

Tipping the Scales of Justice: The Influence of Victimization on Belief in a Just World

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Abstract Previous research has suggested that people have a need to believe in a just world in order to function adaptively, even when negative events occur. However, existing work has not examined how different types of negative events may differentially influence the degree to which people believe the world is just. Drawing data from two waves of a large-scale, nationally representative longitudinal study (Americans' Changing Lives), we propose that two primary types of injustices—major injustices and threshold injustices—should affect belief in a just world (BJW) differently. Major injustices include traumatic events that are overwhelmingly intense and severe (i.e., experiencing the death of a child); threshold injustices are traumatic events that, while difficult and impactful, are less severe (i.e., being attacked, robbed, or burglarized). We expected that major injustices would be associated with higher BJW, whereas threshold injustices would be associated with lower BJW. Results largely confirmed our hypothesized effects both within the waves of data as well as across waves. Implications for BJW theory and the experience of different types of victimization are discussed.

Keywords Belief in a just world · Victimization · Life events · Threshold injustice · Major injustice · Severity · Health · Coping

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Introduction

Melvin J. Lerner's landmark book, *The Belief in a Just World: A Fundamental Delusion* (1980), proposes that people need to maintain the belief that the universe they live in operates in a predictably "just" manner. Lerner (1980) cogently argued that one of the primary functions of this belief is to adaptively function in social situations. To invest in long-term decisions (i.e., delay gratification) and to develop a moral compass that will direct a person toward pro-social behavior, that person must hold an implicit belief that hard work and self-discipline will meet with reward, while impulsive and injurious behaviors will meet with punishment (Hafer & Bègue, 2005; Hafer, Bègue, Choma, & Dempsey, 2005; Lerner, 1980, 2003). Lerner (1977) theorized that this heuristic of justice is based on a "personal contract," an individual's internalized conception of justice based on a lifetime of associating morality with rewards and punishments, as opposed to a "social contract," which refers to external social pressures to behave morally. However, despite the adaptive and functional benefits presupposed by a need to believe that the world is just, there are many ways in which this belief may be challenged. When people's *actual* experiences are inconsistent with their *expectations* of fairness in the world, they experience a threat to their belief in a just world (BJW) (Fasel & Spini, 2010; Hafer, 2000a; Hafer & Gosse, 2011; Haynes & Olson, 2006), which must be reconciled for the sake of one's BJW. That is, experiences of injustice necessitate alterations of the personal contract and consequently the individuals' BJW.

Some existing research has suggested that serious and/or persistent injustices sometimes alter BJW (Cubela Adoric, 2004; Cubela Adoric & Kwartuc, 2007; Dalbert, 2007; Fasel & Spini, 2010; Xie, Liu, & Gan, 2011). However, such research has not delineated potentially different outcomes for BJW based on the type of injustice vis-à-vis issues of severity. As Cubela Adoric (2004) has suggested, there may be a "subjectively critical point" of injustice severity, leading certain injustices to have little impact on one's just-world schema, versus a large impact (p. 262). It is also worth noting that BJW is of particular importance for victims of perceived injustice because of its functionality as a personal resource (Dzuka & Dalbert, 2002, 2007; Xie et al., 2011). That is, injustices do not simply stimulate the defense of BJW for its own sake but also constitute situations in which individuals are in greater need of positive worldviews and the benefits imbued by BJW. In the current work, we examine the ways in which experienced injustices of different degrees of severity may alter BJW endorsement. We delineate two types of injustices: "major injustices" and "threshold injustices". Major injustices include traumatic events that are overwhelmingly intense and severe (i.e., experiencing the death of a child); threshold injustices are traumatic events that, while difficult and impactful, are less severe (i.e., being attacked, robbed, or burglarized). We expect threshold injustices to be sufficient to challenge preconceived notions of justice and thus show reduced endorsement of BJW (in the current study, operationalized as having experienced a serious physical attack, robbery, or burglary). We expect major injustices to be overwhelmingly intense life events that provoke the need to

increase one's BJW for coping purposes (in the current study, operationalized as having experienced the death of their child). We provide supporting details for these arguments in the sections that follow.

BJW as a Mechanism for Coping with Threat

Research has shown that when people experience a threat to their BJW, they employ various coping mechanisms in an attempt to maintain it, because doing so allows them to remain confident in their own actions and their ability to control outcomes in their lives (Aguiar, Vala, Correia, & Pereira, 2008; Anderson, Kay, & Fitzsimons, 2010; Dalbert, 2009; Furnham, 2003; Jost et al., 2014; Lerner, 1980). Hafer and Gosse (2011) discuss numerous conscious, preconscious, and protective strategies for maintaining BJW, such as preventing injustice, compensating victims, avoiding or withdrawing from injustice, reinterpreting injustice to seem more fair, believing that eventually justice will manifest itself (ultimate justice), believing that injustices in other's lives are unrelated to one's own world (multiple world view), believing that one does not believe in justice and therefore does not need to defend the belief (penultimate justice), and demonizing unjust others as a way of dismissing injustice as an anomaly. The number of defense mechanisms people might employ to maintain BJW indicates its fundamentality, while the differing protective strategies for dealing with injustices indicate a wide range of potential responses (based on subjectively construed events relevant to BJW as a personal resource). For instance, people differ in the degree to which they personally expect justice in their own lives ("personal BJW"), and this has been shown to predict mental health (Dalbert, 1999; Dalbert & Stoerber, 2006; Dzuka & Dalbert, 2002, 2007; Xie et al., 2011), demonstrating that subjective differences in justice beliefs can have relevant implications. This study does not specifically measure personal BJW because the concept was developed after the data used in this study had been collected, but the variety of protective strategies like personal BJW do suggest that subjective differences in BJW can be meaningful.

The benefits of maintaining the belief that the world is just are clear. This belief has been negatively correlated with rule-breaking behavior (Donat, Umlauf, Dalbert, & Kamble, 2012) psychopathy (Fischer & Bolton Holz, 2010; Hafer et al., 2005; Otto, Boos, Dalbert, Schöps, & Hoyer, 2006) and positively correlated with feelings of social inclusion (Donat et al., 2012), feelings of control (Fischer & Bolton Holz, 2010), self-regulation (Laurin, Fitzsimons, & Kay, 2011), and goal-setting behavior (Hafer, 2000b; Hafer et al., 2005; Sutton & Winnard, 2007). Such findings support Lerner's (1980) theory that BJW serves an adaptive function that is important for one's mental health and overall well-being. The presence of individual differences in beliefs about justice suggests that life experiences may influence people's BJW.

Belief in a Just World as an Individual Difference

Although most people are motivated to believe in a just world (Hafer et al., 2005), they differ in the degree to which they believe the world is just. That is, BJW can

operate as a relatively stable individual difference variable (Dalbert, 2009; Dzuka & Dalbert, 2007). If an individual's conception of justice is based on a developed understanding of his/her environment, there is no reason to believe that all individuals perceive justice to be the same thing (Jost & Hunyady, 2002). Some individuals' ideal of a just world may be very different from the world in which they live, and consequently, they may report lower perceptions of justice in the world.

As an individual difference, greater endorsement of BJW can serve as a personal resource in the face of tragedy. Research has demonstrated that people with higher BJW seem to cope with traumatic life events in healthier ways (Dzuka & Dalbert, 2007; Janoff-Bulman & Wortman, 1977, Libow & Doty, 1979; Otto et al., 2006) such as reporting higher self-esteem and positive affect in the face of unemployment (Dzuka & Dalbert, 2002), finding positive aspects of tragedies that befall others (Anderson et al., 2010), and implicitly assuming that the socially disadvantaged are happier and more honest (Kay & Jost, 2003). High BJW has also been linked to internal locus of control (Witt, 1989), which is often considered a healthy disposition because it enables individuals to suit their behaviors to their goals (e.g., Britt, Cumbie, & Bell, 2013) and take responsibility for their actions (Gussak, 2009). Furthermore, people who endorse beliefs that the world is unjust tend to experience negative psychological states such as depressive symptoms, anxiety, and high levels of neuroticism (Lench & Chang, 2007). Given the benefits of maintaining the belief that the world is just, it is worthwhile to examine factors that may influence the degree to which people believe it to be so.

The Impact of Life Events

Previous work examining BJW as an individual difference has established correlations between high BJW and mental health, but little research has focused on how traumatic life events may provoke not only defensive reactions meant to protect BJW but a greater endorsement of BJW as a personal resource for those dealing with injustice, which is a focus of the current research. Because experimental approaches examining how experienced injustice might influence BJW would be ethically challenging to carry out (cf. Hafer & Bègue, 2005), establishing temporal sequence of changes in BJW has proven difficult. Furthermore, most of the existing examinations of how BJW may change in an individual predict only negative effects of injustices on BJW. For instance, Fasel and Spini (2010) found that people who had been directly affected by war and lived in unstable economic situations reported lower BJW, Dzuka and Dalbert (2007) found that teachers who reported being victimized by students reported lower personal BJW, and Xie et al. (2011) found a similar reduction in BJW for people who suffered losses of property and loved ones in the wake of an earthquake. Long-term unemployment among young people, coupled with negative experiences, can diminish BJW (Cubela Adoric, 2004), as can mobbing (severe, group-based bullying) at work (Cubela Adoric & Kvartuc, 2007), and the experience of sexist events for women (Fischer & Bolton Holz, 2010). In addition, Witt (1989) found that residents of urban areas were lower in BJW and theorized that for these individuals chance may play more of a role in day-to-day life than fairness, because

of the higher frequency and complexity of external influences such as crime, traffic, and competition for resources. Taken together, these findings suggest that people who live in environments that are less stable, less controllable, and that produce more negative experiences may report lower BJW (Dzuka & Dalbert, 2002, 2007; Fasel & Spini, 2010; Witt, 1989; Xie et al., 2011). Such studies often suggest that the protection of BJW should be particularly important for victims, but neglect to mention that this protection of BJW does not occur for its own sake. Rather, the current research proposes that victimization necessitates the alteration of beliefs about the world. Experiences of threshold injustices would lower ones' BJW, as they are relatively minor traumatic experiences, leading one to believe that the world is less just. However, major injustices, because of their distinct severity, necessitate an increase in BJW because not doing so would compromise victims' ability to function in everyday life.

Changes in BJW Based on Severity of Victimization

If experiences of injustice can differentially affect people's BJW, then the question becomes what intensity of perceived injustice is necessary for BJW to be conceptually rejected by a victimized individual, and what intensity of injustice is necessary for the individual to reaffirm BJW as a coping mechanism? What traumatic life events that meet or exceed the "subjectively critical point" (Cubela Adoric & Kvartuc, 2007, p. 262) of intensity strain BJW. Indeed, much previous research has indicated that relatively minor life events can be traumatic enough that subjects report lower BJW (e.g., experiencing bullying and sexist events, living in an urban environment) (Cubela Adoric & Kvartuc, 2007; Fischer & Bolton Holz, 2010; Witt, 1989). For instance, Harrison and Kinner (1998) found that even 6–12 months after the event, victims of armed robbery exhibited distress levels comparable to levels found in victims of serious physical injuries and mass shooting survivors, and Elklit (2002) found no significant differences in the stress reactions of victims of violent assault and victims of robbery, with the average respondent qualifying for acute stress disorder. Breslau et al. (1998) found that 20.9 % of victims of "assaultive violence" (e.g., rape, mugged/threatened with weapon, badly beaten up) experienced PTSD. Taken together, these findings suggest that more minor traumatic events such as experiencing an attack, robbery, or burglary may be considered threshold injustices, which could lower victims' BJW.

But extremely intense traumatic life events could require the individual to maintain the belief more adamantly as a way of coping with the event. The death of a child is widely considered one of the most severely traumatic life events an individual can experience (Cook, 1983; Murphy et al., 1999; Murphy, Chung, & Johnson, 2002) and can be considered to constitute a form of vicarious victimization for the bereft parent or parents (Rinear, 1988). Cook (1983) found that bereft parents felt the death of their child was "overwhelming in its intensity" (p. 47), which resulted in feelings of absence, painful associations during holidays, difficulty and jealousy when seeing other children, the solitude of inexpressible grief, and unanticipated reminders of the deceased child. An early investigation of relative stress found that the death of a spouse was the single most stress-provoking event

respondents reported experiencing (setting an arbitrary score of one hundred), while the death of a close family member ranked fifth (at 63) (whereas serious personal illness or injury ranked sixth at 53) (Holmes & Rahe, 1967). Furthermore, those who experienced the sudden, unexpected death of a loved one showed a 31.1 % chance of developing PTSD (Breslau et al., 1998). Thus, although robbery and physical attacks can certainly be intense traumatic experiences with the potential to destabilize BJW, the death of a child may be more persistent in its severity, driving bereft parents to view future injustices as comparatively insignificant, while maintaining BJW in general could prove important for enduring and coping.

Summary and Hypotheses

Previous research suggests that experiencing sufficient victimization may influence people's beliefs about the world, both threatening BJW and increasing its necessity as a personal coping resource. In the current research, we examined how two broad types of victimization (threshold injustices and major injustices) would influence people's BJW both concurrently and over time. We proposed two primary hypotheses. First, we hypothesized that individuals who have experienced threshold injustices (i.e., having been attacked or robbed) would show lower BJW and reduce their endorsement of BJW over time. Second, we hypothesized that individuals who experienced major injustices (i.e., the death of their own child) would show higher BJW and increase their endorsement of BJW over time.

Method

We utilized data from two waves of the Americans' Changing Lives Study (1986 and 1989), a longitudinal survey conducted between 1986 and 2013 that measures numerous social and psychological variables among Americans aged 24–96 years. These waves were chosen because participants' BJW was only assessed during these waves. The study, conducted by the Survey Research Center at the University of Michigan's Institute for Social Research and funded by the National Institute on Aging, is “the oldest ongoing nationally representative longitudinal survey of the role of a broad range of social, psychological, and behavioral factors” (Institute for Social Research, 2012, para. 1) and their influences on health. This dataset has been widely utilized in previous research (e.g., Herzog, House, & Morgan, 1991; House et al., 1990; Morgan, 1992; Umberson, 1993).

Participants

The Americans' Changing Lives Study purposely oversampled traditionally underrepresented groups (House, 2002). Specifically, they utilized a 2:1 sampling technique for elderly (60+ years old) and Black individuals living in the contiguous 48 states. The average age in the sample was 53.64 (range 26–96, $SD = 17.63$). Approximately 62.5 % of the sample was female, and 37.5 % were male.

Participants were primarily White/Caucasian (64.2 %) and Black/African-American (32.5 %); the remainder identified themselves as other races (3.3 %).

At Wave 1 the full sample included 3617 participants. Of them, 621 had lost a child (2996 had not). Of those who had lost a child, 85 had done so in the previous 3 years (3493 had not, 39 missing in original dataset). Also at Wave 1, 558 participants had been seriously physically attacked (3059 had not). Lastly at Wave 1, 334 participants had been robbed or burglarized in the past 3 years (3233 had not).

Wave 2 included 2867 participants (79.25 % participant retention from Wave 1). Of them, at Wave 2, 470 participants had had a child die (2397 had not). Of those who had lost a child at Wave 2, 69 had done so in the previous 3 years since Wave 1 (2773 had not). Also at Wave 2, 438 participants had been attacked within in their lifetime (2429 had not). Lastly, 295 participants had been robbed within the previous 3 years since Wave 1 (2572 had not).

Materials: Wave 1 (1986)

Victimization Items

During Wave 1, participants responded to a series of yes/no items about their victimization experiences in their lifetime or in the previous 3 years. Specifically, they reported if they (1) had “ever had a child who died? (including stillbirths but NOT miscarriages)”; (2) had a “child who died recently (last 3 years)”; (3) had “ever been the victim of a serious physical attack or assault AT ANY TIME IN YOUR LIFE?” (emphasis in original); and (4) had been “robbed or [had] your home burglarized IN THE LAST THREE YEARS?” (emphasis in original) (House, 2002). On the basis of severity, items 1 and 2 were defined as major injustices, and items 3 and 4 were defined as threshold injustices. Unfortunately, data were not collected with regard to whether participants had been robbed or burglarized at any point previously in their lives (as was the case for if they had a child die or if they had been attacked), so these questions were not included in our analyses.

Belief in a Just World

Likely due to the length of the Americans’ Changing Lives survey instrument, abbreviated versions of many scales were used, including BJW. Three items from existing research on BJW assessed participants’ endorsement of just-world beliefs. Examples of publications in which these items have been used are in parentheses after each item, including Rubin and Peplau (1975), which was a scale validation publication: “by and large, people deserve what they get” (Rubin & Peplau, 1975; Umberson, 1993), “people who meet with misfortune have often brought it on themselves” (Rubin & Peplau, 1975; Umberson, 1993), and “in the long run good people will be rewarded for the good things they have done” (Musick & Wilson, 1998; Umberson, 1993) (α for Wave 1 = .59). Participants completed these items on a four-point Likert-type scale from 1 (*strongly agree*) to 4 (*strongly disagree*).

Materials: Wave 2 (1989)

The same victimization items that were measured in Wave 1 were also used in Wave 2. We also utilized the same three items to measure BJW at Wave 2 (α for Wave 2 = .54).

Procedures

Changes in BJW were calculated by averaging participants' responses on the three BJW items; their BJW scores were compared in three scenarios. We expected effects both within the same time period of measurement (e.g., effects of injustices prior to Wave 1 on BJW at Wave 1, and injustices prior to Wave 2 on BJW at Wave 2) as well as across time periods (i.e., effects of injustices prior to Wave 1 on BJW at Wave 2).

Results

Influence of Death of a Child (Major Injustice) on BJW

As can be seen in Table 1, individuals who had either had children die in the previous 3 years or at any point in their lifetimes, compared to others who did not experience the death of a child, increased their BJW. For both of these variables, the death of a child prior to Wave 1 affected both Wave 1 BJW values as well as Wave 2 BJW measured 3 years later. This test was also significant for the influence of having a child die in their lifetime by Wave 2 on Wave 2 BJW. The test did not reach statistical significance ($p = .12$), although the means were in the same direction for the effect of having a child die in the previous 3 years before Wave 2 on Wave 2 BJW. Thus, the overall pattern of results supports the notion that individuals who experienced a major injustice increased their BJW as compared to those who did not experience such an injustice.

Influence of Being Attacked or Robbed (Threshold Injustice) on BJW

To examine how being attacked or robbed would influence BJW, we compared changes in BJW based on data collected at Wave 1 and Wave 2. First, with regard to *being attacked*, those who were attacked prior to Wave 1 reported lower BJW at Wave 2 than those who were not attacked prior to Wave 1. Similarly, those who were attacked prior to Wave 2 also reported lower BJW at Wave 2 than those who were not attacked. However, although the means were in the same direction as the anticipated effect, those who had been attacked prior to Wave 1 did not report a statistically significant drop in BJW at Wave 1 ($p = .50$).

Furthermore, those who *were robbed* prior to Wave 1 reported lower BJW at Wave 1 and lower BJW at Wave 2. However, those who reported being robbed prior to Wave 2 did not show the hypothesized drop in their BJW at Wave 2 ($p = .76$). Thus, keeping in mind the general trend of findings for those who were victimized

Table 1 The effect of Wave 1 and Wave 2 injustice type on BJW at Wave 1 and Wave 2

	Wave 1 BJW				Wave 2 BJW					
	Non-victim M (SD)	Victim M (SD)	df	F	η^2_p	Non-victim M (SD)	Victim M (SD)	df	F	η^2_p
<i>Wave 1 predictor (injustice type)</i>										
Child died (ever)	2.84 (0.66)	3.00 (0.66)	1,3597	30.80***	.008	2.81 (0.61)	2.96 (0.64)	1,2850	24.88***	.009
Child died (3 years)	2.86 (0.67)	3.07 (0.64)	1,3558	8.16**	.002	2.83 (0.62)	3.02 (0.73)	1,2825	7.24**	.003
Attacked (ever)	2.87 (0.66)	2.85 (0.69)	1,3597	0.46 (ns)	.000	2.85 (0.62)	2.75 (0.62)	1,2850	10.65**	.004
Robbed (3 years)	2.88 (0.66)	2.76 (0.69)	1,3597	11.38**	.003	2.84 (0.62)	2.76 (0.64)	1,2850	5.06 ^a	.002
<i>Wave 2 predictor (injustice type)</i>										
Child died (ever)						2.81 (0.61)	2.94 (0.64)	1,2850	15.73***	.005
Child died (3 years)						2.83 (0.62)	2.96 (0.69)	1,2850	2.36 (ns)	.001
Attacked (ever)						2.85 (0.62)	2.71 (0.61)	1,2850	13.20***	.005
Robbed (3 years)						2.84 (0.62)	2.82 (0.65)	1,2850	0.09 (ns)	.000

(ns) not statistically significant

* $p < .05$; ** $p < .01$; *** $p < .001$

^a Effect reduced to non-significance when controlling for family income, race, and gender ($F[4, 2847] = 1.96, p = .16, \eta^2_p = .001$)

by being attacked and being robbed, both of these threshold injustices appeared to reduce participants' BJW compared to individuals who had not experienced them.

Autoregressive Models

To further support our argument that victimization influences BJW, we also conducted autoregressive analyses. These ANCOVAs examine the effect of injustices on BJW at Wave 2, controlling for levels of BJW at Wave 1. Such analyses provide a conservative test of our hypothesis, given that BJW is treated as an individual difference variable, and as such, it should not be surprising that levels of an individual difference variable should be predictive of that same individual difference variable 3 years later.

As can be seen in Table 2, Wave 1 BJW was a strong predictor of Wave 2 BJW regardless of the type of victimization experienced ($F_s > 720$, $p_s < .001$). However, despite this fact, most of the victimization experiences were still significant predictors of BJW at Wave 2, controlling for Wave 1 BJW. Only two effects that were previously statistically significant were reduced to non-significance. These included the influence of having a child die within the past 3 years

Table 2 Autoregressive models of the Wave 2 injustice type on BJW, controlling for Wave 1 BJW

	Wave 2 BJW		<i>df</i>	<i>F</i>	η_p^2
	Non-victim <i>M</i> (SD)	Victim <i>M</i> (SD)			
<i>Wave 1 predictors (injustice type)</i>					
Wave 1 BJW			1,2839	724.48***	.203
Child died (ever)	2.81 (0.61)	2.96 (0.64)	1,2839	9.93**	.003
Wave 1 BJW			1,2814	721.44***	.204
Child died (3 years)	2.83 (0.62)	3.02 (0.73)	1,2814	2.72 (ns)	.001
Wave 1 BJW			1,2839	743.74***	.208
Attacked (ever)	2.85 (0.62)	2.75 (0.62)	1,2839	10.13**	.004
Wave 1 BJW			1,2839	737.89***	.206
Robbed (3 years)	2.84 (0.62)	2.76 (0.64)	1,2839	0.82 (ns)	.000
<i>Wave 2 predictors (injustice type)</i>					
Wave 1 BJW			1,2839	730.38***	.205
Child died (ever)	2.81 (0.61)	2.94 (0.64)	1,2839	5.04*	.002
Wave 1 BJW			1,2839	740.19***	.207
Child died (3 years)	2.83 (0.62)	2.96 (0.69)	1,2839	0.04 (ns)	.000
Wave 1 BJW			1,2839	732.63***	.205
Attacked (ever)	2.85 (0.62)	2.71 (0.61)	1,2839	4.78*	.002
Wave 1 BJW			1,2839	743.59***	.208
Robbed (3 years)	2.84 (0.62)	2.82 (0.65)	1,2839	0.48 (ns)	.000

(*ns*) not statistically significant

* $p < .05$; ** $p < .01$; *** $p < .001$

prior to Wave 1 on Wave 2 BJW, as well has the influence of being robbed in the past 3 years prior to Wave 1 on Wave 2 BJW. All other effects remained the same. Thus, the effects of the different types of victimization appear to influence BJW, above and beyond the effects of initial levels of BJW.

Analyses Controlling for the Influence of Income, Race, and Gender

Given the fact that numerous variables may affect how experiencing victimization could influence BJW, we conducted additional ANCOVAs for all of the effects reported above. Specifically, for both the traditional ANOVAs and the autoregressive ANCOVAs, we ran supplemental analyses in which we controlled for the effects of self-reported family income, race, and gender. With one exception for the traditional ANOVAs and one exception for the autoregressive ANCOVAs, including these three control variables did not influence the statistical significance of our effects. The exception for the traditional ANOVAs was for the effect of being robbed in the past 3 years at Wave 1 on BJW at Wave 2. Results of the ANCOVAs including the three control variables revealed that the effect of these controls (and particularly the effect of family income) reduced this effect to non-significance. The exception for the autoregressive ANCOVAs was for the effect of having a child die ever at Wave 2 on BJW at Wave 2. Thus, when examining these many tests in aggregate, it does not appear that income, race, and gender have an appreciable influence on BJW change based on the experience of victimization.

Discussion

The current research provides a nationally representative, cross-sectional, and longitudinal examination of the ways in which different types of victimization influence people's BJW. Relatively few studies have examined how real-life traumatic events may influence people's BJW. As many have noted, it has been difficult to detect effects of factors that may alter people's BJW (cf. Fasel & Spini, 2010); however, as the current findings suggest, remarkable circumstances such as victimization and trauma may in fact do so. In general, studies examining the effects of victimization and trauma on BJW have found that such experiences can decrease BJW (e.g., Cubela Adoric, 2004; Cubela Adoric & Kwartuc, 2007; Fasel & Spini, 2010; Xie et al., 2011). Our findings are in line with this previous research, but only for what we have characterized as threshold injustices, experiences typically considered traumatizing (i.e., being attacked, robbed, or burglarized) but not necessarily as severe as some other traumatic experiences. Threshold injustices were associated with lower BJW contemporaneously and over time. Perhaps more surprising is the evidence we have provided that the experience of major injustices or overwhelmingly intense life events that provoke the need to believe in a just world for coping reasons (i.e., experiencing the death of a child) were actually associated with an increase in victims' BJW, contemporaneously and over time.

Implications for BJW Theory and Types of Injustices

Although Lerner (1980) theorized that people's BJW was a "fundamental delusion" shared by anyone capable of functioning in society, he had also theorized that this belief was the result of a "personal contract" one develops through personal experiences and interpretations of justice (Lerner, 1977). That is, even though people are motivated to maintain and protect their BJW, significant life events may influence such beliefs, especially if these life events are traumatic. The current findings demonstrate that people who experience threshold injustices (i.e., being attacked, robbed, or burglarized) showed lower endorsement of BJW than non-victims, whereas people who suffer major injustices (i.e., the death of a child) showed greater endorsement of BJW. These findings suggest that not only are people's beliefs about justice in the world influenced by significant life events, but the degree and intensity of the injustice is also predictive of how it will influence justice beliefs.

The distinction between threshold and major injustices used in the current research may be an important contribution to understanding how negative events may influence people's BJW and view of the world more broadly. Previous research has shown mixed results with regard to how victimization may influence BJW. For example, some have found that victims do not alter their BJW (vs. non-victims) (Cubela Adoric & Kvartuc, 2007). Others have suggested that victimization does influence BJW, but that the influence depends on the duration of experiences of victimization (Cubela Adoric, 2004; Fasel & Spini, 2010), domain of victimization (Fasel & Spini, 2010), or the individual versus group versus societal basis of victimization (Ferguson, 2000). Certainly, each of these considerations may be important to understanding how victimization influences BJW; however, these previous analyses may more easily be explained by a distinction between threshold and major injustices. For example, major injustices may be indicative of victimizations perceived as enduring and persistent in their severity, prompting the aggrieved individual to adopt a world view that makes it easier to function while reducing hostile thoughts.

Major injustices could arouse a greater need for BJW and the benefits BJW can afford as a stress buffer and personal resource. That BJW can be particularly important for victims of traumatic experiences is often expressed or assumed by research into BJW reduction/retention (Dzuka & Dalbert, 2002, 2007; Xie et al., 2011), yet we know of no research, until now, which has demonstrated that traumatic experiences may result in greater endorsement by the aggrieved. Indeed, maintaining or strengthening BJW after such victimization experiences may help serve as a coping mechanism (cf. Fasel & Spini, 2010), potentially through such pathways as increased feelings of control (Fischer & Bolton Holz, 2010) and reduced likelihood for psychopathy (Fischer & Bolton Holz, 2010; Hafer et al., 2005; Otto et al., 2006). As previous research has indicated, cultivating high BJW can have a protective function against traumatic events and negative experiences (Fetchenhauer, Jacobs, & Belschak, 2005; Laurin et al., 2011; Otto et al., 2006).

BJW as an Individual Difference

Individual differences in BJW have been found to have a meaningful impact on individuals and their perceptions of others, perhaps particularly for individuals coping with trauma. High BJW has been found to help victims and people in unfortunate circumstances maintain positive attitudes (Dzuka, & Dalbert, 2002; Dzuka & Dalbert, 2007; Libow & Doty, 1979) and act as a buffer against depression, anxiety, social insecurity, hostility, and paranoid thinking (Otto et al., 2006). In addition to potentially serving coping and resilience functions, BJW has also been associated with belief in one's ability to control and deserve outcomes (Hafer et al., 2005; Witt, 1989) and has been negatively correlated with rule-breaking behavior and psychopathy (Donat et al., 2012; Fischer & Bolton Holz, 2010; Hafer et al., 2005; Otto et al., 2006). Interestingly, the boost in BJW demonstrated among participants who had a child die may be a key feature in the resilience of individuals who experience such traumatic experiences.

Limitations

We distinguished two broad classes of injustices, termed “threshold” and “major” injustices and found that they affect individuals' BJW differently. While threshold and major injustices affected respondents in the predicted ways, it should be noted that there are certainly other ways to classify victimization experiences (e.g., based on duration of time in which the effects occur, based on the cause attributed to the injustice). Our results are interpreted based on our theoretical conceptualization of victimization experiences, but this does not rule out other ways of explaining our effects. For example, it is possible that attributing one's victimization to a burglar, robber, or assailant may augment feelings of cynicism and embitterment that might result in reduced endorsement of BJW, while the absence of a culpable party may encourage acceptance of the injustice and thus its normalization. That intensity, severity, and relative permanence were greater influences on BJW, however, seems most plausible, but we hope that future research continues to examine the consequences of factors such as culpability and blame attributions. It is possible that meaningful individual difference variables (e.g., internal locus of control, see Witt, 1989) would alter peoples' responses to victimization experiences; as such, we encourage future research to examine these potential moderators.

Given that the current research is self-reported and does not include an experimental manipulation, we cannot make a strong affirmation of causality about the relationships between our variables. However, the inclusion of two measurement periods, 3 years apart, among a large sample of participants supports the notion that changes in victimization status may influence BJW. This causal direction of effects seems likely given the similarities in findings when examined contemporaneously (i.e., in measurements of victimization and BJW at Wave 1 and Wave 2) and over time (i.e., in measurements of victimization at Wave 1 and measurements of BJW at Wave 2). Of course, in studies which are not controlled experiments, it is impossible to rule out alternative causes for our effects, such as the influence of confounding variables. However, we were able to statistically control for the effects of

participants' family income, race, and gender. These variables seemed among those likely to influence the nature of our effects, but they had very little influence on our actual results.

Another limitation was the absence of items measuring personal as opposed to general BJW. Dalbert's (1999) exploration of the personal BJW or the belief that justice is pertinent in one's own life (as opposed to the lives of others in general) found that the personal BJW was distinct yet related to general BJW, more powerful in assessing subjective well-being and self-esteem, and is generally theorized to be more effective in predicting mental health (Dalbert & Stoeber, 2006; Dzuka & Dalbert, 2002, 2007; Xie et al., 2011). Though scales measuring this dimension of BJW had not been developed at the time that the Waves 1 and 2 of the Americans' Changing Lives Study was being conducted, others studies have found that general BJW is also an effective predictor of mental health (Fasel & Spini, 2010; Ritter, Benson, & Snyder, 1990).

Conclusion

Research has demonstrated broad positive and negative implications of high and low BJW, respectively. Much of the literature assessing post-traumatic changes in BJW stresses the importance of BJW for victims (Dzuka & Dalbert, 2002, 2007; Xie et al., 2011). The present study expands upon the idea that BJW is especially important for victims by examining the relationship between traumatic life events of differing severity and differences in BJW, finding that threshold injustices (i.e., assault, robbery, and burglary) were related to lower BJW, while major life events (i.e., the death of a child) were related to higher BJW. This distinction between threshold injustices and major injustices may help explain why some victims of some major injustices seem to cope more easily with later injustices (e.g., stress inoculation theory) (Andersen, Silver, Stewart, Koperwas, & Kirschbaum, 2013; Seery, Holman, & Silver, 2010), while victims of what might be considered threshold injustices are at greater risk of physical and mental symptoms later in life (Anda et al., 2006; Arias, 2004; Smith, Thornton, DeVellis, Earp, & Coker, 2002). With the distinction of threshold and major injustices in mind, future research should further examine alterations in BJW following major life events.

References

- Aguiar, P., Vala, J., Correia, I., & Pereira, C. (2008). Justice in our world and in that of others: Belief in a just world and reactions to victims. *Social Justice Research, 21*, 50–68. doi:10.1007/s11211-007-0059-3.
- Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C., Perry, B. D., et al. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archive of Psychiatry and Clinical Neuroscience, 256*, 174–186. doi:10.1007/s00406-005-0624-4.

- Andersen, J. P., Silver, R., Stewart, B., Koperwas, B., & Kirschbaum, C. (2013). Psychological and physiological responses following repeated peer death. *PLoS One*, *8*, 1–10. doi:[10.1371/journal.pone.0075881](https://doi.org/10.1371/journal.pone.0075881).
- Anderson, J. E., Kay, A. C., & Fitzsimons, G. M. (2010). In search of the silver lining: The justice motive fosters perceptions of benefits in the later lives of tragedy victims. *Psychological Science*, *21*, 1599–1604. doi:[10.1177/0956797610386620](https://doi.org/10.1177/0956797610386620).
- Arias, I. (2004). The legacy of child maltreatment: Long-term health consequences for women. *Journal of Women's Health*, *13*, 468–473. doi:[10.1089/1540999041280990](https://doi.org/10.1089/1540999041280990).
- Breslau, N., Kessler, R. C., Chilcoat, H. D., Schultz, L. R., Davis, G. C., & Andreski, P. (1998). Trauma and posttraumatic stress disorder in the community: The 1996 Detroit Area Survey of Trauma. *Archives of General Psychiatry*, *55*, 626–632. doi:[10.1093/jurban/jth138](https://doi.org/10.1093/jurban/jth138).
- Britt, S., Cumbie, J. A., & Bell, M. M. (2013). The influence of locus of control on student financial behavior. *College Student Journal*, *47*, 178–184.
- Cook, J. A. (1983). A death in the family: Parental bereavement in the first year. *Suicide and Life-Threatening Behavior*, *13*, 42–61. doi:[10.1111/j.1943-278X.1983.tb00004.x](https://doi.org/10.1111/j.1943-278X.1983.tb00004.x).
- Cubela Adoric, V. (2004). Belief in a just world and young adults' ways of coping with unemployment and the job search. In C. Dalbert & H. Sallay (Eds.), *The justice motive in adolescence and young adulthood: Origins and consequences* (pp. 189–214). London: Routledge.
- Cubela Adoric, V., & Kvartuc, T. (2007). Effects of mobbing on justice beliefs and adjustment. *European Psychologist*, *12*, 261–271. doi:[10.1027/1016-9040.12.4.261](https://doi.org/10.1027/1016-9040.12.4.261).
- Dalbert, C. (1999). The world is more just for me than generally: About the Personal Belief in a Just World Scale's validity. *Social Justice Research*, *12*, 79–98. doi:[10.1023/A:1022091609047](https://doi.org/10.1023/A:1022091609047).
- Dalbert, C. (2007). Dealing with strain at the workplace: A just world perspective. *European Psychologist*, *12*, 250–252. doi:[10.1027/1016-9040.12.4.250](https://doi.org/10.1027/1016-9040.12.4.250).
- Dalbert, C. (2009). Belief in a just world. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 288–297). New York: Guilford Publications.
- Dalbert, C., & Stoeber, J. (2006). The personal belief in a just world and domain-specific beliefs about justice at school and in the family: A longitudinal study with adolescents. *International Journal of Behavioral Development*, *30*, 200–207. doi:[10.1177/0165025406063638](https://doi.org/10.1177/0165025406063638).
- Donat, M., Umlauf, S., Dalbert, C., & Kamble, S. V. (2012). Belief in a just world, teacher justice, and bullying behavior. *Aggressive Behavior*, *38*, 185–193. doi:[10.1002/ab.21421](https://doi.org/10.1002/ab.21421).
- Dzuka, J., & Dalbert, C. (2002). Mental health and personality of Slovak unemployed adolescents: The impact of belief in a just world. *Journal of Applied Social Psychology*, *32*, 732–757. doi:[10.1111/j.1559-1816.2002.tb00240.x](https://doi.org/10.1111/j.1559-1816.2002.tb00240.x).
- Dzuka, J., & Dalbert, C. (2007). Student violence against teachers: Teachers' well-being and the belief in a just world. *European Psychologist*, *12*, 253–260. doi:[10.1027/1016-9040.12.4.253](https://doi.org/10.1027/1016-9040.12.4.253).
- Elklit, A. (2002). Acute stress disorder in victims of robbery and victims of assault. *Journal of Interpersonal Violence*, *17*, 872–887. doi:[10.1177/0886260502017008005](https://doi.org/10.1177/0886260502017008005).
- Fasel, R., & Spini, D. (2010). Effects of victimization on the belief in a just world in four ex-Yugoslavian countries. *Social Justice Research*, *23*, 17–36. doi:[10.1007/s11211-010-0111-6](https://doi.org/10.1007/s11211-010-0111-6).
- Ferguson, N. (2000). The impact of sectarian justice and the paramilitary ceasefires on adolescent just world beliefs in Northern Ireland. *The Irish Journal of Psychology*, *21*, 70–77. doi:[10.1080/03033910.2000.10558240](https://doi.org/10.1080/03033910.2000.10558240).
- Fetchenhauer, D., Jacobs, G., & Belschak, F. (2005). Belief in a just world, causal attributions, and adjustment to sexual violence. *Social Justice Research*, *18*, 25–42. doi:[10.1007/s11211-005-3369-1](https://doi.org/10.1007/s11211-005-3369-1).
- Fischer, A. R., & Bolton Holz, K. (2010). Testing a model of women's personal sense of justice, control, well-being, and distress in the context of sexist discrimination. *Psychology of Women Quarterly*, *34*, 297–310. doi:[10.1111/j.1471-6402.2010.01576.x](https://doi.org/10.1111/j.1471-6402.2010.01576.x).
- Furnham, A. (2003). Belief in a just world: Research progress over the past decade. *Personality and Individual Differences*, *34*, 795–817. doi:[10.1016/S0191-8869\(02\)00072-7](https://doi.org/10.1016/S0191-8869(02)00072-7).
- Gussak, D. (2009). Comparing the effectiveness of art therapy on depression and locus of control of male and female inmates. *The Arts in Psychotherapy*, *36*, 202–207. doi:[10.1016/j.aip.2009.02.004](https://doi.org/10.1016/j.aip.2009.02.004).
- Hafer, C. L. (2000a). Do innocent victims threaten the belief in a just world? Evidence from a modified Stroop task. *Journal of Personality and Social Psychology*, *79*, 165–173. doi:[10.1037//0022-3514.79.2.165](https://doi.org/10.1037//0022-3514.79.2.165).
- Hafer, C. L. (2000b). Investment in long-term goals and commitment to just means drive the need to believe in a just world. *Personality and Social Psychology Bulletin*, *26*, 1059–1073. doi:[10.1177/01461672002611004](https://doi.org/10.1177/01461672002611004).

- Hafer, C. L., & Bègue, L. (2005). Experimental research on just-world theory: Problems, developments, and future challenges. *Psychological Bulletin*, *131*, 128–167. doi:10.1037/0033-2909.131.1.128.
- Hafer, C. L., Bègue, L., Choma, B. L., & Dempsey, J. L. (2005). Belief in a just world and commitment to long-term deserved outcomes. *Social Justice Research*, *18*, 429–444. doi:10.1007/s11211-005-8569-3.
- Hafer, C. L., & Gosse, L. (2011). Predicting alternative strategies for preserving a belief in a just world: The case of repressive coping style. *European Journal of Social Psychology*, *41*, 730–739. doi:10.1002/ejsp.807.
- Harrison, C. A., & Kinner, S. A. (1998). Correlates of psychological distress following armed robbery. *Journal of Traumatic Stress*, *11*, 787–798. doi:10.1023/A:1024405802709.
- Haynes, G. A., & Olson, J. M. (2006). Coping with threats to just-world beliefs: Derogate, blame, or help? *Journal of Applied Social Psychology*, *36*, 664–682. doi:10.1111/j.0021-9029.2006.00023.x.
- Herzog, A. R., House, J. S., & Morgan, J. N. (1991). Relation of work and retirement to health and well-being in older age. *Psychology and Aging*, *6*, 202–211. doi:10.1037/0882-7974.6.2.202.
- Holmes, T. H., & Rahe, R. H. (1967). The social readjustment scale. *Journal of Psychosomatic Research*, *11*(2), 213–218. doi:10.1016/0022-3999(67)90010-4.
- House, J. (2002). *Americans' changing lives: Wave I, wave II* (Computer File). Ann Arbor, MI: Survey Research Center [producer], Inter-University Consortium for Political and Social Research. Retrieved from www.icpsr.umich.edu/cgi-bin/file?comp=none&study=4690&ds=1&file_id=954699&path=ICPSR
- House, J. S., Kessler, R. C., Herzog, A. R., Mero, R. P., Kinney, A. M., & Breslow, M. J. (1990). Age, socioeconomic status, and health. *Milbank Quarterly*, *68*, 383–411. doi:10.2307/3350111.
- Institute for Social Research, University of Michigan. (2012). *Understanding social disparities in health and aging: The Americans' Changing Lives Study*. <http://www.isr.umich.edu/ac/>
- Janoff-Bulman, R., & Wortman, C. B. (1977). Attributions of blame and coping in the “real world”: Severe accident victims react to their lot. *Journal of Personality and Social Psychology*, *35*, 351–363. doi:10.1037/0022-3514.35.5.351.
- Jost, J. T., Hawkins, C., Nosek, B. A., Hennes, E. P., Stern, C., Gosling, S. D., & Graham, J. (2014). Belief in a just God (and a just society): A system justification perspective on religious ideology. *Journal of Theoretical and Philosophical Psychology*, *34*, 56–81. doi:10.1037/a0033220.
- Jost, J. T., & Hunyady, O. (2002). The psychology of system justification and the palliative function of ideology. *European Review of Social Psychology*, *13*, 111–153.
- Kay, A. C., & Jost, J. T. (2003). Complementary justice: Effects of “poor but happy” and “poor but honest” stereotype exemplars on system justification and implicit activation of the justice motive. *Journal of Personality and Social Psychology*, *85*, 823–837. doi:10.1037/0022-3514.85.5.823.
- Laurin, K., Fitzsimons, G. M., & Kay, A. C. (2011). Social disadvantage and the self-regulatory function of justice beliefs. *Journal of Personality and Social Psychology*, *100*, 149–171. doi:10.1037/a0021343.
- Lench, H. C., & Chang, E. S. (2007). Belief in an unjust world: When beliefs in a just world fail. *Journal of Personality Assessment*, *89*, 126–135. doi:10.1080/00223890701468477m.
- Lerner, M. J. (1977). The justice motive: Some hypotheses as to its origins. *Journal of Personality*, *45*, 1–52. doi:10.1111/j.1467-6494.1977.tb00591.x.
- Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion*. New York: Plenum Press.
- Lerner, M. J. (2003). The justice motive: Where social psychologists found it, how they lost it, and why they may not find it again. *Personality and Social Psychology Review*, *7*, 388–399.
- Libow, J. A., & Doty, D. W. (1979). An exploratory approach to self-blame and self-derogation by rape victims. *American Journal of Orthopsychiatry*, *49*, 670–679. doi:10.1111/j.1939-0025.1979.tb02652.x.
- Morgan, J. N. (1992). Health, work, economic status, and happiness. In N. E. Cutler, D. W. Gregg, & M. P. Lawton (Eds.), *Aging, money, and life satisfaction: Aspects of financial gerontology* (pp. 101–133). New York: Springer Publishing Company.
- Murphy, S. A., Braun, T., Tillery, L., Cain, K. C., Johnson, L. C., & Beaton, R. D. (1999). PTSD among bereaved parents following the violent deaths of their 12- to 28-year-old children: A longitudinal prospective analysis. *Journal of Traumatic Stress*, *12*, 273–291. doi:10.1023/A:1024724425597.
- Murphy, S. A., Chung, I., & Johnson, L. C. (2002). Patterns of mental distress following the violent death of a child and predictors of change over time. *Research in Nursing and Health*, *25*, 425–437. doi:10.1002/nur.10060.

- Musick, M. A., & Wilson, J. (1998). Work, race and the American dream. *Sociological Focus*, *31*, 17–30. doi:[10.1080/00380237.1998.10571089](https://doi.org/10.1080/00380237.1998.10571089).
- Otto, K., Boos, A., Dalbert, C., Schöps, D., & Hoyer, J. (2006). Posttraumatic symptoms, depression, and anxiety of flood victims: The impact of the belief in a just world. *Personality and Individual Differences*, *40*, 1075–1084. doi:[10.1016/j.paid.2005.11.010](https://doi.org/10.1016/j.paid.2005.11.010).
- Rinear, E. E. (1988). Psychosocial aspects of parental response patterns to the death of a child by homicide. *Journal of Traumatic Stress*, *1*, 305–322. doi:[10.1002/jts.2490010304](https://doi.org/10.1002/jts.2490010304).
- Ritter, C., Benson, D. E., & Snyder, C. (1990). Belief in a just world and depression. *Sociological Perspectives*, *33*, 235–252. doi:[10.2307/1389045](https://doi.org/10.2307/1389045).
- Rubin, Z., & Peplau, L. A. (1975). Who believes in a just world? *Journal of Social Issues*, *31*, 65–89. doi:[10.1111/j.1540-4560.1975.tb00997.x](https://doi.org/10.1111/j.1540-4560.1975.tb00997.x).
- Seery, M. D., Holman, E., & Silver, R. (2010). Whatever does not kill us: Cumulative lifetime adversity, vulnerability, and resilience. *Journal of Personality and Social Psychology*, *99*, 1025–1041. doi:[10.1037/a0021344](https://doi.org/10.1037/a0021344).
- Smith, P. H., Thornton, G. E., DeVellis, R., Earp, J., & Coker, A. L. (2002). A population-based study of the prevalence and distinctiveness of battering, physical assault, and sexual assault in intimate relationships. *Violence Against Women*, *8*, 1208–1232. doi:[10.1177/107780102320562691](https://doi.org/10.1177/107780102320562691).
- Sutton, R. M., & Winnard, E. J. (2007). Looking ahead through lenses of justice: The relevance of just-world beliefs to intentions and confidence in the future. *British Journal of Social Psychology*, *46*, 649–666. doi:[10.1371/journal.pone.0097075](https://doi.org/10.1371/journal.pone.0097075).
- Umberson, D. (1993). Sociodemographic position, world views, and psychological distress. *Social Science Quarterly*, *74*, 575–589.
- Witt, L. (1989). Urban-nonurban differences in social cognition: Locus of control and perceptions of a just world. *The Journal of Social Psychology*, *129*, 715–717. doi:[10.1080/00224545.1989.9713793](https://doi.org/10.1080/00224545.1989.9713793).
- Xie, X., Liu, H., & Gan, Y. (2011). Belief in a just world when encountering the 5/12 Wenchuan earthquake. *Environment and Behavior*, *43*, 566–586. doi:[10.1177/0013916510363535](https://doi.org/10.1177/0013916510363535).