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# Personal Versus General Belief in a Just World, Karma, and Well-Being: Evidence from Thailand and the UK

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## Abstract

The belief in a just world (BJW) is the belief that people get what they deserve and deserve what they get. The theory and research findings suggest that believing the world is fair to “me” (personal BJW or PBJW) is associated with positive psychological functioning, whereas believing that the world is fair to people in general (general BJW or GBJW) may not. Against a backdrop of mixed findings in samples recruited in Asian countries, we conducted two studies in Thailand ( $N=177$  and  $N=175$ ) and one in the UK ( $N=345$ ). Study 1 examined the relationships between PBJW, GBJW, life satisfaction, and depression in Thailand; Study 2 also included Karma and was conducted in Thailand and the UK. In both studies, PBJW uniquely predicted well-being. When controlling for BJW, belief in Karma positively predicted life satisfaction and depression only in the UK sample. In addition, Karma was uniquely predicted by GBJW but more strongly so in Thailand. Furthermore, within both samples, individuals endorsed PBJW more strongly than GBJW; comparing across samples, PBJW was more strongly endorsed in the UK than Thailand, whereas GBJW was more strongly endorsed in Thailand than the UK. However, sample nationality did not moderate associations between BJW, Karma and well-being. Results support the cultural generality of just world theory and the psychological priority of PBJW and indicate that the cultural concept of Karma does not explain relationships between just-world beliefs and well-being.

**Keywords** Belief in a just world · Karma · Well-being · Culture

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## Introduction

### Just World Beliefs and Well-Being

The belief in a just world (BJW) is the belief that people get what they deserve and deserve what they get. According to the just world theory (Lerner, 1980), this belief, though delusional, makes people feel their lives are stable, controllable, orderly, meaningful, and secure. In the just world theory, justice in people's *own* lives is of primary importance to their well-being. The justice or injustice experienced by others is of importance to people primarily because it signals whether or not they can expect their own lives to be just (Correia et al., 2007, 2012; Hafer & Sutton, 2016; Lerner, 1980). Despite the importance of the distinction between justice for the self and justice for others, early studies on the correlates of BJW employed scales that did not distinguish between them.

Addressing this limitation, Dalbert (1999) proposed that BJW is a bidimensional construct, consisting of personal BJW (PBJW: e.g., "I believe that I usually get what I deserve") and general BJW (GBJW: e.g., "I believe that, by and large, people get what they deserve"). Research has shown that despite being correlated positively, PBJW and GBJW serve different psychological functions. In line with Lerner (1980)'s claim that justice in "the world of the self" is vital for psychological functioning, PBJW—but not GBJW—consistently emerges as a predictor of subjective well-being indices, including greater life satisfaction (Correia & Dalbert, 2007; Dalbert, 1999) and lower levels of depression (Megías et al., 2019; Nartova-Bochaver et al., 2019; Otto et al., 2006), the two well-being indices widely examined in research on just world beliefs (Hafer et al., 2020). In contrast, GBJW is typically found to relate to negative outcomes such as dishonest behavior (Wenzel et al., 2017). Note that parallel to Dalbert's (1999) distinction between PBJW and GBJW, Lipkus et al. (1996) developed a scale measuring BJW for the self vs. BJW for others. Research using this alternative scale has obtained much the same results (e.g., Bègue & Bastounis, 2003; Sutton & Winnard, 2007; Sutton et al., 2017), so much so that researchers tend to use PBJW interchangeably with BJW for the self, and GBJW interchangeably with BJW for others (Hafer & Sutton, 2016).

### Just World Beliefs and Well-Being in WEIRD vs. Non-WEIRD Cultures

Most studies of BJW have been conducted in Western, Educated, Industrialized, Rich and Democratic (WEIRD, see Henrich et al., 2010) societies. The limited coverage of other cultural contexts raises questions about the generalizability of the findings observed in this literature so far. Researchers have questioned, in particular, whether similar findings would be observed in collectivist cultures (Wang et al., 2021; Wu et al., 2011), in which social relationships and groups tend to be more important for individuals' well-being, and in which there is a greater overlap between the self and others (e.g., Markus & Kitayama, 1991; Park & Huebner, 2005; Tam et al., 2012). This analysis suggests a broad *cultural specificity* hypothesis that

in collectivist cultures, GBJW may be more strongly endorsed than PBJW, and may also be as strongly or more strongly related to well-being. This hypothesis competes with a broad *cultural generality* hypothesis that in collectivist and individualistic cultures alike, PBJW would be endorsed more strongly than GBJW and confer stronger psychological benefits.

Studies that have examined relationships between BJW and well-being in non-WEIRD countries do not provide clear support, as yet, for either of these broad hypotheses. Some studies have had important limitations, for example by including only PBJW, but not GBJW (India: Correia et al., 2009; Donat et al., 2016, Pakistan: Fatima & Suhail, 2010). Therefore, those data do not provide insight into the differential roles played by these two constructs in different cultural contexts. Other studies included both PBJW and GBJW but did not simultaneously analyze both constructs as predictors of well-being (e.g., Tian, 2019). Moreover, research that has simultaneously studied both PBJW and GBJW as predictors of well-being has revealed mixed findings, with some showing that PBJW was uniquely related to well-being (e.g., in India: Kamble & Dalbert, 2012), whereas others demonstrating that both constructs were related to well-being (though generally GBJW was a weaker predictor than PBJW: e.g., in China: Wu et al., 2011; Yu et al., 2018).

This mixed evidence cautions against generalizations about the primacy of GBJW or PBJW in all collectivistic or Asian societies and points to the need to consider other cultural factors relating to justice that may be relevant to the results. One important justice-related variable, more widespread and influential in Asian than in WEIRD cultures, but also varying in form and influence between Asian societies, is Karma (Agrawal & Dalal, 1993; Baumard & Boyer, 2013; Reichenbach, 1988; White et al., 2017, 2019).

### **Karma, Just-World Beliefs, and Well-Being**

Karma is a cultural belief that is conceptually related to BJW and may help shed light on how BJW relates to well-being in different cultural contexts. Karma, a word originating in Sanskrit, translates to English as “act, effect, fate.” In more general terms, it is defined as the result of one’s actions and refers to an impersonal and supernatural force that monitors moral behavior, rewarding good actions and punishing bad or wrong ones. While theistic beliefs focus on the legitimacy of powerful and moralizing gods (Bronkhorst, 2011; White et al., 2016), belief in Karma is driven by a supernatural conception of justice, in which just outcomes are brought about by an impersonal cosmic force (Baumard & Boyer, 2013).

Karma is a common belief in Asian cultures and is embedded in some Eastern religious traditions such as Buddhism, Hinduism, and Jainism (Reichenbach, 1988; White et al., 2017; for a review, see White & Norenzayan, 2019). Although Karma seems to be increasingly recognized and familiar to many in the West (e.g., Kaufman, 2005; Perrett, 1985; Statista Research Department, 2021), it is less strongly endorsed by Christians and non-religious Westerners than by Hindu Indians and Singaporean Buddhists (White et al., 2019, 2021). Moreover, it may be a belief seen as culturally inconsistent with the Western scientific worldview (Lin & Yen, 2015).

Karma has been shown to be associated with just world beliefs in Asian cultural groups (e.g., Agrawal & Dalal, 1993; Baumard & Boyer, 2013; Reichenbach, 1988; White et al., 2017, 2019). Past research has shown that belief in Karma is associated with BJW among Hindu Myocardial Infarction patients (Agrawal & Dalal, 1993) and with BJW for the self among both Canadian and Indian samples, with stronger associations emerging in the Indian, Hindu-majority sample (White et al., 2019). Thus far, however, no research has examined associations between belief in Karma and PBJW and GBJW to shed light on how the Karma-BJW link observed so far holds across different BJW constructs.

The way in which Karma is believed to deliver justice gives reason to expect differences in how it may be associated with GBJW and PBJW. Karma refers to the fundamental metaphysics of the cosmos, with implications for how everyone—not only the self—receives justice (Reich & Wang, 2015). According to Karmic beliefs, two physically unrelated events can be identified as cause and effect no matter how long the delay is between them (Reichenbach, 1988). Thus, people who strongly endorse Karma tend to be more prone to immanent and ultimate justice reasoning, in which freak accidents and other random negative outcomes are ascribed to victims' previous wrongdoings (Callan et al., 2014; Harvey & Callan, 2014; Taylor et al., 2020). Thus, Karma could be more strongly associated with GBJW than with PBJW. This prediction provides a basis for a cultural specificity hypothesis that GBJW would be more strongly endorsed in cultures that endorse Karma compared with those identified as non-Karmic.

Theorizing about the relationship between Karma and well-being is more complex. Like BJW, Karma can provide a degree of order and meaning to life, resulting in psychological benefits. Yet, Karma also has an affinity with a pessimistic explanatory style, referring to stable (long-lasting) and global (affecting all life aspects) causes of negative life events (Levy et al., 2009). In this sense, belief in Karma has both bright and dark sides. Past findings reflect this ambivalence. For example, some studies showed that belief in Karma is positively associated with well-being, physical and mental recovery, and healthy coping among patients and victims of accidents, natural disasters, and major life crises (Agrawal & Dalal, 1993; Anand, 2009; Dalal & Pande, 1988; Priya, 2004). Other studies, however, have found that belief in Karma is associated with poor physical and psychological well-being (Davidson et al., 2005; Levy et al., 2009).

In sum, Karma presents itself as a promising variable to consider in research on just-world beliefs across cultural settings, and one which specifically could help explain the contradictory findings concerning the relationship between just-world beliefs and well-being. To shed light on contradictory findings in this literature, we conducted studies to examine the associations between PBJW, GBJW, Karma, and well-being and the difference between PBJW and GBJW endorsements among the samples in two sites: Thailand and the UK.

## The Present Research

In the present studies, we examined the cultural generality and the cultural specificity hypotheses concerning the relationship between PBJW, GBJW, and well-being. We also aimed to explore the role of Karma in these hypotheses, as a relatively

neglected variable with links to BJW that could explain cultural differences in the relative strength, and function, of PBJW and GBJW. Before examining the role of Karma, we first sought (in Study 1) to establish whether the strength and the psychological functions of BJW in Thailand: an understudied cultural setting considered as highly collectivistic (Christopher et al., 2012; Hofstede, 2001; Neff et al., 2008; Oyserman et al., 2002) are different from the previous findings in WEIRD countries. In Study 2, we replicated Study 1 and also assessed Karma to examine its associations with BJW and well-being in two different samples: one recruited Thailand—as in Study 1—a collectivistic country with a majority-Buddhist country in which Karma is culturally salient (Central Intelligence Agency, 2022; White et al., 2019, 2021) and one in the UK (considered an individualistic country).

## Study 1

In this study conducted with Thai participants only, we derived the following contrasting predictions about PBJW and GBJW from the cultural specificity and cultural generality hypotheses:

**Hypothesis 1** Regarding the psychological functions of BJW, the cultural specificity hypothesis entails that PBJW and GBJW both predict higher life satisfaction and lower depression in the Thai sample (Hypothesis 1A). In contrast, the cultural generality hypothesis entails that only PBJW predicts higher life satisfaction and lower depression (Hypothesis 1B).

**Hypothesis 2** Regarding the strength of BJW, the cultural specificity hypothesis entails that GBJW is equally or even more strongly endorsed than PBJW as it has been in some other collectivist contexts (Wu et al., 2011, 2013) (Hypothesis 2A). In contrast, the cultural generality hypothesis entails that much as in WEIRD countries, PBJW is more strongly endorsed than GBJW (Hypothesis 2B).

## Method

### Participants and Procedure

The sample consisted of 177 undergraduate students recruited at a university located in the Bangkok Metropolitan Region (76.3% female, aged between 18 and 27 years, [ $M = 20.49$ ,  $SD = 1.45$ ]). Participants completed the study using paper-based questionnaires and received course credit for participation. The study took about 15 min to complete. Participants were thanked and debriefed upon completion.

All measures were translated from English into Thai and then independently back-translated, as described by Brislin (1970). The two English versions were compared for inaccuracies, which were resolved through discussion among the translators. The study received ethical approval from the Psychology research ethics panel (Reference ID: 201614605301653840).

## Measures

### Just World Beliefs

To assess just world beliefs, we used the 13-item *Belief in a Just World Scale* (BJW) developed by Dalbert (1999) which consists of a 6-item General Belief in a Just World scale (GBJW) (e.g., “I believe that, by and large, people get what they deserve.”,  $\alpha = .74$ ) and a 7-item Personal Belief in a Just World scale (PBJW) (e.g., “I believe that I usually get what I deserve.”,  $\alpha = .82$ ) (1 = *strongly disagree* to 6 = *strongly agree*).

### Well-Being Indices

We used a 5-item *Satisfaction with Life Scale* (SWLS) developed by Diener et al. (1985) to assess life satisfaction (e.g., “I am satisfied with my life,” 1 = *strongly disagree* to 7 = *strongly agree*,  $\alpha = 0.85$ ) and the 11-item *Rasch-derived short form of the Center for Epidemiological Studies Depression scale* (CES-D) developed by Cole et al. (2004) which asked how often respondents felt and behaved during the past week (e.g., “I felt that I couldn’t stop feeling down even with help from my family or friends.”, “I feel depressed.”, 0 = *rarely or none of the time [less than 1 day]* to 3 = *most or all of the time [5–7 days]*,  $\alpha = .74$ ).<sup>1</sup>

## Results

### Preliminary Factor Structure

We first examined the psychometric properties of the scales by conducting principal component analysis (PCA) using Oblimin with Kaiser normalization (an oblique rotation).

### Just World Beliefs

Using the eigenvalue > 1 criterion, we found a 3-factor structure, with the last factor emerging as marginally significant (eigenvalue = 1.344). Based on this, we computed a two-factor model and found that all items loaded appropriately onto

<sup>1</sup> In Study 1, we also created a 14-item affect scale borrowing positive affect items from the Affect Valuation Index by Tsai et al. (2006) (5 items, e.g., calm, relaxed, satisfied,  $\alpha = .74$ ) and negative affect items from the psychological discomfort measure by Elliot and Devine (1994) (9 items, e.g., unhappy, sad, tense,  $\alpha = .85$ ) which ask how often individuals have had each feeling during the last month (1 = never to 4 = all of the time). When we entered both BJW constructs predicting positive and negative affect, PBJW predicted positive affect ( $\beta = .49$ ,  $p < .001$ ) and negative affect ( $\beta = -.40$ ,  $p < .001$ ) in expected ways, whereas GBJW did not predict positive affect ( $\beta = -.00$ ,  $p = .960$ ) or negative affect ( $\beta = .15$ ,  $p = .062$ ). Note that the marginal positive relationship between GBJW and negative affect is the opposite of the negative relationship predicted by the cultural specificity hypothesis.

one of the two factors (loadings ranging from .440 to .898), with the exception of item “In my life injustice is the exception rather than the rule” which had similarly strong loadings onto the both two factors (.260 and .246, respectively). We therefore decided to drop this item from the creation of the PBJW scale ( $\alpha = .85$ ).

## Well-Being Indices

The PCA revealed one component for the life satisfaction items, with item loadings ranging from .736 to .830.

The PCA with the depression items revealed a 3-factor structure, with the last two factors emerging as marginally significant (eigenvalues = 1.465 and 1.085, respectively). Based on this finding, we computed a one-factor model, with most items loading appropriately onto one factor (loadings ranging from .562 to .788), with the exception of item “I felt that everything I did was an effort” loading negatively ( $-0.236$ ) onto the factor despite not being a reverse statement. In addition, the item “I felt that I was just as good as other people” and “I felt hopeful about the future” were problematic with loadings less than .200 (.149 and  $-0.183$ , respectively). We thus excluded these items from the scale ( $\alpha = 0.86$ ).

Though scale analyses led to some items being deleted from reported analyses, all results were the same when all items were included.

## Bivariate Correlations Between Study Variables

As shown in Table 1, initial analyses of bivariate correlations showed a significant *positive* correlation between PBJW and life satisfaction, as well as a significant *negative* correlation between PBJW and depression. There was also a significant *positive* correlation between GBJW and life satisfaction. In line with past results (e.g., Correia & Dalbert, 2007; Megías et al., 2019; Nartova-Bochaver et al., 2019; Tian, 2019), PBJW and GBJW were positively correlated with each other (yet the VIF suggested multicollinearity is not cause a concern, see Table 2). These correlations demonstrate the need to consider the unique predictive roles of PBJW and GBJW in well-being.

## Just World Beliefs as Predictors of Well-Being

To test hypothesis 1, we conducted multiple regression analysis in which both B JW constructs were entered as predictors of well-being. In support of the cultural generality hypothesis (1B) and disconfirming the cultural specificity hypothesis (1A), PBJW significantly predicted both indices of well-being: life satisfaction ( $\beta = .57, p < .001$ ) and depression ( $\beta = -.49, p < .001$ ), whereas GBJW did not predict life satisfaction ( $\beta = .05, p = .491$ ) or depression ( $\beta = .14, p = .073$ ) (see Table 2).



**Table 1** (Study 1) Descriptive statistics and correlations between all variables

| Variables            | <i>M</i> ( <i>SD</i> ) | 1       | 2      | 3       | 4 |
|----------------------|------------------------|---------|--------|---------|---|
| 1. PBJW              | 3.82 (.65)             | –       |        |         |   |
| 2. GBJW              | 3.51 (.74)             | .43***  | –      |         |   |
| 3. Life Satisfaction | 3.92 (1.01)            | .59***  | .30*** | –       |   |
| 4. Depression        | 1.07 (.61)             | –.43*** | –.07   | –.49*** | – |

Pearson's correlations (*r*) \*\*  $p < .01$ , and \*\*\*  $p < .001$

The BJW scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*)

The life satisfaction scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*)

The depression scale ranging from 0 (*rarely or none of the time [less than 1 day]*) to 3 (*most or all of the time [5–7 days]*)

**Table 2** (Study 1) Multiple linear regression analyses showing unique relations between PBJW and well-being

| Variable | Life satisfaction |             |         |           |      | Depression |             |                  |           |      |
|----------|-------------------|-------------|---------|-----------|------|------------|-------------|------------------|-----------|------|
|          | <i>B</i>          | <i>SE B</i> | $\beta$ | Tolerance | VIF  | <i>B</i>   | <i>SE B</i> | $\beta$          | Tolerance | VIF  |
| PBJW     | .89               | .11         | .57***  | .81       | 1.24 | –.46       | .07         | –.49***          | .82       | 1.22 |
| GBJW     | .06               | .09         | .05     | .81       | 1.24 | .11        | .06         | .14 <sup>†</sup> | .82       | 1.22 |

Life satisfaction:  $R^2 = .34$  ( $p < .001$ )

Depression:  $R^2 = .24$  ( $p < .001$ )

<sup>†</sup>  $p < .10$ , \*\*\* $p < .001$

## Difference Between Personal and General Belief in a Just World

To test hypothesis 2, we conducted a paired samples t-test with both BJW constructs and found in support of the cultural generality hypothesis (2B) and disconfirming the cultural specificity hypothesis (2A) that Thai participants endorsed PBJW ( $M = 3.28$ ,  $SD = .65$ ) more strongly than they did GBJW ( $M = 3.51$ ,  $SD = .74$ ),  $t(175) = 5.50$ ;  $p < .001$ ,  $d = .31$ .

## Discussion

Study 1 showed variations in the strength and possible psychological functions of BJW in a Thai sample, closely resembling those typically found in WEIRD cultural contexts. Specifically, PBJW was endorsed more strongly than GBJW and uniquely predicted all indices of well-being. The present findings therefore provide provisional support for the cultural generality hypothesis in which justice in the world of the self, rather than other people generally, is of primary

psychological importance. However, the present study is the first to be conducted in Thailand on the strength and functions of BJW, and more confidence in its results would be possible if they were replicated. Further, the study does not offer any clues as to why PBJW appeared to be more strongly endorsed and more strongly associated with psychological functioning in the present sample, nor, by extension, why the results in this respect were similar to some other studies of Asian samples (e.g., in India: Kamble & Dalbert, 2012) and not others (e.g., in China: Wu et al., 2011; Yu et al., 2018). Thus, in Study 2, we sought to replicate our results and considered the role of the possibly crucial variable, belief in Karma, and compare the findings between a Thai and a UK sample.

## Study 2

In Study 2, we sought to replicate Study 1 by recruiting another sample of participants in Thailand to compare with a sample in the UK. We also assessed Karma in this study because it is a justice concept empirically and conceptually related to just world beliefs (Agrawal & Dalal, 1993; White et al., 2019). In addition, Karma is a commonly held belief in Eastern religions including Buddhism (Reichenbach, 1988; White et al., 2017) and it is more strongly endorsed among the believers including Hindus and Buddhists (White et al., 2019, 2021).

Karmic beliefs are widely recognized by individuals in WEIRD contexts (e.g., Kaufman, 2005; Perrett, 1985; Statista Research Department, 2021), but do not represent shared, culturally mandated belief systems underpinned by wider religious or metaphysical systems of meaning. They may be more ad hoc observations derived from people's interpretation of their individual experience, learned through casual contact with Eastern or 'New-Age' cultural ideas, or have a metaphorical function (York, 2001). Thus, we aimed to explore the unique role of Karma in predicting well-being when controlling for BJW. We predicted that Karma would be related to well-being but also that relationships between Karma and well-being would be different across the two samples. Specifically, as Karma is more endemic in the East, Karma should be more important to well-being among individuals in the Thai sample. In addition, this analysis enabled us to examine whether, in both samples, the two BJW constructs predict well-being independently of belief in Karma, and so explore how this cultural belief system may or may not explain the apparent psychological benefits of BJW.

We tested the following hypotheses in the present study:

**Hypothesis 1** Regarding the psychological functions of BJW, the cultural generality and cultural specificity hypotheses entail the same predictions for well-being in the UK sample: that only PBJW should predict higher life satisfaction and lower depression. As in Study 1, they entail contrasting predictions for the Thai sample: the cultural specificity hypothesis entails that PBJW and GBJW both predict higher life satisfaction and lower depression among Thai students (Hypothesis 1A), in contrast to the cultural generality hypothesis which entails that only PBJW predicts higher life satisfaction and lower depression (Hypothesis 1B).

**Hypothesis 2** We predicted that the relationships outlined in Hypothesis one would survive when Karma is controlled for, indicating the functions of BJW are not reducible to belief in Karma.

**Hypothesis 3** We predicted that nonetheless, Karma would predict well-being, reflected even after both BJW constructs are controlled for. We also predicted that Karma would be more strongly predictive of well-being in Thailand than in the UK.

**Hypothesis 4** We predicted that Karma would be associated uniquely with GBJW once PBJW was adjusted for, and that the strength of its relation to well-being would be stronger in Thailand than in the UK.

**Hypothesis 5** Regarding the strength of BJW, the cultural generality and cultural specificity hypothesis yield the same predictions for the UK sample: that PBJW would be endorsed more strongly than GBJW. For the Thai sample, they yield contrasting predictions. Cultural specificity entails that GBJW will be as or even more strongly endorsed than PBJW among Thai students (Hypothesis 5A), whereas the cultural generality hypothesis entails that PBJW will be more strongly endorsed than GBJW among Thai students (Hypothesis 5B).

**Hypothesis 6** The cultural specificity hypothesis as expressed in Hypothesis 5A entails that sample nationality moderates the difference in strength of PBJW and GBJW. Even if PBJW remains stronger overall than GBJW in Thailand (supporting the contrasting prediction 5B), it is still possible that the beliefs differ relative to the UK. Specifically, the cultural specificity hypothesis suggests that compared to individuals in the UK sample, individuals in the Thai sample would endorse PBJW less strongly, and GBJW more strongly.

## Method

### Participants and Procedure

A total of 520 undergraduate students participated in this study for course credit including 175 from Thailand (74.3% female, 80.6% Buddhist, aged between 18 and 29 years [ $M = 19.82$ ,  $SD = 1.52$ ]), and 345 from the UK (83.5% female, 62.0% no religion and 30.7% Christian, aged between 18 and 55 years<sup>2</sup> [ $M = 19.32$ ,  $SD = 3.64$ ]) who self-reported living in the country since birth. Participants completed the study via online questionnaires. The study took about 20 minutes to complete. Upon completion, participants were thanked and debriefed. The study received ethical approval

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<sup>2</sup> We recruited the UK samples from the School's research participation scheme; thus, some mature students completed our study. When we exclude mature students (age over 23) in the analyses, the main result patterns are still the same.

from the Psychology research ethics panel (Reference ID: 201614823093564204 and 201714931330824423).

## Measures

### Measures Adapted from Study 1

We included the following measures as in Study 1: *Belief in a Just World Scale (BJW)* (Dalbert, 1999): (for PBJW,  $\alpha = .77$  in Thailand and  $\alpha = .84$  in the UK and for GBJW,  $\alpha = .69$  in Thailand and  $\alpha = .81$  in the UK), *Satisfaction with Life Scale (SWLS)* (Diener et al., 1985) ( $\alpha = .85$  in Thailand and  $\alpha = .86$  in the UK), *Rasch-derived short form of the Center for Epidemiological Studies Depression scale (CES-D)* (Cole et al., 2004) ( $\alpha = .80$  in Thailand and  $\alpha = .86$  in the UK).

### Belief in Karma

We used the 7-item *Belief in Karma Scale* developed by Kopalle et al. (2010) (e.g., “I believe in Karma” and “Good/bad actions in the present lead to good/bad outcomes in the future either in this life or in the hereafter,” 1 = *strongly disagree* to 7 = *strongly agree*,  $\alpha = .79$  in Thailand and  $\alpha = .74$  in the UK).

## Results

### Preliminary Factor Structure

As in Study 1, we conducted principal component analysis (PCA) using Oblimin with Kaiser normalization (an oblique rotation).

### Just World Beliefs

Using the eigenvalue  $> 1$  criterion, we found 4 factors in the Thai sample, with the last two factors emerging as marginally significant (eigenvalues = 1.296 and 1.112, respectively). Based on this finding, we computed a two-factor model and found that most items appropriately loaded onto the two factors (loadings ranging from .429 to .809) although with the exception of the item “In my life injustice is the exception rather than the rule” loading onto the GBJW Factor (.416). In the UK, the analysis revealed a 3-factor structure, with the last factor emerging as marginally significant (eigenvalue = 1.076). Based on this finding, we used the two-factor model and found that all items appropriately loaded onto one of the two factors, with loadings ranging from .499 to .838. After removing the problematic items, the reliability coefficients of both scales were adequate ( $\alpha = .80$  in the Thai sample and  $\alpha = .84$  in the UK sample).

## Well-Being Indices

The PCA revealed a one-factor solution for the life satisfaction items, with loadings ranging from .716 to .832 in the Thai sample and from .638 to .864 in the UK sample.

For depression items, the PCA revealed a 3-factor solution in the Thai sample, with the last factor emerging as marginally significant (eigenvalue = 1.043). Next, we computed a two-factor model and found that most items loaded onto Factor 1, with loadings ranging from 0.437 to 0.728; a second factor did not show consistent loadings. The item “I felt that everything I did was an effort” seems to be problematic because the loading onto Factor 1 (0.201) was much lower than onto Factor 2 (0.677). In addition, the reversed item “I felt that I was just as good as other people.” did not load strongly onto Factor 1 (0.284). Based on this finding, running the 1-factor model, both reverse items: “I felt that I was just as good as other people.” and “I felt hopeful about the future.” did not appropriately load onto the factor (0.477 and 0.009, respectively). The PCA revealed a 2-factor solution in the UK sample, with the last factor emerging as marginally significant (eigenvalue = 1.067). In a 1-factor model, all items loaded appropriately onto one factor, with loadings ranging from 0.459 to 0.837. After removing the problematic items, we reached  $\alpha = .83$  in Thailand and  $\alpha = .85$  in the UK.

## Karma

The PCA with the Karma items revealed two factors in the Thai sample, with the last factor emerging as marginally significant (eigenvalue = 1.134). Thus, we decided to use a 1-factor model, with items loadings ranging from .248 to .894. In the UK, the analysis revealed two factors. Most items loaded onto Factor 1 (loadings ranging from .301 to .930); a second factor did not show consistent loadings. The items “There is no beginning or end to the universe.” and “The world was not formed by a once-for-all act of creation.” seem to be problematic because they did not appropriately load onto the Factor 1 (.026 and  $-.281$ , respectively). After removing the problematic items, we reached  $\alpha = .87$  in Thailand and  $\alpha = .79$  in the UK.

Though scale analyses led to some items being deleted from reported analyses, all results were the same when all items were included.

## Bivariate Correlations Between Study Variables

As seen in Tables 3, both PBJW and GBJW were *positively* correlated with life satisfaction in both Thailand and the UK. Moreover, both BJW constructs were *negatively* correlated with depression in the UK while only PBJW was *negatively* correlated with depression in Thailand. Karma was correlated with GBJW only, in both samples.

**Table 3** (Study 2) Descriptive statistics and correlations between all variables in Thailand and the UK

| Variables            | <i>M</i> ( <i>SD</i> ) | 1       | 2      | 3    | 4       | 5 |
|----------------------|------------------------|---------|--------|------|---------|---|
| <i>Thailand</i>      |                        |         |        |      |         |   |
| 1. PBJW              | 4.01 (.62)             |         |        |      |         |   |
| 2. GBJW              | 3.71 (.66)             | .51***  | –      |      |         |   |
| 3. Karma             | 4.90 (1.24)            | .09     | .28*** | –    |         |   |
| 4. Life Satisfaction | 4.25 (1.02)            | .44***  | .20**  | .05  | –       |   |
| 5. Depression        | 1.06 (.58)             | –.21**  | .02    | .10  | –.29*** | – |
| <i>UK</i>            |                        |         |        |      |         |   |
| 1. PBJW              | 4.17 (.75)             | –       |        |      |         |   |
| 2. GBJW              | 3.28 (.85)             | .26***  | –      |      |         |   |
| 3. Karma             | 4.24 (1.26)            | .06     | .16**  | –    |         |   |
| 4. Life Satisfaction | 4.50 (1.25)            | .56***  | .23*** | .13* | –       |   |
| 5. Depression        | .87 (.64)              | –.29*** | –.14** | .09  | –.45*** | – |

Pearson's correlations (*r*). †  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , and \*\*\*  $p < .001$

The BJW scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*)

The belief in Karma ranging from 1 (*strongly disagree*) to 7 (*strongly agree*)

The life satisfaction scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*)

The depression scale ranging from 0 (*rarely or none of the time [less than 1 day]*) to 3 (*most or all of the time [5–7 days]*)

### Just World Beliefs and Karma as Predictors of Well-Being

To test Hypothesis 1 concerning the relative predictive value of PBJW and GBJW for well-being, we conducted multiple linear regression analyses by entering PBJW and GBJW as predictors of life satisfaction and depression (Model 1). As in Study 1, in the Thai sample, PBJW was uniquely related to life satisfaction ( $\beta = .45$ ,  $p < .001$ ) and depression ( $\beta = -.30$ ,  $p < 0.001$ ) in expected ways. GBJW positively predicted depression ( $\beta = .18$ ,  $p = .040$ ) (see Table 4) favoring the cultural generality hypothesis (1B) over the cultural specificity hypothesis (1A). In the UK, both PBJW ( $\beta = .54$ ,  $p < .001$ ), and GBJW ( $\beta = .09$ ,  $p = .049$ ) significantly predicted life satisfaction. PBJW uniquely predicted depression ( $\beta = -.27$ ,  $p < .001$ ) whereas GBJW did not ( $\beta = -.07$ ,  $p = .188$ ) (see Table 5). Providing support for the cultural generality hypotheses, moderation analyses using Hayes's (2017) Process Model (version 3.5.3, Model 1, with 5,000 resamples and 95% standardized confidence intervals) revealed no evidence that sample nationality (UK =  $-1$  and Thailand =  $1$ ) was a significant moderator of the relationships between just-world beliefs and well-being (PBJW and life satisfaction: effect =  $-.216$ ,  $p = .129$ , effect size =  $.00$ , PBJW and depression: effect =  $-.048$ ,  $p = .571$ , effect size =  $.00$ , GBJW and life satisfaction: effect =  $-.034$ ,  $p = .822$ , effect size =  $.00$ , GBJW and depression: effect =  $-.126$ ,  $p = .121$ , effect size =  $.01$ ).

To test Hypothesis 2, we included Karma as an additional predictor (Model 2) and found that the relationships between PBJW and well-being remained similar in both countries (see Tables 4 and 5).

**Table 4** (Study 2) Summary of hierarchical regression analyses for BJW and belief in Karma predicting well-being in Thailand

| Variable       | Life satisfaction |             |         |           |      | Depression |             |                  |           |      |
|----------------|-------------------|-------------|---------|-----------|------|------------|-------------|------------------|-----------|------|
|                | <i>B</i>          | <i>SE B</i> | $\beta$ | Tolerance | VIF  | <i>B</i>   | <i>SE B</i> | $\beta$          | Tolerance | VIF  |
| <i>Model 1</i> |                   |             |         |           |      |            |             |                  |           |      |
| PBJW           | .75               | .13         | .45***  | .75       | 1.34 | -.28       | .08         | -.30***          | .75       | 1.34 |
| GBJW           | -.05              | .12         | -.03    | .75       | 1.34 | .15        | .08         | .18*             | .75       | 1.34 |
| <i>Model 2</i> |                   |             |         |           |      |            |             |                  |           |      |
| PBJW           | .75               | .13         | .46***  | .74       | 1.35 | -.28       | .08         | -.30**           | .74       | 1.35 |
| GBJW           | -.06              | .13         | -.04    | .69       | 1.45 | .13        | .08         | .15 <sup>†</sup> | .69       | 1.45 |
| Karma          | .02               | .06         | .02     | .92       | 1.09 | .04        | .04         | .08              | .92       | 1.09 |

Life satisfaction:  $R^2 = .18$  at Model 1;  $\Delta R^2 = .00$  ( $p < .001$ )

Depression:  $R^2 = .06$  at Model 1;  $\Delta R^2 = .01$  ( $p < .01$ )

<sup>†</sup>  $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Table 5** (Study 2) Summary of hierarchical regression analyses for BJW and belief in Karma predicting well-being in the UK

| Variable       | Life satisfaction |             |                  |           |      | Depression |             |         |           |      |
|----------------|-------------------|-------------|------------------|-----------|------|------------|-------------|---------|-----------|------|
|                | <i>B</i>          | <i>SE B</i> | $\beta$          | Tolerance | VIF  | <i>B</i>   | <i>SE B</i> | $\beta$ | Tolerance | VIF  |
| <i>Model 1</i> |                   |             |                  |           |      |            |             |         |           |      |
| PBJW           | .90               | .08         | .54***           | .93       | 1.07 | -.23       | .05         | -.27*** | .93       | 1.07 |
| GBJW           | .14               | .07         | .09*             | .93       | 1.07 | -.05       | .04         | -.07    | .93       | 1.07 |
| <i>Model 2</i> |                   |             |                  |           |      |            |             |         |           |      |
| PBJW           | .89               | .08         | .53***           | .93       | 1.07 | -.23       | .05         | -.28*** | .93       | 1.07 |
| GBJW           | .11               | .07         | .08 <sup>†</sup> | .91       | 1.10 | -.07       | .04         | -.09    | .91       | 1.10 |
| Karma          | .09               | .05         | .09*             | .97       | 1.03 | .06        | .03         | .12*    | .97       | 1.03 |

Life satisfaction:  $R^2 = .31$  at Model 1;  $\Delta R^2 = .01$  ( $p < .001$ )

Depression:  $R^2 = .08$  at Model 1;  $\Delta R^2 = .01$  ( $p < .001$ )

<sup>†</sup>  $p < .10$ , \* $p < .05$ , \*\*\* $p < .001$

To test Hypothesis 3, we conducted multiple linear regression analyses and found that, in the Thai sample, Karma predicted neither life satisfaction ( $\beta = .02$ ,  $p = .742$ ) nor depression ( $\beta = .08$ ,  $p = .283$ ) (see Table 4). In contrast, Karma was a positive predictor of both life satisfaction ( $\beta = .09$ ,  $p = .048$ ) and depression ( $\beta = .12$ ,  $p = .023$ ) in the UK, although these associations were small in conventional terms (see Table 5). Moderation analyses using Hayes's (2017) Process Model (version 3.5.3, Model 1, with 5,000 resamples and 95% standardized confidence intervals) suggested that these subtle differences in patterns of association between the two samples did not achieve statistical significance. Sample nationality (UK = -1 and Thailand = 1) did not moderate the relationship between Karma and life satisfaction: effect = -.090,  $p = .305$ , effect size = .00, nor Karma and depression: effect = -.001,  $p = .977$ , effect size = .00).

## Just World Beliefs as Predictors of Karma

To test hypothesis 4, which predicted that Karma would be uniquely associated with GBJW once PBJW is adjusted for. We found support for this hypothesis from a multiple regression analysis in which both PBJW and GBJW were entered simultaneously as the predictors of Karma. The results showed that in the Thai sample, Karma was predicted by GBJW ( $\beta = .32, p < .001$ ) but not PBJW ( $\beta = -.07, p = .396$ ). In the UK sample, Karma was also predicted by GBJW ( $\beta = .15, p = .006$ ) but not PBJW ( $\beta = .02, p = .695$ ). Thus, GBJW uniquely predicted Karma across both samples, although more strongly so in Thailand. In addition, we conducted a moderation test using Hayes's (2017) Process Model (version 3.5.3, Model 1, with 5,000 resamples and 95% standardized confidence intervals) to confirm whether the sample nationality (UK = -1 and Thailand = 1) moderates the association between GBJW and Karma. We found a marginal moderating effect, providing weak evidence for the prediction that GBJW and Karma were more strongly related in Thailand than the UK (effect = .15,  $p = .067$ , effect size = .00).

## Difference Between Personal and General Belief in a Just World

Having examined interrelationships between BJW, Karma, and well-being, we turned finally to analysis of the strength of BJW.

To test Hypothesis 5 concerning the strength of BJW constructs, we conducted a paired samples t-test with both BJW constructs and found in support of the cultural generality hypothesis and replicating Study 1, PBJW ( $M = 4.01, SD = 0.62$ ) was endorsed more strongly than GBJW ( $M = 3.71, SD = 0.66$ ) in the Thai sample,  $t(175) = 6.19, p < .001, d = .30$ . In the UK sample, consistent with previous research and with both perspectives, PBJW ( $M = 4.17, SD = 0.75$ ) was also endorsed more strongly than GBJW ( $M = 3.28, SD = 0.85$ ),  $t(344) = 16.89, p < .001, d = .89$ .

Tests of Hypothesis 6 supported the cultural generality hypothesis in that PBJW was endorsed more strongly in both samples. However, the possibility remains that consistent with a weaker interpretation of the cultural specificity hypothesis, this effect is less pronounced in the Thai than the UK sample. In support of this prediction, the results of a mixed-design analysis of variance (ANOVA) with nationality as the between-groups factor and sphere of BJW as the within-groups factor uncovered the predicted interaction effect ( $F(1,518) = 52.55, p < .001$ , partial  $\eta^2 = .09$ ). Consistent with our predictions, the UK participants endorsed PBJW more strongly than did the Thai participants ( $t(412.52) = 2.68, p = .008, d = .17$ ) whereas the Thai participants endorsed GBJW more strongly than did the UK participants, ( $t(434.53) = 6.29, p < .001, d = .43$ ).

In addition, we performed the analysis of variance (ANOVA) to examine the difference between Karma endorsements across both samples when treating PBJW and GBJW as covariates. In support of predicting Karma as an endemic concept, Thai participants ( $M = 4.90, SD = 1.34$ ) endorsed Karma more strongly than did the UK participants ( $M = 4.24, SD = 1.26$ ), ( $F(1516) = 19.87, p < .001$ , partial  $\eta^2 = .04$ ).



## Discussion

The results of Study 2 replicated Study 1 by showing that participants in both Thai and UK samples endorsed PBJW more strongly than they did GBJW and that participants' endorsement of PBJW was uniquely associated with their well-being. These results are consistent with previous studies conducted in WEIRD and some non-WEIRD contexts. This finding favors the cultural generality hypothesis that believing the world to be fair to the self is psychologically adaptive across cultures. We also found differences in BJW endorsements across the samples: participants in the UK sample endorsed PBJW more strongly than did participants in the Thai sample, whereas participants in the Thai sample more strongly endorsed GBJW than the participants in the UK sample. These results support the cultural specificity hypothesis.

The present results also extend Study 1 by showing that these associations are not explained by variations in beliefs in Karma, a construct that is common to Eastern religions (Reichenbach, 1988; White et al., 2017) including Buddhism in Thailand. All the relationships observed between BJW and well-being remained significant when Karma was controlled for. Surprisingly, Karma was not associated with well-being in Thailand as revealed in bivariate correlations and in regressions that were adjusted for BJW. In the UK sample, on the other hand, Karma was positively correlated with life satisfaction, and predicted life satisfaction and depression when controlling for BJW. However, relationships between Karma and well-being were not significantly different across the two samples; further, the sample in the UK was larger, affording greater statistical power.

Overall, therefore, the relationship between Karma and well-being seemed weak and inconsistent, in keeping with the weak and inconsistent effects observed in other studies. This result is also in keeping with the ambivalent nature of Karma, which, on the one hand, invests the cosmos with meaning but on the other may be associated with helpless or pessimistic explanatory styles. In contrast, a clear message delivered by Study 2's findings is that the relationship between PBJW and well-being is robust and cannot be reduced to beliefs in Karma. Though there are clearly significant conceptual overlaps between Karma and BJW (Agrawal & Dalal, 1993; Levy et al., 2009), the present results show that their implications for well-being can diverge.

The results also provide some helpful clarification about how Karma and BJW are related. Across various samples, White et al. (2019) found that Karma was related to BJW for the self (BJW-Self), a scale that is very similar conceptually to PBJW. They did not simultaneously measure or adjust for beliefs in justice for people generally. The present results suggest that across both samples, Karma positively correlated with both PBJW and GBJW but more strongly with the latter. Further, when both BJW constructs were entered simultaneously as the predictors of Karma, Karma was uniquely predicted by GBJW. Belief in Karma refers to a metaphysical order in which supernatural cosmic forces reward good behaviors and punish bad ones. Since individuals do not live in the cosmos alone, it makes sense that Karma is related to beliefs about the extent to which the world is just in general.

## General Discussion

### The Present Findings

Lerner's (1980) just world theory proposes that people need to believe that life is fair. It does not suggest that this need is innate, but nor does it suggest that it is specific to any culture. Rather, it emerges as children learn to temper the pursuit of immediate personal gratification by acting in line with their society's rules of conduct. In other words, the need to believe in justice emerges inherently from the development of moral agency (see also Bandura, 1999). Thus, just world theory suggests that beliefs concerning that outcomes in one's own life are fair is of primary psychological importance (Dalbert, 1999; Lerner, 1980). Believing that outcomes in other people's lives are fair more generally is of secondary importance and matters to the extent that the outcomes other people experience may be a sign of things to come for the self. Consistent with this theory, much research has shown that compared to GBJW, PBJW is not only endorsed more strongly, but is also more predictive of well-being. However, some theorizing and research findings suggest that this pattern of results may be confined to individualistic cultures. In collectivistic cultures, beliefs about others may be at least as important to people's well-being as beliefs about the self, and so both PBJW and GBJW may be important to well-being.

In the present studies, we tested this cultural specificity hypothesis (i.e., PBJW and GBJW will positively predict well-being.) against the cultural generality hypothesis (i.e., PBJW will positively predict well-being). We found clear evidence that PBJW was more strongly endorsed and more psychologically important in Thailand—a highly collectivistic country—as well as in the UK. The pattern of results was very similar across the two countries, which supports the cultural generality hypothesis. This finding, such as others in the literature, indicates that PBJW has psychological priority even in certain collectivistic contexts (e.g., in India: Kamble & Dalbert, 2012). It is therefore worth considering factors that may explain the psychological functions of BJW, other than individualism and collectivism. The present findings add to a growing body of evidence that psychological generalizations cannot readily be made about Asia, or collectivistic countries, as if they were a homogenous entity (Vignoles et al., 2016). More nuanced theorizing and research is required, including attention to cultural factors that may differentiate these countries.

One of these possible factors is belief in Karma, which in majority-Buddhist Thailand is salient (Central Intelligence Agency, 2022). Like BJW, Karma promises that good deeds are immediately or ultimately rewarded and bad deeds are punished. Indeed, previous work has shown that it is correlated with BJW, and more strongly so in cultures where Karma is an endemic concept (White et al., 2019). These findings raise important questions for the cultural generality and mechanisms linking BJW to well-being. These questions include whether Karma fulfills the same psychological functions as BJW, and how strong and specific are its relationships with the PBJW and GBJW. The present studies yield important initial findings suggesting that whether or not belief in Karma is culturally endemic, Karma is uniquely related to GBJW, and has little or no relation to well-being.

## Limitations and Future Directions

Aside from Karma, demographic variables and shared experiences of hardship may also be important. A limitation of the present studies is their reliance on student samples (Ercikan, 2009; Landis & Kuhn, 1957), consisting mostly of women. Student samples may be more privileged and Westernized relative to other citizens and be more exposed to international media (Giles & Maltby, 2004; Shome, 2012). To address this limitation, future studies should recruit the samples from more than a single location, capitalizing on the multilevel approach to studying just world beliefs. Some previous studies suggest that GBJW (or BJW for others) may be endorsed more strongly, or also play an important role in people's well-being, in non-student samples, especially those who have experienced chronic hardship (McParland & Knussen, 2010; Sutton & Winnard, 2007; Wu et al., 2009, 2011). Future studies should therefore seek to sample other sections of the population. Nonetheless, the present data provide a useful glimpse into relatively privileged and educated young people, whose beliefs about justice and Karma may have an important influence on the future of their society. As well as confirming parallels between Thailand and the UK, they also point to subtle differences, such as the differing relations between just world and Karmic beliefs in the two societies.

These results, together with other recent results (e.g., White et al., 2019), pave the way for further research into cultural variations in just world and Karmic beliefs. As well as recruiting non-student samples, researchers would benefit from using longitudinal and experimental methods to better understand causal relations between these variables and well-being. Further, it is recommended that researchers conduct studies over multiple sites, which would help test the cultural generality hypothesis beyond samples from two contexts only, as we did here, and use multilevel analyses to tease apart the effect of individual-level vs. regional variations in BJW and Karma.

## Conclusions

The singular message of the present results is that in some sections of Asian, collectivist societies, PBJW seems to be more important than GBJW for well-being, much as it is in WEIRD societies. Further, the relation between just-world beliefs and well-being is not explained by beliefs in Karma, even in a society such as Thailand in which Karmic beliefs are widespread and entrenched culturally. This offers support for the hypothesis that Lerner's (1980) just world theory can be generalized to some non-WEIRD cultures. Though the overall results tend to support the cultural generality hypothesis that the relative strength and functions of PBJW and GBJW remain much the same even across diverse cultural variations, there are some signs in the present data of variation in the strength of these two constructs of BJW. While PBJW was endorsed more strongly in both countries, the difference was significantly attenuated in Thailand: Thai students endorsed PBJW less strongly and endorsed GBJW more strongly than did UK students. These findings, together with previous evidence of contextual differences in the strength or function of BJW (e.g.,

Wu et al., 2011, 2013), suggest that more research is required to identify cultural or other social factors that shape how strongly people believe the world is just to themselves and others, and what these beliefs mean for them psychologically.

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## Declarations

**Conflict of interest** We have no known conflict of interest to disclose.

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