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How Do Coworkers “Make the Place”? Examining Coworker Conflict and the Value of Harmony in China and the United States

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The goal of this study was to test cross-cultural/cross-national differences in the association between coworker interpersonal justice and coworker conflict and the implications of such differences for employee effectiveness. Harmony is a central value in China but is less important in the United States, and the individual value of harmony may influence Chinese and US employees differently in their response to low levels of coworker interpersonal justice. We collected data from employees and their coworkers in China (214 dyads) and the US (301 dyads). There were three major findings. First, coworker interpersonal justice was negatively related to coworker conflict. Second, coworker conflict significantly mediated coworker interpersonal justice in relation to the employee effectiveness variables of task performance, organisational citizenship behaviours, and counterproductive work behaviours. Finally, in the Chinese sample, harmony significantly *buffered* the indirect effect of coworker interpersonal justice on employee effectiveness via coworker conflict, whereas in the US sample, harmony significantly *intensified* the indirect effect of coworker interpersonal justice on employee effectiveness via coworker conflict.

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INTRODUCTION

Coworkers define one's social environment at work (Schneider, 1987) because they comprise one's social and task partners (Chiaburu & Harrison, 2008). Positive coworker interactions can increase one's perceived well-being (Sloan, Newhouse, & Thompson, 2013) and enhance one's job performance (Chen, Takeuchi, & Shum, 2013). However, coworker relationships can also contribute to negative outcomes, because workplace conflict is ubiquitous (Gelfand, Nishii, Holcombe, Dyer, Ohbuchi, & Fukuno, 2001).

Coworker conflict, defined as relationship-oriented conflict behaviours among coworkers, relates positively to employees' job strains (Frone, 2000) and negatively to organisational effectiveness (e.g. Bruk-Lee & Spector, 2006; Chiaburu & Harrison, 2008). A potential trigger for such conflict is low organisational justice, which has been linked to anger, moral outrage, revenge, sabotage, and retaliation (Folger & Cropanzano, 1998). The multifoci model of organisational justice identifies coworkers as important sources of perceived justice (Lavelle, Rupp, & Brockner, 2007). Low *coworker interpersonal justice*—defined as a lack of fair interpersonal treatment from a coworker (e.g. lack of respect and propriety; Bies & Moag, 1986; Colquitt, 2001; Donovan, Drasgow, & Munson, 1998)—may result in employees engaging in conflict behaviours toward the responsible coworker in order to restore justice. Our first goal is to contribute to the conflict literature by identifying low level of coworker interpersonal justice as a potential predictor of coworker conflict (see Figure 1).

Coworker conflicts are associated with employee effectiveness variables, such as task performance, organisational citizenship behaviours (OCBs), and counter-productive work behaviours (CWBs) (Bruk-Lee & Spector, 2006; Chiaburu & Harrison, 2008). Meanwhile, low interpersonal justice is also related to task performance, OCBs, and CWBs (Colquitt, Scott, Rodell, Long, Zapata, Conlon, & Wesson, 2013). We contend that coworker conflict serves as the underlying mechanism that mediates the relations between low coworker interpersonal justice and employee effectiveness. Colquitt et al. (2013) predicted that social exchange quality indicators (e.g. leader-member exchange or LMX) mediates the relationship between organisational justice and employee effectiveness, but their findings were inconsistent. One possible reason is that their meta-analysis did not match the source of justice and the source of social exchange quality. Our study contributes to the justice literature by focusing on a specific source of justice and examining the mediating effect of the same source conflict on the justice-employee effectiveness relationships.

The research on coworker conflict is largely limited to North American and other Western samples, which is unfortunate because theories and findings are culture-bound. The US and China are both leading economic nations, yet employees from these nations may theoretically have very different conflict experiences due to their cultural orientations, such as their valuing of harmony

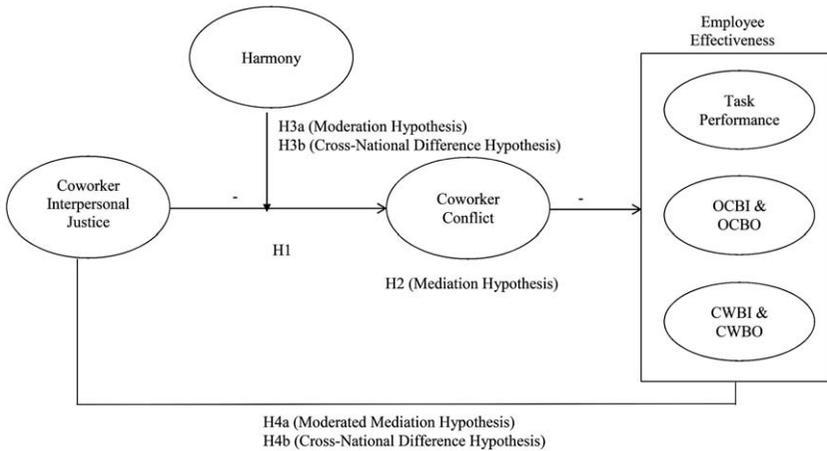


FIGURE 1. The moderated mediation model: the moderating effect of harmony on the relationships between coworker interpersonal justice and employee effectiveness via coworker conflict in China and the United States.

Note: The moderating effect of harmony on the relationship between coworker interpersonal justice and coworker conflict is hypothesised to be different in China and in the United States (H3b & H4b).

(e.g. Oyserman, Coon, & Kimmelmeier, 2002). *Harmony* refers to the extent to which an individual values peaceful and concordant interpersonal relationships. Individuals with high harmony give priority to social relationships, strive to maintain them (Oyserman et al., 2002; Sawami, Yamaguchi, Park, & Robinson, 2015), and have high tolerance for interpersonal transgressions (Leung, 1997). As a major value in China (Chen, 2001), harmony serves as a guiding principle for interpersonal behaviours (Hwang, 1997), but it has received limited attention in research that examines coworker relationships (Leung, 1997). A final purpose of this study was to shed light on how harmony affects Chinese and US employees' responses to situations wherein low levels of coworker interpersonal justice exist. This research contributes to the cross-cultural literature by comparing the different moderating effects of harmony on *the coworker interpersonal justice–coworker conflict–employee effectiveness relationships* in China and the US. As summarised in Figure 1, we developed a model of negative, lateral interpersonal exchanges by incorporating the cultural value of harmony; we expected this model to apply to Chinese and US employees in both similar and unique ways and to extend our understanding of coworker relations in both countries.

Coworker Interpersonal Justice and Coworker Conflict

Interpersonal conflict occurs when the interactions between two parties lead to perceived opposition of goals, interests, and values (Putnam & Poole, 1987).

Interpersonal conflict includes cognitive, affective, motivational, and behavioural stages (Thomas, 1992), and it is at the behavioural stage that conflict becomes visible. Conflict behaviours vary in intensity from minor disagreements to intense arguments, or in the extreme, physical violence (Jex, 1998). The behavioural definition of conflict has received the most research attention in the job stress literature and is the focus in this study (e.g. Frone, 2000; Spector & Jex, 1998).

Interpersonal conflict can happen with different social partners, including coworkers and supervisors (Frone, 2000). These conflict behaviours are bidirectional (Liu, Nauta, Spector, & Li, 2008), which differentiates them from other social stressors, such as workplace aggression and incivility (Hershcovis, 2011). Coworker conflict includes both direct (e.g. overt confrontations) and indirect (e.g. spreading harmful rumours about a coworker) behaviours (Liu et al., 2008) and is a known source of negative influence for employees (Chiaburu & Harrison, 2008). Surprisingly, even though employees interact with their coworkers more often than with their supervisors, coworker conflict has received limited research attention (Chiaburu & Harrison, 2008). Thus, the first question is to address what predicts coworker conflict.

The social exchange theory predicts that people reciprocate what they receive from others (Blau, 1964). Coworker conflict expresses problems and issues, and therefore presents a damaged social exchange relationship with coworkers. On the other hand, organisational justice, such as interpersonal justice, facilitates the formation of a healthy social exchange (e.g. Rupp & Cropanzano, 2002). Low interpersonal justice, especially from coworkers, is a potential antecedent for damaged social exchanges, reflected in coworker conflicts.

Interpersonal justice was initially defined as the perceived interpersonal treatment of an employee by his/her supervisor when procedures are implemented (Bies & Moag, 1986). We argue for the importance of studying this type of justice from coworkers (Lavelle et al., 2007). The rule of reciprocation is pronounced among coworkers because they share similar status, and therefore all types of exchanges are more likely (Chiaburu & Harrison, 2008; Frone, 2000). Perceived low levels of coworker interpersonal justice erode mutual respect and serve as bases for retaliatory behaviours (Chiaburu & Harrison, 2008; Gouldner, 1960). When employees are treated with inadequate justice, they are likely to trace the source of low justice (the multifoci model of organisational justice, Lavelle et al., 2007). Once identified, the responsible party is the target of the employee's reactions (Folger & Cropanzano, 1998; Lavelle et al., 2007; Rupp & Cropanzano, 2002). Thus, when perceiving low levels of coworker interpersonal justice, employees may engage in conflict behaviours toward the responsible agent as a form of retaliation or as an attempt to restore justice (Bies & Tripp, 2005). Research has shown that fair treatment from coworkers is related to higher coworker satisfaction (Donovan et al., 1998),

more cooperative teamwork (Li, Cropanzano, & Bagger, 2013), and less aggressive behaviour toward other people at work (Ladebo, Awotunde, & AbdulSalaam-Saghir, 2008).

It is worth noting that the relationships between interpersonal justice and conflict may be reciprocal under certain circumstances (e.g. Ford, Matthews, Woolridge, Mishra, Kaker, & Strahan, 2014). Whereas there is a long-standing research tradition exploring conflict as a source of injustice, increasingly research also investigates the opposing direction (e.g. Au & Leung, 2016; Liu, Yang, & Nauta, 2013). As a form of retaliatory behaviours, coworker conflicts could be outcomes of perceived low levels of coworker interpersonal justice. To the best of our knowledge, the relationship between coworker-specific justice and conflict has not been studied. Moreover, because of the ubiquitous nature of interpersonal justice and the general applicability of the reciprocity rule (Gouldner, 1960), we expected that interpersonal justice from coworkers be negatively related to coworker conflict in both China and the US (see Figure 1).

Hypothesis 1: Coworker interpersonal justice is negatively related to coworker conflict.

Coworker Interpersonal Justice, Coworker Conflict, and Employee Effectiveness

Employee effectiveness behaviours include task performance, OCBs, and CWBs (Harrison, Newman, & Roth, 2006). *Task performance* refers to employees' activities that contribute to the technical core of an organisation (Borman & Motowidlo, 1993). *OCBs* are volitional behaviours beyond employees' core tasks that benefit the social and motivational context of an organisation (Williams & Anderson, 1991). *CWBs* are behaviours that are destructive to other individuals and the organisation (Bennett & Robinson, 2000).

Coworker conflicts and employee effectiveness are related (Brook-Lee & Spector, 2006; Chiaburu & Harrison, 2008). Coworker conflict reflects coworker antagonism, which refers to the enactment of bad interpersonal behaviours (e.g. unwelcomed, distained behaviours) toward a focal employee (Chiaburu & Harrison, 2008). These coworker antagonism behaviours are easily remembered by the focal employee. Consequently, that focal employee may display fewer OCBs and more CWBs toward other individuals perceived as instigators (OCBI and CWBI) (Chiaburu & Harrison, 2008). Due to a spillover effect, the focal employee may also display fewer OCBs and more CWBs toward the organisation (OCBOs and CWBOs). That is, when employees experience negative relationships with coworkers, they will feel negative about their entire work group and environment, which accounts for a broad range of

negative outcomes. Moreover, coworker conflict will reduce the focal employee's task performance because coping with negative relationships takes cognitive resources (Duffy, Ganster, & Pagon, 2002).

Similarly, interpersonal justice has been shown to relate to supervisor-rated task performance, OCBI and OCBO, and CWBI and CWBO (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Masterson, Lewis, Goldman, & Taylor, 2000). The reason interpersonal justice from supervisors influences employee effectiveness may lie in the quality of the supervisor-employee relationship (i.e. LMX, Masterson et al., 2000). Similarly, we believe coworker interpersonal justice influences the quality of coworker relationships (e.g. coworker conflict), which in turn, contributes to reduced employee effectiveness. Lavelle et al.'s (2007) target similarity model provides theoretical support to the mediating effect of coworker conflict by predicting that target-specific justice perceptions (e.g. low levels of coworker interpersonal justice) impact the quality of social exchange relationships between the employee and that party (as reflected by coworker conflict). Target-specific social exchange relationships (e.g. coworker conflict) may therefore mediate the relationship between target-specific justice and employee effective behaviours.

Three areas of research render support to the mediating role of coworker conflict. First, Masterson et al. (2000) found that interactional justice affected job satisfaction and OCBs via the mediating variable of LMX. High-quality LMX leads employees to engage in helping behaviours and to deviate from anti-social behaviours (Settoon, Bennett, & Liden, 1996; Wayne, Shore, & Liden, 1997). Second, Kidwell, Kellermanns, and Eddleston (2012) reasoned that justice was the key to good relationships (e.g. trust and commitment), while relationship conflict might stimulate poor behaviours. They found that relationship conflict mediated the relationship between distributive justice and family impediment. Third, a construct similar to coworker interpersonal justice is interactional intra-unit justice climate, which refers to the quality of interpersonal treatment among team members (Li & Cropanzano, 2009). This interpersonal teamwork process mediated the relationship between peer interpersonal justice and team citizenship behaviours (Cropanzano, Li, & Benson III, 2011). Since workplace conflict is a salient job stressor for both Chinese and US employees (e.g. Liu, Li, Fan, & Nauta, 2015; Liu, Spector, & Shi, 2007), we predicted the mediating effect of coworker conflict in both China and the US (see Figure 1).

Hypothesis 2: Coworker conflict mediates the relationships between coworker interpersonal justice and employee effectiveness, specifically task performance, OCBI, OCBO, CWBI, and CWBO.

Although the associations between forms of justice and work-related outcomes have been theoretically posited and to some degree empirically

established, Colquitt, Scott, Judge, and Shaw (2006) noted the findings tend to be inconsistent and that moderators probably account for variation in the associations. In this study, we focus on the moderating effect of culture norms on how justice relates to conflict—a proximal outcome of justice. Previous research found that power-distance moderated the relationship between procedural justice and conflict with a supervisor (Liu et al., 2013). Although useful, the construct of power-distance as a moderator is less likely to be relevant among coworker relationships than among supervisor-employee relationships given that hierarchies are less likely to exist among coworkers. Research is needed to examine other cultural values that may moderate the justice-conflict relationships with respect to coworkers. We believed harmony is one such moderator that is particularly relevant to coworker justice and conflict given that it is applicable to all interpersonal relationships.

The Cultural Value of Harmony

Harmony as a unidimensional construct has been validated in both eastern and western studies (e.g. Sawaumi et al., 2015; Schwartz, 1999), such as with samples from 49 nations (Schwartz, 1999). Originating from China, the cultural value of harmony endorses a favourable relationship amongst people, things, and/or ideas (Li, 2006). There is *harmony in interpersonal relationships*, as studied by Confucianism (Hwang, 1997); and there is *harmony with nature*, as proposed in the Chinese philosophy of Taoism (Li, 2006). Our study's focus on coworker conflict makes interpersonal harmony particularly relevant to examine.

Interpersonal harmony is an important component of a broader construct of collectivism (Oyserman et al., 2002; Taras et al., 2014), or the endorsement of the subordination of individual goals to group goals, emphasising compliance, interdependence, traditionality, and interpersonal harmony (Triandis, 1995). Outside of the individualism/collectivism research, when discussing interpersonal harmony, Leung (1997) proposed the dualistic model that differentiated two types of harmony. *Harmony enhancement* is affective in nature, with a goal of promoting harmonious relationships as a result of genuine concern about relationship quality. People high in harmony enhancement actively engage in behaviours that build rapport and affiliation. *Disintegration avoidance* is instrumental in nature and has a goal of achieving other ends (e.g. future personal gain) via relationships. People high in disintegration avoidance are concerned with the negative consequences of a strained relationship and passively minimise actions or avoid events, in the hopes that doing so will lead to relationship problems resolving themselves.

Leung's (1997) dualistic model of harmony is consistent with the harmony definition derived from research on individualism/collectivism. As described by Oyserman et al. (2002), people with high harmony values care about group

members getting along and tend to avoid conflict. Thus, regardless of the type, with high harmony values, people try to maintain concordant or peaceful relationships through either harmony enhancement or disintegration avoidance. Harmony is a central value in China (e.g. Chen, 2001) but is a less important value in the US (e.g. Oyserman et al., 2002). Due to different cultural emphases and interactional tendencies, we predicted harmony would influence Chinese and US employees' workplace relationships differently. However, it is worth noting that since cross-cultural research on harmony is scarce, our predictions on these cross-national differences are exploratory in nature.

The Moderating Effect of Harmony on the Coworker Interpersonal Justice–Coworker Conflict Relationship in China. The value of harmony is a powerful determinant of people's behaviours in China (Chen, 2001). Chinese people tend to believe the society can only flourish when harmony prevails (e.g. Legge, 1955). The ability to reach a harmonious relationship is an important criterion to evaluate if a Chinese individual is a competent communicator (Chen, 2001). In China, "forbearance," which leads to giving up one's personal interests in order to maintain a harmonious relationship (Hwang, 1997), is learned early in life.

When experiencing low coworker interpersonal justice, employees are in a state of tension between wanting to confront and needing to maintain a harmonious relationship (Brew, 2007). In China, protecting relationships is viewed as more important than justifying the fairness issues (Erdogan & Liden, 2006). Under these guiding principles, Chinese employees high in harmony have strong motives to minimise conflict because interpersonal conflict represents a breakdown in harmonious interaction (Leung, Brew, Zhang, & Zhang, 2011). They are less likely to follow the "tit-for-tat" strategy when they experience low coworker interpersonal justice, instead either avoiding conflict or approaching the situation with harmony-enhancing behaviours (Hook, Worthington, & Utsey, 2009). Avoidance provides a temporary cooling-off period which may prevent the escalation of animosity (Friedman, Chi, & Liu, 2006). Thus, instead of reacting negatively to low coworker interpersonal justice, Chinese employees with high harmony values may allow the situation to continue in the hope that it will improve on its own (Erdogan & Liden, 2006). Consistent with this argument, Leung et al. (2011) found that harmony (i.e. disintegration avoidance) was positively related to conflict avoidance in China. Likewise, Sawaumi et al. (2015) found that when there was a high concern for harmony, Japanese participants (from another eastern country that values harmony) were more likely to try to change their own thoughts and behaviours than attempt to influence another party to change. As a result, we proposed that harmony will *buffer* the positive relationship between (low levels of) coworker interpersonal justice and coworker conflict in China.

The Moderating Effect of Harmony on the Coworker Interpersonal Justice–Coworker Conflict Relationship in the US. The emphasis on harmony as a value can vary across countries. The US and other Western countries are characterised by individualism, which is linked to individual rights, freedom, independence, and personal pleasure (Lukes, 1973; Oyserman et al., 2002). In such cultures, although harmony is perceived as positive, it tends to be more peripherally related to people's daily lives (Leung et al., 2011). On the other hand, justice is one of the core values in the US (Moland, 2002). When experiencing low levels of coworker interpersonal justice, US employees also have dual motives of restoring interpersonal fairness and maintaining harmony (Brew, 2007). However, they are more likely to confront the source of unfairness in order to protect their rights and self-esteem (e.g. Brew & Cairns, 2004; Friedman et al., 2006). For them, restoring justice and protecting personal interests are more important than maintaining harmony and avoiding conflict. Therefore, the buffering effect of harmony on the positive relationship between (low levels of) coworker interpersonal justice and coworker conflict could be offset by US employees' high endorsement of justice. Accordingly, we expected that the buffering effect of harmony will be weaker in the US than in China.

When a person's value is congruent with the presumed value of his or her country, the individual value is more influential on personal behaviours (e.g. Oyserman et al., 2002). For example, Earley (1994) found that among US managers, self-focused training had greater impact on performance than group-focused training, whereas for Chinese managers, group-focused training had a greater impact on performance than self-focused training. For high-harmony Chinese employees, since their personal value is congruent with the presumed cultural focus of the country, harmony may more readily affect their behaviour. On the other hand, since harmony is not an essential value in the US (Oyserman et al., 2002), harmony does not act like a guiding principle for high-harmony US employees the same way as it does for their Chinese counterparts. Thus, the buffering effect of harmony will be weaker in the US than in China.

What's more, preserving coworker relationships may be perceived as less essential to high-harmony US employees than to their Chinese counterparts. When US individuals feel it is too costly to maintain a relationship, they may quit and choose another group (Oyserman et al., 2002; Triandis, 1995). Indeed, those in the US tend to interact with more people and groups than do their Hong Kong counterparts (Wheeler, Reis, & Bound, 1989), and people in the US feel they can choose different groups more freely (cf. Oyserman et al., 2002). On the other hand, Chinese people tend to treat a relationship as permanent and are more reluctant to damage the relationship. Thus, US employees may be more willing than their Chinese counterparts to sacrifice a relationship with a coworker in the name of restoring justice because they anticipate joining

other social groups. Therefore, harmony value may serve as a weaker buffer on the justice-conflict relationship in the US than in China.

Hypothesis 3a: Individual harmony moderates the relationship between coworker interpersonal justice and coworker conflict. Specifically, the relationship is stronger for employees low in harmony than for employees high in harmony.

Hypothesis 3b: There is a cross-cultural difference in the moderating effect of harmony. The moderating effect of harmony is stronger in China than in the US.

Conditional Effect of Harmony on the Coworker Interpersonal Justice–Coworker Conflict–Employee Effectiveness Relationships in China and the US. As per Hypothesis 2, we predicted that coworker conflict mediates the relationships between coworker interpersonal justice and employee effectiveness, specifically task performance, OCBI, OCBO, CWBI, and CWBO. As per Hypothesis 3a and 3b, we predicted that there is a cross-cultural difference in the moderating effect of individual harmony on the relationship between coworker interpersonal justice and coworker conflict. Taken together, we proposed a moderated mediation model, in which harmony buffers the mediational relationships among (low levels of) coworker interpersonal justice, coworker conflict, and employee effectiveness, and such a buffering effect is stronger in China than in the US.

Hypothesis 4a: Individual harmony moderates the indirect relationships between coworker interpersonal justice and employee effectiveness via coworker conflict. The indirect relationships are stronger for employees low in harmony than for employees high in harmony.

Hypothesis 4b: There is a cross-cultural difference in the moderating effect of individual harmony on the indirect relationships between coworker interpersonal justice and employee effectiveness via coworker conflict. The moderated mediational effect is stronger in China than in the US.

The Current Study

To test these hypotheses, we recruited university employee-coworker dyads from China and the US. We limited samples to the same work environments and jobs to minimise confounding of country with industry and job (Sanchez & Spector, 2012). To minimise common method variance, we asked employees to provide data on interpersonal justice and harmony and used coworker surveys to measure coworker conflict and employee effectiveness variables (task performance, OCBI, OCBO, CWBI, and CWBO) experienced by corresponding employees.

METHOD

Participants and Procedure

We recruited administrative and support staff and faculty from three universities (one each from the Midwest, the west coast, and the north-east) in the US and three universities (all in the north-east) in China. The universities in these two countries are comparable in that (1) they comprehensively provide both undergraduate and graduate education, and (2) employees are occupied with similar kinds of work.

At the US universities, we obtained employee lists from the Human Resources departments. We randomly selected participants from the lists and mailed survey packets to them via the campus mail system. Each packet included a cover letter with informed consent form, an employee survey, a coworker survey, two self-addressed return envelopes, and two small “thank-you” gifts (Chinese decorative chains). We asked employees to write a random code on both the employee and coworker surveys before giving the coworker survey to one of their coworkers. Employees and coworkers returned the surveys to the researcher independently. Reminder letters were sent two weeks later. We linked employee and coworker data using the codes. We had responses from 301 US employee-coworker dyads. The employee sample had 209 (69.44%) females and 89 (29.57%) males. Three employees did not report gender. The mean age was 45.40 ($SD = 11.22$). The coworker sample had 201 (72.43%) females and 77 (25.58%) males. Six coworkers did not report gender. The mean age was 42.05 ($SD = 12.58$).

At the three Chinese universities, we contacted managers through personal connections. With help from school personnel, we administered the survey during randomly selected employee meetings. The survey packets included the same measures as the ones used in the US. The Chinese participants received small financial incentives of US\$4 for filling out the employee survey and US\$2 for filling out the coworker survey. Employees were assured that participation was voluntary and anonymous, and the data were for research purposes only. We collected 214 employee-coworker dyads in China. The employee sample had 147 (68.69%) females and 63 (29.44%) males. Four employees did not report their gender. The mean age was 42.50 ($SD = 8.85$). The coworker sample had 146 (68.22%) females and 60 (28.04%) males. Eight coworkers did not report their gender. The mean age was 41.75 ($SD = 8.77$).

Measures

Coworker Interpersonal Justice (Self-Report). Coworker interpersonal justice was measured with four items developed by Colquitt (2001). We slightly

adapted the items so that coworker was specified as the source of justice. An example item is, "Have your coworkers treated you in a polite manner?" Response choices range from 1 = *to a small extent* to 5 = *to a large extent*.

Coworker Conflict (Coworker-Report). Coworker conflict was measured with the 9-item Cross-Cultural Interpersonal Conflict Scale (CC-ICS; Liu et al., 2008). The CC-ICS measures both direct and indirect conflict in a cross-cultural context. The items were adapted so that the source (i.e. coworker) of a conflict was specified (Frone, 2000). Coworkers filled out the scale using the corresponding employees as referents. An example item of direct conflict is "This employee and his/her coworkers raise their voices in anger to each other." Example items of indirect conflict are "This employee complains about his/her coworkers behind their backs" and "His/her coworker(s) complains about this employees behind this employee's back." Response choices range from 1 = *never or rarely* to 6 = *several times per day*.

Harmony (Self-Report). Since harmony is an important component of a broader construct of collectivism (Oyserman et al., 2002; Taras et al., 2014), we administered the 8-item individualism/collectivism scale developed by Dorfman and Howell (1988). Two industrial and organisational psychologists independently examined the eight items and identified three that reflected the value of harmony. They are: "Being accepted by the members of your workgroup is very important," "Group harmony is very important," and "In a group, it is important to have a harmonious climate." Response choices range from 1 = *strongly disagree* to 5 = *strongly agree*.

We conducted an exploratory factor analysis (EFA) on all eight items (using Principle Axis Factoring and Varimax with Kaiser Normalisation rotation). Among the US sample, two factors had eigenvalues over 1. The first factor included the three items we identified as harmony items, and factor loadings ranged from .71 to .84. The other five items loaded on the second factor, which reflected individual-group relationships. An example item is "Group success is more important than individual success." The factor loadings ranged from .75 to .78. The EFA on the Chinese sample returned similar results. The first factor (harmony) had three items with factor loadings ranging from .60 to .91. The second had five items with loadings ranging from .70 to .84.

Next, we collected evidence for validity of the three-item harmony scale by administering it along with two established scales with which it would be expected to relate, specifically the 16-item harmony enhancement scale and 10-item disintegration avoidance scale developed by Leung et al. (2011). Data were collected from 195 American employees using Amazon's Mechanical-Turk website (mTurk, <https://www.mturk.com>). Among 195 respondents, 79 (41%) were female and 115 (59%) were male. One

participant did not report gender. The average age was 34.37 years ($SD = 11.04$). The average tenure was 11.33 years and the average work hour per week was 39.44 hours. Our three-item harmony scale ($\alpha = .67$) was significantly related to harmony enhancement ($\alpha = .91, r = .63, p < .001$), and disintegration avoidance ($\alpha = .80, r = .37, p < .001$), thus providing evidence for the convergent validity of the scale.

Employee Effectiveness (Coworker-Report). We used Williams and Anderson's (1991) scales to measure task performance (six items), OCBI (six items), and OCBO (seven items). An example item for task performance is "Adequately completes assigned duties." An example item for OCBI is "Helps others who have been absent." An example item for OCBO is "Attendance at work is above the norm." Each coworker indicated how much he/she agreed with the statement describing the corresponding employee. Response choices range from 1 = *strongly disagree* to 7 = *strongly agree*.

We used Bennett and Robinson's (2000) deviance scales to measure CWBI (five items) and CWBO (nine items). For CWBI, an example item is: "Made fun of someone at work." For CWBO, an example item is: "Taken property from work without permission." Coworkers rated their corresponding employees in terms of how often the employees engaged in specified behaviours. Response choices ranged from 1 = *never* to 7 = *daily*.

Measurement Equivalence/Invariance (ME/I). All Chinese versions of the scales were subjected to the translation and back-translation process (Werner & Campbell, 1970). We examined cross-cultural ME/I using LISREL 8.8 (Jöreskog & Sörbom, 2006). According to Vandenberg and Lance (2000), we first established a baseline model by testing the form invariance (i.e. similar factor patterns) of each scale across the two countries. Next, we examined the metric model by testing the factorial invariance (i.e. similar factor loadings) of each scale. As shown in Table 1, the practical indices suggested the baseline models were established for the scales of coworker interpersonal justice, coworker conflict, harmony, task performance, OCBI, OCBO, CWBI, and CWBO (Bentler & Bonett, 1980). Then we looked at the changes in CFI moving from the baseline model to the metric model. As shown in Table 1, the changes in CFI were at or less than $-.02$, indicating scale invariance between the two countries (Cheung & Rensvold, 2002).

RESULTS

Descriptive Information and Correlation Analyses

Descriptive statistics, coefficient alphas, and correlations among the variables for the US and Chinese samples are presented in Table 2. The internal

TABLE 1
 Summary of Fit Statistics for Measurement Equivalence/Invariance Tests of the Scales Using LISREL

Scale	Model	χ^2	df	NFI	CFI	IFI	SRMR	ΔCFI
<i>Coworker interpersonal justice</i>	Model 1. Baseline	18.67	4	.99	.99	.99	.02	—
	Model 2. Metric Invariance	20.03	7	.99	.99	.99	.03	—
	Model 1-2	—	—	—	—	—	—	0
<i>Coworker conflict (coworker-report)</i>	Model 1. Baseline	259.41	46	.94	.95	.95	.05	—
	Model 2. Metric Invariance	372.96	52	.92	.93	.93	.095	—
	Model 1-2	—	—	—	—	—	—	-.02
<i>Harmony</i>	Model 1. Baseline ^a	0.00	0	1.00	1.00	1.00	.00	—
	Model 2. Metric Invariance	2.81	2	.99	1.00	1.00	.02	—
	Model 1-2	—	—	—	—	—	—	0
<i>Performance (coworker-report)</i>	Model 1. Baseline	17.46	16	.99	1.00	1.00	.01	—
	Model 2. Metric Invariance	19.59	20	.99	1.00	1.00	.02	—
	Model 1-2	—	—	—	—	—	—	0
<i>OCBI (coworker-report)</i>	Model 1. Baseline	233.08	18	.92	.93	.93	.07	—
	Model 2. Metric Invariance	243.87	23	.92	.93	.93	.07	—
	Model 1-2	—	—	—	—	—	—	0
<i>OCBO (coworker-report)</i>	Model 1. Baseline	261.90	28	.91	.92	.92	.07	—
	Model 2. Metric Invariance	275.43	34	.90	.91	.91	.09	—
	Model 1-2	—	—	—	—	—	—	-.01
<i>CWBI (coworker-report)</i>	Model 1. Baseline	83.82	10	.92	.93	.93	.07	—
	Model 2. Metric Invariance	102.38	14	.91	.92	.92	.095	—
	Model 1-2	—	—	—	—	—	—	-.01
<i>CWBO (coworker-report)</i>	Model 1. Baseline	229.77	47	.93	.94	.94	.08	—
	Model 2. Metric Invariance	274.99	53	.92	.93	.93	.11	—
	Model 1-2	—	—	—	—	—	—	-.01

Notes: NFI = Normed fit index; CFI = Comparative Fit Index; IFI = Incremental Fit Index; SRMR = Standardised Root Mean Square Residual. $N_{US} = 301$, $N_{CN} = 214$.

^aThis is a saturated model.

TABLE 2
Correlations among Variables and Variables Descriptives

	1	2	3	4	5	6	7	8	9	10
1. Age	1.00	-.01	-.12 ⁺	.00	.02	.02	.12 ⁺	.07	-.04	-.12 ⁺
2. Gender	-.02	1.00	.14*	-.07	.28**	.15*	.16*	.13 ⁺	-.14*	-.15*
3. Coworker interpersonal justice	.04	-.01	1.00	-.27**	.17*	.22**	.03	.20**	-.16*	-.15*
4. Coworker conflict (coworker-report)	-.01	.03	-.26**	1.00	-.13 ⁺	-.28**	-.22**	-.30**	.46**	.51**
5. Harmony	.05	-.05	-.08	-.10	1.00	.16*	.13 ⁺	.09	.00	-.07
6. Performance (coworker-report)	-.01	.04	.08	-.27**	-.05	1.00	.56**	.60**	-.24**	-.30**
7. OCBI (coworker-report)	-.02	.03	.12*	-.25**	.00	.68**	1.00	.78**	-.26**	-.28**
8. OCBO (coworker-report)	.01	-.02	.12*	-.24**	.03	.63**	.75**	1.00	-.27**	-.33**
9. CWBI (coworker-report)	-.08	-.04	-.08	.48**	-.11 ⁺	-.29**	-.29**	-.24**	1.00	.62**
10. CWBO (coworker-report)	-.01	-.04	-.07	.20**	.09	-.37**	-.24**	-.27**	.48**	1.00
N (China)	205	210	212	210	211	207	212	208	212	212
M (China)	42.50	1.70	4.08	1.15	4.32	5.58	5.77	5.71	1.10	1.11
SD (China)	8.85	.46	.83	.36	.50	.90	.81	.82	.27	.34
α (China)	—	—	.94	.91	.78	.79	.90	.87	.82	.83
N (US)	291	298	295	221	298	291	296	290	297	288
M (US)	45.40	1.70	4.28	1.25	4.02	6.42	6.10	5.95	1.58	1.20
SD (US)	11.22	.46	.82	.47	.60	.95	.93	.91	.89	.47
α (US)	—	—	.94	.84	.74	.92	.90	.87	.77	.80

Note: For gender, males were coded as 1 and females were coded as 2; results based on the US data were presented under the diagonal and results based on the Chinese data were presented above the diagonal. ⁺ $p < .10$; * $p < .05$; ** $p < .01$.

reliabilities were acceptable for all scales used in both countries. Harmony was significantly higher in China ($M = 4.32$) than in the US ($M = 4.01$), $t(507) = -6.08, p < .001$. In the US, coworker interpersonal justice was negatively related to coworker conflict, and positively related to OCBI and OCBO. Coworker conflict was related to all employee effectiveness variables in expected directions. In China, coworker interpersonal justice was negatively related to coworker conflict, CWBI and CWBO, and positively related to harmony, task performance, and OCBO. Coworker conflict was significantly related to all employee effectiveness variables in expected directions. We ran regression analyses to test Hypothesis 1, which stated that coworker interpersonal justice is negatively related to coworker conflict. Coworker interpersonal justice negatively predicted coworker conflict in the US sample ($b = -.15, p < .001$), and in the Chinese sample ($b = -.12, p < .001$), providing support to Hypothesis 1.

The Mediation Analyses

Hypothesis 2 predicted coworker conflict mediates coworker interpersonal justice in relation to employee effectiveness. We tested the hypothesis using the bootstrapping method with Preacher and Hayes' (2004) SPSS Mediation

TABLE 3
The Indirect Effects of Coworker Interpersonal Justice on Employee Effectiveness through Coworker Conflict

<i>Mediation Models</i>		<i>Indirect effect point estimate</i>	<i>BCa 95% CI</i>	
			<i>Lower</i>	<i>Upper</i>
In China,				
Coworker interpersonal justice – coworker conflict (coworker-report)	– Performance (coworker-report)	.07	.04	.12
	– OCBI (coworker-report)	.06	.03	.11
	– OCBO (coworker-report)	.07	.04	.12
	– CWBI (coworker-report)	–.04	–.07	–.02
	– CWBO (coworker-report)	–.05	–.12	–.02
In the US,				
Coworker interpersonal justice – coworker conflict (coworker-report)	– Performance (coworker-report)	.09	.03	.19
	– OCBI (coworker-report)	.07	.03	.15
	– OCBO (coworker-report)	.06	.02	.15
	– CWBI (coworker-report)	–.14	–.23	–.08
	– CWBO (coworker-report)	–.04	–.10	–.01

Note: BCa 95% CI = bias corrected and accelerated 95% bootstrapping confidence intervals that include correction for median bias and skew. Bootstrapping results were based on 5,000 bootstrapped samples. $N_{US} = 209 \sim 215, N_{CN} = 202 \sim 208$.

Macro. As shown in Table 3, in both the US and Chinese samples, coworker conflict significantly mediated coworker interpersonal justice in relation to task performance, OCBI, OCBO, CWBI, and CWBO. Hypothesis 2 was supported.

The Moderation Analyses

Hypothesis 3a and 3b predicted a three-way interaction among coworker interpersonal justice, harmony, and country in predicting coworker conflict. Harmony was expected to buffer the relationship between justice and conflict in China more strongly than in the US. We used moderated multiple regression (MMR) analysis to test the three-way interaction. We centred all predictor variables, and controlled for age and gender. As can be seen in Table 4, the three-way interaction was significant, indicating country interacted with harmony to moderate the coworker interpersonal justice-coworker conflict relationship, $b = .20$, $p = .03$.

Using the Chinese data, we conducted simple slope analyses for employees with low harmony and for employees with high harmony, respectively. For low-harmony Chinese employees, coworker interpersonal justice significantly predicted coworker conflict, $b = -.18$, $p = .02$. For high-harmony Chinese

TABLE 4
The Three-Way Interaction of Coworker Interpersonal Justice, Harmony, and Country in Predicting Coworker Conflict, While Controlling for Age and Gender

Predictor	Coworker conflict (coworker-report)	
	ΔR^2	<i>B</i>
Step 1	<.001	
Age		<.001
Gender		-.016
Step 2	.08***	
Coworker interpersonal justice		-.12***
Harmony		-.08*
Country		-.10*
Step 3	.006	
Coworker interpersonal justice × Harmony		-.04
Coworker interpersonal justice × Country		.07
Harmony × Country		.01
Step 4	.01*	
Coworker interpersonal justice × Harmony × Country		.20*
Total R^2	.10***	
N	409	

Note: For country, 1 = the US, 2 = China. All predictor variables are centred variables. *B*: unstandardised coefficients. Each ΔR^2 is for the correspondent step. * $p < .05$; *** $p < .001$.

employees, coworker interpersonal justice did not predict coworker conflict, $b = -.05$, $p = .08$. The moderating effect of harmony in China is presented in Figure 2a. High harmony was indicated by 1 *SD* above the mean, and low harmony was indicated by 1 *SD* below the mean. In China, coworker interpersonal justice was more negatively related to coworker conflict for employees with low harmony than for employees with high harmony. Hypothesis 3a, which predicted that harmony buffers the relationship between coworker interpersonal justice and coworker conflict was supported by the Chinese data.

Using the US data, we conducted the simple slope analyses for employees with low and high harmony, respectively. For low-harmony US employees, coworker interpersonal justice did not predict coworker conflict, $b = .15$, $p = .40$. For high-harmony US employees, coworker interpersonal justice significantly predicted coworker conflict, $b = -.23$, $p < .001$. The moderating effect of harmony in the US is presented in Figure 2b. High harmony was

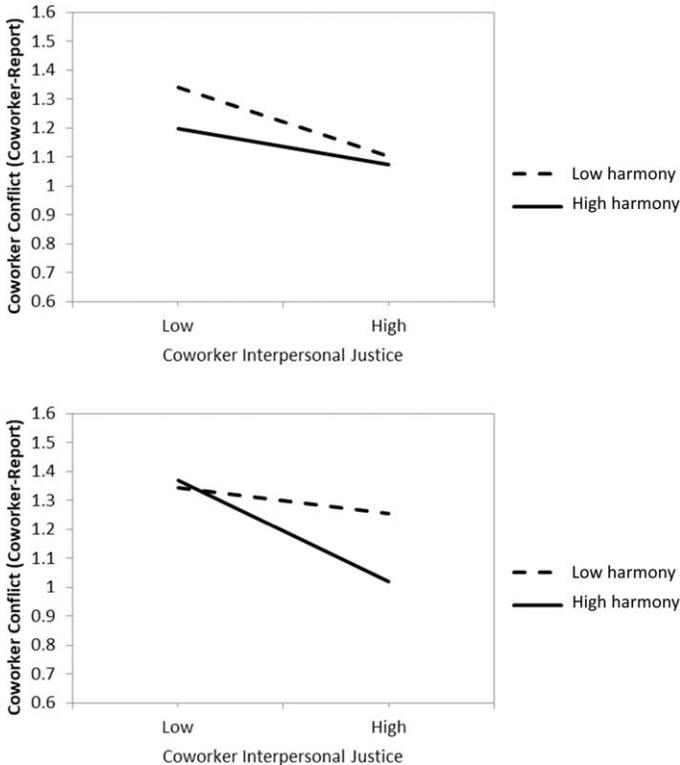


FIGURE 2. The Moderating Effect of Harmony on the Relationship between Coworker Interpersonal Justice and Coworker Conflict in (a) China and (b) the US.

indicated by 1 *SD* above the mean, and low harmony was indicated by 1 *SD* below the mean. In the US sample, coworker interpersonal justice was more negatively related to coworker conflict for employees with *high* harmony than for employees with low harmony. Hypothesis 3b predicted that the buffering effect of harmony would be stronger in China than in the US. We found harmony had a different moderating effect in these two countries. Whereas harmony buffered the relationship in China, it intensified this relationship in the US, partly supporting Hypothesis 3b.

The Moderated Mediation Analysis

Hypothesis 4a and 4b proposed a moderated mediation model in which harmony moderates the indirect relationships between coworker interpersonal justice and employee effectiveness via coworker conflict. We predicted that the moderated mediational effect is stronger in China than in the US. First, we tested the moderated mediation model in China and the US simultaneously using the multiple-group path analysis in Mplus 7.2 (Kline, 2005; Koopman, Matta, Scott, & Conlon, 2015). We specified the moderated mediation model in both samples. Model 1 was a baseline model in which all paths were constrained to be equal across the two samples. The data indicated a moderate fit: $\chi^2 = 86.18$, $df = 35$, $RMSEA = .08$, $CFI = .96$, $SRMR = .05$. In Model 2, we freed paths involving the interaction term of coworker interpersonal justice and harmony across the US and Chinese samples. Data indicated an improved fit: $\chi^2 = 67.26$, $df = 29$, $RMSEA = .07$, $CFI = .97$, $SRMR = .04$. Moving from the baseline model to Model 2, χ^2 decreased significantly, $\Delta\chi^2$ ($\Delta df = 6$) = 18.92, $p < .01$, indicating that Model 2 improved significantly from Model 1. That is, the moderating effect of harmony on the mediational relationships among coworker interpersonal justice, coworker conflict, and organisational effectiveness was significantly different in the US and China.

Next, we used the bootstrapping method with Preacher, Rucker, and Hayes' (2007) SPSS ModMed Macro to examine the moderated mediation model in the Chinese and US samples, respectively. Harmony was programmed to moderate the justice-conflict relationship. In the Chinese sample, we examined the mediating effect of coworker conflict on the justice-outcome relationships at the harmony values of 3.82 (-1 *SD*), 4.32 (mean), and 4.82 ($+1$ *SD*). As shown in Table 5, the indirect effects were significant when harmony was equal or less than the mean; they were *not* significant when harmony was greater than the mean, indicating that harmony buffered the mediational relationships among coworker interpersonal justice, coworker conflict, and employee effectiveness (task performance, OCBI, OCBO, CWBI, and CWBO) in China. Hypothesis 4a was supported by the Chinese data.

In the US sample, we examined the mediating effect of coworker conflict on the justice-outcome relationships at the harmony values of 3.40 (-1 *SD*), 4.02

TABLE 5
Regression Results for Conditional Indirect Effect at Different Levels of Harmony

Model:		Harmony	B	p
In China,	Performance (coworker-report)	-1 SD	.08*	.03
		M	.06*	.03
Coworker interpersonal justice-coworker conflict (coworker-report) –	OCBI(coworker-report)	+1 SD	.03	.27
		-1 SD	.06*	.04
	OCBO(coworker-report)	M	.04*	.04
		+1 SD	.03	.27
	CWBI(coworker-report)	-1 SD	.08*	.02
		M	.06*	.02
	CWBO(coworker-report)	+1 SD	.03	.25
		-1 SD	-.04**	.008
	CWBI(coworker-report)	M	-.03**	.009
		+1 SD	-.02	.22
	CWBO(coworker-report)	-1 SD	-.06**	.008
		M	-.04**	.009
In the US,	Performance (coworker-report)	+1 SD	-.03	.22
		-1 SD	.05	.15
In the US,	Performance (coworker-report)	M	.08**	.009
		+1 SD	.11**	.006
Coworker interpersonal justice-coworker conflict (coworker-report) –	OCBI(coworker-report)	-1 SD	.03	.37
		M	.06*	.02
	OCBO(coworker-report)	+1 SD	.10*	.01
		-1 SD	.02	.40
	CWBI(coworker-report)	M	.06*	.03
		+1 SD	.09*	.02
	CWBO(coworker-report)	-1 SD	-.05	.35
		M	-.12**	.002
	CWBI(coworker-report)	+1 SD	-.18***	<.001
		-1 SD	-.02	.16
	CWBO(coworker-report)	M	-.04*	.02
		+1 SD	-.05*	.02

Note: For harmony in the US sample, $M = 4.02$; $SD = .60$. For harmony in the Chinese sample, $M = 4.32$; $SD = .50$. Bootstrap sample size = 5,000. * $p < .05$; ** $p < .01$; *** $p < .001$. $N_{US} = 301$, $N_{CN} = 214$.

(mean), and 4.62 (+1 SD). As shown in Table 5, the indirect effects were significant when harmony was equal or greater than the mean; they were *not* significant when harmony was less than the mean, indicating harmony *intensified* the mediational relationships among coworker interpersonal justice, coworker conflict, and employee effectiveness in the US. Hypothesis 4b, which predicted that the moderated mediational effect is stronger in China than in the US, was partly supported.

DISCUSSION

This study's aim was to broaden the focus of coworker conflict research and examine how coworker interpersonal justice relates to employee effectiveness via coworker conflict in different cultural settings. Consistent with our prediction, the moderating effect of harmony was different in China and the US. We found that harmony served as a double-edged sword with *opposite* moderating effects in China and the US. Our results suggested that Chinese employees with high harmony values were less likely to respond to low levels of coworker interpersonal justice by initiating coworker conflict and reducing their job effectiveness altogether. However, in the US, high harmony intensified the relationships among these variables.

Theoretical Contributions

Coworker interpersonal justice was negatively associated with coworker conflict. This finding extends the research on negative outcomes associated with low coworker interpersonal justice (e.g. Bies & Tripp, 2005) by showing that interpersonal conflict among coworkers is a possible consequence. Our findings also revealed that this relationship held among both US and Chinese samples, thus contributing to the limited body of literature on mechanisms underlying coworker-initiated mistreatment and adding to the dearth of research on intercultural interpersonal justice (Gelfand, Erez, & Aycan, 2007).

We found that coworker justice had indirect effects on employee effectiveness through coworker conflict. Employees who reacted negatively to the agents they held responsible for low interpersonal justice seemed to suffer poor job effectiveness. These results were consistent with Eddleston and Kellermanns' (2007) finding that positive relationships in family firms enhance performance. They were also consistent with the finding that a sense of feeling connected with people predicts less rule-breaking or violations of norms (i.e. CWBs; Sims, 2002). Previous results on the direct effect of interpersonal justice on employee outcomes was less consistent (Fox, Spector, & Mills, 2001). Our results suggest that the deteriorated coworker relationship due to low coworker justice is a potential driving engine for reduced task performance, OCBI, and OCBO, and increased CWBI and CWBO. In addition, our study supports the mediating role of social exchange relationships predicted in the multifoci model of organisational justice and the target similarity model (Lavelle et al., 2007). Most empirical support for the theories has relied on organisational and supervisor foci of justice, but our study renders more support to the theory with coworkers as sources of justice and as targets of social exchange relationships.

The degree to which an employee values harmonious relationships played a role in her or his reactions to coworker interpersonal justice. To the best of our knowledge, this study is the first to investigate the different effect of harmony

in the East versus in the West. In the Chinese sample, we found harmony buffered the mediational relationship among coworker interpersonal justice, coworker conflict, and organisational effectiveness. For Chinese employees who endorsed low harmony, low coworker interpersonal justice was related to more conflict. For Chinese employees with high harmony, low levels of fair treatment from coworkers did not necessarily relate to more conflict, perhaps due to their high tolerance of unpleasant interpersonal interactions. High-harmony Chinese employees either avoid actions that would strain a relationship or engage in behaviours that would amend or enhance a relationship (Leung et al., 2011). Both of these behaviours help them experience less coworker conflict, which further prevent them from demonstrating undesirable organisational behaviours subsequently.

On the other hand, the surprising finding was that harmony intensified the relationship between justice and conflict in the US. There are several possible reasons. First, the effect of harmony on employees' behaviours may not be universal, but be culture-bound. When the value is consistent with societal norms and cultures, the effect of individual value on people's behaviours is more salient (e.g. Oyserman et al., 2002). This is the case in China. On the other hand, when the individual value is different from societal norms, the more-emphasised national culture may override the extent to which an individual value is expressed in behaviour. For example, regardless of individual values, self-focused training was more effective for US managers, whereas group-focused training was more effective for Chinese managers (Earley, 1994). Due to a generally higher premium placed on fairness in the US, harmony does not serve as a behavioural guiding principle in the same way as it does in China. When there are low levels of coworker interpersonal justice, the most important thing for US employees may be to fight and restore justice. Thus, US employees react with more conflict, regardless of their harmony value.

These results are consistent with the cultural tightness-looseness theory, defined as the strength of societal norms and sanctioning (Gelfand, Nishii, & Raver, 2006). In tight societies, such as China, there are more constraints and highly developed systems to monitor and sanction norm-deviated behaviours. Therefore, harmony has a strong effect on the behaviours of Chinese employees. In loose societies, such as the United States, there are lower constraints and weakly developed systems to monitor and sanction norm-deviated behaviours. Therefore, harmony has a weak effect on US employees' conflict behaviours.

Second, in certain circumstances, such as low levels of coworker interpersonal justice, individual values may be expressed in different behaviours, depending upon societal norms and the national cultures. That is, the value of harmony could be associated with different behaviours depending on what the Chinese and US societies regard to be appropriate and/or legitimate. Chinese people have tendencies to avoid conflict, whereas those from the US are more

in favour of confrontation (Friedman et al., 2006; Tinsley & Brett, 2001). Research has found that Chinese participants agree more with a nonconfrontational style and agree less with an assertive style when handling conflict than did their Anglo counterparts (Brew & Cairns, 2004). As such, when facing low levels of coworker interpersonal justice, high-harmony Chinese employees may choose to “wait-and-see” whereas US employees who strongly value harmony may seek to tackle interpersonal issues using culturally approved behaviours, such as speaking up.

Third, our results suggest that Chinese and US employees may hold different goals of conflict when coworker interpersonal justice is low. Whereas Chinese employees tend to frame interpersonal conflict with relationship-preserving perspective and goals (e.g. Huang, 1999; Tinsley & Brodt, 2004), US employees are more likely to approach low interpersonal justice from a conflict framework designed to protect self-interests or maintain fairness (e.g. Brew & Cairns, 2004; Friedman et al., 2006). US employees may attempt to “rectify” the infractions of coworker justice by approaching the offending coworker. Conflict may not be perceived by high-harmony US employees as a relationship breakdown, but a means to attain justice. Whereas Chinese employees might work hard to avoid conflicts that are misaligned with their value of harmony, US employees perceive interpersonal conflict as unavoidable in certain situations and are ready to confront the other party if need be (e.g. Tinsley & Brett, 2001; Trubisky, Ting-Toomey, & Lin, 1991).

Fourth, due to the high value placed on interpersonal relationships, high-harmony US employees might be more sensitive to issues related to interpersonal justice than low-harmony US employees. Such increased sensitivity may make high-harmony US employees particularly upset by low levels of coworker interpersonal justice. Sensitivity has been linked to increased negative outcomes associated with low justice (Greenberg, 1993). High-harmony US employees are more likely to dwell on issues related to coworker interpersonal justice and feel angrier, which may precede coworker conflict.

Practical Contributions

Our findings were consistent with the adage that “coworkers make the place”. Coworker conflict has detrimental effects on employees in ways that affect organisations, so it is important to manage conflict. Identifying possible antecedents is the initial step. Low fairness (e.g. low procedural and interpersonal justice) has been suggested to elicit both supervisor and coworker conflict. Promoting fair treatment among people at work could be effective in reducing coworker conflict. Managers may need to help coworkers conceptualise and articulate what fair treatment involves in order to reduce the occurrence of interpersonal justice violations.

Chinese are among the largest immigrant groups in the US. We found that employees' harmony value moderated how they reacted to low levels of coworker interpersonal justice. Harmony buffered the indirect effect of low coworker justice on employee effectiveness via coworker conflict in China. Chinese employees may tolerate some incidents of low interpersonal fairness in the beginning, with a hope that the situation will improve on its own. In this case, the US coworkers may not be aware of the detrimental effect of their behaviours. Therefore, behaviour change is not likely to happen and the situation could get worse. Less conflict reactions may only reflect Chinese employees' high tolerance of interpersonal transgression. If the situation exacerbates, these Chinese employees may simply leave their positions, leading to high attrition rates. Therefore, at the organisation level, our results help US managers retain talented Chinese employees; at the individual level, our results help US employees more effectively interact with people with different cultural values.

Our results are particularly informative to managers working overseas, as retaining expatriates is a continuing problem for international management (Hechanova, Beehr, & Christiansen, 2003). The retention rate for expatriates in US companies is relatively low (e.g. Hechanova et al., 2003). One possible reason for the poor adjustment of expatriates into the overseas assignments is that they fail to understand the local culture, which in turn, hinders their management and their work effectiveness. Our findings help inform future expatriate training about how to handle responses from employees with different cultural backgrounds. Improving expatriate management and effectiveness may be feasible ways to retain them on overseas assignments. Our study is another example indicating that US and Chinese employees' different cultural backgrounds may make them react differently in similar circumstances.

Limitations and Future Research

This study's findings need to be considered in light of its limitations. First, data were collected from only China and the US. Although we proposed harmony might account for the differences we found, other differences between the two countries might also be underlying factors that account for our results. In order to provide more conclusive evidence that harmony is an important factor, it is necessary to replicate this study using several countries that vary in the value of harmony. Nonetheless, China and the US differ significantly in harmony. The moderating effects of individual harmony were significantly different on the relationship between coworker interpersonal justice and coworker conflict in China and the US. Thus, we are relatively confident about the impact of harmony on employees' conflict experience. Second, justice is one of the values highly endorsed in the US culture (Moland, 2002). We speculated that the national value of justice might override the individual value of harmony in the US. However, we did not measure the value of justice. In future cross-cultural

research, it would be interesting to examine these two important values together.

Third, we limited our samples to university employees in order to make our cross-national samples more comparable. Future research is warranted to cross-validate our study findings by collecting data from a wider range of occupations to increase generalisability. Fourth, we asked employees to give the coworker surveys to people with whom they worked. It was possible that the employees gave the surveys to coworkers with whom they have good relationships. Since the coworker surveys were anonymous and coworkers returned the surveys to the researchers directly, it was unlikely that coworkers purposely distorted the ratings. Nevertheless, it would be ideal for future studies to collect data from multiple coworkers and take the average scores of their ratings on focal employees.

Fifth, due to the survey design of the study, causal interpretations of the results are not possible. We found that coworker interpersonal justice was negatively related to coworker conflict. Yet the predictive effect of justice on conflict should be interpreted with caution because it is plausible that coworker conflict functions as an antecedent of subsequent low coworker interpersonal justice perceived by the focal employee. Given a plethora of evidence suggesting the existence of reciprocal relationships between social environmental factors and employee experiences (Ford et al., 2014), the relationships between coworker interpersonal justice and conflict would be reciprocal under certain circumstances. Although theoretical evidence supports the justice-to-conflict direction somewhat more strongly than the other way around, it is important for future research to adopt experimental or experience sampling designs to examine the causal direction.

Despite the above limitations, we proposed and tested the negative interpersonal exchange model that applied to both Chinese and US employees in both similar and unique ways. Our model and research hypotheses received support with multi-source data collected in cross-cultural settings. This study extended our theoretical understandings in coworker relationships and cultural value of harmony in cross-cultural contexts.

REFERENCES

- Au, A.C., & Leung, K. (2016). Differentiating the effects of informational and interpersonal justice in co-worker interactions for task accomplishment. *Applied Psychology: An International Review*, *65*, 132–159. doi:10.1111/apps.12060
- Bennett, R.J., & Robinson, S.L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, *85*, 349–360.
- Bentler, P.M., & Bonett, D.G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, *88*, 588–606.
- Bies, R.J., & Moag, J.S. (1986). Interactional justice: Communication criteria of fairness. *Research on Negotiation in Organizations*, *1*, 43–55.

- Bies, R.J., & Tripp, T.M. (2005). The study of revenge in the workplace: Conceptual, ideological, and empirical issues. In S. Fox & P.E. Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 65–81). Washington, DC: American Psychological Association. doi:10.1037/10893-003
- Blau, P.M. (1964). *Exchange and power in social life*. New York: Wiley.
- Borman, W., & Motowidlo, S. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, W.C. Borman, & Associates (Eds.), *Personnel selection in organizations* (pp. 71–98). San Francisco, CA: Jossey-Bass.
- Brew, F.P. (2007). Harmony and controversy: The Yin and Yang of conflict in East Asian and Western cultures. In J.H. Liu, C. Ward, A. Bernardo, M. Karasawa, & R. Fischer (Eds.), *Castings the individual in societal and cultural contexts. Progress in Asian Social Psychology Series*, (Vol. 6, pp. 39–59). Seoul: Kyoyook-Kwahak-Sa Publishing.
- Brew, F.P., & Cairns, R.D. (2004). Styles of managing interpersonal workplace conflict in relation to status and face concern: A study with Anglos and Chinese. *International Journal of Conflict Management*, *15*, 27–56.
- Bruk-Lee, V., & Spector, P.E. (2006). The social stressors-counterproductive work behaviors link: Are conflicts with supervisors and coworkers the same? *Journal of Occupational Health Psychology*, *11*, 145–156. doi:10.1037/1076-8998.11.2.145
- Chen, G.M. (2001). Toward transcultural understanding: A harmony theory of Chinese communication. In V.H. Milhouse, M.K. Asante, & P.O. Nwosu (Eds.), *Transcultural realities: Interdisciplinary perspectives on cross-cultural relations* (pp. 55–70). Thousand Oaks, CA: Sage Publications.
- Chen, Z., Takeuchi, R., & Shum, C. (2013). A social information processing perspective of coworker influence on a focal employee. *Organization Science*, *24*, 1618–1639.
- Chiaburu, D.S., & Harrison, D.A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, *93*, 1082–1103.
- Cheung, G.W., & Rensvold, R.B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, *9*, 233–255.
- Colquitt, J.A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, *86*, 386–400.
- Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, C.O.L.H., & Ng, K.Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, *86*, 425–445. doi:10.1037/0021-9010.86.3.425
- Colquitt, J.A., Scott, B.A., Judge, T.A., & Shaw, J.C. (2006). Justice and personality: Using integrative theories to derive moderators of justice effects. *Organizational Behavior and Human Decision Processes*, *100*, 110–127. doi:10.1016/j.obhdp.2005.09.001
- Colquitt, J.A., Scott, B.A., Rodell, J.B., Long, D.M., Zapata, C.P., Conlon, D.E., & Wesson, J. (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology*, *98*, 199–236.
- Cropanzano, R., Li, A., & Benson III, L. (2011). Peer justice and teamwork processes. *Group and Organization Management*, *36*, 567–596.

- Donovan, M.A., Drasgow, F., & Munson, L.J. (1998). The perceptions of fair interpersonal treatment scale: Development and validation of a measure of interpersonal treatment in the workplace. *Journal of Applied Psychology, 83*, 683–692.
- Dorfman, P.W., & Howell, J.P. (1988). Dimensions of national culture and effective leadership patterns. In R.N. Farmer & E.G. McGoun (Eds.), *Advances in international comparative management* (Vol. 3, pp. 127–150). London: JAI Press.
- Duffy, M.K., Ganster, D.C., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal, 45*, 331–351.
- Earley, P.C. (1994). Self or group? Cultural effects of training on self-efficacy and performance. *Administrative Science Quarterly, 39*, 89–117.
- Eddleston, K.A., & Kellermanns, F.W. (2007). Destructive and productive family relationships: A stewardship theory perspective. *Journal of Business Venturing, 22*, 545–565.
- Erdogan, B., & Liden, R.C. (2006). Collectivism as a moderator of responses to organizational justice: implications for leader-member exchange and ingratiation. *Journal of Organizational Behavior, 27*, 1–17.
- Folger, R., & Cropanzano, R. (1998). *Organizational justice and human resource management*. Thousand Oaks, CA: Sage Publications.
- Ford, M.T., Matthews, R.A., Wooldridge, J.D., Mishra, V., Kakar, U., & Strahan, S.R. (2014). How do occupational stressor-strain effects vary with time? A review and metaanalysis of the relevance of time lags in longitudinal studies. *Work & Stress, 28*, 9–30.
- Fox, S., Spector, P.E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior, 59*, 291–309. doi:10.1006/jvbe.2001.1803
- Friedman, R., Chi, S.-C., & Liu, L.A. (2006). An expectancy model of Chinese–American differences in conflict-avoiding. *Journal of International Business Studies, 37*, 76–91.
- Frone, M.R. (2000). Interpersonal conflict at work and psychological outcomes: Testing a model among young workers. *Journal of Occupational Health Psychology, 5*, 246–255.
- Gelfand, M.J., Erez, M., & Aycan, Z. (2007). Cross-cultural organizational behavior. *Annual Review of Psychology, 58*, 479–514. doi:10.1146/annurev.psych.58.110405.085559
- Gelfand, M.J., Nishii, L.H., Holcombe, K.M., Dyer, N., Ohbuchi, K.-I., & Fukuno, M. (2001). Cultural influences on cognitive representations of conflict: Interpretations of conflict episodes in the United States and Japan. *Journal of Applied Psychology, 86*, 1059–1074.
- Gelfand, M.J., Nishii, L.H., & Raver, J.L. (2006). On the nature and importance of cultural tightness-looseness. *Journal of Applied Psychology, 91*, 1225–1244.
- Gouldner, A.W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25*, 161–178.
- Greenberg, J. (1993). Stealing in the name of justice: Informational and interpersonal moderators of theft reactions to underpayment inequity. *Organizational Behavior and Human Decision Processes, 54*, 81–103. doi:10.1006/obhd.1993.1004

- Harrison, D.A., Newman, D.A., & Roth, P.L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, *49*, 305–325.
- Hechanova, R., Beehr, T.A., & Christiansen, N.D. (2003). Antecedents and consequences of employees' adjustment to overseas assignment: A meta-analytic review. *Applied Psychology: An International Review*, *52*, 213–236. doi:10.1111/1464-0597.00132
- Hershcovis, M.S. (2011). “Incivility, social undermining, bullying. . . oh my!”: A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior*, *32*, 499–519.
- Hook, J.N., Worthington, E.J., & Utsey, S.O. (2009). Collectivism, forgiveness, and social harmony. *The Counseling Psychologist*, *37*, 821–847. doi:10.1177/0011000008326546
- Huang, L.L. (1999). *Interpersonal harmony and conflict: Indigenous theories and research*. Taipei, Taiwan: Gui Guan (in Chinese).
- Hwang, K.K. (1997). Guanxi and mientze: Conflict resolution in Chinese society. *Intercultural Communication Studies*, *1*, 17–42.
- Jex, S.M. (1998). *Stress and job performance: Theory, research, and implications for managerial practice*. Thousand Oaks, CA: Sage.
- Jöreskog, K.G., & Sörbom, D. (2006). *LISREL for Windows*. Lincolnwood, IL: Scientific Software International.
- Kidwell, R.E., Kellermanns, F.W., & Eddleston, K.A. (2012). Harmony, justice, confusion, and conflict in family firms: Implications for ethical climate and the “Fredo Effect.” *Journal of Business Ethics*, *106*, 503–517. doi:10.1007/s10551-011-1014-7
- Kline, R.B. (2005). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- Koopman, J., Matta, F.K., Scott, B.A., & Conlon, D.E. (2015). Ingratiation and popularity as antecedents of justice: A social exchange and social capital perspective. *Organizational Behavior and Human Decision Processes*, *131*, 132–148.
- Ladebo, O.J., Awotunde, J.M., & AbdulSalaam-Saghir, P. (2008). Coworkers' and supervisor interactional justice: Correlates of extension personnel's job satisfaction, distress, and aggressive behavior. *Journal of Behavioral And Applied Management*, *9*, 206–225.
- Lavelle, J.J., Rupp, D.E., & Brockner, J. (2007). Taking a multifoci approach to the study of justice, social exchange, and citizenship behavior: The target similarity model. *Journal of Management*, *33*, 841–866. doi:10.1177/0149206307307635
- Legge, J. (1955). *The four books*. Taipei: Wen Yo.
- Leung, K. (1997). Negotiation and reward allocations across cultures. In P.C. Earley & M. Erez (Eds.), *New perspectives on international industrial organizational psychology* (pp. 640–675). San Francisco, CA: New Lexington.
- Leung, K., Brew, F.P., Zhang, Z.X., & Zhang, Y. (2011). Harmony and conflict: A cross-cultural investigation in China and Australia. *Journal of Cross-Cultural Psychology*, *42*, 795–816. doi:10.1177/0022022110363474
- Li, C.Y. (2006). The Confucian ideal of harmony, philosophy East & West, *University of Hawai'i Press*, *56*, 583–603.

- Li, A., & Cropanzano, R. (2009). Fairness at the group level: Justice climate and intraunit justice climate. *Journal of Management*, *35*, 564–599.
- Li, A., Cropanzano, R., & Bagger, J. (2013). Justice climate and peer justice climate: A closer look. *Small Group Research*, *44*, 563–592. doi:10.1177/1046496413498119
- Liu, C., Li, C., Fan, J., & Nauta, M.M. (2015). Workplace conflict and absence/lateness: The moderating effect of core self-evaluation in China and the United States. *International Journal of Stress Management*, *22*, 243–269. doi:10.1037/a0039163
- Liu, C., Nauta, M.M., Spector, P.E., & Li, C. (2008). Direct and indirect conflicts at work in China and the US: A cross-cultural comparison. *Work & Stress*, *22*, 295–313. doi:10.1080/02678370802573984
- Liu, C., Spector, P.E., & Shi, L. (2007). Cross-national job stress: A quantitative and qualitative study. *Journal of Organizational Behavior*, *28*, 209–239. doi:10.1002/job.435
- Liu, C., Yang, L.-Q., & Nauta, M.M. (2013). Examining the mediating effect of supervisor conflict on procedural injustice–job strain relations: The function of power distance. *Journal of Occupational Health Psychology*, *18*, 64–74. doi:10.1037/a0030889
- Lukes, S. (1973). *Individualism*. New York: Harper & Row.
- Masterson, S.S., Lewis, K., Goldman, B.M., & Taylor, M.S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, *43*, 738–748.
- Moland, J.J. (2002). The value-oriented Civil Rights Movement and passive resistance: An expression of civility in the pursuit of social justice. *Sociological Inquiry*, *72*, 442–455. doi:10.1111/1475-682X.t01-1-00027
- Oyserman, D., Coon, H.M., & Kummelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, *128*, 3–72. doi:10.1037/0033-2909.128.1.3
- Preacher, K.J., & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*, 717–731. doi:10.3758/BF03206553
- Preacher, K.J., Rucker, D.D., & Hayes, A.F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, *42*, 185–227.
- Putnam, L.L., & Poole, M.S. (1987). Conflict and negotiation. In F.M. Jablin, L.L. Putnam, K.H. Roberts, & L.W. Porter (Eds.), *Handbook of organizational communication* (pp. 549–599). Newbury Park, CA: Sage.
- Rupp, D.E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. *Organizational Behavior and Human Decision Processes*, *89*, 925–946. doi:10.1016/S0749-5978(02)00036-5
- Sanchez, J.I., & Spector, P.E. (2012). Administrative, measurement, and sampling issues in large-scale cross-national research: UN or NATO approach? In A.M. Ryan, F.T.L. Leong, & F.L. Oswald (Eds.), *Conducting multinational research: Applying organizational psychology in the workplace* (pp. 123–147). Washington, DC: American Psychological Association.

- Sawaumi, T., Yamaguchi, S., Park, J., & Robinson, A.R. (2015). Japanese control strategies regulated by urgency and interpersonal harmony evidence based on extended conceptual framework. *Journal of Cross-Cultural Psychology, 46*, 252–268. doi:10.1177/0022022114563749
- Schneider, B. (1987). The people make the place. *Personnel Psychology, 40*, 437–453.
- Schwartz, S.H. (1999). A theory of cultural values and some implications for work. *Applied Psychology: An International Review, 48*, 23–47.
- Settoon, R.P., Bennett, N., & Liden, R.C. (1996). Social exchange in organizations: Perceived organizational support, leader–member exchange, and employee reciprocity. *Journal of Applied Psychology, 81*, 219–227. doi:10.1037/0021-9010.81.3.219
- Sims, R.L. (2002). Ethical rule breaking by employees: A test of social bonding theory. *Journal of Business Ethics, 40*, 101–109. doi:10.1023/A:1020330801847
- Sloan, M.M., Newhouse, R.J.E., & Thompson, A.B. (2013). Counting on coworkers race, social support, and emotional experiences on the job. *Social Psychology Quarterly, 76*, 343–372. doi:10.1177/0190272513504937
- Spector, P.E., & Jex, S.M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology, 3*, 356–367. doi:10.1037/1076-8998.3.4.356
- Taras, V., Sarala, R., Muchinsky, P., Kemmelmeier, M., Singelis, T. M., Avsec, A., . . . Sinclair, H.C. (2014). Opposite ends of the same stick? Multi-method test of the dimensionality of individualism and collectivism. *Journal of Cross-Cultural Psychology, 45*, 213–245.
- Thomas, K.W. (1992). Conflict and conflict management: Reflections and update. *Journal of Organizational Behavior, 13*, 265–274.
- Tinsley, C.H., & Brett, J.M. (2001). Managing workplace conflict in the United States and Hong Kong. *Organizational Behavior and Human Decision Processes, 85*, 360–381.
- Tinsley, C.H., & Brodt, S.E. (2004). Conflict management in Asia: A dynamic framework and future directions. In K. Leung, & S. White (Eds), *Handbook of Asian management*. New York: Kluwer Academic Publishers.
- Triandis, H.C. (1995). The psychological measurement of cultural syndromes. *American Psychologist, 51*, 407–415.
- Trubisky, P., Ting-Toomey, S., & Lin, S.-L. (1991). The influence of individualism–collectivism and self-monitoring on conflict styles. *International Journal of Inter-cultural Relations, 15*, 65–84.
- Vandenberg, R.J., & Lance, C.E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods, 3*, 4–70. doi:10.1177/109442810031002
- Wayne, S.J., Shore, L.M., & Liden, R.C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal, 40*, 82–111. doi:10.2307/257021
- Werner, O., & Campbell, D. (1970). Translation, working through interpreters and the problem of decentering. In R. Naroll & R. Cohen (Eds.), *A handbook*

- of method in cultural anthropology* (pp. 398-420). New York: Natural History Press.
- Wheeler, L., Reis, H.T., & Bond, M.H. (1989). Collectivism-individualism in everyday social life: The middle kingdom and the melting pot. *Journal of Personality and Social Psychology*, *57*, 79-86.
- Williams, L.J., & Anderson, S.E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, *17*, 601-617.

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