A CROSS-CULTURAL EXPLORATION OF EMOTIONAL SUPPORT AND IN-GROUP COLLECTIVISM AS JOINT MODERATORS OF PSYCHOLOGICAL STRAIN -- AFFECTIVE ORGANIZATIONAL COMMITMENT RELATIONSHIPS

ABSTRACT

We develop a framework to study the effects of emotional support in the relationship between psychological strain and affective organizational commitment in different cultural contexts. Based on the job demands-resources model and conservation of resources theory, we hypothesize that employees' emotional support and in-group collectivism orientation jointly moderate the relationship between psychological strain and affective organizational commitment. We tested the hypothesis on a sample of 2702 respondents from eight different countries: Germany, India, Indonesia, Poland, South Korea, Turkey, United Arab Emirates, and the United States. The results highlight the roles of emotional support and in-group collectivism in employees' responses to psychological strain.

Key Words: Emotional Support, Psychological Strain, In-Group Collectivism, Affective Organizational Commitment

INTRODUCTION

Research over the past seven decades suggests that the productivity and satisfaction of employees can be strongly influenced by the encouraging words and supportive actions of their coworkers, supervisors, peers, mentors, and other important people at work. In particular, social support is important when employees deal with organizational stressors (House, 1981; Eisenberger, Fasolo & Davis-LaMastro, 1990; Beehr & Glazer, 2001). It is a key aspect of work-related social relationships and associated outcomes. Nevertheless, there are gaps in the empirical literature regarding a cross-cultural examination of how social support is perceived and how it impacts work behaviors in contexts other than in the U.S. or Western-based cultures. Although a few studies have attempted to address these gaps (e.g. Glazer, 2006; Glazer & Beehr, 2005; Goodwin & Plaza, 2000; Pluut, Ilies, Curseu, & Liu, 2018; Kim, Sherman, & Taylor, 2008; Taylor, Sherman, Kim, Jarcho, Takagi, & Dunagan 2004), no study has examined the influence of social support on psychological strain and organizational outcomes across multiple countries. In the present investigation, we take insights from job demands-resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) and conservation of resources (COR) theory (Hobfoll 1989, 2001) to study the combined effects of a particular facet of social support and perceived cultural orientation on the psychological strain-organizational commitment relationship. More specifically, we are investigating the effects of emotional support and perceived in-group collectivism on the relationship between psychological strain and affective organizational commitment in eight different cultural contexts.

We study specific facets of social support and organizational commitment for two main reasons. First, studying the interrelationships between specific facets of their larger constructs provides a more detailed understanding of their theoretical associations. Different facets of social

support (e.g. instrumental, informational, and emotional) and organizational commitment (e.g. affective, normative, and continuance) represent distinct and separate sub-dimensions of these constructs (House, 1980; Meyer, Allen, & Smith, 1993). Second, emotional support is theoretically linked to affective organizational commitment (AOC) because AOC refers specifically to the emotional ties that members have with their organizations (Meyer et al., 1993). Therefore, and as we detail below, employing the JD-R model and COR theory is uniquely fitting given that emotional support and AOC refer to emotional resources and emotional outcomes, respectively.

The Job Demands-Resources (JD-R) model posits that in any job there are both demands and resources (Bakker & Demerouti, 2007). Job demands (e.g. work interruption, time pressure) refer to "physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs" (p. 312). Conversely, job resources (e.g. emotional support, salary) are aspects of the job that are instrumental in meeting job requirements and ameliorate the costs associated with job demands. They may also stimulate growth and development. This suggests that the relationship between psychological strain and AOC is shaped by a combination of job demands and resources.

Researchers have also used Conservation of Resources (COR) theory to predict a wide range of stress outcomes in organizational settings (Quick & Gavin, 2001; Karatepe, Yavas, Babakus, & Deitz, 2018). COR theory posits that people strive to marshal, build, and protect resources they value and that resource loss is a major cause of strain (Hobfoll, 1989, 2001). Resources include "objects (e.g. tools), personal characteristics (e.g. emotional stability), conditions (e.g. presence of social support), and energies (e.g. money)" (Alarcon, 2011, p.550).

Strain occurs when such resources are threatened or lost. Few studies have analyzed how people assign value to these given resources. That is, emotional support may be perceived as a more valuable resource to some than to others. Individuals' perceptions about the support provided by their employing organizations play an important role in influencing their level of commitment to their organizations (Eisenberger et al., 1990; Richard, Ismail, Bhuian, & Taylor, 2009; Robinson, 1996; Rousseau, 1995; Settoon, Bennett, & Lydon, 1996). Thus, emotional support may vary in how it influences the relationship between psychological strain and AOC.

Moreover, cross-cultural literature suggests that national culture has differential effects on persons such that individualists and collectivists tend to have: (a) different attitudes towards working conditions or workplace stressors (e.g. Chiu & Kosinski, 1999; O'Connor & Shimizu, 2002; Spector et al., 2001; Spector et al., 2002); (b) varying perceptions of and attitudes toward social support (e.g. Beehr & Glazer, 2001; Glazer, 2006; Kim, Sherman & Taylor, 2008 and (c) varying levels of organizational commitment, turnover intentions, and job satisfaction (e.g. Coyne & Ong, 2007; Felfe, Yan, & Six, 2008; Lee, Allen, Myer, & Rhee, 2001; Noordin, Williams, & Zimmer, 2002; Thomas & Au, 2002; Wasti, 2003). Specifically, in this study we focus on how *in-group collectivistic values* influence the relationships among strain, emotional support, and AOC. Therefore, two research questions are explored: (1) What is the relative strength of psychological strain, emotional support, and perceived in-group collectivism orientation in affecting the AOC of individuals? and (2) in what ways do emotional support and perceived in-group collectivism interact with psychological strain to affect AOC?

By exploring the research questions examined in this paper, we hope to contribute to: (a) the *stress-strain literature* by delineating the role of emotional support in the psychological strain-organizational commitment relationship in various cultural contexts; (b) the *social support*

literature by testing emotional support in various cultural contexts; and (c) the *cross-cultural management* literature by specifying how the nature of relationships between psychological strain and emotional support are perceived and influence AOC in various cultural contexts.

In the next section we discuss the JD-R model, COR theory of stress and introduce our conceptual model linking psychological strain, emotional support, AOC, and in-group collectivistic values. Following that, we discuss the extant literature related to the emotional support construct.

THEORETICAL BACKGROUND AND CONCEPTUAL MODEL

Integrating the JD-R model and COR theory

Both the JD-R model and COR theory provide theoretical rationale in our study of the psychological strain/AOC relationship. The JD-R model makes two main claims relevant to our study. First, job resources (e.g. emotional support) can ameliorate the costs of job demands and are valuable in their own right because they may lead to personal growth and development. Second, job demands and resources beget relatively independent processes (Bakker & Demerouti, 2007). In other words, job demands may lead to negative outcomes such as burnout and emotional stress while job resources may lead to positive outcomes such as high performance, low unavoidable absence, and increased organizational commitment (Hu, Schaufeli, & Taris, 2011).

How, then, do individuals manage competing job demands and resources? COR theory posits that people marshal and conserve resources to avoid stress at all times (Hobfoll, 1989). From this perspective, Hobfoll (2002) described stress resiliency as one's abilities to prevent resource loss and to cope with the threat of such loss. In other words, those who are able to gain resources, protect remaining resources, and manage resource loss are better suited to resist the

negative impact of organizational job demands. Moreover, the individual is embedded within an organization that is nested within a society. Hobfoll (2001) argues that to "separate any piece of this unit, without reference to the greater whole, will necessarily lead to limited predictive capacity. The self derives from primary attachments within biological families and intimate social groups" (p. 338). This suggests that people may assign different values to available resources when they are negotiating the job demands-resources equation. For example, research has shown that people with higher self-transcendence values (i.e. higher levels of benevolence and universalism values) are likely to place less value upon material and psychosocial resources (Morelli & Cunningham, 2012). Hence, to properly study how individuals cope with job demands and resources, the external environment in which the individual is embedded must be considered (Brauchli, Schaufeli, Jenny, Fullemann, & Bauer, 2013).

Integrating the JD-R model and COR theory, the model we propose suggests that emotional support from persons (e.g., co-workers, supervisor, mentor) in the organization is beneficial for the employees. It weakens the negative effects of psychological strain on AOC. Moreover, we propose that persons who have a more collectivistic cultural values orientation will have varying expectations of voluntary exchange relationships with the organization. As such, the impact of emotional support on the relationship between psychological strain and AOC will differ. We propose a three-way interaction between psychological strain, emotional support and in-group collectivism on AOC. The proposed conceptual model is presented in Figure 1.

Insert Figure 1 about Here

We next discuss each of the three predictor variables and the literature that supports our research hypotheses for this study.

Psychological Strain

A meta-analysis found that the average corrected correlation between stress and organizational commitment is -.330 (Mathieu & Zajac, 1990). Psychological strain is, however, the result of stress. Although previous research and theorizing have been less clear on whether the relationship between stress and AOC is direct or mediated by psychological strain, what is clear is that employees who tend to report greater levels of strain also tend to report lower levels of organizational commitment's various facets (Mathieu & Zajac,1990).

Psychological strain arises from one's unfavorable perception of one's work environment. Put differently, psychological strain refers to a state of depleted energy which is caused by excessive psychological and emotional demands. According to Hobfoll (1989), resources such as energies can be gained or spent. Thus, if AOC refers to the emotional ties that employees have with their organizations, it is reasonable to suspect that in order to conserve resources (i.e. prevent further resource loss), employees may jettison the cause of resource loss, which in this case refers to the organization itself. Indeed, research has shown that psychological strain is likely to have a positive influence on turnover intentions and a negative influence on AOC because psychological strain is an indicator that available resources are inadequate to buffer the effects of workplace stressors (Noblet & Rodwell, 2009). Thus, consistent with other research findings, we propose:

Hypothesis 1: Psychological strain is negatively related to affective organizational commitment.

Emotional Support

We incorporate the definition given by House (1981) that "social support is an emotional concern, instrumental aid, and information and appraisal support that an individual receives from various members of her/his role set*"* (p.22-25). Although House identifies four dimensions of

social support (i.e. emotional, appraisal, informational and instrumental), the focus of the current study is on *emotional support* which has been examined in social support research in (1) career dynamics and the role of mentors and social capital in career success (cf. Ragins and Cotton, 1999; Richard, Ismail, Bhuian, & Taylor, 2009), and (2) organizational stressors and the role of emotional support in minimizing the negative effects of stressors (cf. Beehr, Jex, Stacy, & Murray, 2000; Glazer and Beehr, 2005).

According to Edwards (1980), *emotional support* is provided when an individual has someone who shows concern that his/her goals are reached, who is emotionally reinforcing and who can be trusted and depended upon - similar to Cobb's (1976) notions of emotional and esteem support. Given that most management stress and coping studies have involved the more global social support construct, it is unclear when, and which facets of, support will lead to specific organizational outcomes. However, some empirical evidence reveals that not all facets of social support have equal criterion validities. For example, Ford (1985) found that emotional support, but not informational or instrumental support, had positive effects on job satisfaction, job stress, and role stress in a sample of black employees. In addition, managers can reduce employee turnover intentions by providing emotional support (Firth, Mellor, Moore, & Loquet, 2004). From a psychological contract and job resource perspective, emotional support should strengthen AOC. Additionally, Rhodes and Eisenberger (2002) surmise that perceived support in the workplace meets employees' needs for emotional support, affiliation, esteem and approval. Our focus here is more on the *type* of support provided (e.g., emotional) as opposed to the *source* of the support (e.g., supervisor, co-worker, or spouse; see Pluut et al., 2018). According to the JD-R model, emotional support is a job resource which leads to positive outcomes. Thus:

Hypothesis 2: Emotional support is positively related to affective organizational commitment.

Cultural Values Orientation (In-Group Collectivism)

The relative emphasis of individualism-collectivism remains one of the strongest predictors of cultural differences in behavior across social settings (Triandis, 1989). Specifically, we consider here how people lower or higher on collectivistic values differ in how they relate to coworkers in organizations[1]. The GLOBE studies purport that there are two distinct collectivism dimensions: institutional collectivism and in-group collectivism. Institutional collectivism refers to "the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action" (House & Javidan, 2004: 12). In-group collectivism is "the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families" (House & Javidan, 2004: 12). Since our hypotheses are in-part explained by the differential nature of how individuals perceive and interpret their social relationships, we focus on perceived in-group collectivism instead of institutional collectivism, which is less relevant to our theory.

Collectivists, with their preference for close and long-term relationships, define themselves by in-group memberships (Earley & Gibson, 1998; Triandis, 1989). In an organizational setting, they demonstrate moral involvement with their co-workers and organizations, feel morally obliged to serve their company and are particularly concerned about the results of their actions on their organizations (Triandis, 1989). Collectivists also tend to respond more positively to provisions and support offered by the organization than do individualists (Earley & Gibson, 1998). They are concerned about keeping or losing face in front of others in the social setting. This may be a primary incentive for them to fulfill their duties

[1] We acknowledge the ongoing debate on whether individualism-collectivism are independent constructs, interdependent, or a continuum. Since our study involves GLOBE's in-group collectivism construct, we refer to individuals and cultures as being higher or lower on collectivism. For a discussion regarding Hofstede and GLOBE's Individualism-Collectivism dimension, please see Brewer and Venaik (2011).

(Hofstede, 1980 &1991). Collectivists value interpersonal harmony within the organization and place more importance on the group over their self-interest (Earley, 1989). It follows then, that collectivists may feel stronger emotional ties to their organizations. Thus:

Hypothesis 3: In-group collectivism is positively related to affective organizational commitment.

Psychological Strain and Affective Organizational Commitment: Roles of Emotional Support and In-group Collectivism

A question often arises in stress research: "if workplace stressors result in psychological strain, what are the effects of strain on organizationally-valued outcomes such as organizational commitment, job satisfaction, and intention to quit?" As noted previously, psychological strain is an indicator that available emotional support or other resources are not adequate enough to buffer the effects of workplace stressors. Emotional support, then, may weaken the relationships between psychological strain and AOC. However, we propose that the effects of emotional support on the strain-commitment relationship will vary depending on cultural orientation.

The differential nature of the exchange relationship in high collectivistic cultures versus low collectivistic cultures should explain varying effects of emotional support on the strain-commitment association. In high collectivistic cultures, employees tend to place less importance on equity assessments and instrumental outcomes (Paine & Organ, 2000). On the other hand, in low collectivistic cultures, employees' loyalty to the organization depends upon the tangible and intangible benefits they receive from the organization. From a psychological contract perspective, Western cultures emphasize transactional contracts, whereas Eastern cultures emphasize relational contracts (Thomas, Au, & Ravlin, 2003). As such, high emotional support may not be perceived as valuable of a resource in less collectivistic societies. For instance, positive feedback is universally preferred over negative feedback. However, this is even more so in collectivistic cultures (Van de Vliert et al. 2004). In addition, previous studies have found that

satisfaction with work and promotions were the strongest predictors of organizational commitment among Western countries, whereas satisfaction with one's supervisor was a stronger predictor of organizational commitment among Eastern countries (Wasti, 2003). Given that AOC refers to emotional ties, emotional support may be a more valued resource from the perspective of highly collectivistic employees, as it buffers the negative effects of psychological strain. Therefore, we suggest that a three-way interaction exists between psychological strain, emotional support, and in-group collectivism orientation in predicting AOC. Thus:

Hypothesis 4a: When employees receive high levels of emotional support, the negative relationship between psychological strain and affective organizational commitment weakens for employees when their cultural values orientation is high versus low on in-group collectivism.

Conversely, in instances of low emotional support, there is reason to believe that high collectivistic employees may react more negatively than low collectivistic employees. Thomas et al. (2003) theorized that employees with higher collectivistic values would experience more negative affective reactions when psychological contract breaches are perceived. Given that a collectivist's psychological contract is more relational in nature, low emotional support may be perceived as an overt violation, whereas employees with lower collectivistic values may perceive violations in terms of pay and promotions as a stronger criterion for violation. Referring back to the JD-R model and COR theory, low emotional support may effectively be seen as a deprivation of a more valuable resource from the perspective of high collectivistic employees versus that of low collectivistic employees. It follows that high collectivistic employees would have a stronger negative affective reaction to this deprivation of resource. Thus:

Hypothesis 4b: When employees receive low levels of emotional support, the negative relationship between psychological strain and affective organizational commitment strengthens for employees when their cultural values orientation is high versus low on in-group collectivism.

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METHOD

Prior to testing the hypotheses, the measurement equivalence of our instruments was examined using confirmatory factor analysis. Subsequently, in testing our hypotheses, hierarchical linear regression procedures were used to examine the relationships depicted in our conceptual model. The methodological procedures are described in detail below

Sample and Procedures

An important methodological issue in conducting cross-national research has to do with the comparability of different samples. In the present study, our samples were drawn from comparable professional populations of employees. Employees and managers of firms in nine different industries (education, financial services, food services, government/public service, healthcare, manufacturing, retail/sales, software development/information technology, and transportation) across eight countries provided the data for the present study. All respondents volunteered to participate and their anonymity was assured. The 2702 respondents represented the countries of Germany (256), India (606), Indonesia (552), Poland (248), South Korea (365), Turkey (209), United Arab Emirates (237), and the United States (229). With two exceptions, these eight national samples did not differ significantly in sex, age, education, and organizational tenure. The percentage of female respondents for the India and South Korea samples were about 20% while all others were 42% and higher.

A holdout sample of 520 participants was randomly selected from the two largest country samples and from the USA sample (India - 200; Indonesia - 200; USA - 120) for exploratory factor analysis (EFA) as discussed below. Participants ranged in age from 18 to 66, with 72% ranging between the ages of 26 and 50; 44% were female; 62% held at least a bachelor's degree and another 19% had some college attendance. Participants were employed on a full-time basis

ranging from 1 to 56 years (mean = 14.2); they worked with their current employers from 1 to 48 years (mean = 10.2).

We approached country collaborators to obtain their help in collecting samples from their respective countries. It was important to select countries that represented a cross-section of the 10 GLOBE country clusters (House, Hanges, Javidan, Dorfman, & Gupta, 2004). As such, the country samples represent five of the 10 GLOBE country clusters: Anglo Cluster (USA), Middle East Cluster (Turkey and UAE), Southern Asia Cluster (India and Indonesia), Confucian Asia Cluster (South Korea), and Eastern Europe Cluster (Germany & Poland). Collection of data followed the recommendations reflected in Van de Vijver and Leung (1997) regarding cross-cultural research with respect to ensuring equivalence of samples, inclusion of context variables, and proper administration of research instruments. In particular, the study items were embedded in a questionnaire designed to assess respondents' attitudes about a number of different aspects of their work situations. Questionnaires were provided in English for the USA and India samples. For all other countries, appropriate translation and back translation procedures were undertaken to ensure correct understanding of the questionnaire items.

Measures

Measures were selected to provide maximally valid and reliable indicators of the variables identified in our conceptual model (shown in Figure 1) while employing shortened versions of some measures due to concerns about questionnaire length. The shortened versions of these scales are psychometrically valid. All measures were adapted from previously developed and published scales. Systematic error as a result from common method biases were limited as the measures used are drawn from a much larger study.

Emotional Support. Based on the magnitude of the item loadings, five of nine items (which reflected emotional support) from the original work environment support scale developed by Edwards (1980) were included in the research questionnaire. Participants were asked to indicate on five-point Likert-type response scales the extent to which they had someone in the workplace who provided the type of supportive behaviors indicated. The response categories ranged from 1 (to a very little extent) to 5 (to a great extent). A representative sample of emotional support items are: having someone "you can depend on" and "you can trust and who trusts you in return."

Affective Organizational Commitment. The organizational commitment measure was adapted from Mowday, Steers and Porter's (1979) six-item scale that used a seven-point Likert scale ranging from 1 = *Strongly Disagree* to 7 = *Strongly Agree*. Exploratory Factory Analysis (EFA) revealed two subscales of three items each. The three-item scale we used met both of the above-mentioned criteria. A sample item for this scale is: "I am proud to tell others that I am part of this organization."

Psychological Strain. The psychological strain measure involved the job-induced tension items adapted from House and Rizzo's (1972) eleven-item measure that assessed negative affective outcomes associated with work-related stress. That is, respondents were asked to indicate the extent to which they experienced various reactions to their work situations. We did not use the four somatic tension items. Participants responded to the items on seven-point Likert scales with 1 = *Strongly Disagree* and 7 = *Strongly Agree*. A sample item is: "This job directly affects my health."

Cultural Values Orientation. One of the nine GLOBE societal cultural dimensions (see House et al., 2004) was used as an indicator of societal cultural orientation. Perceived *in-group*

collectivism was measured by four items that evaluated whether children should take pride in the accomplishments of their parents and, conversely, whether parents should take pride in the accomplishments of their children. Also assessed is whether or not members should take pride in being a member of the society and whether or not it should be important that the society is viewed positively by persons in other societies (Gelfand, Bhawuk, Nishi, & Bechtold 2004). Participants responded on seven-point Likert scales to the items, where each item had different scale anchors. As such, in-group collectivism is treated as an individual perceptual measure in the present study rather than a societal-level measure.

Analysis

EFA runs were made on the holdout sample of 520 respondents to determine whether the *a priori* factors emerged. All measures emerged as unidimensional measures except organizational commitment which emerged as two factors involving three items each. One factor appeared to be more consistent with affective commitment and the other factor appeared to be more consistent with continuance commitment. We believed the affective commitment measure was more aligned with the study's objectives. Therefore, the three-item continuance commitment measure was dropped from further consideration. All remaining measures were then examined via Confirmatory Factor Analysis (CFA) to verify their dimensionality, to establish their reliability and validity, as well as to establish their equivalency across the eight countries using LISREL VIII (Joreskog & Sorbom, 1993). In particular, we tested the fit of a four-factor model using the measurement equivalence procedures suggested by Byrne (1994) and Rensvold & Cheung (1998). We tested the fit of the model using Multi-Group Confirmatory Factor Analysis (MG-CFA) in order to simultaneously establish configural and metric measurement equivalence of the study variables across all countries. We then compared the results against a one-factor model.

In examining the MG-CFA results, several scholars have suggested that researchers use various combinations of cutoff values from selected ranges for evaluating model fit because the combination might perform better than a single index assessment (Hu & Bentler, 1999; Cheung & Rensvold, 2002; Wu, Li, & Zumbo, 2007). Following these suggestions, we used a combination of Gamma hat (Steiger, 1989), TLI, and CFI $\geq$ .90 and RMSEA $\leq$ .08 for testing configural invariance; we used a combination of ΔCFI $\leq$ -.01 and ΔGamma hat $\leq$ -.001 for testing metric invariance (Meade, Johnson, & Braddy, 2008).

Our analyses for testing the hypotheses involved a test of the direct and moderating effects for the psychological strain – organizational commitment relationship. The interaction effects hypothesized were tested using SPSS Hierarchical Linear Regression procedures and graphed using online tools developed by Dawson and his colleagues (Dawson, 2014; Dawson & Richter, 2006). In the first step, psychological strain was entered into the regression equation. In the second step, the two moderator variables of emotional support and perceived in-group collectivism were entered. In the third step, interaction terms, computed as the cross-product of the predictor and moderator variables, as well as the cross-product between the moderators, were entered into the equation. Finally, in the fourth step, the three-way interaction term involving the predictor and both moderators was added to the equation. The change in R^2 associated with the fourth step compared to the third step was examined for significance to determine whether the joint moderator variables had the predicted effect. As a precaution, in order to minimize effects due to multicollinearity, all predictors were mean-centered (due to differing scale lengths) prior to calculating the cross-product terms and undertaking the analyses (Aiken and West, 1991).

RESULTS

Preliminary Analyses

The CFA results by country, shown in Table 1, indicate that a factor structure specifying the unidimensionality of all four constructs was consistent with the data across all eight countries and provided a good fit to the data (CFI's ranged from .89 - .95). All factor coefficient loadings were significant ($p < .01$) and above the 0.40 threshold level. Additionally, the one-factor model yielded a significantly worse fit compared to the four-factor model (all $\Delta\chi^2$ s were large and significant, and CFI's ranged from .54 - .73).

Insert Table 1 about Here

The MG-CFA results provided support for both configural invariance and metric invariance. These results are provided in Table 2. Based on these results, we can comfortably say that respondents from all countries perceived the same factor structure. Indeed, evidence of configural invariance is a necessary condition for measurement invariance and further testing is not warranted if configural invariance does not hold (Cheung & Rensvold, 2002; Vandenberg & Lance, 2000). Failure to demonstrate configural invariance suggests that different constructs were measured across groups (Wu et al., 2007). Having established configural invariance across the countries, we determined the extent to which stronger forms of Measurement Equivalence/Invariance (ME/I) existed across countries. Table 2 also presents the results of the successively more restrictive tests of ME/I. A test of metric or weak invariance was performed to determine if the factor structure coefficients for items were invariant across countries. This test is designated as Model 2 in Table 2. The results for Model 2 confirm that metric invariance

did indeed exist across the eight countries, wherein the ΔCFI and ΔGamma hat indices both met the required cutoff values. Scalar invariance (Model 3, Table 2) met one but not both of the cutoff criteria.

Insert Table 2 about here

The psychometric properties of the study measures were assessed using Cronbach's alpha reliability index and these reliability indices are shown in Table 3 as the diagonal values of the inter-correlation matrices among the study variables for each country. As shown, Cronbach's alpha for our four measures ranged from .43 to .89, with the majority above the .70 standard (Nunnally, 1978). Two exceptions were the organizational commitment and in-group collectivism measures. Three of eight Cronbach alpha values for organizational commitment were below the .70 standard, whereas all eight Cronbach alpha values for in-group collectivism were well below the .70 standard. The values shown for in-group collectivism are an improvement over original values and were achieved by dropping from the construct one of the items indicated to improve the reliability of the construct. It is possible that these low reliability values might have affected the results of our analyses which we address later in the paper. Given the magnitude of the correlations among the study variables in Table 3, it does not appear that multicollinearity was a problem. This was tested by examining the variance inflation factors (VIF) associated with the inter-correlations. No VIF was larger than 3.0.

Insert Table 3 about Here

Hypothesis Tests Results

Hypothesis 1 predicted that psychological strain was negatively associated with affective organizational commitment. The result for Model 1 in Table 4 shows that this hypothesis was supported at the $p < .01$ level of significance. Hypotheses 2 and 3 predicted that emotional support and perceived in-group collectivism were, respectively, positively related to affective organizational commitment. Model 2 in Table 4 indicates that both hypotheses were supported at the $p < .01$ level of significance.

Hypothesis 4a predicted that emotional support and in-group collectivism jointly interact with psychological strain in such a way that the negative association between psychological strain and organizational commitment weakens when emotional support is high and collectivism is also high rather than low. Hypothesis 4b predicted that emotional support and in-group collectivism jointly interact with psychological strain in such a way that the negative association between psychological strain and organizational commitment strengthens when emotional support is low and collectivism is high rather than low. Model 4 of Table 4 shows a significant three-way interaction between in-group collectivism, psychological strain, and emotional support ($b = .038$, $p < .05$) in predicting organizational commitment.

Insert Table 4 about Here

To assess whether the form of the interaction was consistent with Hypotheses 4a and 4b, we plotted the three-way interaction, depicted in Figure 2, for all possible combinations of low and high emotional support and low and high in-group collectivism. Hypothesis 4a involves a comparison of lines 1 and 2 in Figure 2, while Hypothesis 4b involves a comparison of lines 3

and 4 in Figure 2. Figure 2 shows that the relationship between psychological strain and organizational commitment is more negative when emotional support is high and collectivism is low (line 2) rather than high (line 1), suggesting that possibly H4a is supported. Further, Figure 2 also shows that when collectivism is high, the relationship between strain and organizational commitment is more negative (line 3) (strengthened) when emotional support is low compared to when it is high (line 1) (weakened). Moreover, the negative relationship between psychological strain and organizational commitment is neither strengthened nor weakened under low support conditions for high in-group collectivism levels (line 3) compared to low levels of collectivism (line 4), thereby suggesting that possibly H4b is not supported. In any case, at high levels of psychological strain, lowest levels of commitment are observed when subordinates receive low social support and are from cultures that are low in collectivism (line 4) and highest levels of commitment are observed when subordinates receive high social support and are from cultures that are high in collectivism (line 1).

The differences in slopes of the regression lines shown in Figure 2 were examined in testing Hypotheses 4a and 4b. Table 5 presents the results of these tests. As seen in Table 5, the difference in slopes between regression lines 1 and 2 in Figure 2 was highly significant (t = 47.901, $p < .001$), thereby confirming the prediction in H4a. That is, the slope of regression line 1 is not as steep (weaker) as the slope of regression line 2. Further, the difference in slopes between regression lines 3 and 4 was not significant ($t = 0.180$, n.s.). Therefore, Hypothesis 4a was supported but Hypothesis 4b was not supported.

Insert Figure 2 and Table 5 about Here

A *post-hoc* analysis of industry as a potential control variable was examined to rule out any potential industry subculture effects. This variable had no bearing on our results and is therefore not shown in our analysis of hypothesis tests in Table 4.

DISCUSSION

The objective of this cross-national study was directed at examining how emotional support and in-group collectivism shape the relationship between psychological strain and affective organizational commitment (AOC) in eight different countries. Four out of five of our hypotheses were supported. We found support for our hypotheses that the predictor variables (psychological strain, emotional support, and in-group collectivism) have independent main effects on AOC. We further hypothesized that emotional support and in-group collectivism would jointly moderate the relationship between psychological strain and AOC. A significant three-way interaction effect was found and a significant difference in slopes of regression lines representing high versus low in-group collectivism coupled with high emotional support conditions was observed.

By integrating the JD-R model and COR theory, our investigation into the psychological strain—AOC relationship with the consideration of emotional support and in-group collectivism contributes in three ways. First, we contribute to the *stress-strain literature* by delineating the role of emotional support in impacting the effects of psychological strain in different cultural contexts. Second, we contribute to the *social support literature* by testing the emotional support facet in high and low in-group collectivism cultural contexts. The picture is more complete when we consider the same model across cultures. Third, we contribute to the *cross-cultural management* literature by specifying how the nature of relationships between psychological

strain and emotional support are perceived and ultimately influence organizational commitment in different cross-cultural settings. Our multicultural investigation benefits scholars and practitioners in conducting future studies and in applying human resource strategies in a cross cultural context.

Based on previous research and theory which has typically used organizational commitment as a moderator in the stress-strain literature (e.g., see Meyer & Maltin, 2010; Rivkin, Diestel, & Schmidt, 2015), we believe that there are strong theoretical reasons to expect that psychological strain could also decrease AOC. Specifically, employees who wish to conserve or mitigate the continuous loss of resources (i.e. psychological strain) may voluntarily leave in an effort to jettison further resource depletion. Hence, the empirical support for the first hypothesis suggests that AOC may be a mediator between the psychological strain and voluntary turnover relationship. Put differently, in order for employees to voluntarily leave their company, they must first emotionally detach from the organization, reducing the psychological cost of turnover. This rationale is compatible with the "Side-Bet Theory" of organizational commitment (Becker, 1960). Future studies should test this possibility explicitly.

Organizational theorists have found that the social exchange process is one of the most critical determinants of employee's reactions to workplace conditions (c.f. Eisenberger et al. 1986 & 1990; Flynn, 2005; Noblet & Rodwell, 2009; Robinson, 1996; Rousseau, 1995; Settoon, Bennett, & Lydon, 1996). For example, social support in the form of mentoring has been identified as an exchange relationship whereby the parties involved in the relationship have much to gain and offer to each other (e.g. Ensher, Thomas, & Murphy, 2001; Olian, Carroll, Giannantonio, 1993; Richard et al., 2009; Tepper & Taylor, 2003). As such, our second hypothesis stated that emotional support was positively related to organizational commitment.

Still we acknowledge that the inclusion of social exchange process measures (e.g. organizational justice, fairness perceptions and psychological contract breach) as mediating factors in our proposed relationship between psychological strain and employee commitment would render much stronger theoretical support for the integration of social exchange theory with job strain theory.

Our study involved the examination of only a single cultural variable, namely, perceived in-group collectivism values, which was treated as an individual-level construct. These values are positively related to AOC (hypothesis 3). More interestingly, however, is how this construct shapes the buffering effect of emotional support on psychological strain (hypotheses 4a and 4b). We believe this three-way interaction provides a strong test of the proposition that, although people marshal and conserve resources, people differentially value certain resources. In this case, persons' in-group collectivism values shape how much people may value emotional support as a resource. Given that hypothesis 4b was unsupported, it may be that although high collectivistic-orientated employees value emotional support more than do low collectivistic-oriented employees, emotional support is primarily a strain-reducing resource, the lack of which does not further negatively strengthen the strain-AOC relationship for highly collectivistic employees.

Implications for Managers

Our findings suggest several important practical implications for managers. First, managers should pay attention to the causes of psychological strain in the workplace given that our results suggest that psychological strain plays a role in AOC. Companies increasingly value their human capital. As such, organizations have emphasized the need for work-life balance to keep employees satisfied and productive. We demonstrate that the strain from one's job is connected with how emotionally tied one feels to one's organization. Therefore, similar to

programs that aim to build organizational commitment, organizations can also increase organizational commitment through programs that reduce psychological strain.

Second, the results underscore the value of resources such as emotional support (Searle et al., 2001). Managers may not always be able to direct and modify employees' jobs to reduce psychological strain given that jobs and job responsibilities often result from market demand. Furthermore, work overload (an antecedent to psychological strain) frequently occurs because organizations may not have the resources to hire a sufficient number of employees. In these instances, managers have the opportunity to offer emotional support themselves to employees who experience psychological strain or to train their co-workers to do the same in order to buffer the negative effects of psychological strain on organizationally-valued outcomes.

Finally, managers should be wary of treating all employees the same. As national economies perpetually integrate, employees from various cultures will be required to work together. Managers of these diverse teams would benefit from understanding how culture can shape employee cognition and behavior. Managers have limited time to support subordinates. However, managers may be more efficient with their time if they understand how to support and motivate employees from different cultures. Specifically, to reduce psychological strain and to increase AOC, managers may provide more collectivistic employees emotional support, while offering less collectivistic employees other desired resources.

Limitations and future research

The cross-sectional nature of the study is a limitation that precludes the test of direct causal relations among the study variables. Longitudinal studies that explore the nature of relationships at different points in time would more fully enhance our understanding. Additionally, because all study variables were collected from the same source, common method

bias issues cannot be ignored. However, we believe, given our analyses, that common method bias is not a significant problem in the present study because the variables measured here are part of a much larger cross-cultural study involving more constructs (Evans, 1985). As such, it is unlikely that participants drew illusory correlations or identified item demand characteristics (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Another limitation of this study is the small sample of countries. Although cross-cultural management research requires extensive resources to conduct, in order to investigate cross-level interactions, more countries should be included in future studies. For multilevel models, the sample size of group-level constructs offers more statistical power than merely increasing the number of individuals nested per group (Scherbaum & Ferreter, 2009).

We selected countries for our study in a manner that provided for a cross-section of the 10 GLOBE country clusters. However, we did not examine the hypothesized relationships within each country. Future studies that would build on the relationships we examined should consider not only a broader cross-section of the country clusters and within-country analyses, but also a wider range of the key culture variables of interest such as power distance, future orientation, uncertainty avoidance, or performance orientation as potential cross-level moderators of job strain-commitment relationships. Additionally, other types of support such as structural support, instrumental support, and informational support may together influence employees' views toward their work and their organization. For example, it may be that more individualistic employees value instrumental support more than do collectivistic employees. Given the limitation of examining only one type of support in this study, we cannot provide explanations of the effects from other types of social support.

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TABLE 1
Fit Indices for CFAs for Eight Country Samples

Country	χ^2	*df*	$\Delta\chi^2$ / Δdf	CFI	TLI	RMSEA	SRMSR
USA							
1 Four-Factor Model	387.03	220	--	**0.94**	**0.94**	**.06**	**.06**
2 One Factor Model	1391.72	230	1004.69/10	0.68	0.65	.15	.14
Germany							
1 Four-Factor Model	418.22	220	--	**0.94**	**0.93**	**.06**	**.06**
2 One Factor Model	1735.00	230	1316.78/10	0.66	0.62	.16	.14
India							
1 Four-Factor Model	504.57	220	--	**0.95**	**0.95**	**.05**	**.04**
2 One-Factor Model	2562.48	230	2057.91/10	0.69	0.66	.13	.11
Indonesia							
1 Four-Factor Model	529.46	220	--	**0.95**	**0.94**	**.05**	**.04**
2 One Factor Model	2046.92	230	1517.46/10	0.73	0.70	.12	.10
Poland							
1 Four-Factor Model	419.66	220	--	**0.94**	**0.93**	**.06**	**.07**
2 One Factor Model	1560.38	230	1140.72/10	0.69	0.66	.15	.13
S. Korea							
1 Four-Factor Model	733.81	220	--	***0.89***	***0.88***	**.08**	**.07**
2 One Factor Model	2592.16	230	1858.35/10	0.54	0.49	.17	.15
Turkey							
1 Four-Factor Model	408.05	220	--	**0.93**	**0.92**	**.06**	**.07**
2 One-Factor Model	1619.19	230	1211.14/10	0.62	0.58	.17	.15
UAE							
1 Four-Factor Model	492.02	220	--	**0.93**	**0.91**	**.07**	**.07**
2 One Factor Model	2032.32	230	1540.30/10	0.68	0.65	.18	.16

TABLE 2
Summary of Tests for Measurement Equivalence/Measurement Invariance of the Study Scales across Eight Countries

MG-CFA Analysis	χ^2/df	CFI	Gamma hat	ΔCFI	ΔGamma hat	RMSEA	Model Comparison	Was Test Met?
1. Configural Invariance	3411.06/1762	**0.95**	**.999**	--	--	**0.05**	--	Yes
2. Metric Invariance	3781.31/1888	**0.94**	**.999**	**- 0.01**	**0.000**	**0.06**	2 vs 1	Yes
3. Scalar Invariance	5736.56/1979	0.89	.998	-0.05	**-0.001**	**0.07**	3 vs 2	No *

*****One, but not both, criteria were met, resulting in a "no" conclusion for scalar invariance.

TABLE 3
Mean, Standard Deviations, Reliability and Correlations across Eight Countries

Variable	Mean	Std. Dev	1	2	3	4
USA (N = 229)						
Psychological Strain	3.20	1.29	**(.88)**			
Emotional Support	3.21	0.53	-.07	**(.83)**		
Org. Commitment	5.39	1.20	-.14*	.11	**(.78)**	
Ingroup Collectivism	4.95	0.91	-.005	.08	-.06	**(.58)**
Germany (N = 256)						
Psychological Strain	3.46	1.29	**(.88)**			
Emotional Support	3.73	0.78	-.07	**(.85)**		
Org. Commitment	4.66	1.19	-.004	.17**	**(.61)**	
Ingroup Collectivism	4.90	0.77	-.07	.02	.133*	**(.52)**
India (N = 606)						
Psychological Strain	3.12	1.24	**(.86)**			
Emotional Support	3.51	0.70	-.09*	**(.78)**		
Org. Commitment	5.97	0.93	-.12**	.17**	**(.62)**	
Ingroup Collectivism	4.97	1.06	.08*	.01	.01	**(.63)**
Indonesia (N = 552)						
Psychological Strain	3.04	1.09	**(.84)**			
Emotional Support	3.32	0.64	-.14**	**(.78)**		
Org. Commitment	5.46	0.96	-.19**	.21**	**(.65)**	
Ingroup Collectivism	5.09	0.98	.09*	.03	.03	**(.43)**
Poland (N = 248)						
Psychological Strain	4.44	1.12	**(.82)**			
Emotional Support	3.33	0.68	-.27**	**(.89)**		
Org. Commitment	5.58	0.97	.05	.21**	**(.74)**	
Ingroup Collectivism	5.21	0.90	.02	.10	.03	**(.50)**

TABLE 3 continued

S. Korea (N = 365)						
Psychological Strain	4.01	0.87	**(.77)**			
Emotional Support	3.13	0.70	-.03	**(.84)**		
Org. Commitment	4.73	0.98	-.05	.31**	**(.72)**	
Ingroup Collectivism	4.81	0.74	-.03	-.03	-.003	**(.41)**
Turkey (N = 209)						
Psychological Strain	4.12	1.23	**(.79)**			
Emotional Support	3.40	1.07	-.14	**(.87)**		
Org. Commitment	4.90	1.38	-.06	.31**	**(.70)**	
Ingroup Collectivism	5.06	1.04	.16*	.19**	.26**	**(.52)**
UAE (N = 237)						
Psychological Strain	3.52	1.20	**(.86)**			
Emotional Support	3.66	0.71	-.13*	**(.81)**		
Org. Commitment	5.39	1.29	-.15*	.48**	**(.80)**	
Ingroup Collectivism	4.74	1.17	-.11	.31**	.39**	**(.61)**

***** Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

TABLE 4
Cross-Level Moderating Analysis of Organizational Commitment as a Function of Psychological Strain, Social Support, and In-group Collectivism

	Model 1	Model 2	Model 3	Model 4
Individual-level Predictor				
a. Psychological Strain (**H1**)	**-.155****	-.137**	-.141**	-.144**
Moderator Variables				
b. Emotional Support (**H2**)		**.208****	.208**	.205**
c. Perceived In-group Collectivism (**H3**)		**.118****	.119**	.124**
Two-way Interations				
d. Strain x Support			.022	.017
e. Strain x Collectivism			.025	.025
f. Support x Collectivism			-.023	-.023
Three-way Interaction				
g. Collectivism x Strain x Support (**H4**)				**.038***
R^2	.024	.085	.086	.088
ΔR^2	.024**	.061**	.001	.002*

* $p < .05$ ** $p < .01$

TABLE 5
Slope Difference Tests for Moderating Effect of Social Support and Ingroup Collectivism on Psychological Strain-Organizational Commitment Relationship (Figure 2)

Pair of Slopes	*t* – value for Slope Difference	*p* – value for Slope Difference
1 & 2 (H4a)	47.901***	0.000
1 & 3	5.991***	0.000
1 & 4	5.708***	0.000
2 & 3	-2.389*	0.017
2 & 4	-2.257*	0.024
3 & 4 (H4b)	0.180	0.857

* $p < ..05$ * ** $p < .001$

FIGURE 1
Conceptual Model

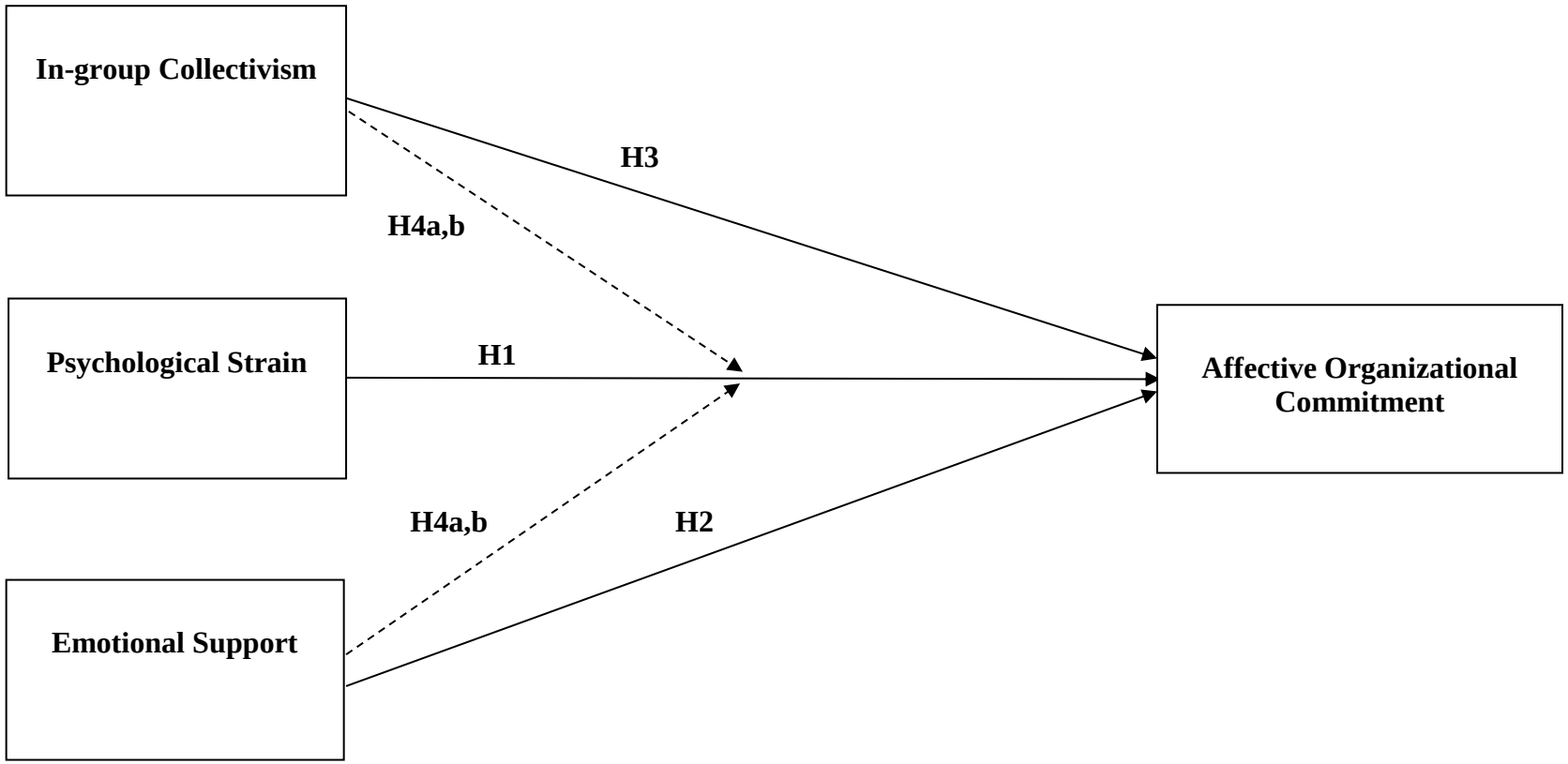

FIGURE 2

Interactive Effects of Emotional Support and In-group Collectivism on Organizational Commitment