. When thinking of Mr. Carter, I can only imagine how compassionate he is.
5. Very simply, I can see nothing but good in Mr. Carter.
6. I feel that the world would be worse off if Mr. Carter simply ceased to exist.
7. I could not give enough praise for Mr. Carter's actions.
8. If every reminder that Mr. Carter ever existed were destroyed, the world would be a worse place.
9. If I had been in Mr. Carter's place, I would have done the exact same thing he did.
10. I think I would have acted differently if I had been in Mr. Carter's place.
11. I would encourage all people to act as Mr. Carter did.
12. Mr. Carter put himself at much risk by confronting Mr. Beatty.
13. Mr. Carter was NOT really in a lot danger when he tried to stop Mr. Beatty from fleeing the area.
14. Mr. Carter helped stop Mr. Beatty just for the glory of capturing him.
15. Mr. Carter had no ulterior motive in helping capture Mr. Beatty.



16. Mr. Carter definitely felt good inside by stopping Mr. Beatty from fleeing.
17. Mr. Carter helped apprehend the bad guy just because Mr. Carter was truly a good guy.
18. Mr. Carter was arrogant in boasting about apprehending the suspect, Mr. Beatty.
19. Mr. Carter is a hero for helping apprehend the suspect.
20. Mr. Carter's actions to apprehend the suspect were not heroic.

"Below are items concerning possible rewards for Mr. Carter's helpful actions. Please respond to them using the scale provided."

1. I would recommend Mr. Carter for an official mayoral award from Kansas City.
2. I would recommend Mr. Carter for Kansas's statewide Good Samaritan Award.
3. I would recommend Mr. Carter for the National (U.S.) Good Samaritan Award.
4. I would recommend a monetary award.
5. "If Mr. Carter does receive a monetary award from authorities, how much money do you think Mr. Carter should receive? Monetary awards in such cases typically range from \$500 to \$5,000."

"Please respond to items below concerning rewards for prosocial actions using the scale provided."

1. Giving money to people for helping increases people's motivations to help long-term.
2. Giving money to people for helping sets a bad example because people will not help in the future unless they expect money in return.
3. Giving awards to people for helping sets a bad example because people will not help in the future unless they expect an award.
4. Giving awards to people who help increases people's motivation to help long-term.
5. We should give commendations, not monetary awards, to people who help.
6. There is nothing much we can do to make people be more helpful and altruistic.