

Belief in an Unjust World: When Beliefs in a Just World Fail

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Belief in a just world, where people get what they deserve, has been hypothesized to underlie a variety of psychological phenomena (Lerner, 1965). Close inspection of individual difference measures of this belief, however, has indicated repeatedly that just world beliefs are not a unidimensional construct. The purpose of this investigation was to elaborate upon the conceptualization of unjust world beliefs as a related but separate construct from just world beliefs. In two studies, the Unjust World Views scale (UJVS) was developed and its reliability and validity examined. The UJVS demonstrated acceptable reliability and validity and accounted for more variability in related outcomes than just world beliefs. Further, belief in an unjust world was related to defensive coping, anger, and perceived future risk. These findings contribute to theory development and suggest that a belief in an unjust world may serve a self-protective function. Clinical implications are discussed as unjust world views also were found to be potentially maladaptive.

People want to believe that the world is just and fair and that they will be rewarded with positive outcomes if they invest time and effort into attaining their goals. Frequently, however, reality defies these expectations. People often invest tremendous time and effort into goals, such as in marriages and careers, but fail to attain them or gain satisfaction from them. What happens to people's expectations that the world is just and fair when they are faced with unexpected failure or perceived unfairness in their own lives? This article examines this question by further developing the theoretical construct of belief in an *unjust world*. We propose that beliefs in an unjust world are characterized by cognitions that rationalize to the self that people often get what they do not deserve or do not get what they do deserve. We also propose that this rationalization is one way that individuals cope with negative experiences. Researchers and clinicians have acknowledged that beliefs in an unjust world are potentially important, but there is currently no reliable and valid scale for this construct.

JUST AND UNJUST WORLD BELIEFS

Lerner (1980) defined belief in a just world as "a theory of justice that has as its basic premise the notion that people get what they deserve and deserve what they get" (p. 512). According to the Belief in a Just World Hypothesis, belief in a just world is thought to be caused by people's motivations to

predict a positive future for themselves (Lerner, 1965, 1980). Rubin and Peplau (1975) created a scale to measure potential individual differences in the extent to which people believe in a just world. The Just World scale (JWS) treated just world beliefs as a unidimensional attitude, ranging from acceptance to rejection of the belief that the world is fair and just. These beliefs have been associated with greater well-being, more effective coping, and less intense negative emotions (Dalbert, 1999, 2002).

Although belief in a just world appeared to be a robust and useful construct, there have been decades of debate about the psychometric properties of the JWS (for a review, see Furnham, 2003). Among the psychometric concerns with this original scale was the fact that factor analyses repeatedly revealed a multidimensional construct, in contrast to the proposed unidimensional structure. Some researchers reported one primary factor, as intended by the scale developers (Ahmed & Stewart, 1985). Others, however, report multiple dimensions (Ambrosio & Sheehan, 1990; Hyland & Dann, 1987; O'Quin & Vogler, 1990). Although two factors (just and unjust) commonly have been reported, the internal consistency is typically low for the unjust factor-derived scales (Couch, 1998; Loo, 2002; Whatley, 1993). Furnham (1985) and colleagues (Furnham & Procter, 1989) suggested that just and unjust world beliefs were two separate constructs that could be measured as individual differences. They proposed that just world beliefs reflected an orderly and fair

world, whereas unjust world beliefs reflected beliefs in an arbitrary world.

It is insufficient, however, to create a scale from reversed items on an existent measure without theory development. The reversed items on previous measures demonstrated low internal consistency, and thus these items do not form a coherent measure that reliably measures a single psychological construct (Couch, 1998; Loo, 2002). In addition, it is difficult to develop and validate a measure unless the underlying construct has been defined clearly and theory developed sufficiently to identify related constructs. Further, the properties of the measure and the relation of the construct to theoretically related phenomena must be investigated systematically. This would allow psychologists and practitioners to use the scale with greater confidence regarding what unjust world beliefs represent.

The first attempt to develop a construct of unjust world beliefs recently was undertaken. Dalbert and colleagues found that just and unjust beliefs were best measured as two separate, but negatively correlated, factors in a series of three studies (Dalbert, Lipkus, Sallay, & Goch, 2001). They also explored whether beliefs in an unjust world related to religiosity, affect, well-being, and political preference. In their Study 1 and Study 2, beliefs in an unjust world were not related to any of the other variables. In Study 3, they found that prisoners reported stronger beliefs in an unjust world than prison guards. Further, among prisoners, the belief in a just and unjust world were not negatively correlated—prisoners could score high on both measures. They suggested that belief in an unjust world may make it easier to commit a crime or may be a reaction to guilt after committing a crime. Their investigation represented an initial attempt to develop and test a measure of belief in an unjust world. Dalbert and colleagues suggested that additional scales should be designed to measure belief in an unjust world, in part because their scale did not relate to other constructs included in the study. In addition, they suggested that additional research is required in order to understand what belief in an unjust world might represent.

The present investigation extended preliminary research that identified the existence of unjust world beliefs. Our aim was to differentiate an unjust world belief from a just world belief and develop a general measure for use in clinical and research settings. It is proposed that unjust world beliefs function differently from just world beliefs. For example, in the event of a negative experience, people may be threatened by the sense that they may not be capable of attaining positive outcomes. As a result, individuals rationalize that the negative event is the result of an unjust world rather than a reflection of their own potential. Lerner (1980) referred to this strategy as the “penultimate defense,” with the ultimate defense being belief in a just world. Because belief in an unjust world serves a self-protective function, beliefs in a just world would not necessarily be affected by this increase in an unjust world belief.

Logically, it should be difficult to maintain a belief in a just world and belief in an unjust world concurrently. However, people frequently use multiple strategies to cope with stressful situations (Lazarus & Folkman, 1984). Further, the correlations between belief in a just and unjust world are frequently near zero or statistically small. After the injustice has passed, people can reduce their belief in an unjust world and can again expect that the time and resources they invest in pursuing goals will result in success. Although belief in an unjust world is conceptualized as a state, these beliefs may remain chronically high and lead to stable individual differences in the intensity of belief in an unjust world if people repeatedly encounter severe injustice in their own lives. It may be possible that unjust world beliefs encourage selfish action because people believe everyone is out for themselves, as Dalbert and colleagues (2001) suggest, but we propose that differences in unjust world beliefs between guards and prisoners were due to the negative outcomes frequently experienced by people who commit crimes. Prisoners may have experienced or perceived multiple injustices in their own lives, leading to chronically increased beliefs in an unjust world. These same injustices also may have led guilty prisoners to commit their crimes out of desperation or anger.

PROPOSED RELATIONSHIPS

The proposal that belief in an unjust world is a reaction to perceived injustice in one’s own life has several implications for how the construct should function and relate to other constructs. First, belief in an unjust world was expected to be correlated negatively with, but separate from, belief in a just world. Experience with negative events challenges the conception of a just world, so it would not be surprising if people who experience multiple negative events have lower levels of beliefs in a just world.

Second, people who attend to negative outcomes may be more likely to perceive negative events and injustice, and thus should score higher on belief in an unjust world. People high on trait characteristics such as anxiety, depression, and neuroticism attend to and remember negative events (e.g., Hertel, 2004; Koster, De Raedt, Goeleven, Franck, & Crombez, 2005). Thus, their beliefs in an unjust world were expected to be greater than individuals low on these measures because they focus more on negative events and potentially are more threatened by these events. In contrast, optimists attend to and focus on positive outcomes and positive events (e.g., Segerstrom, 2001). Individuals high on optimism were expected to report less belief in an unjust world because they are not likely to focus on injustices in their lives. In addition, if belief in an unjust world is a self-protective cognition, as we propose, it also should be related to coping strategies that involve defensive coping, such as use of denial and disengagement. Unjust world beliefs were conceptualized as a type of defensive coping that allows people to avoid confronting

negative events fully and avoid making changes in their own lives as a result of negative experiences.

Third, belief in an unjust world is an elevated awareness of injustice and, though temporary, should increase the likelihood that subsequent events are perceived as unjust. Specifically, belief in an unjust world was expected to be related to a heightened state of anger. Inasmuch as anger is a consequence of perceived injustice (e.g., Averill, 1983), greater feelings of anger should accompany beliefs in an unjust world, especially when they have been affected by a recent negative event. In addition, belief in an unjust world was expected to predict the perception that negative outcomes were more likely and positive outcomes were less likely. People generally are optimistic about their futures, believing that positive events are more likely to occur and negative events are less likely to occur (e.g., Lench & Levine, 2005; Weinstein, 1980). Beliefs in an unjust world are characterized by the belief that rewards and punishments are not distributed as deserved. If people believe in an unjust world, they were expected to be less optimistic, believing that negative events are more likely and positive events are less likely to happen in their lives.

OVERVIEW OF THE PRESENT INVESTIGATION

The purpose of the current investigation was to conceptualize belief in an unjust world, to develop items for a measure (Unjust Views Scale [UJVS]) to be used in research and clinical settings, and to examine the relationship of unjust world beliefs to related constructs. Beliefs in an unjust world may function as self-protective cognitions, allowing people to remain engaged with their goals even when they experience negative events. In Study 1, a measure of beliefs in an unjust world was developed and evaluated. Study 1 also examined whether these beliefs related to trait anxiety, depression, neuroticism, and optimism. In Study 2, the relationship between unjust world beliefs and other coping strategies was investigated.

Study 1

The UJVS was developed to measure unjust world beliefs according to the conceptual analysis outlined above. The aim of this study was to examine the relationship between the UJVS and measures of just world beliefs and to investigate the hypothesis of a positive relationship of beliefs in an unjust world to trait anxiety, depression, and neuroticism, and a negative relationship with optimism.

Method

Scale development. Based on a review of relevant literature on just and unjust world beliefs, we generated a list of items that appeared face valid to measure the strength of

belief in an unjust world. Questions were written at a sixth-grade reading level, as determined by a word processing program. Seven items initially were developed, but two were dropped after results from exploratory factor analysis using structural equation modeling (SEM). The coefficient for the item "Even if I am committed to my relationships, they may still fall apart" was not significant, showing that it was not an indicator of unjust world beliefs. Potentially due to the use of a college-student sample, the item "If I work hard at something, I may still be unsuccessful" was also dropped because it exhibited very little variance in responses. The results suggested that five of the original items represented a cohesive scale that measured unjust world beliefs. The instructions for the scale asked participants to rate how much they agreed with each of the statements on a 5-point Likert-type scale, including 1 (*strongly disagree*), 2 (*disagree*), 3 (*neutral*), 4 (*agree*), and 5 (*strongly agree*). This response format was chosen in order to allow the measure to be compared easily to existent measures of just world beliefs. Five response points were chosen to allow a neutral response. A composite score was computed as the mean of the items, with higher scores indicating greater belief in an unjust world.

Procedure. Participants were recruited anonymously from psychology courses and took study materials home to complete. They received course extra credit for participating. Surveys had to be completed within one week, and participants were instructed to complete them at one sitting in a quiet setting.

Participants. The final sample of 397 participants consisted of two groups of undergraduates recruited for course credit from their introductory psychology courses to complete either paper-and-pencil or on-line surveys. The students attended a large research university in southern California. The two groups ($N = 169$ and $N = 228$, 3 excluded for failure to complete measures) did not differ in their means on the study measures and thus were combined for subsequent analysis. The final sample had a mean age of 20.44 years ($SD = 3.26$, ranging from 18 to 49 years) and was composed mostly of women (75.9%). The majority of participants were from upper-middle-class backgrounds (yearly reported income: 5.6% under \$15,000, 15.6% \$15,000–\$30,000, 12.5% \$30,000–\$45,000, 16.3% \$45,000–\$60,000, and 50% over \$60,000).

The sample was multiethnic, reflecting the diversity of the region. They were mainly Asian American (45%; $n = 178$) and White (32%; $n = 128$). The remaining were Middle Eastern, Latin American, and African American. Asian Americans consisted mainly of East Asians (59% were Chinese, Korean, or Japanese), with the remaining being from Southeast Asian (17%, e.g., Vietnamese), Filipino/Pacific Islander (16%), and South Asian (7%, e.g., Indian) backgrounds. Asian Americans were grouped together in this study because their traditions and beliefs often are regarded by researchers to be collectivistic. Further, they did not differ significantly

on study measures. For example, there were no mean differences in unjust world views between the four Asian American subgroups, $F(3,142) = 1.67$, *n.s.*

Materials. To assess discriminant validity, or the extent to which a construct is different from other potentially related constructs, participants completed the Belief in a Just World Scale (BJWS; Dalbert, Montada, & Schmitt, 1987). Participants rated their agreement with six statements on a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Items formed a mean composite score (range = 1–6), with greater scores indicating greater belief in a just world. This scale has been reported to have acceptable internal reliability ($\alpha = .91$ in our sample), better psychometrics than the original Rubin and Peplau (1975) scale, and validity in German samples (Dalbert, Montada, & Schmitt, 1987).

In addition, half the participants completed the original JWS (Rubin & Peplau, 1975). Participants rated their agreement with 20 statements on a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Items formed a mean composite score (range = 1–6), with greater scores indicating greater belief in a just world. As in prior studies, this scale had low internal consistency in our sample ($\alpha = .59$). This scale has demonstrated validity through relation to theoretically related constructs (see Furnham, 2003, for a review).

To measure anxiety, participants completed the trait portion of the State–Trait Anxiety Inventory (STAI; Spielberger, 1983). They rated the frequency of 20 experiences on a 4-point scale ranging from 1 (*almost never*) to 4 (*almost always*). Items formed a mean composite score (range = 1–4), with greater scores indicating greater anxiety. The anxiety scale has been shown to have acceptable reliability $\alpha = .82$ in our sample) and validity with diverse populations (Spielberger, 1983).

The NEO Personality Inventory–Revised (Costa & McCrae, 1992) also was administered to evaluate individual differences in neuroticism. Participants rated their agreement with 24 items on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Items formed a mean composite score (range = 1–5), with greater scores indicating greater neuroticism. The NEO–Revised has been shown to have adequate reliability in a variety of populations ($\alpha = .86$ in our sample for neuroticism) and validity through relation to associated constructs (Costa & McCrae, 1995; McCrae & Costa, 1992).

To measure depression, participants completed the Center for Epidemiological Studies Depression Scale (CES–D; Radloff, 1977, 1991). Participants rated how often they experienced 20 depressive symptoms on a 4-point scale ranging from 1 (*rarely or none of the time*) to 4 (*most or all of the time*). Items formed a mean composite score (range = 1–4), with greater scores indicating greater depression. The CES–D has demonstrated acceptable reliability ($\alpha = .77$ in

our sample) and validity in diverse populations (e.g., Beeber, Shea, & McCorkle, 1998; Radloff, 1991).

Participants completed a measure of trait optimism, the Life Orientation Test–Revised (LOT–R; Scheier, Carver, & Bridges, 1994). Responses to the six items were rated on a 5-point scale, ranging from 0 (*strongly disagree*) to 4 (*strongly agree*). Items formed a mean composite score (range = 0–4), with greater scores indicating greater optimism. This scale has been shown to have adequate reliability and validity in some studies (Scheier et al., 1994), but internal consistency was low in our sample ($\alpha = .32$). Although previous studies also have shown low internal consistency for this scale, it remains the most commonly used scale of optimism (e.g., Robinson-Whelen, Kim, MacCullum, & Kiecolt-Glaser, 1997). Because of low reliability in this sample, results concerning this scale should be interpreted cautiously.

Participants rated how intensely they currently felt angry on a 5-point scale ranging from 1 (*not at all*) to 5 (*extremely*). A single item was used to reduce the time requirements for completing the questionnaires. Similar items have been used frequently in emotional research and have demonstrated validity by predicting changes in theoretically related constructs (e.g., Gross & Levenson, 1995; Lench & Levine, 2005)

Participants also completed a Life Events Scale, on which they rated the likelihood that they would experience 15 positive and 15 negative outcomes. The outcomes, which were presented in a random order, concerned general health (e.g., remaining healthy; becoming ill) and life events (e.g., remaining happily married; getting a divorce). Thus, participants were asked to make judgments concerning a range of possible life events. For each outcome participants were asked, “Compared to the average college student, your same age and gender, what are your chances of *outcome*?” Participants responded by indicating their comparative risk on a 7-point scale, ranging from 1 (*far below average*) to 7 (*far above average*). Items formed a mean composite score (range = 1–7), with greater scores indicating a greater perceived likelihood that positive or negative events would occur. This procedure frequently is used in risk perception research and has been shown to have acceptable reliability in student samples ($\alpha = .80$ for positive items and $.76$ for negative items in our sample) and validity in college-student samples (e.g., Lench & Levine, 2005; Weinstein, 1980).

Results and Discussion

Means and standard deviations for study variables are included in Table 1. Results are organized in three sections. First, the factor structure of the UJVS, including its measurement equivalency across ethnic groups and gender, was tested. Second, the relationship of the UJVS to anxiety, depression, neuroticism, and optimism was examined. Finally, the contribution of the UJVS to predicting anger and risk perception was tested over and above the belief in a just world.

TABLE 1
Descriptive Statistics for Study Variables in Studies 1 and 2

	<i>Mean</i>	<i>SD</i>
Study 1		
Unjust World Views Scale	2.57	(0.55)
Subsample of Men	2.60	(0.58)
Subsample of Women	2.55	(0.54)
White Subsample	2.41	(0.52)
Asian Subsample	2.59	(0.59)
Belief in a Just World Scale (BJWS)	3.13	(0.71)
Just World Scale	3.53	(0.37)
Anxiety Inventory	2.26	(0.33)
Neuroticism—NEO	2.79	(0.58)
Depression CES-D	1.96	(0.50)
Optimism—Life Orientation Test	3.18	(0.55)
Current Anger	1.61	(1.15)
Likelihood of Positive Events	4.88	(0.79)
Likelihood of Negative Events	2.69	(0.81)
Study 2		
Unjust World Views Scale	2.62	(0.64)
Optimism	3.26	(0.69)
Denial	1.44	(0.53)
Behavioral Disengagement	1.57	(0.53)
Mental Disengagement	2.25	(0.63)
Alcohol—Drug Disengage.	1.34	(0.66)
Active Coping	2.58	(0.58)
Planning	2.81	(0.70)
Suppression of Activities	2.41	(0.65)
Restraint Coping	2.29	(0.62)
Seeking Support—Instrumental	2.80	(0.80)
Seeking Support—Emotion	2.77	(0.95)
Positive Reinterpretation	2.87	(0.72)
Acceptance	2.71	(0.70)
Turning to Religion	2.16	(1.07)
Focus & Venting Emotion	2.35	(0.79)

Psychometrics of the UJVS. Table 2 presents the means and standard deviations of the UJVS items and the correlations between items on the UJVS. We compared the UJVS with two measures of just world beliefs. The UJVS was correlated negatively with the JWS, the most commonly ad-

TABLE 2
Descriptive Statistics for Unjust World Views Scale

<i>Unjust World Views Item Wording</i>	<i>M</i>	<i>(SD)</i>	<i>Correlations</i>			
			2	3	4	5
1. I should have more than what I get	2.76	(0.86)	.43**	.28**	.19**	.16**
2. The awful things that happen to me are unfair	2.86	(0.86)	—	.29**	.24**	.24**
3. Things generally do not work out in the end	2.26	(0.83)		—	.28**	.23**
4. Those who are unkind often have the most friends	2.10	(0.85)			—	.34**
5. People who do evil things get away with it	2.86	(0.91)				—

Note. ** $p < .01$.

ministered scale of just world beliefs (Rubin & Peplau, 1975), $r(227) = -.34, p < .001$. The UJVS also was correlated negatively with the BJWS, a more recent measure with better psychometric properties than the JWS (Dalbert et al., 1987), $r(394) = -.30, p < .001$.

Confirmatory Factor Analyses (CFAs) were conducted with the structural equation modeling program, AMOS 5.0 (Arbuckle & Wothke, 1999), using maximum likelihood estimation on the covariance matrix, in order to assess whether belief in an unjust world was separate from belief in a just world. Data were screened for nonnormality and outliers, and missing values were imputed from the average (Byrne, 2005). As recommended by Kline (1998), in order to standardize the latent variable, the unstandardized coefficient of one indicator for each latent variable was fixed to 1.0 and error terms were constrained. All other parameters were free to be estimated from the data.

For each model, we report the associated chi-square statistic and its significance value. In samples with more than 200 participants, the chi square is likely to be significant due to large sample size and not a poorly fitting model (Kline, 1998). We therefore also report statistics that are less sensitive to sample size to evaluate the consistency across indices (Byrne, 2001; Kline, 1998). The Bentler-Bonnett Comparative Fit Index (CFI) is reported, which reflects the percent improvement of the hypothesized model over a null independence model. Values greater than .90 are considered indicative of good fit (Byrne, 2001). The root-mean-square error of approximation (RMSEA) is a goodness of fit statistic, with values under .08 representing reasonable errors and values under .05 representing a good fit.

In Model 1, UJVS and BJWS can be represented adequately as a unidimensional construct, ranging from belief in a just world to belief in an unjust world. If this were the case, all items would load significantly on the latent variable of just world beliefs, and fit indices would indicate that one latent variable was sufficient to capture the relations among items. This 11-item single-factor structure, however, was not a good fit to the data. The chi-square was significant, and other indices also suggested that the model was not a good fit, $\chi^2(44, N = 396) = 257.73, p < .001, CFI = .754, \text{Root Mean Square Residual (RMR)} = .07, \text{RMSEA} = .11$ (90% confidence interval .10–.12).

Model 2 tested the hypothesis that the UJVS and BJWS were best represented by two correlated constructs of just and unjust world views. Model 2 tested whether BJWS items loaded significantly onto a latent factor of just world views; and UJVS items loaded significantly onto a latent factor of unjust world views. Similar to the results of Model 1, the chi square was significant, and other indices also suggested that the model was still not an exceptional fit to the data, $\chi^2(43, N = 396) = 143.58, p < .001, CFI = .884, \text{RMR} = .05, \text{RMSEA} = .08$ (90% CI .06–.09). The latent variables of just beliefs (the BJWS) and unjust beliefs (the UJVS) were negatively correlated ($r = -.46, p < .001$).

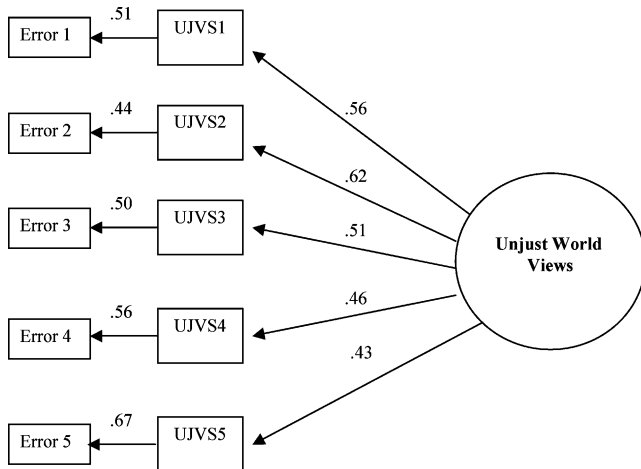


FIGURE 1. Structural equation model of unjust world views items. Standardized parameter estimates are reported.

To test the hypothesis that unjust world beliefs are best conceived of as a separate dimension from just world beliefs, CFA models consisting of BJWS and UJVS items were compared by testing the difference in chi squares ($\Delta\chi^2$) between Model 1 and Model 2. A significant $\Delta\chi^2$ (Δdf) would indicate that Model 2 is a statistically significantly better measurement model than Model 1. Model 2 was a significant improvement over Model 1, $\Delta\chi^2(1) = 114.10$, $p < .001$. Thus, just world beliefs are better conceptualized as two dimensions rather than simply one dimension.

A separate model (Model 3) was tested to analyze the unidimensional factor structure of unjust world views (5 items) independently of just world beliefs. The chi square was significant for Model 3, as is expected with samples larger than 200, and other fit indices suggested that the model provided an acceptable fit to the data, $\chi^2(5, N = 396) = 28.20$, $p < .001$; CFI = .897, RMR = .04, RMSEA = .11 (90% CI .07–.15). Figure 1 displays the model and standardized coefficients for unjust world views. Path values less than .10 are considered to be small, path values of .30 are considered medium, and path values of .50 are considered large (Kline, 1998). As shown in Figure 1, all items on the UJVS had medium to large path values, and all were statistically significant.

For any scale, it is important that the measure be consistent across gender and ethnic groups in order for scores to be compared. Table 1 shows the means for men, women, Whites, and Asian Americans. An independent sample t test demonstrated that there were no mean differences between the Asian American and Caucasian groups on the UJVS, $t(260) = 0.32$, n.s., effect size $r = .02$. Multigroup comparisons were used to assess the measurement equivalence of UJVS between Asian Americans ($n = 178$) and Whites ($n = 128$). The sample size for the rest of the ethnic groups (i.e., Middle Easterners, Hispanics, and African Americans) was not large enough to allow for a meaningful model fit.

Measurement equivalence was examined between the two ethnic groups by comparing a model with all parameters freed (except for the first item) ($\chi^2(10) = 29.76$, $p = .001$, CFI = .892, RMR = .05, RMSEA = .08, 90% CI .05–.12) with a model that constrained the paths and error variances ($\chi^2(19) = 37.38$, $p < .01$; CFI = .899, RMR = .06, RMSEA = .06, 90% CI .03–.08). Measurement equivalence was demonstrated for the UJVS between Asians and Whites as the change in chi square was not statistically significant, $\Delta\chi^2(9) = 7.62$, $p > .05$.

Multigroup comparisons also were used to assess measurement equivalence between men and women in unjust world views by comparing a model with all parameters freed ($\chi^2(10) = 29.22$, $p = .001$, CFI = .913, RMR = .04, RMSEA = .07, 90% CI .04–.10) with a model where the path values and error variances were constrained to be equal, $\chi^2(19) = 44.23$, $p = .001$; CFI = .886, RMR = .04, RMSEA = .06 (90% CI .04–.08). The UJVS was found to be equivalent between the two genders, $\Delta\chi^2(9) = 15.01$, $p > .05$.

The UJVS and related traits. Next, we examined the relation between belief in an unjust world and several theoretically related traits. To find out if beliefs in an unjust world were related to traits characterized by a focus on negative outcomes, correlations were examined. The UJVS was positively correlated with trait anxiety, $r(395) = .30$, $p < .001$; depressive symptomatology, $r(395) = .36$, $p < .001$; and neuroticism, $r(396) = .30$, $p < .001$. As predicted, participants high in traits that reflect a focus on negative outcomes reported greater belief in an unjust world. It also was expected that participants high in a trait that reflects a tendency to focus on positive outcomes would report lesser belief in an unjust world. Consistent with this prediction, the UJVS was correlated negatively with optimism, $r(396) = -.37$, $p < .001$. Thus the degree to which participants focused on positive and negative outcomes was related to their belief in an unjust world.

Consequences of UJVS. To find out if beliefs in an unjust world were related to greater state anger and a tendency to perceive future threats as more likely, correlations again were examined. Greater beliefs in an unjust world were correlated positively with greater current anger, $r(396) = .33$, $p < .001$. Greater beliefs in an unjust world also were correlated negatively with perceiving positive events as less likely, $r(396) = -.26$, $p < .001$, and positively correlated with perceiving negative events as more likely, $r(396) = .19$, $p < .001$.

Next, we examined the incremental validity of the UJVS over the BJWS to establish that belief in an unjust world predicted outcomes above and beyond what is currently possible with measures of belief in a just world. As recommended by Blais, Hilsenroth, Castlebury, Fowler, and Baity (2001) and Haynes and Lench (2003), forced stepwise linear regressions were conducted to determine the extent to which the

TABLE 3
Results for Incremental Validity Analyses

	<i>B</i>	(<i>SE</i>)	β	<i>t value</i>	<i>R</i> ²
Current anger					.13***
BJWS	-.24	(.08)	-.15	-2.98**	
UJVS	.60	(.10)	.29	5.79***	
Likelihood positive events					.10***
BJWS	.22	(.06)	.19	3.82	
UJVS	-.29	(.07)	-.20	-4.03***	
Likelihood of negative events					.06***
BJWS	-.22	(.06)	-.19	-3.67	
UJVS	.19	(.08)	.13	2.53*	

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

new measures accounted for variance above and beyond that provided by measures of just world beliefs.¹ The BJWS has been shown to demonstrate better reliability and validity and was thus the best psychometric scale for comparison.

Measures on the BJWS were entered on the first step of the regression, and scores on the UJVS were entered on the second step to predict anger in the first analysis and the likelihood of negative or positive events in the second and third analyses, respectively. Results from the second step of the analyses are reported in Table 3. Scores on the UJVS added significantly to the variance accounted for in current anger over the BJWS, $\Delta R = .28$, $F(1,391) = 33.47$, $p < .001$. Thus, belief in an unjust world explained the tendency to experience state anger beyond that accounted for by measures of belief in a just world. We also examined the unique contribution of the UJVS in predicting likelihood judgments for negative and positive outcomes on the Life Events Scale. Scores on the UJVS added significantly to the variance accounted for in likelihood judgments for negative events over the BJWS, $\Delta R = .14$, $F(1,391) = 6.38$, $p < .05$. Scores on the UJVS also added significantly to the variance accounted for in likelihood judgments for positive events over the BJWS, $\Delta R = .20$, $F(1,391) = 16.23$, $p < .001$. In sum, the UJVS contributed to the variance accounted for in state anger and likelihood judgments above that attributed to beliefs in a just world.

Study 2

The UJVS was administered to a separate group of college students to examine the relationship between the UJVS and conceptually related coping strategies. Belief in an unjust world was conceptualized as a defensive strategy that occurs when people are presented with injustice toward the self.

¹If these analyses are reversed to examine the additional variance accounted for when measures of just world beliefs are put into a regression with the UJVS, the results are identical though reversed. In those analyses in which the BJWS is a significant predictor at step 2 reported in the text, it also was significant in regressions analyzing whether the BJWS makes a significant contribution over unjust world beliefs.

This strategy, therefore, should be related to the use of other defensive coping strategies, including denial and disengagement. Optimism consistently is related to coping strategies and therefore it was relevant to control for optimism scores when examining the relationship between belief in an unjust world and coping.

Method

Participants were recruited anonymously from a psychology course and completed the study materials on-line. They received course extra credit for participating. Surveys had to be completed within one week, and participants were instructed to complete them at one sitting in a quiet setting.

Participants. Participants were 276 undergraduate students from the same University as Study 1. The larger investigation examined the effects of optimism and goals on health (Lench, 2006). Participants were sent an e-mail invitation to participate and received course credit. Participants were mostly women (69.6%), with a mean age of 19.30 years ($SD = 1.12$; ranging from 18 to 26 years).

Materials. Participants completed the UJVS described in Study 1 ($\alpha = .72$ in this sample) and a measure of optimism from the Life Orientation Test–Revised (see Method above in Study 1). Participants also completed the COPE (Carver, Scheier, & Weintraub, 1989), a 53-item measure of the strategies used when one is challenged by stressful situations. The scale asked participants to indicate how often they used a particular coping strategy on a 5-point scale, ranging from 0 (*rarely or never*) to 4 (*always*). Mean composite scores were created for each coping strategy (range = 0–4 for each). Coping strategies measured by the COPE include active coping, planning, suppression of competing activities, restraint coping (i.e., waiting for the right time), seeking support for instrumental reasons, seeking support for emotional reasons, positive reinterpretation and growth, acceptance, turning to religion, focus on and venting of emotions, denial, behavioral disengagement, mental disengagement, and alcohol–drug disengagement. All 14 strategies that are measured by the COPE were included in study materials. Although we were interested primarily in the relationship of the UJVS to denial and disengagement strategies, which are regarded as defensive, it was relevant to examine whether the UJVS related only to these strategies or to all coping strategies.

Results and Discussion

Descriptive statistics are reported in Table 1. Consistent with the findings of Study 1, the UJVS was correlated negatively with optimism, $r(276) = -.34$, $p < .001$. Because optimism has been shown to predict coping strategies (Carver et al., 1999), further analyses included optimism and the UJVS.

TABLE 4
Regressions Examining the Relationship of
the UJVS to Coping Strategies

<i>Coping Strategies</i>	<i>R</i> ²	<i>Standardized βs</i>	
		<i>Optimism</i>	<i>UJVS</i>
Denial	.08***	-.16*	.21**
Behavioral Disengagement	.12***	-.25***	.18**
Mental Disengagement	.10***	-.17**	.23***
Alcohol-Drug Disengagement	.04**	-.09	.16*
Active Coping	.08**	.29***	-.01
Planning	.08***	.22***	-.12*
Suppression of Activities	.04**	.19**	-.03
Restraint Coping	.03**	.20**	.04
Seeking Support—Instrumental	.01	—	—
Seeking Support—Emotion	.02*	.16*	-.01
Positive Reinterpretation	.16***	.36***	-.10
Acceptance	.04**	.17**	-.10
Turning to Religion	.04**	.12	-.16*
Focus & Venting Emotion	.02*	-.13*	.06

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Regressions assessed this relationship, with optimism and the UJVS entered as predictors of coping strategy. As shown in Table 4 and consistent with predictions, beliefs in an unjust world were related to the use of denial and a variety of disengagement strategies. Disengagement strategies included behavioral disengagement, mental disengagement, and disengaging through alcohol or drug use. The UJVS predicted the use of these coping strategies after accounting for optimism. The UJVS did not predict the use of other coping strategies, except for being related to less planning. Thus, the UJVS was related consistently to the use of more denial and disengagement coping strategies.

GENERAL DISCUSSION

The purpose of the current investigation was to develop the conceptualization of a belief in an unjust world as a separate psychological construct from a just world belief and to develop a measure with strong preliminary psychometric properties. We proposed that people increase beliefs in an unjust world as a psychological defense. Believing that the world is sometimes unjust can prevent people from abandoning the belief that their actions will be rewarded with positive outcomes when they are faced with injustice. This conceptualization led us to develop a measure of belief in an unjust world in order to test hypotheses about the relation of these beliefs with other psychological constructs. The findings suggest that belief in an unjust world accounts for more variance in anger and risk perception than belief in a just world alone and that the UJVS potentially may be useful for addressing theoretical and applied questions. Greater belief in an unjust world, as measured by the UJVS, was related to greater anxiety, depressive symptoms, neuroticism, defensive

coping, and lower levels of optimism. These results suggest that beliefs in an unjust world may be related to maladaptive cognitions. Interestingly, students on average believed that the world was mildly unjust.

Psychometric Properties

Lerner (1965) did not address individual differences explicitly when he conceptualized just world beliefs. This approach was popularized by the Rubin and Peplau (1975) JWS scale, which proposed that just world beliefs fall along a continuum ranging from just to unjust world beliefs. Previous studies repeatedly have found that the JWS appears to be tapping two constructs. Our findings corroborate these analyses and further indicate the need for two separate measures of just and unjust world beliefs. We found that belief in an unjust world and belief in a just world were moderately correlated, but our findings also indicated that unjust world beliefs were best conceptualized as a separate construct. Although the model incorporating both scales as separate constructs did not demonstrate good fit to the data, the model was better than the model that examined them as a unidimensional construct. The UJVS predicted risk judgments and state anger beyond what could be predicted by participants' scores on other measures of just world beliefs, indicating that two beliefs are likely separate constructs. Further, a model of the UJVS alone did demonstrate adequate fit. The items used to measure unjust world beliefs all loaded moderately or strongly on the latent variable, indicating adequate reliability. Further evaluation of the items in the UJVS is required, and additional items may provide an improved fit.

The UJVS also was used equivalently by Asian American and White participants and by men and women. In further research, it will be useful to verify these findings of equivalence using the rank ordering of participants as assessed by independent measures. Also in future research, it will be useful to investigate the psychometric properties of UJVS scores in community samples and with samples that include substantial numbers of other ethnic groups.

Theoretical Relationships

Individual differences affected the extent to which belief in an unjust world was elevated. Belief in an unjust world was greater in those participants who had traits characterized by the tendency to pay attention to negative events. Specifically, participants who scored high on trait anxiety, depressive symptoms, and neuroticism all reported a greater belief in an unjust world. Optimism, reflecting a general focus on positive outcomes, was associated with lower belief in an unjust world, although the optimism scale demonstrated poor internal consistency. People who perceive more negative events are likely to react to them by increasing their belief in an unjust world. Participants with greater belief in an unjust world also reported that they used defensive coping

strategies, such as denial and disengagement. This relationship also may indicate that the UJVS has consequences for functioning. For instance, people who believe the world is unjust may be less likely to comply with medical regimens or to cope successfully with loss or trauma. Further investigations of belief in an unjust world will inform whether this construct is useful in predicting health and well-being, and possibly identify potential interventions for developing coping strategies.

Belief in an unjust world also predicted the extent to which participants experienced current threats. Participants with greater belief in an unjust world were more likely to report that they were angry at the time of testing. People who believe that the world is unjust are more likely to perceive any situation as unjust, which frequently leads to anger. Dalbert (2002) has found that belief in a just world can decrease anger when people experience negative events and can increase well-being. Our results indicate that belief in an unjust world may be even more critical in predicting anger, and potentially subsequent health and well-being. Further work is needed to verify this relationship. We also found that participants who believed the world was unjust judged that they were more likely to experience negative outcomes and less likely to experience positive outcomes compared with others. The fact that people who believe in an unjust world perceive more current and future threats may increase their future sensitivity to threats. This cycle of increasing sensitivity may lead to chronically elevated belief in an unjust world over time.

Unjust world beliefs were conceptualized as having both state and trait components, whereas individual differences in beliefs in a just world are more robustly a trait variable. Unjust world beliefs are conceptualized as a reaction to negative unjust events in one's own life that allow people to maintain a sense of the world as a fair place where their efforts will result in success. People who repeatedly encounter or perceive negative events, however, may develop chronically high and trait-like beliefs in an unjust world. Just world beliefs, as conceptualized by Lerner (1980), are due to motivations to protect the self and thus should be stable and resistant to change. In contrast, unjust world beliefs are likely affected by experience and thus should be relatively likely to change with new information. It will be important in future research to determine whether unjust world beliefs change with traumatic or unexpected events.

This has interesting implications for using the UJVS in a clinical setting because it suggests that clinicians would need to use caution when identifying a particular set of cognitions as adaptive or maladaptive. For a short period of time after a negative event, it may be adaptive and protective to view the world as an unjust place. If this belief remains elevated or is extremely intense, however, people may be less motivated to pursue goals and may become apathetic and disengaged. Future work should examine the effects of extreme negative events on belief in an unjust world and the time course of these beliefs to identify when they become maladaptive.

ACKNOWLEDGMENTS

Support during this study was provided to the first author by a fellowship from the National Institute of Mental Health, National Research Service Award 5 T32 MH19958-04. We are grateful to Jutta Heckhausen for her support and Elisa Roe for assistance with data collection and entry.

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Received April 10, 2006
 Revised November 3, 2006