

# Exploring Repressive Suffering Construal as a Function of Collectivism and Social Morality

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## Abstract

Prior research demonstrated that an experimentally primed collectivist orientation increased repressive suffering construal (RSC): interpretation of suffering as being caused by deviance and having the purpose of maintaining social order. Furthermore, the effect of collectivism on RSC was mediated by *social morality*: the belief that society dictates morality. The current research provides the first cross-cultural empirical evidence for the links between RSC, collectivism, and social morality. In an investigation of religious subcultures, collectivist Mennonites endorsed RSC to a greater degree than individualist Unitarian Universalists and undergraduates, and this difference was mediated by collectivism. Examining the RSC construct in greater detail, two additional studies compared participants from China and the United States. Chinese participants scored higher on RSC's teleological component—the belief that suffering upholds society—but not its causal component—the belief that suffering is caused by deviance. This difference was mediated by social morality endorsement.

## Keywords

religion, culture, morality, suffering, Mennonites

Across cultures and history, people crave a coherent understanding of suffering (Shweder, Much, Mahapatra, & Park, 1997). Without it, suffering can appear arbitrary and uncontrollable, arousing anxiety and weakening one's overall grip on reality (Janoff-Bulman, 1992). This is why all cultures provide their members with tools for making sense of and coping with frustrating and painful events.

Researchers have begun articulating how, exactly, cultures shape understandings of suffering. Sullivan, Landau, Kay, and Rothschild (2012) found that a collectivist value orientation was positively associated with a *repressive suffering construal* (RSC): seeing suffering as the result

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of the sufferer's deviance from shared norms and serving the purpose of maintaining the social order. Also, experimentally activating collectivism increased RSC by increasing *social morality*—the perception that morality is socially determined.

Our goal in the current research is to investigate the links between collectivism, social morality, and RSC outside of the laboratory using naturalistic and cross-cultural data. We examined three cross-cultural data sets. Study 1 examines variations in RSC and individualism–collectivism between three religious cultural subgroups within the United States: collectivist Mennonites, individualist Unitarian Universalists, and a typical social psychological sample of undergraduates. Studies 2A and 2B compare Chinese and U.S. participants and more closely examine specific components of RSC. In particular, we hypothesize that Chinese participants will differ from U.S. participants in their level of *teleological* RSC—believing that individual suffering upholds society—but not in their level of *causal* RSC—believing that suffering is caused by individual deviance. Next, we discuss the theoretical background of these studies.

## Collectivism and Social Morality

Collectivist cultures and subcultures can be characterized as promoting prosocial goals and the experience of the self as situated in a web of meaningful, indissoluble relationships (Adams & Plaut, 2003). Individualist (sub-)cultures, by contrast, privilege egocentric goals and an autonomous sense of the self as moving through a sea of largely temporary, dissoluble relationships. These orientations have been shown to predict a wide variety of attitudinal, behavioral, and cognitive tendencies (e.g., Cross, Hardin, & Gercek-Swing, 2011).

Of particular interest is evidence that collectivists' valuing of shared norms and conformity reduces their tolerance and lenience for deviant individuals (Bond & Smith, 1996; Brauer & Chaurand, 2010). These tendencies reflect collectivists' (vs. individualists') stronger endorsement of social morality: the belief that morals are determined by the community rather than by self-interested individuals. This construct can be understood in light of Shweder et al.'s (1997) distinction between the ethics of *community*, *divinity*, and *autonomy*. Social morality is high in cultures that emphasize the ethic of community—moral obligations to maintain social coherence and hierarchy—and of divinity—moral obligations to prevent actions that violate sacrosanct rules and taboos. Social morality is low in individualist cultures, which emphasize the ethic of autonomy—moral obligations to protect individual rights.

## Repressive Suffering Construal

Sullivan et al. (2012) extended this work on collectivism and social morality to account for cultural differences in suffering construal. On the basis of prior theory (Ricoeur, 1967) and ethnographic evidence (Hallowell, 1976), they hypothesized that the collectivist orientation toward social morality encourages a repressive construal because it portrays suffering as the consequence of deviating from shared norms and as serving ultimately to reinforce those norms. A series of experiments confirmed that situationally primed collectivist orientation increased RSC. This effect was consistent whether collectivist orientation was primed consciously or nonconsciously, and whether the evaluated suffering was abstract (i.e., “suffering in general”), or a specific type of relatively low-impact (teenage angst) or high-impact suffering (the experience of AIDS). Furthermore, the effect of primed collectivist orientation on RSC was mediated by social morality endorsement. In sum, people who are oriented toward more social (as opposed to personal) goals, roles, and self-concepts also adopt a more social conception of morality, which in turn predicts a tendency to see suffering as caused by deviance and having a repressive (i.e., norm-reinforcing) function.

This mediational analysis suggests an interesting possibility that has yet to be examined: Group differences in social morality might predict higher RSC even in the absence of observable differences in collectivism. Because social morality drives the effect of collectivism on RSC, it is likely that a cultural group that strongly endorses social morality (compared with one that does not) will tend toward RSC regardless of whether they also show a measurable difference in collectivism. This possibility is supported by recent studies suggesting that cultural differences are better explained by alternate approaches to the prevailing “subjective values” framework, which has guided past research on individualism–collectivism (Saucier et al., 2015). For instance, in contrast to the abstract value of collectivism, expressions of social morality may more closely approximate the “cultural tasks” that individuals are socialized to perform in concrete social situations (Kitayama & Imada, 2010) or the folk beliefs shaping their attributions (e.g., about suffering; Leung & Bond, 2004). Such interpretations are in line with the original empirical derivation of the ethics of community and divinity, which was based on analysis of local interpretations of concrete, morally relevant events (Shweder et al., 1997). On the basis of these theoretical refinements, we continue to expect greater collectivism (at the level of cultural values) to predict greater social morality and hence RSC. Yet, we can also expect social morality to predict RSC independently.

### **The Components of RSC: Causal and Teleological**

Sullivan et al. (2012) distinguished RSC’s *causal* and *teleological* components. Causal RSC is the belief that suffering is the result of immorality or deviation from social norms. Teleological RSC is the belief that the purpose of suffering is to enforce compliance with norms and maintain society. The causal aspect of RSC relates to the victim-blaming phenomenon typically studied under the purview of just world theory (Lerner, 1980). The teleological component adds an element that is not reflected in standard belief in a just world research, namely, seeing suffering as having the ultimate function of preserving social order. In collectivist and/or high-social morality cultures, if a person believes suffering to be punishment for antisocial behavior, he or she is also likely to believe suffering has the ultimate effect of stopping people from breaking norms, and of reintegrating deviants into society through atonement rituals (Braithwaite, 1989).

The causal/teleological distinction may be theoretically useful, but at present, there is no evidence that the two components have unique causes and consequences. Indeed, as measured in prior studies within the United States, causal and teleological RSC are highly correlated, which is to be expected based on our guiding analysis. Nevertheless, prior theory, ethnography, and research suggest that cultural differences in RSC might be driven primarily by one or the other aspect. For instance, consider that the aforementioned work on victim blaming and just world belief has involved samples from the United States and Western Europe, which are considered fairly individualistic (Cross et al., 2011). Because these studies consistently show significant levels of victim blaming, it is reasonable to assume that people in individualist societies often attribute suffering to deviance (i.e., they often invoke causal RSC). Why, then, is global RSC associated with cultural collectivism in ethnographic and experimental studies? One possibility, explored in the present research, is that at least some between-culture differences in RSC are driven primarily by differences in the teleological component.

This possibility fits our earlier claim that social morality is the driving force behind RSC (and the indirect path through which any effect of collectivism on RSC occurs). The ethic of autonomy (which is generally opposed to social morality) holds individuals personally accountable for their actions, and thus could sometimes encourage victim blaming and the attribution of suffering to deviant behavior. Therefore, it is possible that individualist groups may sometimes not differ from collectivist groups in causal RSC. This is especially likely for more competitive or *vertical* forms of individualism (Singelis, Triandis, Bhawuk, & Gelfand, 1995), which stress individual

accountability for outcomes. However, social morality (in contrast to the autonomy ethic) uniquely emphasizes how individual behaviors and experiences should be directed toward the social good. Because teleological RSC highlights the perceived prosocial function of suffering, it stands to reason that social morality will be uniquely and consistently associated with this component of the construct.

## The Present Research

Prior studies demonstrate a causal role of collectivist orientation and social morality in promoting RSC. However, these studies were conducted with mainstream samples of U.S. participants and utilized fairly low-impact manipulations. Because we assert that there is a naturally occurring relationship across cultural groups between collectivism, social morality, and RSC, we find it important to demonstrate these links using cross-cultural samples.

Study 1 builds on evidence that religious fundamentalism and collectivism are positively related (e.g., Almond, Appleby, & Sivan, 2003). We examined RSC in two minority religious populations, one of which has strong collectivist and the other strong individualist tendencies. In Studies 2A-B, we compared the United States and China—national groups that many prior studies suggest should differ in both collectivism and social morality. We also examined the RSC construct in greater detail by separately modeling its causal and teleological components. Our global hypothesis across studies was that relative tendencies toward collectivism and/or social morality would be associated with greater RSC endorsement.

## Study 1

Religious affiliation is an important source of ecological variation in collectivism: Some religious identities strongly reinforce collectivist attitudes and behaviors while others reinforce individualism (Cohen & Hill, 2007). To further articulate these relationships as they manifest among religious groups in the United States, we need to distinguish two forms of individualism (Singelis et al., 1995). *Horizontal individualism* espouses and values the uniqueness and freedom of each individual in society, whereas *vertical individualism* emphasizes competition between individuals for status and resources. Although the United States is a relatively individualist culture overall, some cultural and religious subgroups within the country are embedded more in a context of horizontal, rather than vertical, individualism (Shavitt, Torelli, & Riemer, 2010).

Prior research supports the idea that horizontal individualism is a unique form of communitarian individualism. Horizontal individualists value their self-reliance and unique perspective but are also committed to the welfare of the community. Hence, horizontal individualism is higher in countries that practice strong forms of social democracy and welfare (Shavitt et al., 2010). These findings are consonant with the notion that horizontal individualism is strongly associated with the ethic of autonomy—a respect for the rights and well-being of each individual in the community. Hence, we would expect a horizontal individualist subgroup to be the least likely to endorse RSC.

By contrast, a highly vertically individualist worldview involves a more Darwinian focus on social competition and valuing of social hierarchy over social justice (Singelis et al., 1995). Hence, vertical individualism may encourage RSC—particularly the causal component—because continual competition with others can lead to a biased attributional style through which others' misfortunes are seen as the result of their own inferiority (Sidanius, Mitchell, Haley, & Navarrete, 2006). Supporting this possibility, U.S. participants primed with notions of personal choice and agency showed an elevated tendency to blame victims of misfortune for their own suffering (Savani, Stephens, & Markus, 2011).

Building on this observation, in Study 1, we recruited participants from minority religions in the United States and examined variation in their RSC levels. We recruited three groups of

participants whom we believed would represent cultural collectivism, horizontal individualism, and vertical individualism. Specifically, we obtained data from a group of traditionalist Mennonites, who endorse a collectivist lifestyle; a group of Unitarian Universalists, who espouse communitarian individualism; and a sample of undergraduates, likely to represent the vertical individualist culture of the majority United States (Shavitt et al., 2010). We predicted that the Mennonites would show greater general endorsement of RSC compared with the other two groups, and that this effect would be mediated by their relatively higher level of collectivism. By contrast, we expected the Unitarian Universalists—who epitomize the horizontal individualist worldview—to show the lowest level of RSC endorsement.

## Participants

Participants were 28 Church of God in Christ (or “Holdeman”) Mennonites (9 females;  $M_{\text{age}} = 50$ ,  $SD = 19$ ), 29 undergraduate students (17 females;  $M_{\text{age}} = 18.5$ ,  $SD = 1$ ), and 24 Unitarian Universalists (15 females, 1 unidentified;  $M_{\text{age}} = 65$ ,  $SD = 14$ ).

The Holdeman Mennonites are a minority religion in the Anabaptist tradition, with about 21,000 members. Holdemans possess a strong sense of Christian faith that guides their daily behaviors. They perceive the world (i.e., mainstream commercialized society) to be largely materialistic, individualistic, and selfish. They therefore maintain a collectivist subculture emphasizing separation from the temptations and sins of the world (Sullivan, 2016). Holdemans place great importance on living together in harmony and mutual support with their family and other members of their local church community. Congregations negotiate local normative practices, which typically involve unspoken rules for plain attire (especially for women) and the avoidance of any objects, entertainments, or activities that might be construed as selfish or materialistic (Arthur, 1998). When an individual deviates from local norms for behavior, a process of reprimanding is set in motion, which may ultimately result in excommunication and shunning behavior from the community and family members, often followed by reintegration into the community (Barclay, 1967; Hiebert, 1973).

There are currently 161,000 members of the Unitarian Universalist Association (McKanan, 2013). Unitarian Universalism is a liberal religion that eschews many traditional religious concepts. For example, it is technically possible to be a Unitarian Universalist but also have any other religious identity (e.g., one can be a Unitarian Buddhist or a Unitarian atheist). This is possible because Unitarian Universalism is an ethical rather than a creedal religion (Greenwood & Harris, 2011). One of the few “creedal” elements of Unitarian Universalism is a set of seven principles which its members follow (Buehrens & Church, 1998). These principles involve respect for individual dignity, tolerance of others, pursuit of truth and meaning, and acknowledgment of the interconnectedness of all humans and the environment. The denomination may be characterized as a worldview of individualism, representing an attempt to ground individualism in a local and global community (Rasor, 2008). Unitarian Universalists value both individual uniqueness and the welfare of the greater community. Indeed, as Bellah (1998) noted, one of the goals of Unitarian Universalism “is to strengthen a sense of connectedness, interdependence, and community, partly to counterbalance a perceived excessive emphasis on individualism.” Although this may seem paradoxical, the attempt to harmoniously connect individualism and community has been observed in many subgroups in the United States and Europe, and is captured by the construct of horizontal individualism (Shavitt et al., 2010).

Undergraduates in the United States have also been considered highly individualistic (Henrich, Heine, & Norenzayan, 2010). However, compared with the worldview of the Unitarian Universalists, the individualism manifest among undergraduates is typically less grounded in a single group identity, taking instead the form of competitive engagement with other individuals in performance-based settings (e.g., classrooms). For this reason, undergraduates are likely to

score higher than the other two groups on vertical individualism. Because vertical individualism is associated with endorsement of at least the causal aspect of RSC, we expected that undergraduates would score higher than Unitarian Universalists (although not as high as collectivist Mennonites) on our outcome variable.

## Method

All Holdeman participants belonged to the same central Kansas congregation, and data were collected from these participants in a single sitting at their church building. Similarly, all Unitarian Universalists belonged to a single congregation, located in a major Kansas city. About one third of Unitarian Universalist participants completed the survey at their fellowship building, while the remaining participants completed packets at home and mailed them to the experimenter. Data from the undergraduates were collected in a single sitting in a large classroom at a state university in Kansas.

At the beginning of all sessions (and in instruction sheets), it was stressed that whenever they encountered the word *community* in the survey, participants were to think specifically about the local community on the basis of which they had been recruited. In other words, we expect that Holdemans thought about their congregation as a whole, Unitarian Universalists similarly thought about their local fellowship, and undergraduates thought about the undergraduate community at their university.

The following measures were included as part of a larger survey containing a variety of measures (for more details, see Sullivan, 2016). Unless otherwise indicated, participants responded to all items on scales of 1 = *strongly disagree* to 7 = *strongly agree*.

**Individualism–collectivism.** Individualism–collectivism measures were adapted from the dimensional scale of Singelis et al. (1995), with three items each intended to assess vertical collectivism, horizontal collectivism, vertical individualism, and horizontal individualism<sup>1</sup> (see Online Appendix A).

**RSC.** Participants completed a modified version of the five-item RSC Scale developed by Sullivan et al. (2012). Three items assess RSC's *causal* component: "By and large, the people who suffer most severely in life are immoral people"; "By and large, the people who suffer most severely in life are the people who disobey the rules of their community"; and "By and large, the people who suffer most severely in life are those who break away from their community." Two items assess RSC's *teleological* component: "In many cases, it is necessary for people to suffer to prevent them from doing harm to their community," and "In many cases, it is necessary for people to suffer to protect the well-being of the community as a whole." Responses to the five items were averaged to form a composite measure of global RSC ( $\alpha = .87$ ).<sup>2</sup>

**Religiosity.** Because orthodox religiosity, as distinct from collectivism, may predict between-group differences in RSC, we measured it with four items: "My faith sometimes restricts my actions," "One should seek God's guidance when making every important decision," "Nothing is as important to me as serving God as best I know how," and "Do you believe that you yourself, or that God controls your life and the events in it?" (for the last item only, 1 = *I entirely control my life*, 4 = *God has some control over my life*, 7 = *God entirely controls my life*;  $\alpha = .95$ ).<sup>3</sup>

## Results and Discussion

See Table 1 for zero-order correlations between all variables.

**Table 1.** Zero-Order Correlations (Across All Cultural Subgroups), Study 1.

	RSC	Collectivism	Horizontal individualism	Vertical individualism	Religiosity
RSC	—				
Collectivism	.55*	—			
Horizontal individualism	-.12	-.34*	—		
Vertical individualism	.33*	.00	.19	—	
Religiosity	.57*	.70*	-.48*	.10	—

Note.  $N = 81$ . RSC = repressive suffering construal.

\* $p < .01$ .

**RSC.** We submitted RSC scores to a one-way between-participants ANOVA (group: Holdeman Mennonite vs. undergraduate vs. Unitarian Universalist) and obtained a significant result,  $F(2, 78) = 19.32, p < .001$ , partial  $\eta^2 = .33$ . Pairwise comparisons revealed a linear pattern, such that Holdeman Mennonites had higher levels of RSC ( $M = 4.46, SD = 1.46$ ) compared with both undergraduates ( $M = 3.33, SD = 1.45$ ),  $t(78) = 3.14, p < .01$ , and Unitarian Universalists ( $M = 2.11, SD = 1.11$ ),  $t(78) = 6.21, p < .001$ , while undergraduates had higher levels of RSC compared with Unitarian Universalists,  $t(78) = 3.25, p < .01$ .<sup>4</sup>

**Individualism–collectivism.** The groups differed in collectivism,  $F(2, 78) = 50.48, p < .001$ , partial  $\eta^2 = .56$ . Holdemans were more collectivist ( $M = 6.30, SD = 0.62$ ) than undergraduates ( $M = 4.56, SD = 0.87$ ),  $t(78) = 8.02, p < .001$ , and Unitarian Universalists ( $M = 4.22, SD = 0.94$ ),  $t(78) = 9.18, p < .001$ . The latter two groups did not differ,  $p = .13$ .

The groups also differed in vertical individualism,  $F(2, 78) = 16.08, p < .001$ , partial  $\eta^2 = .29$ . Undergraduates were more vertically individualist ( $M = 4.94, SD = 1.18$ ) than Holdemans ( $M = 3.89, SD = 0.91$ ),  $t(78) = 3.78, p < .001$ , and Unitarian Universalists ( $M = 3.34, SD = 1.06$ ),  $t(78) = 5.51, p < .001$ . The latter two groups did not differ,  $p = .07$ .

The groups differed in horizontal individualism,  $F(2, 78) = 23.92, p < .001$ , partial  $\eta^2 = .38$ . Holdemans were less horizontally individualistic ( $M = 3.21, SD = 1.06$ ) than undergraduates ( $M = 5.20, SD = 1.09$ ),  $t(78) = 6.83, p < .001$ , and Unitarian Universalists ( $M = 4.65, SD = 1.20$ ),  $t(78) = 4.66, p < .001$ . The latter two groups did not differ,  $p = .08$ .

**Religiosity.** The groups differed in religiosity,  $F(2, 78) = 114.17, p < .001$ , partial  $\eta^2 = .75$ . Holdemans showed greater orthodox religiosity ( $M = 6.79, SD = 0.27$ ) compared with both undergraduates ( $M = 3.97, SD = 1.50$ ),  $t(78) = 9.42, p < .001$ , and Unitarian Universalists ( $M = 2.11, SD = 1.22$ ),  $t(78) = 14.91, p < .001$ . The latter two groups also significantly differed in religiosity,  $t(78) = 5.99, p < .001$ .

**Mediation analysis.** All of our additional cultural variables were positively correlated with RSC, with the exception of horizontal individualism,  $r(81) = -.12, p = .31$ . Specifically, RSC correlated with collectivism ( $r = .55, p < .001$ ), vertical individualism ( $r = .33, p < .01$ ), and religiosity ( $r = .57, p < .001$ ). We therefore considered these three variables as potential mediators of the group effect on RSC. Using Preacher and Hayes' (2008) bootstrapping procedure, we regressed RSC scores onto group (contrast-coded: Holdemans = 1, undergraduates =  $-.5$ , Unitarian Universalists =  $-.5$ ) with collectivism, vertical individualism, and religiosity simultaneously entered into the model as potential mediators (age was included as a covariate; all continuous variables were centered). Five-thousand bootstrapping resamples were performed. Only for collectivism did the 95% confidence interval (CI) exclude zero [.04, 1.05], supporting our hypothesis that the Holdemans' higher RSC scores are driven by their comparably greater collectivism.<sup>5</sup>

The observed patterns are in full accord with our conceptual analysis. Holdeman Mennonites, who are the most collectivist of the three subcultures represented, show the greatest endorsement of RSC. It is also worth noting that the Holdemans' average RSC level ( $M = 4.46$ , 95% CI [3.94, 4.98]) is a full scale point above the highest average level ( $M = 3.33$ , 95% CI [2.81, 3.88]) reported by undergraduates in the present study, as well as those ( $M = 3.42$ , 95% CI [3.02, 3.83];  $M = 3.41$ , 95% CI [3.12, 3.64]) reported by two random samples of U.S. Internet users in prior research (Sullivan et al., 2012). In short, although typical U.S. research samples tend to report an RSC of about 3.40, the Holdeman Mennonites report about 4.50.

We characterized Unitarian Universalists as high in horizontal (but not vertical) individualism. Accordingly, they scored lower on RSC ( $M = 2.11$ , 95% CI [1.68, 2.56]) than the other two groups, and a full scale point lower than the average value across standard samples.

For our next investigation of the RSC construct, we sought convergent validity by examining variation among North American and Chinese participants, which cultural psychological research has characterized as strongly individualist and collectivist, respectively. A further reason for selecting these samples was to test the possibility that some groups have a primary proclivity toward teleological (rather than causal) RSC.

## Studies 2A-B

Compared with mainstream U.S. culture, Chinese culture has long been considered a paradigmatic example of collectivism (e.g., Cross et al., 2011). Furthermore, there is a historical tradition in China of informal social control being enforced through social morality. Strains of Confucianism and collectivism in the nation's history created a traditional emphasis on considering the well-being of others and the group to an equal if not greater extent than one's own well-being, and elements of this social morality continue to be documented among contemporary Chinese individuals (Jiang, Lambert, & Wang, 2007). For example, in a recent study (Lau et al., 2013), Chinese (compared with Euro-Canadian) children more positively evaluated moral decisions that benefited a group at the expense of an individual, displaying an orientation toward social morality. We therefore would expect Chinese participants to be more willing to endorse RSC compared with U.S. participants.

Simultaneously, given our observation in the "Introduction" that social morality is particularly associated with the teleological component of RSC, we would further expect this component to evince the greatest differentiation between participants in China and the United States. This possibility is further supported by examination of the long tradition of Chinese philosophical and medical attitudes toward suffering, which has prioritized considerations of teleology and social morality. For instance, both formal Chinese traditional medicine and folk healing notions are distinguishable from modern European medicine in their emphasis on restoring the *function* of an inhibited capability rather than identifying the *cause* of an illness (Lin, 1981). This teleological emphasis has led Chinese people to prioritize the restoration of balance, including social balance, in the wake of an instance of suffering (Kleinman & Kleinman, 1997).

Thus, based on prior evidence that China is a more collectivist and more socially moral culture than the United States, we expected Chinese participants to score higher than U.S. participants on RSC. However, based on evidence that Chinese attitudes toward suffering traditionally emphasize teleology over causality, we expected the between-culture difference to be observable on teleological, rather than causal, RSC.

## Study 2A

Study 2A tested our ideas in a comparative sample of 104 Chinese and 98 U.S. Internet users. We administered measures of social morality, causal RSC, and teleological RSC.



A full report of this preliminary study is provided in the online appendix (online supplemental materials are available at <http://jccp.sagepub.com/supplemental>) accompanying this article. Following the method described by Milfont and Fischer (2010), we tested our constructs for invariance across cultural groups and failed to find evidence of construct invariance. We therefore treat the findings of this study with caution. Summarily, we observed the effects predicted by our guiding analysis: Chinese participants scored higher on social morality,  $t(200) = -7.09, p < .001, d = 1.00$ , and teleological (but not causal) RSC,  $t(200) = -2.81, p < .01, d = .39$ , and the between-culture RSC effect was mediated by social morality, 95% CI [0.05, 0.67]. With the appropriate caveats, these results displayed preliminary support for our hypotheses. We sought to replicate them in a subsequent college student sample, which would be more likely to display homogeneity and therefore cross-cultural invariance.

## Study 2B

### Participants and Demographics

Participants were 74 students (57 female;  $M_{\text{age}} = 22$ ) at Zhejiang University in China, and 83 students (70 female;  $M_{\text{age}} = 19$ ) at the University of Arizona in the United States. We assessed perceived family socioeconomic status (SES) by using the MacArthur Subjective Social Status Scale (Adler, Epel, Castellazzo, & Ickovics, 2000) and asking participants to rate their family's relative status from 1 = *worst off* to 10 = *best off*. Average family SES in China was  $M = 5.50, SD = 1.96$ ; in the United States,  $M = 6.66, SD = 1.68$ . Study materials were completed online. We removed data from 57 additional participants who failed a basic attention check item.

### Method

In the sample from China, participants completed translated versions of all items. The items were translated into Chinese by a bilingual speaker (one of the authors), then back-translated into English by a bilingual research assistant. Inconsistencies were resolved by discussion. All items were responded to on scales of 1 = strongly disagree to 7 = strongly agree.

*Individualism–collectivism.* Participants completed the same measure of dimensional individualism–collectivism used in Study 1 (see Online Appendix A).

*Social morality.* Participants completed nine items modified from the moral relevance items developed by Graham, Haidt, and Nosek (2009). Three relevant moral foundations (Shweder et al., 1997) are assessed with three items each: *authority* (sample item: “It is important to respect the traditions of society”), *ingroup* (sample item: “It is important that people never betray their group”), and *purity* (sample item: “It is important not to violate standards of purity and decency”). These subscales best represent our construct of social morality and were used to assess this variable in prior research (Sullivan et al., 2012; for all items, see Online Appendix B).

*Causal and teleological RSC.* To enhance the convergent validity and applied significance of our findings, we assessed RSC not in the domain-general manner of Studies 1 and 2A, but rather with reference to a concrete form of suffering. Participants read a brief description of the suffering that occurs from the experience of depression before responding to five statements assessing causal RSC of depression: “People with depression are more likely to be socially deviant,” “Having depression can mean a person has gone down the wrong path in life,” “People with depression are unlikely to make major contributions to society,” “People experience depression because they break away from society or their family”, and “People with depression are more likely to engage in criminal behavior.” They also responded to five statements assessing teleological RSC of

**Table 2.** Within-Country Correlations and Descriptive Statistics, Study 2B.

	Mean (SD) Chinese Sample	Collectivism	Social Morality	RSC-Causal	RSC- Teleological	Mean (SD) U.S. Sample
Collectivism	5.04 (.88)	—	.36**	.17	.18	5.43 (.78)
Social Morality	5.43 (.87)	.66***	—	.26*	.34**	5.13 (.87)
RSC-Causal	3.33 (1.18)	.08	-.04	—	.67***	3.16 (1.01)
RSC- Teleological	4.68 (1.06)	.31**	.18	.43***	—	3.21 (1.27)

Note. Results for the Chinese sample are reported below, the U.S. sample above the diagonal. RSC = repressive suffering construal.

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

depression: “People with depression would improve if they made more of an effort to belong to their social group,” “Having depression is a sign that a person needs to return to their social group, community, or family,” “Having depression is a sign that a person needs to examine their personal character or morals,” “By seeking treatment for depression, the depressed person is helping to restore harmony in society,” and “People with depression should learn the lesson from depression and treat others better.”

## Results

**Invariance testing.** Prior to any other analyses, we tested our data for cross-cultural metric invariance to ensure mean-level comparison. We used multi-group confirmatory factor analysis, as recommended by Fischer (2009), and followed the specific method described in Milfont and Fischer (2010).<sup>6</sup> We found that only two of our measures demonstrated metric invariance across cultural groups: social morality and teleological RSC. For the social morality measure, metric invariance was achieved when we eliminated one item (“It is important that people be able to control their desires”). As shown in Online Appendix Table 2, the social morality measure demonstrated configural invariance and metric invariance,  $\Delta\chi^2(7) = 12.74$ ,  $p > .05$ , but not scalar invariance,  $\Delta\chi^2(8) = 57.89$ ,  $p < .05$ . Similarly, teleological RSC demonstrated configural invariance and metric invariance,  $\Delta\chi^2(4) = 3.08$ ,  $p > .05$ , but not scalar invariance,  $\Delta\chi^2(5) = 83.74$ ,  $p < .05$ . These measures also displayed acceptable fit with regard to configural invariance, although their root mean square error of approximation (RMSEA) values (.11, .13 respectively) bordered on unacceptable (see Online Appendix Table 2). However, recent research (Kenny, Kaniskan, & McCoach, 2015) finds that the RMSEA values tend to be higher in models with small degrees of freedom and small sample size, and therefore often give a false impression of poor fit. Given the relatively smaller sample size of our study, we believe the acceptable comparative fit index (CFI; .91, .95, respectively) and standardized root mean square residual (SRMR) values (.07, .06, respectively) are sufficient indicators of configural invariance.

Given the results of these tests, we compared observed mean differences between the groups on our measures of social morality and teleological RSC but not on the other measures included in the study, which failed to demonstrate metric invariance.

**Social morality and teleological RSC.** We computed composite measures of social morality (eight items;  $\alpha = .80$ ) and teleological RSC (five items;  $\alpha = .84$ ), and tested these variables for between-group differences. As predicted, Chinese participants scored higher in social morality ( $M = 5.43$ ,  $SD = 0.87$ ) compared with U.S. participants ( $M = 5.13$ ,  $SD = 0.87$ ),  $t(155) = 2.15$ ,  $p = .03$ ,  $d = .34$ .

Chinese participants also endorsed teleological RSC ( $M = 4.68$ ,  $SD = 1.06$ ) more than U.S. participants ( $M = 3.21$ ,  $SD = 1.27$ ),  $t(155) = 7.76$ ,  $p < .001$ ,  $d = 1.26$ .<sup>7</sup>

We tested our prediction that the between-group difference in teleological RSC would be mediated by social morality. Using Preacher and Hayes' (2008) method and SPSS macro, we regressed teleological RSC onto country (dummy coded) with social morality entered as the proposed mediator. Five-thousand bootstrapping resamples were performed. The resulting 95% CI did not contain zero  $[-.28, -.01]$ , supporting an indirect effect of culture on teleological RSC via social morality.

*Within-country analyses.* Although our individualism–collectivism scale failed to demonstrate metric invariance, and hence is not suitable for between-country mean comparisons, we did demonstrate satisfactory configural invariance for this measure across groups (see Online Appendix Table 2). Accordingly, following Milfont and Fischer (2010), we considered it appropriate to conduct within-country analyses examining the correlational associations between collectivism, social morality, and teleological RSC (for all within-group associations and descriptives, see Table 2). We continued to focus on teleological RSC because it displayed both configural and metric invariance, permitting better conceptual comparison of the between- and within-country analyses. Following the approach used in Study 1, we constructed a composite measure of collectivism (China:  $\alpha = .72$ ; the United States:  $\alpha = .73$ ).

Within the U.S. sample, as would be predicted by our guiding analysis, teleological RSC was positively associated with social morality,  $r = .34$ ,  $p < .01$ . Social morality and collectivism were also positively associated,  $r = .36$ ,  $p < .01$ . However, collectivism was not significantly associated with teleological RSC,  $r = .18$ ,  $p = .11$ . Nevertheless, an indirect effects analysis (using 5,000 bootstrapping resamples) of the relationship between collectivism and teleological RSC with social morality as the mediator yielded evidence of an indirect effect, 95% CI  $[0.06, 0.40]$ . This suggests that, within the United States, there is an indirect relationship between collectivism and RSC via social morality (consistent with Study 1 and Sullivan et al., 2012).

Within the Chinese sample, collectivism was associated with teleological RSC,  $r = .31$ ,  $p < .01$ . Collectivism and social morality were also strongly associated,  $r = .66$ ,  $p < .001$ . However, teleological RSC was not significantly associated with social morality,  $r = .18$ ,  $p = .11$ .

Study 2B provides broad, convergent support for our hypothesis that collectivism and social morality drive cultural differences in RSC. These data also refine our understanding of these links by suggesting that, at least in some instances, cultural differences are primarily driven by the teleological (rather than the causal) component of RSC.

There are two major points worth noting about Study 2B. The between-country results replicated the pattern observed in our preliminary Study 2A, but with the added confidence of culturally invariant measures. In both data sets, Chinese participants scored higher in teleological (but not causal) RSC, and this difference was mediated by social morality. A lack of cross-cultural invariance for our collectivism measure prevented group mean comparisons. Nevertheless, within-country analyses revealed interesting divergences: Although within the United States, there was an indirect effect of collectivism on RSC via social morality, within China, we observed only a direct effect of collectivism. Thus, although social morality did emerge as the *between-country* mediator driving Chinese participants' higher levels of teleological RSC, it did not operate as a *within-country* mediator of the association between Chinese participants' level of collectivism and their RSC endorsement.

Second, although a lack of invariance should encourage caution in interpretation of group mean differences on our individualism–collectivism measure, it is worth observing that the U.S. participants in fact scored higher on our measure of collectivism than the Chinese participants (see Table 2). This tentative finding is consistent with recent reviews of the literature (Cross et al., 2011) as well as individual studies (e.g., Hamamura & Xu, 2015) that contradict

long-standing assumptions about these groups. It is possible that recent socioeconomic trends in China have elevated the level of individualism, particularly among Chinese college students and Internet users, producing a convergence or even a surpassing of U.S. levels on self-report measures of this dimension. However, other studies (Kitayama & Imada, 2010; Leung & Bond, 2004) lend credence to the notion that, even if self-reported levels of collectivism in China are decreasing or becoming less coherent, cultural traditions and ecological embodiments characteristic of collectivism may still have an influence on contemporary Chinese citizens. Finally, given a lack of cross-cultural invariance in our collectivism measure, it is difficult to determine whether an identical construct was being assessed in each sample. Minimally, these results encourage further skepticism and careful assessment when investigating variation in individualism–collectivism between China and the United States.

## General Discussion

Prior research (Sullivan et al., 2012) found evidence for the hypothesized causal links between collectivism, social morality, and RSC. Yet, the ecological and external validity of those findings is limited due to a reliance on simple priming procedures and limited samples. The current studies used two ecologically valid sources of variation in collectivism and social morality—religious group and nationality—to show that groups and individuals that are higher in either of these cultural tendencies also evince higher levels of RSC.

The results of Studies 2A-B tentatively suggest that Chinese individuals are more likely than those in the United States to endorse teleological but not causal RSC. Working under this assumption, the pattern may be partly due to the holistic cognitive style typical of Chinese intellectual culture (Nisbett, Peng, Choi, & Norenzayan, 2001). This culture has been characterized as traditionally emphasizing teleological thought processes to a greater extent than that of Western Europe. Holistic thought involves heightened attention to the relationships between elements in a field as well as between actors and the environment, which leads to greater awareness of the consequences of actions and events as well as the ultimate goals of agents. For example, compared with European Canadian participants, East Asian Canadian participants are more likely to perceive events as an inevitable result of fate, rather than the result of isolated causes, suggesting heightened teleological attributional focus (Norenzayan & Lee, 2010). Tweed and Lehman (2002) propose that the traditional Chinese culture of learning focused on a Confucian model, which stresses the ultimate goals and purpose of knowledge, whereas European American educational culture stresses a Socratic approach to understanding true causes, again suggesting that Chinese thought patterns are more teleologically oriented.

Partly as a result of this intellectual history, it may be that for people of Chinese origin, the *purpose* of others' suffering, rather than its *cause*, is of primary importance. An explanation we find likely is that the coherence of a collectivist worldview is more severely threatened by the presence of suffering that serves no purpose and does not, therefore, comport to the centrality of the social order in psychological life. In other words, although suffering might result from a complex web of factors, what matters is that suffering ultimately has a purpose in the social realm, not that its causes are identified. That social morality was the mediator of the group effect on teleological RSC in Study 2B supports this interpretation.

In contrast, individualistic cultural contexts are characterized by an analytical cognitive style and a need for personal control, both of which should lead to a greater emphasis on identifying causes of suffering that do not challenge one's faith in an immutable internal locus of control. From this point of view, the social purpose of suffering may not be particularly significant, but its source (in individual action or decisions) must be explained. Legitimation of others' suffering appears to be much less important than understanding why people suffer in the U.S. context.

In conclusion, the major contribution of these studies is to provide the first truly cross-cultural evidence for the associations between collectivism, social morality, and RSC. Combined with earlier experimental work, this research testifies to the importance of RSC as a prominent form of culturally grounded suffering construal.

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### Notes

1. We performed an exploratory factor analysis (EFA; using Maximum Likelihood Estimation and Promax rotation) on the dimensional individualism–collectivism scale (Singelis, Triandis, Bhawuk, & Gelfand, 1995). The analysis and Scree plot suggested that the variables loaded onto only three distinguishable factors. Specifically, all six collectivism items loaded at .50 or higher on only one factor. Hence, rather than creating separate vertical and horizontal collectivism indices, we created a single collectivism composite ( $\alpha = .80$ ). The EFA suggested meaningful differentiation between the two dimensions of individualism, however, so we created separate vertical ( $\alpha = .55$ ) and horizontal individualism indices ( $\alpha = .50$ ).
2. Results were identical when we performed separate analyses on our causal repressive suffering construal (RSC),  $F(2, 78) = 24.19, p < .001$ , partial  $\eta^2 = .38$ , and teleological RSC subscales,  $F(2, 78) = 6.41, p < .01$ , partial  $\eta^2 = .14$ . Therefore, we focus on results for the composite measure in Study 1.
3. Given the fact that many Unitarian Universalists do not endorse conventional ideas about God, it is not surprising that this group scored lower than the other two on our orthodox religiosity measure,  $F(2, 78) = 114.17, p < .001$ .
4. Across the entire sample, age was almost completely unassociated with RSC,  $r = -.003, p > .98$ . However, regressing RSC onto age, group, and their interaction revealed a significant interaction effect,  $\beta = -.87$ , standard error ( $SE$ ) = .01,  $t(76) = -2.40, p = .02$ . We examined this interaction by running three separate analyses in which group was dummy coded to compare the effect of age within each group to the average effect across the other two groups. Only the analysis in which the Holdeman Mennonites were compared with the other two groups (Holdeman Mennonite = 0, undergraduate = 1, Unitarian Universalist = 1) revealed a significant Dummy code  $\times$  Age interaction,  $\beta = -.99, SE = .02, t(76) = -3.98, p < .001$ . This analysis revealed that the effect of age on RSC within the Holdeman group was significant and positive,  $\beta = .53, SE = .01, t(76) = 2.83, p < .01$ , whereas age was not significantly correlated with RSC in either the undergraduate ( $r = .05$ ) or Unitarian Universalist ( $r = -.05$ ) groups.
5. A parallel mediation analysis using a different contrast code (Unitarian Universalists = 1, Holdemans =  $-.5$ , undergraduates =  $-.5$ ) revealed that only the 95% confidence interval (CI) for collectivism excluded zero [ $-1.03, -0.01$ ], suggesting that Unitarian Universalists' low RSC scores are driven by their relatively lower levels of collectivism.
6. We did not perform parallel tests in Study 1 because our sample size—restricted due to the unique nature of these groups—was below the recommended threshold for invariance tests using structural equation modeling (Little, 2013).
7. Identical effects were observed for the teleological RSC measure when we controlled for the demographic variables of gender, subjective family socioeconomic status, and prior personal experience of depression,  $F(1, 146) = 59.41, p < .001$ , partial  $\eta^2 = .29$ . We included a single dichotomous measure of personal experience with depression (“Have you ever been diagnosed with depression, or thought you might be depressed?” 1 = *yes*, 2 = *no*) to address the possibility that between-country differences might be due to variability in stigmatization of depression. Interestingly, more U.S. participants (41%) reported prior personal experience of depression compared with Chinese participants (27%),  $\chi^2(1) = 3.37, p = .07$ .

However, this variable was unrelated to teleological RSC across groups,  $F = 1.64, p = .28$ . Submitting social morality scores to a parallel ANCOVA yielded a marginally significant effect of country,  $F(1, 146) = 3.27, p = .07$ , partial  $\eta^2 = .02$ . Although prior personal experience of depression was unrelated to RSC scores, it had a significant effect on social morality,  $t(155) = -3.0$ , such that, across countries, participants who reported prior personal experience of depression scored lower ( $M = 5.00, SD = 0.95$ ) than those who did not ( $M = 5.42, SD = 0.81$ ).

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