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Abstract

We conducted five studies to demonstrate that individuals' beliefs in pure evil (BPE) and in pure good (BPG) are valid and important psychological constructs. First, these studies together demonstrated that BPE and BPG are reliable, unitary, and stable constructs each composed of eight theoretically interdependent dimensions. Second, these studies showed that across a wide variety of different measures, higher BPE consistently related to greater intergroup aggression (e.g., supporting the death penalty and preemptive military aggression) and less intergroup prosociality (e.g., opposing criminal rehabilitation, proracial policies, and beneficial social programs), while higher BPG consistently related to less intergroup aggression (e.g., opposing proviolent foreign relations and torture) and greater intergroup prosociality (e.g., supporting criminal rehabilitation and support for diplomacy). In sum, these studies evidence that BPE and BPG relate to aggressive and prosocial orientations toward others and have strong potential to advance current theories on prejudice, aggression, and prosociality.

Keywords

pure evil, pure good, attributions, aggression, prosociality

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The question of why people help or hurt others is perhaps one of humanity's oldest and most urgent questions. Do some individuals just epitomize pure good ("angels") or pure evil ("demons")? Whether pure evil or pure good empirically exists is actually irrelevant to the current studies. Instead, the current studies focus on whether people's beliefs about pure evil and pure good (but not beliefs about oneself as good or evil) affect their own aggressive and prosocial orientations toward others.

What Is "Pure Evil"?

When bad things happen, it appears that people tend to seek quick, comforting explanations so that their 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 provocation, which is the most common scientific definition of *evil*¹ (Baumeister, 1999; Darley, 1992; Miller, 1999, 2004; Staub, 1992; see also "Research on Evil," 2000). Because perceivers are more inclined to draw more dispositional inferences from others' delinquent behavior (an example of the correspondence bias; see Malle, 2006), it seems that "behind evil actions must lie evil individuals" (Darley, 1992, p. 202; see also Baumeister, 1999, chap. 3).² Recorded history shows

that cultures all over the world have developed and maintained a similar "personal archetype of evil," or what Baumeister (1999) referred to as the "myth of pure evil" (p. 62).³

Ultimately, Baumeister (1999) hypothesized a constellation of eight different perceptions that coalesce unidimensionally into the beliefs in pure evil (BPE).

1. *Pure evil involves the intentional infliction of harm* (evil is not accidental or unintended, but is a willful and conscious action by a person).
2. *Pure evil is driven primarily by the wish to inflict harm merely for the pleasure of doing so* (evil people enjoy harming others).
3. *The victim of evil is innocent and good* (if a person harms another, it is because the perpetrator was evil, not because of any provocation by the victim).

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4. *Evil represents the antithesis of order, peace, and stability* (pure evil disrupts people's quiet and orderly daily lives).
5. *Pure evil comes from the "outside"* (evildoers are outsiders who often both look and speak differently than the targeted victim).
6. *Pure evil is stable in the person* (people are born evil or forever corrupted by evil).
7. *Pure evil is marked by egotism* (evildoers suffer from exaggerated high self-esteem, more akin to narcissism or self-love).
8. *Pure evil is associated with difficulty in maintaining control over emotions, especially anger and rage* (i.e., evildoers have very low self-restraint or self-regulation over their emotions). (pp. 72-75)

These hypothesized components of BPE 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 (e.g., harming is dispositional) and the agent's motivations for harm (e.g., for pleasure).

The Value of Assessing People's BPE

Generally, people are suspicious of or hostile toward those who are different than them because they look and/or think differently (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 more inclined to blame outgroups for bad things that happen to their ingroup (Mullen & Johnson, 1990). Ultimately, according to BPE, "There is no point in being patient, tolerant, and understanding when one is dealing with evil" (Baumeister, 1999, p. 69). Eliminating (aggressing against or withholding help from) evildoers helps eliminate 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 prejudice, discrimination, and violence (Baumeister, 1999). Ultimately, BPE may not just be a benign perception of human behavior but may also have tangible, negative consequences.

Preliminary research indicates that imbuing the perpetrators of harm with evil characteristics (either by associating the perpetrator with evil symbols or giving the perpetrator "evil" mannerisms) increases aggressive reactions toward perpetrators (Burriss & Rempel, 2011; van Prooijen & van de Veer, 2010). However, none of these studies examined how individual differences in BPE—or any other social-attribitional variables—related to such aggressive reactions or other measures of aggressiveness/prosociality.

Researchers have developed other individual difference measures assessing perceptions of social behavior, including

attributional complexity (the motivation to think more deeply about other people's social behavior; Fletcher, Danilovics, Fernandez, Peterson, & Reeder, 1986), belief in a just world (the extent to which individuals believe that people get what they deserve to maintain the view of a just and orderly world; Lerner, 1980), and pessimism (generally having negative expectations and explanations regarding life outcomes). Lower attributional complexity and greater just-world beliefs and pessimism are associated with greater aggression and lower prosociality, especially in terms of criminal punishment (e.g., greater support for the death penalty and greater opposition to criminal rehabilitation, respectively; Butler & Moran, 2007; Kelley & Braithwaite, 1990; Sargent, 2004; Tam, Au, & Leung, 2008).

It is critical to note that attributional complexity, just-world beliefs, and pessimism do not directly assess perceptions of others' harming. Thus, BPE represents a novel and unique contribution to the literature on aggression and prosociality (cf. Krueger, Hicks, & McGue, 2001). Given its attitudinal specificity, BPE should predict aggression and prosociality above and beyond these broader attributional constructs (see Weigel, Vernon, & Tognacci, 1974). Nonetheless, because of BPE's emphasis on simple but gloomy explanations of harmful behavior to maintain the perception of an orderly, just world (Darley, 1992), we expected that people scoring higher in BPE will be less attributionally complex and more greatly endorse just-world and pessimistic beliefs.

What Is Pure Good?

Scholars in the biological and social sciences have debated whether pure good—in essence, pure altruism or selfless helping—exists (e.g., Batson, 1991; Wilson, 2005). Whether pure good exists is not pertinent to the current investigation; we are concerned about people's perceptions of whether pure good exists. To our knowledge, no one has examined whether perceptions of pure good correlate with relevant psychological phenomena.

Given that "good" is often perceived to be the opposite of "evil," can one simply infer that the beliefs in pure good (BPG) components are simply the converse of the BPE components? In some cases, it appeared that the answer was affirmative; however, at times, we were hard-pressed to find a direct opposite. In cases where there appeared to be no direct opposites, we perused the altruism and volunteerism literature (e.g., Batson, 1991; Snyder, Omoto, & Lindsay, 2004) for other qualities that may exemplify pure good. Ultimately, we hypothesized eight different BPG components listed below.

1. *Pure good is about intentional help.* At its core, pure good—like pure altruism—is about intentionally helping for help's sake (Batson, 1991; Snyder et al., 2004).

2. *Pure good is about selfless help.* In thinking about the definition of pure altruism, people do not only intentionally and consciously but also selflessly help—that is, they act without expectation of intrinsic (to feel good) or extrinsic (to look good to others) rewards (Batson, 1991).
3. *Pure good is about helping anyone in need.* We reasoned that pure good is about providing impartial aid, whether the benefactors are friends or enemies.
4. *Pure good is about helping without hurting others.* Pure good is about acting prosocially without resorting to aggression or violence, if at all possible.
5. *Pure good cannot be corrupted.* Pure good cannot be corrupted by the forces of evil—that is, pure good can resist the temptations (abstract or material rewards) to joining the “dark side” (using *Star Wars* nomenclature).
6. *Pure good is a stable trait in people.* We were unsure as to how people who believe in pure good would think about the stability and malleability of pure goodness. It could be that people who believe in pure good hold that do-gooders like Mother Theresa or Gandhi were born purely good; however, it may be that wayward criminals can see “the error of their ways” and become good.
7. *Pure good facilitates peace, order, and stability.* People who believe in pure good likely assert that pure good exists because such prosociality helps foster a more peaceful and orderly society.
8. *Pure good is rare in the world.* History has been plagued with human violence. Accordingly, people who believe in pure good may perceive that pure good is too rare in this world. Indeed, examples of purely good people and acts appear to be limited.

The hypothesized BPG components partly overlap with the scientific definition of altruism (i.e., selfless helping); however, belief in pure good comprises other attributes about the agent of help (e.g., nonviolent attitudes) and his/her motivations for helping (e.g., to make the world more peaceful).

The Value in Assessing Belief in Pure Good

If individuals believe that there are very few individuals in the world who intentionally and impartially help without the use of violence and without expectation of reward, and that such prosociality is the key to maintaining and facilitating a better world, then such individuals—that is, those scoring higher in BPG—should exhibit a more prosocial (and less aggressive) orientation toward others. Such individuals would encourage others to act in a purely good manner and apply the same criteria in deciding how to act toward others. In contrast, denying that pure good exists may serve to justify people’s prosocial apathy: “If ‘everybody is [selfish]’—if everybody

must be like that—we need not feel guilty about our own self-interested behavior or try to change it” (Lichtenberg, 2010, italics in original).

We also expect BPG to correlate with other social attributional variables, such as attributional complexity, just-world beliefs, and pessimism. In particular, people scoring higher in BPG should be more attributionally complex and optimistic because of BPG’s implicit consideration of the complex causes of human goodness (and, very likely, for human evilness, too); however, because these other attributional variables do not directly assess people’s perceptions of human prosociality, BPG provides a novel and unique contribution to the aggression and prosociality literature.

The Relationship Between BPE and BPG

The popular view is that people concurrently believe in good and evil (i.e., where there is pure evil, there needs to be pure good; Baumeister, 1999), so it is possible that as BPE increases, so does BPG. Conversely, 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 likely believe that doing good means not harming others, while people scoring higher in BPE likely feel that violence and aggression are justified to root out evildoers. Despite competing hypotheses regarding the nature of the relationship between BPG and BPE, we have made clear predictions in how BPE and BPG should relate to aggressiveness and prosociality.

Overview of Current Studies

Our first aim was to develop reliable and stable measures of BPE and BPG (Studies 1-3). Our second aim was to demonstrate that BPE and BPG relate to a wide variety of aggression and prosociality measures (primarily on an intergroup level), first by focusing on social attributional variables and criminal punishment in Studies 1 and 2 and then extending across the aggression and prosocial literature in Studies 4 (broadly, sociopolitical attitudes and foreign policy relations) and 5 (broadly, religiosity and domestic policy positions; see Pratto, Sidanius, Stallworth, & Malle, 1994, for a very similar approach).

Studies 1 and 2

Studies 1 and 2 first aimed to develop reliable BPE and BPG scales. Three previous studies attempted to construct BPE scales (Burriss & Rempel, 2011; Wetering, 2005; Wetering, Svekla, Hiebert, Olvera, & Dehghan, 2007). These researchers should be lauded for attempting to construct and validate BPE scales; however, these attempts were not as “fruitful” as hoped, at least in Wetering’s case (personal communication, February 15, 2011). Most of these studies share some

Table 1. Participant Demographics for All Studies.

Study	<i>n</i> _{women}	<i>n</i> _{men}	<i>M</i> _{age}	<i>SD</i> _{age}	% Caucasian
1	102	130	20.02	2.85	69.4
2	190	96	18.84	2.20	87.4
3	40	17	18.53	0.66	86.0
4	56	76	19.15	1.42	71.3
5	54	47	19.46	2.50	86.1

Note. For Study 1, the gender of 23 participants was not recorded. For Study 2, 11 did not report their gender.

common limitations. First, these researchers generally did not create a large pool of items for each hypothesized BPE component. Second, two of the scales exhibited low internal consistency ($\alpha = .68, .94, \text{ and } .77$, respectively). Third, each was tested using a fairly small sample ($Ns < 148$). Finally, the scales did not consistently correlate with other measures of intergroup aggression (if any attempt at convergent discrimination was conducted).

Thus, we made several improvements in developing our BPE and BPG scales. First, we developed a more detailed and sophisticated list of potential BPE and BPG items (see Churchill, 1979). Second, we used an adequate sample size to test the scales' psychometric properties (≥ 200 participants per study; Fabrigar, Wegener, MacCallum, & Strahan, 1999). Third, instead of using a specific number of items as a cutoff point (e.g., Wetering, 2005), we retained items exhibiting item-total scale correlations $> .30$ via reliability analyses (Everitt, 2002; Field, 2005; Nunnally, 1967). By using a number of items as a cutoff point, Wetering and colleagues (2007) may have unfortunately disregarded items pertaining to key BPE dimensions.

Finally, if these constructs do represent unitary constructs, reliability analyses should show a high internal consistency among a core set of items. Baumeister (1999) explicitly stated that BPE should be considered a "composite" variable of his eight hypothesized components (p. 72). Indeed, BPE and BPG are alluring (partly) because of their unitary construction, theoretically and grammatically ("belief in pure evil" vs. "beliefs in pure evil"). BPE and BPG can only be theoretically supported if the hypothesized components successfully coalesce into reliable, unitary constructs. Thus, reliability analysis (rather than exploratory and confirmatory factor analysis) could more parsimoniously test the underlying theorized structure of BPE and BPG (cf. Saucier & Webster, 2010; Webster & Saucier, 2011).

Method

Participants. Two groups of introductory psychology students completed all potential BPE and BPG items in separate semesters (online via Sona Systems)—spring/summer 2011 (Study 1) and fall 2011 (Study 2)—in exchange for course credit (see Table 1 for demographics).

Creating the BPE and BPG Scales

Item creation. We first created four to six (protrait and contrait) items for each of the hypothesized BPE and BPG components (65 and 53 items for BPE and BPG, respectively). We postulated four additional components to BPE from others' previous theorizing (e.g., Darley, 1992; Miller, 2004; Staub, 1992): understanding evil (trying to understand evil is futile because pure evil is dispositional and will only foster greater empathizing with perpetrators and condoning of their harmful behavior), too much evil (there is too much evil in the world right now), discounting situations (mitigating circumstances play little or no role in producing evil behavior), and general endorsement (general willingness to say that people believe in pure evil). On a theoretical level, it was important 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.

We aimed to avoid overtly religious content in the items so that belief in neither pure good nor pure evil would be confounded with religious dogma (and it appears we were successful; see Study 5). Furthermore, we were extremely cautious not to confound good and evil within the same item to achieve a clearer delineation between BPE and BPG (ultimately, in the final scales, 3 out of 22 BPE items referenced "good" and 2 out of 28 BPG items referenced "evil"). Participants responded to all BPE and BPG items on a 1 (*disagree very strongly*) to 7 (*agree very strongly*) Likert-type scale.

Reliability analyses. We conducted reliability analyses on the BPE and BPG item scores for Studies 1 and 2 separately (after reverse-coding relevant items) and retained items that exhibited item-total correlations $\geq .30$ in both the studies (see, for example, Fletcher et al., 1986; Saucier & Webster, 2010). It appeared that .30 was a compromise between more liberal (e.g., .20) and more conservative (e.g., .40) cutoff recommendations (Everitt, 2002; Field, 2005; Nunnally, 1967).

Final scales. Ultimately, 22 BPE and 28 BPG items (see Tables 2 and 3, respectively) were retained after the analyses. Descriptives (*Ms*, *SDs*, α s, and skewness levels) for the BPE and BPG scales are listed in Table 4 for all the six current studies. Across all the studies, the BPE ($\alpha > .88$) and BPG ($\alpha > .91$) scales exhibited excellent reliability, approximated a normal distribution, and demonstrated sufficient variation in scores. 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. The only proposed dimension not represented in the final BPG scale was whether pure good was dispositional.

We also note here that participants completed these finalized BPE and BPG scales in Studies 3 to 5. Participants always responded on a 1 (*disagree very strongly*) to 7 (*agree*

Table 2. Belief in Pure Evil (BPE) 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. If we could just get rid of the evildoers—those "bad apples"—we would have a much more peaceful society.	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 in Studies 3 to 5.

very strongly) scale to keep response scales parallel across studies.

The relationships between BPE, BPG, attributional variables, and criminal punishment. Next, we assessed the relationship between BPE, BPG, attributional variables regarding social behavior (attributional complexity, just-world beliefs, and pessimism), and attitudes toward criminal punishment using identical sets of measures in Studies 1 and 2 (to ideally find a convergence of results across the two samples). Participants responded to items on a 1 (*disagree very strongly*) to 7 (*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.

Attributional complexity. Participants completed Fletcher et al.'s (1986) 28-item attributional complexity scale ($\alpha = .91$ and $.92$ for Studies 1 and 2, respectively), which assesses the tendency to think more deeply about the causes for other people's behavior.

Just-world beliefs. Participants completed Lucas, Alexander, Firestone, and LeBreton's (2007) measures of procedural and distributive justice (5 items each; $\alpha > .81$ for

Studies 1 and 2, respectively), which assess the tendency to believe that people are treated fairly (procedural justice) and get what they deserve (distributive justice).

Optimism/pessimism. Participants also completed Scheier, Carver, and Bridges's (1994) measures of optimism (3 items; $\alpha = .68$ and $.73$ for Studies 1 and 2, respectively) and pessimism (3 items; $\alpha = .72$ and $.76$ for Studies 1 and 2, respectively).

Attitudes toward criminal punishment. Criminal punishment provides an excellent test of the differential effects of BPE and BPG on aggression and prosociality because people can choose to punish, help, or punish and help criminal perpetrators (see Sessar, 1999). Specifically, we assessed the participants' support for the death penalty (see Tam et al., 2008; 5 items, $\alpha = .71$ and $.73$ for Studies 1 and 2, respectively) and criminal rehabilitation (see Tam et al., 2008; 5 items, $\alpha = .80$ and $.78$ for Studies 1 and 2, respectively), respectively. The participants also provided their recommended sentences (on a progressively increasing scale from 1 = *less than 1 year* to 11 = *the death penalty*) for different crimes that were reliably grouped into three main categories: stealing (income tax fraud, money laundering, shop lifting, and embezzlement; $\alpha = .81$ and $.83$ for Studies 1 and 2,

Table 3. Belief in Pure Good (BPG) 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. ^a	Without reward
10. We DO NOT need more "purely good" people in this world. ^a	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. ^a	Without reward
13. "Pure good" only exists in fictional stories. ^a	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. ^a	Facilitates peace
16. Purely good people can resist the temptation to do evil things.	Defies corruption
17. Even selfless people hate helping enemies. ^a	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.	Without reward
20. The forces of evil will fail when they try to corrupt pure-hearted people.	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. ^a	Impartial help
23. Purely good people are too foolish to realize that the world will always be a violent place, and they will eventually loose in the end. ^a	Facilitates peace
24. "Pure good" is doing unselfish, heroic things for others in need.	Intentional help
25. Even selfless people enjoy using violence sometimes. ^a	Avoids aggression
26. People <i>never</i> intentionally and selflessly help people. ^a	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 actions.	Without reward

^aReverse-coded items. Items presented in the order participants viewed them in Studies 3 to 5.

Table 4. Descriptives and Reliabilities for the BPE and BPG Scales for All Studies.

Study	Belief in Pure Evil Scale (22 items)				Belief in Pure Good Scale (28 items)			
	<i>M</i>	<i>SD</i>	α	<i>Skew</i>	<i>M</i>	<i>SD</i>	α	<i>Skew</i>
1	3.85	0.78	.88	-0.07	4.79	0.78	.91	0.17
2	3.83	0.83	.89	-0.03	5.10	0.82	.91	-0.25
3 ^a	4.07	0.89	.91	0.05	4.84	0.85	.93	0.30
4	3.93	1.05	.94	0.16	5.04	0.88	.92	-0.35
5	3.60	1.06	.95	0.12	5.05	0.79	.92	0.14

^aSecond administration only. Participants responded to all items on a 1 (Strongly Disagree) to 7 (Strongly Agree) scale.

respectively), aggravated assault (physical child abuse, child kidnapping, and raping a woman; α s = .86 and .83 for Studies 1 and 2, respectively), and murder (first-degree, second-degree, and hit-and-run murder; α s = .67 and .62 for Studies 1 and 2, respectively).

Given our overarching hypotheses on BPE and BPG, we predicted that people scoring higher in BPE would generally report greater support for criminal punitiveness and more opposition to criminal rehabilitation, while people scoring higher in BPG would generally report greater support for

Table 5. Intercorrelations Between Variables of Interest (Studies 1 and 2).

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Belief in pure evil	—	.00	-.03	.15	.02	-.22	.25	.18	-.21	.31	.16	.28	.27
2. Belief in pure good	.01	—	-.19	-.23	.17	.31	.15	.15	.32	-.14	.07	.07	-.01
3. Participant sex	.13	-.07	—	.02	.01	-.08	.09	.09	-.08	.15	-.09	-.19	-.09
4. Pessimism	.20	-.16	.09	—	-.53	-.03	-.07	-.14	-.18	.03	-.07	.03	.00
5. Optimism	-.08	.26	-.12	-.49	—	-.01	.15	.23	.18	-.06	-.05	-.01	.06
6. Attributional complexity	-.26	.43	-.16	-.13	.04	—	-.04	-.16	.34	-.12	-.06	-.02	-.09
7. Distributive justice	.19	.10	.18	-.08	.19	-.16	—	.57	.02	.24	.18	.11	.07
8. Procedural justice	.20	.01	.10	-.07	.08	-.29	.59	—	.03	.21	.11	.09	.15
9. Support for rehabilitation	-.27	.38	-.05	-.11	.15	.40	.01	-.12	—	-.28	-.16	-.16	-.14
10. Support for death penalty	.32	-.21	.18	.10	-.11	-.24	.19	.05	-.29	—	.16	.10	.18
11. Sentencing for murders	.16	-.05	-.02	.04	-.04	-.09	.06	-.01	-.20	.23	—	.52	.48
12. Sentencing for assault	.29	-.02	.00	.20	-.13	-.10	-.02	.07	-.24	.26	.55	—	.53
13. Sentencing for stealing	.18	-.24	.02	.12	-.07	-.25	.03	.13	-.21	.15	.40	.44	—

Note. Correlations for Study 1 appear below the diagonal, while correlations for Study 2 appear above the diagonal. Correlations significant at $p < .05$ are bolded ($r_s \geq .14$ for Study 1 and $r_s \geq .12$ for Study 2). Correlations with BPE and BPG are highlighted for readability. Participant sex coded as 0 = "female" and 1 = "male."

criminal rehabilitation and more opposition to severe criminal punitiveness.

Results

Intercorrelations. Across both the studies, BPE and BPG scores were completely uncorrelated (see Table 5). More importantly, people scoring higher in BPE reported greater just-world beliefs, greater pessimism, and lower in attributional complexity; meanwhile, people scoring higher in BPG reported greater optimism and greater attributional complexity. Furthermore, consistent with predictions, BPE and BPG differentially correlated with support for the death penalty and support for rehabilitation: People scoring higher in BPE reported a greater support for the death penalty but greater opposition to criminal rehabilitation; meanwhile, people scoring higher in BPG reported a greater opposition to the death penalty but greater support for criminal rehabilitation.⁴ Moreover, across both of our samples, BPE positively correlated with harsher punishments for different categories of crimes (however, only in Study 1 did BPG uniquely correlate with more lenient punishments, but only for stealing crimes).

Predictive validity. Hierarchical regression analyses were conducted to assess whether BPE and BPG predicted support for the death penalty, jail sentencing, and criminal rehabilitation above and beyond the attributional variables. We entered the attributional variables in Step 1 (if significantly correlated with the criteria) and BPE and BPG scores in Step 2.

Across Studies 1 and 2, these analyses showed that BPE and BPG together accounted for significant amounts of variance in the criteria ($\Delta R^2_s = .03-.09$, $p_s < .05$) above and beyond attributional complexity, just-world beliefs, and pessimism. BPE uniquely predicted more punitive and aggressive criminal attitudes: greater support for the death penalty

($\beta_s > .25$), less support for criminal rehabilitation ($\beta_s > -.14$), and greater jail sentences for stealing ($\beta_s > .14$) and assault ($\beta_s > .27$) crimes. Concurrently, BPG also uniquely predicted less punitive and more helpful criminal attitudes: that is, less support for the death penalty ($\beta_s = -.18$), a greater support for criminal rehabilitation ($\beta_s > .21$), and—in Study 1—less harsh jail sentences for stealing crimes ($\beta = -.19$).

Discussion

The results from Studies 1 and 2 converged to indicate that BPE and BPG are reliable psychological constructs. Both the BPE and BPG scales exhibited excellent reliability ($\alpha_s > .88$), which supports Baumeister's (1999) theory that these are unidimensional constructs. Second, as predicted, across both the studies BPE and BPG were related to, but not redundant with, other theoretically relevant attributional variables: People scoring higher in BPE were less attributionally complex, reported greater just-world beliefs, and were more pessimistic; meanwhile, people scoring higher in BPG were more attributionally complex and less pessimistic. Furthermore, BPE and BPG uniquely predicted aggression and prosociality in hypothesized ways above and beyond the other attributional variables: People scoring higher in BPE were more supportive of the death penalty and less supportive of criminal rehabilitation, while those scoring higher in BPG were less supportive of the death penalty and more supportive of criminal rehabilitation.

Study 3

The purpose of Study 3 was to assess the stability of BPE and BPG scale scores. A subgroup of participants from Study 2 (who initially completed the BPE and BPG scale items between August 25 to September 12, 2011) completed the

final BPE and BPG measures again roughly 2 months later (between November 1 and November 17, 2011).

Method

Participants and procedure. In total, 57 general psychology students completed the initial and second administration of the BPE and BPG scales (see Table 1 for descriptives).

Results and Discussion

First, the internal consistency of the scales was excellent in the initial and second administrations: for BPE, α s = .88 and .92, respectively; for BPG, α s = .91 and .93, respectively. Second, BPE (test–retest $r = .63$) and BPG (test–retest $r = .78$) scores exhibited good stability for attitudinal constructs. Finally, as in Studies 1 and 2, BPE and BPG were not intercorrelated in either administration (r s = .01 and .14, p s < .28, respectively). Thus, BPE and BPG scores exhibited good stability over a period of roughly 2 months and replicated their independence.

Study 4

In Study 4, we examined the relationships between BPE, BPG, sociopolitical ideology, and relevant foreign policy positions. Various sociopolitical perceptions and beliefs appear to justify intergroup aggression and suppress intergroup prosociality (Crandall & Eshleman, 2003). These include greater perceptions of a dangerous, competitive, or vile world (Duckitt, 2001; Stankov, Saucier, & Knežević, 2010); greater levels of social dominance orientation (SDO, the tendency to endorse power hierarchies and group-based dominance to maintain those hierarchies; Pratto et al., 1994) and right-wing authoritarianism (RWA, the tendency to endorse traditional values, submission to authority, and aggression to protect those values and authority; Altemeyer, 1998); and greater levels of extremist-militant thinking (i.e., greater proviolent solutions to solve world problems; Stankov et al., 2010).

Those scoring higher in BPE would likely endorse some of the same types of sociopolitical perceptions and beliefs (e.g., would likely see the world as a more vile and dangerous place, more greatly support group-based dominance, and more greatly support proviolent solutions to solve intergroup relations) to help bolster their rationalizations for a greater intergroup aggression and less intergroup prosociality. Meanwhile, given BPG's emphasis on selfless, nonviolent, and impartial prosociality, people scoring higher in BPG should more greatly oppose such aggressive sociopolitical perceptions and beliefs (especially those regarding using violence to solve intergroup problems) and be more likely to support nonviolent intergroup strategies (e.g., diplomacy).

As for variables that suppress aggression (Whitley & Kite, 2006) and spur intergroup prosociality (Davis, 1983),

because of BPG's emphasis on selfless, indiscriminate helping, people scoring higher in BPG are likely higher in perspective taking and empathic concern. People scoring higher in BPE likely experience empathy, but probably in specific cases (e.g., when a "good and innocent" ingroup member needs help; cf. Saroglou, 2006); thus, we do not predict a consistent relationship between BPE and empathy.

The measures of intergroup aggression and prosociality focused on attitudes toward foreign policy issues (attitudes toward U.S. militarism, torture, diplomacy/peacemaking, and humanitarian wars, as well as measures of prejudice toward Muslims and Iranians). We predicted that higher BPE would be related to greater support for more aggressive and less diplomatic foreign policy stances, whereas higher BPG would be related to support for more diplomatic and less aggressive policy stances.

Method

Participants and procedure. Participants completed the following materials online (via Sona Systems) to partially fulfill a course requirement (see Table 1 for demographics).

Materials. Unless noted, participants responded to items on a 1 (*disagree very strongly*) to 9 (*agree very strongly*) Likert-type scale, and all the 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 (7 items; $\alpha = .82$); perspective taking (7 items; $\alpha = .76$).

Perception of dangerous and competitive worldviews. Participants completed Duckitt's (2001) perceptions of a dangerous-world (11 items; $\alpha = .74$) and competitive-jungle world (13 items; $\alpha = .83$) measures.

SDO. Participants completed Jost and Thompson's (2000) revised ("balanced") version of Pratto et al.'s (1994) Social Dominance Orientation scale. Eight items assess each of the SDO's two components: opposition to equality ($\alpha = .79$) and group-based dominance ($\alpha = .82$). 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.⁵

Militant-extremist attitudes. Participants completed the Proviolence (10 items; $\alpha = .85$) and Perception of a Vile World (6 items; $\alpha = .85$) subscales (Stankov et al., 2010).

Support for militarism. Participants completed two measures of support for military action assessing either provoked or preemptive/unbridled aggression. First, they rated the extent to which they agreed with using armed force against Iran given 11 different scenarios of provocation (Vail & Motyl, 2010; $\alpha = .89$). Second, they completed a more general nine-item measure assessing support for extreme/preemptive military force by the United States against other countries (Weise et al., 2008; $\alpha = .88$).

Prejudice. Participants rated how they felt toward Muslims and Iranians on three positive (e.g., warm and friendly, positive, good) and three negative (e.g., cold and distant, negative, bad) affective descriptors (e.g., Webster, Burns, Pickering, & Saucier, in press; Whitley, 1999). The scores on the positively worded items were reverse-scored and then averaged together with the scores on the negatively worded items to create one affective prejudice mean score (α s = .82 and .84, respectively). Prejudice toward Muslims and Iranians correlated at .86, so we formed a composite variable of these two variables.

Support for torture. Participants completed the Attitudes Toward Torture Scale (Crandall, Eidelman, Skitka, & Morgan, 2009), composed of seven items ($\alpha = .88$).

Support for peacemaking/diplomacy. Participants completed Vail and Motyl's (2010) 12-item Support for Diplomacy Scale ($\alpha = .87$).

Support for humanitarian wars. Participants rated their agreement with six items about engaging in humanitarian war (see International Committee of the Red Cross, 1949; Pratto et al., 1994; $\alpha = .92$).

Results and Discussion

Correlations with BPE and BPG. First, as in our previous studies, BPE and BPG were not significantly correlated ($r = .06$, $p = .50$; see Table 6). More importantly, higher BPE related to greater perceptions of a dangerous world, SDO, proviolence, perceptions of a vile world, provoked militarily aggression, preemptive military aggression, prejudice toward Muslims and Iranians, and support for torture; concurrently, greater BPE did not relate to support for more peaceful/diplomatic foreign policies (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, proviolence, and support for torture.

Intriguingly, BPG also correlated with greater support for provoked military aggression (i.e., military action in response to Iranian provocation). Exploratory factor analysis on the provoked military aggression measure indicated that the measure could be separated into two smaller subscales: first,

whether participants would approve of military aggression by the United States against Iran if Iran directly threatened the United States (six items, $\alpha = .91$; for example, "If Iran threatens to attack the United States"); and second, approval of the U.S. military aggression against Iran if Iran threatened its neighboring countries (2 items, $\alpha = .64$; for example, "If Iran threatens to attack one of its neighboring countries"). We found that greater BPE and BPG correlated with greater approved provoked aggression when the United States was directly threatened (r s = .22 and .40, p s < .01, respectively); however, higher BPG ($r = .25$, $p < .01$)—but not the higher BPE ($r = .16$, $p = .07$)—was related to sanctioned aggression when neighboring countries were attacked.

Regression analyses predicting 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 foreign policy variables (support for provoked militarism and preemptive militarism, prejudice toward Muslims and Iranians, support for torture, support for diplomacy, and support for humanitarian wars.) after controlling for any other correlated predictors (e.g., empathic concern, SDO). Thus, in step 1, any significant correlates of the criterion were entered (all correlates were theoretically consistent with the past research). In step 2, BPE and BPG scale scores were entered (if the BPE and/or BPG scales significantly correlated with the criterion). Please note that the high correlation between SDO and proviolence produced multicollinearity (Variance Inflation Factor > 3.0) and problems with suppression (reversing signs of other predictors); thus, when SDO and proviolence predicted the criterion, the variable that correlated most highly with the criterion was entered.

These analyses showed that BPE and BPG predicted several of the criterion above and beyond the other predictors (ΔR^2 s = .04 to .21). Higher BPG ($\beta = .41$, $p < .001$) and BPE ($\beta = .16$, $p = .038$) uniquely predicted provoked aggression, such that people higher in BPG or BPE supported aggression toward Iran when provoked. BPE ($\beta = .35$, $p < .001$) also uniquely predicted preemptive aggression, such that people higher in BPE more greatly supported preemptive aggression. It ($\beta = .16$, $p = .036$) also uniquely predicted support for torture, such that people higher in BPE more greatly supported torture techniques. Finally, BPG ($\beta = .33$, $p = .001$) scores uniquely and positively predicted support for humanitarian wars, such that people higher in BPG supported a more humanitarian approach to intergroup conflicts.

Preference for aggressive or peaceful foreign policies. We thought that it would be reasonable to explore actual preferences for aggressive (vs. peaceful) intergroup strategies. We created two composite mean scores of the aggressive (provoked military action, preemptive military action, anti-Muslim/Iran prejudice, and torture; $\alpha = .70$) and diplomatic/peaceful (peacemaking/diplomacy and humanitarian wars; $\alpha = .75$) foreign policy variables. Then, we created a

Table 6. Descriptives and Intercorrelations for Variables of Interest (Study 4).

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Belief in pure evil	—														
2. Belief in pure good	.10	—													
3. Participant sex	-.05	.11	—												
4. Empathic concern	-.02	.55	.34	—											
5. Perspective taking	-.02	.36	.10	.54	—										
6. Dangerous world	.43	.06	.08	.20	-.07	—									
7. Competitive world	.13	-.57	-.35	-.61	-.37	-.09	—								
8. Social dominance	.18	-.58	-.25	-.51	-.25	-.05	.61	—							
9. Provioleence	.27	-.56	-.32	-.57	-.34	-.01	.59	.76	—						
10. Vile world	.37	-.11	-.10	-.03	-.13	.50	.20	.24	.25	—					
11. Provoked aggression	.28	.32	-.07	.12	.05	.16	.00	-.02	-.01	.11	—				
12. Preempt aggression	.42	-.10	-.19	-.22	-.05	.18	.39	.39	.45	.29	.51	—			
13. Prejudice	.18	-.10	-.15	-.19	-.26	.15	.25	.34	.27	.12	.30	.30	—		
14. Support for torture	.25	-.25	-.42	-.41	-.20	.04	.53	.43	.51	.16	.28	.52	.22	—	
15. Support for diplomacy	-.05	.40	.24	.44	.25	.14	-.50	-.52	-.49	.03	-.03	-.34	-.31	-.44	—
16. Humanitarian war	.10	.50	.23	.50	.21	.16	-.49	-.51	-.47	.04	.23	-.19	-.12	-.30	.63

Note. Correlations significant at $p < .05$ ($r_s \geq |.18|$) are bolded. Scores ranged from 1 to 9, except for BPE and BPG scores, which ranged from 1 to 7. Higher scores indicated greater levels of the construct. Sex coded as 0 = "male," 1 = "female." Correlations with BPE and BPG are highlighted for readability.

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 scoring higher in BPE preferred more aggressive solutions, $r = .21$, $p < .01$, while people scoring 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 the support for peaceful/diplomatic foreign policies.

Thus, overall, Study 4 results fit our overarching hypotheses that people scoring higher in BPE prefer more aggressive stances in foreign relations, while those scoring higher in BPG would advocate more prosocial stances.

Study 5

Study 5 assessed the relationships between BPE/BPG, religiosity, and attitudes toward domestic social policies. 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 personifications of good and evil (Baumeister, 1999; Russell, 1977). For example, in Christian thought, the general notion is that God is all good and powerful and will eventually crush the forces of evil, personified by Satan or the Devil (Russell, 1977).

In Study 5, we focused on devout Christian beliefs and practices given the prevalence of Christianity in the United States (78.5% of Americans identified as "Christian" in a 2004 Pew poll; see <http://religions.pewforum.org/affiliations>). Given that Christianity highlights a perpetual battle with evil, we reasoned that more devout Christian beliefs and practices would be related to greater levels of BPE. Meanwhile, more devout Christian beliefs and practices may also be related to greater levels of BPG as well, especially given religious norms about helping others (cf. Saroglou, 2006). Believing in BPG may also be psychologically comforting to religious adherents—that is, it is likely comforting to believe that there is pure good in this world to battle pure evil. Furthermore, Christian devotees likely see many religious figureheads and saints (including God and Jesus) as purely good people as well.

To measure prosocial intentions, we focused on support for disadvantaged groups in the American society, that is, on various domestic social policy issues, including proracial policies designed to help equalize opportunities between social groups (e.g., affirmative action) and broader social policies that use government or private assistance to help individuals meet physical and psychological needs (e.g., homeless shelters, psychological hospitals, taxing the rich, early education programs). We reasoned that people higher in BPG should display indiscriminate prosociality (support for proracial and social programs in general). People higher in BPE would likely oppose such programs because the programs target perceived criminal (e.g., drug addicts may be perceived as breaking the law because they are addicted to illegal drugs) or social (e.g., homeless people begging) deviants.

Given the nature of the variables in Study 5, we also included measures of anti-Black racism (which we expected to positively correlate with BPE given their expected opposition to such prosocial social policies) and humanitarian–egalitarian attitudes (which should positively correlate with BPG, but not likely correlate with BPE given the nonsignificant correlations of the prosocial variables in Study 4).

Method

Participants and procedure. Participants completed the following materials online (via Sona Systems) to partially fulfill a course requirement (see Table 1 for demographics).

Materials. Unless noted, the participants responded to items on a 1 (*disagree very strongly*) to 9 (*agree very strongly*) Likert-type scale, and all the measures were scored as the average response per item with higher mean values reflecting higher levels of the construct of interest.

Frequency of religious behavior. Participants self-reported how often they attend religious services, pray, and volunteer for religious and nonsecular organizations on the same response scale (1 = *never* to 8 = *more than once a week*). Frequencies of religious behavior (religious services, praying, religious volunteering) highly intercorrelated ($r_s = .43$ to $.70$) and formed a reliable composite ($\alpha = .80$), thereby leaving reports of secular volunteering as its own variable.

Fundamentalism. Participants completed Altemeyer and Hunsberger's (2004) "short-form" (12 items; $\alpha = .92$) measure of religious fundamentalism (strongly adhering to the "literal" interpretation of the Bible).

Christian orthodoxy. Participants completed Hunsberger's (1989) Christian Orthodoxy Scale–Short Form (6 items, $\alpha = .93$), which measures belief in basic Christian principles (e.g., the divinity of the Christ).

Divine power. Participants completed Stankov et al.'s (2010) eight-item Divine Power Scale ($\alpha = .84$), which generally assesses belief in religious redemption and salvation.

Functional religious beliefs. Participants completed the internal/intrinsic (adhering to religious dogma for intrinsic rewards, such as relief, comfort, and protection from the vicissitudes of life; nine items, $\alpha = .94$), external/extrinsic (adhering to religious dogma for the social or extrinsic benefits; 11 items, $\alpha = .83$), and quest religiosity scales (religion as a lifelong pursuit of an eternal truth; 12 items, $\alpha = .81$; see Batson, 1976; Batson & Ventis, 1982).

Christian devoutness. The measures of religious behaviors, religious fundamentalism, divine power, Christian orthodoxy, and intrinsic religiosity listed above were all highly

intercorrelated (r_s ranged from $.61$ to $.81$). Thus, we formed a very reliable composite of these religiosity variables ($\alpha = .93$), henceforth referred to as Christian devoutness.⁶

Humanitarianism–egalitarianism. Participants completed Katz and Hass's (1988) 10-item Humanitarianism–Egalitarianism Scale ($\alpha = .88$), which assesses the general belief that everyone deserves to be treated humanely and fairly.

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 five items addressing issues related to housing, busing, jobs, and education ($\alpha = .85$).

Contemporary racism. Given that Study 2 assessed support for racial policy, we also measured the participants' level of 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 RAS scores were reliable and predicted discriminatory behavior above other well-known measures of subtle or contemporary racism (Saucier & Miller, 2003).

Support for social programs. Participants completed an adapted version of Pratto et al.'s (1994) support for Social Programs Scale. Specifically, the participants rated their support for 17 different social policies or programs designed to munificently benefit the public, especially the poor and disadvantaged (e.g., government sponsored health care, low income housing; $\alpha = .88$).

Results and Discussion

Correlations with BPE and BPG. First, BPE and BPG were again uncorrelated ($r = .05$, $p = .59$; see Table 7). Interestingly, BPG—but not BPE—correlated with religiosity. Participants scoring higher in Christian devoutness (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 (but not BPE). Perhaps BPE and religiosity were not correlated because organized religions may be downplaying the role of battling evil over the past century. Obtaining a more evangelical sample (in or outside the United States)—one that highlights battling evil more—may also produce stronger relationships between BPE and religiosity (our sample scored nonsignificantly different from the midpoint of the scale on fundamentalism). Regardless, we aimed to scrub any religious content from the BPE and BPG scales, and the pattern of correlations

Table 7. Descriptives and Intercorrelations for Variables of Interest (Study 5).

Variables	1	2	3	4	5	6	7	8	9	10	11
Belief in pure evil	—										
Belief in pure good	.05	—									
Participant sex	-.13	.06	—								
Secular volunteerism	-.01	.28	.16	—							
Christian devoutness	.05	.44	-.04	.33	—						
Extrinsic religiosity	.06	-.06	-.03	.08	-.13	—					
Quest religiosity	-.16	-.04	.09	.12	-.26	.33	—				
Humanitarianism–Egalitarianism	-.18	.38	.12	.10	.12	-.04	.15	—			
Supportive racial policies	-.29	.16	.14	-.01	-.07	-.03	.13	.59	—		
Racial Attitude Scale (RAS)	.29	.09	-.07	.12	.09	.00	.02	-.10	-.15	—	
Support social programs	-.30	.09	.26	-.02	-.23	.05	.23	.58	.29	-.24	—
Support needy children	-.19	.27	.11	.00	-.09	-.05	.14	.56	.21	-.17	.77

Note. Correlations significant at $p < .05$ ($r_s \geq |.20|$) 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." Correlations with BPE and BPG are highlighted for readability.

support that BPE and BPG can be differentiated from religious beliefs.

Furthermore, BPG correlated positively with humanitarian–egalitarian beliefs, as predicted. However, BPG did not correlate with the support for social programs, which did not align with our predictions. We reviewed the correlations between BPG and the individual social program items. 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 health care for children in low-income households." For exploratory reasons, we created a composite variable of these two items ($\alpha = .74$). However, hierarchical regression analyses indicated that BPG did not uniquely predict support for social programs benefiting children above and beyond other predictors ($\Delta R^2 = .011$, $p = .21$). Meanwhile, people scoring higher in BPE showed a consistent antisocial pattern: Such individuals reported more opposition to proracial policies and social programs, while concurrently reporting more racial prejudice via the RAS. Hierarchical regression analyses also showed that BPE ($\beta_s = -.23$, $-.22$, and $.28$, $p_s < .005$, respectively) uniquely predicted opposition to proracial policies, opposition to social programs, and racism after controlling for other predictors (ΔR^2 s = $.049$, $.042$, and $.075$, $p_s < .005$, respectively).

In sum, despite people scoring higher on volunteerism and humanitarianism–egalitarianism, people scoring higher in BPG exhibited "limited prosociality" (cf. Saroglou, 2006); such individuals only supported policies aimed to help needy children, probably the most helpless victims (i.e., those who cannot fend for themselves) mentioned in the social program measure. However, BPG did not uniquely predict support for such policies after controlling for other predictors. Meanwhile, people higher in BPE exhibited a more aggressive pattern in their responses: Such individuals reported more racism and opposed proracial and other social

programs. Overall, Study 5 adds support to our general predictions that BPE is associated with greater aggressions and less prosociality in intergroup relations, while (to a lesser extent) BPG is associated with less aggression and more prosociality, thereby demonstrating convergence, but not redundancy, with variables known to justify/suppress aggression or helping.

General Discussion

Five studies demonstrated that individuals' BPE and in BPG are valid and important psychological constructs. First, the BPE and BPG scales exhibited high reliability across all the studies (α s ranged from $.89$ to $.95$). Such high and consistent reliabilities evidenced that BPE's and BPG's different component beliefs successfully coalesce into their respective unitary constructs, as Baumeister (1999) theorized. Second, the studies demonstrated that BPE and BPG are related to aggressive and prosocial attitudes, orientations, and responses in hypothesized ways (which concurrently helped demonstrate convergent and discriminant validity for the scales).

People scoring higher in BPE consistently scored higher on perceptions and attitudes that foster greater aggressive and less prosocial responding (e.g., lower perceptions of a competitive-jungle world, SDO); meanwhile people scoring higher in BPG in large part opposed attitudes that foster greater aggressive and less prosocial responding (e.g., lower perceptions of a competitive-jungle world, SDO). Moreover, people scoring higher in BPE consistently scored higher on 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 scoring higher in BPG scored lower on measures of aggression (e.g., support for torture) and higher in measures

of prosociality (e.g., greater support for peacemaking, humanitarian wars, programs benefiting needy children). However, the patterns indicate that BPE is more greatly tied to aggression, while BPG seems related to aggression and prosociality (see Krueger et al., 2001).

At first glance, then, people scoring higher in BPG may come across as principally pacifistic given (a) their strong opposition to proviolence, SDO, competitive-jungle world beliefs, and preemptive military force and (b) their strong support for empathy, peacemaking, and humanitarianism. However, people scoring higher in BPG showed no greater or lesser tendency to endorse many aggression variables and actually favored military aggression when the United States is provoked by Iran. Thus, it appears that for people scoring 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 if the United States would aggressively react, people scoring higher in BPG would support humanitarian ideals in armed conflicts.

Meanwhile, people scoring higher in BPE consistently favor aggression to solve intergroup problems, from crime to war; however, this does not mean that they necessarily discount more peaceful routes to solving problems (e.g., BPE did not significantly correlate with support for peacemaking). Perhaps people scoring higher in BPE are more proactive in applying aggression partly because of their greater perceptions of a dangerous and vile world—a policy of “better safe than sorry.” Consequently, people scoring higher in BPE may also be more reluctant to forgive and reconcile with people who harmed them or others close to them. Thus, people higher in BPE may have to be pressured (e.g., by allies) to participate in mediation, on an intergroup and interpersonal level (see Gobodo-Madikizela, 2002).

Regardless, we found these effects despite nonsignificant correlations between BPE and BPG. It is likely that people scoring higher in BPE and BPG want to better the world—that is, they have good intentions—however, they differ on how to create a better world. People higher in BPE supported more aggressive solutions, while people higher in BPG believed that rehabilitation and diplomacy are better routes. Ultimately, BPG and BPE are different constructs as evidenced by their lack of relationship and by their differential relationships to aggression and prosociality.

We emphasize that we are in no way labeling people who believe in pure evil as actually evil or labeling people who believe in pure good as actually good. Again, our focus was on how perceptions of pure evil and pure good relate to various operational definitions of aggression and prosociality, not to render subjective judgments about our participants. Regardless, it would be interesting to study the effects of belief in pure evil and belief in pure good on one's perceived proclivity to engage in evildoing or prosociality.

Future Research Prospects

First, it is important to assess how BPE and BPG differentially relate to aggression and prosociality in an experimental context (especially given the limited prosociality demonstrated by people lower in BPG in Study 5). Preliminary research indicates that imbuing the perpetrators of harm with evil characteristics (either by associating the perpetrator with evil symbols or giving the perpetrator evil mannerisms) increases aggressive reactions toward perpetrators (Burris & Rempel, 2011; van Prooijen & van de Veer, 2010). However, these studies did not examine how individual differences interacted with these experimental conditions to predict such reactions toward criminals. It would also be prudent to assess how BPE and BPG predict reactions toward do-gooders who exhibit (vs. not exhibit) purely good characteristics (on which we are currently working). Experimentally manipulating other perpetrator and do-gooder characteristics (e.g., changing the race and sex of the targets in-text or via pictures, having the perpetrator apologize or not apologize for his actions) would further test the contribution of BPE and BPG across different experimental contexts as well as augment the 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).

Future research should assess whether people's levels of BPE and BPG change depending on the situational context. Burris and Rempel (2011) increased participants' levels of BPE by explicitly priming evil symbols. Thus, we suggest that similar studies investigate whether priming well-known “purely evil” and “purely good” nonfictional (e.g., Adolph Hitler and Mother Theresa, respectively) or 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 levels of aggression and prosociality. Such studies could not only demonstrate that situational constraints can affect levels of BPE and BPG (and consequently alter aggressiveness and prosociality) but also help show how societies help develop, transmit, and maintain beliefs about good and evil (see Hesse & Mack, 1991). Regardless, given the novelty of BPE and BPG, we (and hopefully other researchers) will no doubt refine the theoretical framework underlying these constructs as more research is conducted.

Limitations

Of course the studies herein are inherently limited by several factors. First, we assume that BPE and BPG are causal factors that influence aggression and prosociality; however, the current studies do not substantiate a causal relationship (but the studies examining how situational factors may affect BPE and BPG levels could offer more substantive evidence

in the future). Second, these studies are limited in their generalizability beyond a student sample and self-report measures. Furthermore, generalizability is also limited by location; the samples from the current studies were all drawn from one Midwestern university, which is located relatively close (<20 miles) to a large military base. Students or students' friends/family may have served or be actively serving in the military. Midwestern and military culture thus may have helped explain some studies' results (e.g., the positive relationship between BPG and support for military action when provoked in Study 4 may have been partly explained by participants' associations with military culture). Accordingly, it would be interesting to assess the levels and effects of BPE and BPG in other cultures, especially given the culture of honor (how threats to reputation spur aggression; Nisbett & Cohen, 1996) that is so prevalent in the Southern United States and other parts of the world.

Concluding Remarks

Does "pure evil" or "pure good" exist? The current studies do not specifically answer (and are not concerned about answering) this question. Rather, these studies 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 novel systematic examination of the nature, measurement, and correlates of individuals' BPE and BPG affirmatively answer both of these questions. We can reliably measure people's beliefs about good and evil and our data show a consistent pattern of effects: People scoring higher in BPE endorse perceptions and attitudes that help rationalize greater aggressive behavior and are more willing to act more aggressively, while people scoring higher in BPG endorse perceptions and attitudes that help promote prosocial behavior and also are more willing to act more prosocially. Ultimately, some people believe that there are "angels" and "demons" in this world, and such beliefs do meaningfully impact people's prosocial and aggressive orientations toward others.

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Notes

1. In this paper, the term *evil* used alone refers to this definition. Evildoer refers to a person who has engaged in evil.
2. Following this logic, the word *evil* as an adjective is searched more often than "evil" as a noun via Merriam-Webster online searches (<http://www.merriam-webster.com/dictionary/evil>).
3. 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.
4. One may ponder why BPE and BPG showed opposite correlations with criteria even though BPE and BPG are uncorrelated. Although it seems rare, this is statistically and theoretically possible. For example, even though right-wing authoritarianism and social dominance orientation are sometimes not significantly correlated, their positive correlations with generalized intergroup bias appear to remain consistent (e.g., Duckitt & Sibley, 2007).
5. Participants also completed Funke's (2005) 12-item Right-Wing Authoritarianism (RWA) scale, which assesses each of RWA's three components (Aggression, Conventionalism, and Submission to Authority) using two protrait and two contrait items. However, most of the RWA subscales in the current sample did not exhibit even close to acceptable internal consistency (α s = .16, .52, and .13 for the Aggression, Conventionalism, and Submission scales, respectively). Due to the extremely low and suspicious reliabilities for the subscales, we lamentably did not conduct any analyses using RWA scores.
6. One may reason that it would be prudent to only include those participants who identified as "Christian" in the final analyses. However, self-identification as a Christian does not completely overlap with religious behaviors, content, or functionality; indeed, we found sufficient variation in the continuous religiosity variables but not in the participants' categorical religious identification. Thus, we included all participants in the final analyses.

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