# Role Conflict, Mindfulness, and Organizational Ethics in an Education–Based Healthcare Institution

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ABSTRACT. Role conflict occurs when a job possesses inconsistent expectations incongruent with individual beliefs, a situation that precipitates considerable frustration and other negative work outcomes. Increasing interest in processes that reduce role conflict is, therefore, witnessed. With the help of information collected from a large sample of individuals employed at an education-based healthcare institution, this study identified several factors that might decrease role conflict, namely mindfulness and organizational ethics. In particular, the results indicated that mindfulness was associated with decreased role conflict, and that perceived ethical values and a shared ethics code were associated with decreased role conflict and increased mindfulness. Despite the study's limitations, these findings imply that companies might better manage role conflict through the development of mindfulness and organizational ethics.

KEY WORDS: role conflict, mindfulness, ethical values, ethics codes

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Stress, in its elemental form, is a transaction between a person and her/his circumstances (Lazarus and Folkman, 1984). When environmental demands exceed one's ability to meet those challenges, an individual confronts a stressor. Structurally, the stressor represents a "gap" between what a person wishes to do and is able to do (Lazarus and Folkman, 1984). In the organizational setting, stressors occur when workers recognize that they cannot meet the demands of the moment and still remain within their role as defined by the institution. In a hospital, for example, a nurse may lack the decision authority, the time, the equipment, or perhaps the clear directives and policy guidelines required in adequately attending a patient. Irrespective of the missing resource, the "gap" between what the nurse wishes to do (or thinks should be done) for the patient, and what is unaccomplished, results in role conflict. In sum, role conflict occurs because of confusing, poorly supported, and/or contrary work demands that often clash with core values, beliefs, or motives (Rizzo et al., 1970).

Unfortunately, decades of organizational research indicate that role conflict is associated with reduced work performance and work quality (i.e., Churchill et al., 1974; Singh, 2000; Varca, 1999). The human consequences of role stress are also negative, manifesting in burnout, low job satisfaction and work commitment, as well as increased interpersonal conflict (i.e., Perrewé et al., 2004; Rizzo et al., 1970; Singh et al., 1994, 1996). Faced with these discouraging findings, other research has attempted to mitigate the impact of role conflict by examining various interventions such as empowerment, task control, and relational support (i.e., Hartline and Ferrell, 1996; House, 1981; Schneider, 1980; Singh, 2000; Singh et al., 1996; Varca, 2002). However, practical results in these areas have been meager.

Given this past experience of previous studies, the purpose of this study was to identify several organizational determinants of role conflict so that companies might better manage workplace inconsistencies and incongruities, or what individuals might perceive to be conflicting job characteristics. Such inquiry is theoretically and practically important. For instance, role theory suggests that an understanding of organizational role requirements should shape how employees function in their jobs (Jaramillo et al., 2006), and when such requirements are consistent and clear, role conflict should decrease. Further, although research clearly underscores a strong relationship between role conflict and negative correlates in the work setting, it is less articulate over the causes or determinants of role conflict. Findings in this area can help build the conceptual framework surrounding role conflict, as well as provide prescriptive guidance about decreasing role conflict through organizational factors that enhance comprehension of work requirements. In addition, for the purpose of this study which was to broadly interpret findings in a manner that generates implications for many different organizations, a sample of individuals working for a large healthcare institution was utilized. The data provide a rich context to explore the study's proposed relationships given that work in the health care profession is sometimes challenged by role conflict and other similar concerns (e.g., Comerford and Abernethy, 1999; Hafer and Joiner, 1984; Jimmieson and Griffin, 1998).

Based on the extant literature, organizational characteristics should influence role conflict because such factors orchestrate the dynamics of the work situation experienced by employees. One such possibility, not previously investigated, is a collective mindfulness that unifies employees under a common set of work assumptions (Weick and Sutcliffe, 2001; Weick et al., 1999). Another possibility involves the level of organizational ethics based on ethical values and codes (Ferrell et al., 2008; Trevino and Nelson, 2007), which likely enhances mindfulness and reduces role conflict. Figure 1 summarizes these proposed relationships.
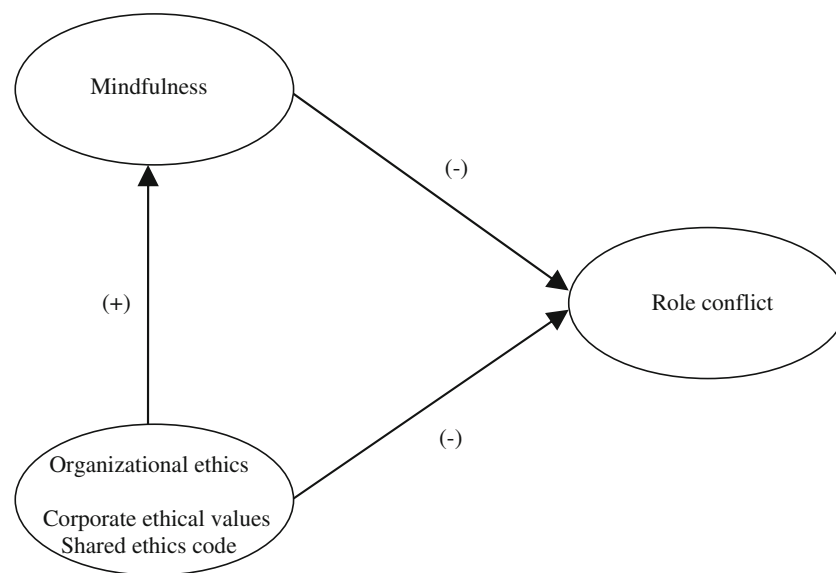


Figure 1. Hypothesized relationships.

While no comprehensive definition exists (Brown et al., 2007b), mindfulness involves one's ability to realistically and accurately evaluate circumstances in a manner that facilitates the construction of significant ideas (Brown et al., 2007b; Olendzki, 2005). Mindfulness includes "interpretive work directed at weak signals, differentiation of received wisdom, and reframing, all of which can enlarge what is known about what was noticed" (Weick et al., 1999, pp. 89–90). Brown et al. (2007a, p. 276) provided additional comments about mindfulness:

> Self-controlled regulation is pervasive in modern Westernized cultures, marked as it is by ongoing, effortful regulation of goals and a focus upon achievement in both professional and personal life domains. Unlike self-control, mindfulness is not primarily a tool to keep the self moving in a preordained direction. It is rather the capacity to, first and foremost, be aware of the ongoing parade put on by the self, including one's attempts to exert self control. Indeed, mindfulness may even permit better choices about whether and when to control the self in the service of chosen ends, and when it might be better to step out of the parade.

As a consequence, mindfulness is a positive characteristic that enables individuals to more effectively respond to environmental demands.

Mindfulness should be particularly relevant to the understanding and goal setting that occurs in organizations (Weick and Sutcliffe, 2001). Indeed, previous research shows that mindfulness is associated with enhanced executive attention in situations that call for increased self-regulation (Brown et al., 2007b). From a company perspective, mindfulness should, therefore, improve how employees understand, monitor, and react to workplace situations, activities that further augment sensemaking throughout the organization (Weick, 1979, 1995, 2001; Weick and Sutcliffe, 2001). Mindfulness is also likely to influence individuals' perceptions of their jobs because a stronger sense of organizational purpose is established to connect work activities within the firm. Finally, mindfulness should result from institutionalized business values, primarily through the sensemaking collectively practiced by employees as they understand more clearly their job responsibilities. For instance, focusing on ethical business practices encourages employees to take greater notice of the organization's functional

processes that enhance an ethical orientation. Such an understanding should prompt greater reflection about the individual and group roles that should support such an orientation.

More recent study in the area of mindfulness, however, might have considerable import for understanding how role conflict occurs and how its effects can be potentially reduced. The key to understanding the link between the two constructs is recognizing that role conflict is based on perception; in other words, it *is* a state of mind. Confronted with stress-inducing situations, workers must "make sense" of their environment before they can adapt to it. The cognitive patterns inherent with sensemaking keep a person centered on the external environment moment, focused on external stimuli, prepared for the unexpected and somewhat unemotional – all for the purpose of learning and adapting. Operationally, this is mindfulness as conceived in the management literature (Weick, 1995, 2001) and lays the foundation for how sensemaking might influence role conflict.

Interestingly, mindfulness as a technique for mood management in clinical settings is also growing (i.e., Shapiro et al., 2008; Williams, 2008). In the therapeutic setting, mindfulness is self-regulated cognition that mediates positive outcomes such as reduced stress (Jacobs and Blustein, 2008). True, mindfulness does occur naturally, does vary in degree across people, but it can also be cultivated to bring about a variety of beneficial results. For instance, empirical research has demonstrated that mindfulness is associated with increased positive mood states and reduced depressive episodes, stress, anxiety, and physical pain (Kabat-Zinn et al., 1986, 1992; Shapiro et al., 2008; Williams, 2008).

The fundamental ingredients for increasing mindfulness rest with focusing on moment-to-moment events, recognizing cognitive and behavioral patterns that increase rumination, and cultivating the ability to respond to external events without negative emotion (Jacobs and Blustein, 2008; Shapiro et al., 2008; Williams, 2008). These themes of self-regulating cognitions, controlling cognitive reactivity, and moment-to-moment learning are critical to increasing one's sense of control over external events and reducing negative affect when confronted by stressors. Importantly, these patterns of interacting with the environment are critical to managing perceived conflict

(Karasek, 1979), and are also essential elements in the theoretical construction of mindfulness in the work setting (Weick, 1995, 2001; Weick and Sutcliffe, 2001). Indeed, role theory implies that the collective learning and adaptation associated with mindfulness in part mitigate role conflict because a greater understanding of work requirements is achieved through clear and consistent expectations (Jaramillo et al., 2006; Rizzo et al., 1970).

If individuals believe they control their immediate environment, then stressors such as role conflict are not over-inflated (Folkman, 1984; Frese, 1989). This is crucial since the true "gap" between what the environment demands and what the person can actually deliver is always unknown. Thus, the experienced strain resulting from role conflict flows from one's personal assessment of her/his environment. Mindful workers, practiced at self-regulation, self-control, and self-awareness, should be well-equipped to accurately assess and act on perceived stressors. In other words, if individuals are "making sense" of their work situation in a grounded, learning, and emotionally functional manner, the level of reported role conflict should drop.

As a consequence, the organizational interconnectedness derived from mindfulness whether perceived or experienced should enhance the degree to which work roles are clearly, consistently, and congruently defined in a company, thus reducing role conflict. On the basis of this logic and the research cited above, the following hypothesis is offered:

*Hypothesis 1*:   There will be a significant negative relationship between mindfulness and role conflict. That is, individuals reporting higher levels of mindfulness will experience decreased levels of perceived role conflict.

Organizational ethics should also influence both role conflict and mindfulness. Firms commonly advocate positive values/practices that strengthen organizational ethics and increase employees' ethical awareness, reasoning, and conduct (e.g., Barnett and Vaicys, 2000; Douglas et al., 2001; Jones and Kavanagh, 1996; Singhapakdi et al., 2000; Valentine and Barnett, 2007). Such efforts include reprimanding/rewarding individuals for unethical/ethical behavior, encouraging top leadership to support ethics, acting with social responsibility, and adopting ethical norms of conduct

(e.g., Ferrell et al., 2008; Hunt et al., 1989; Sims, 1991; Snider et al., 2003; Svensson and Wood, 2008; Trevino, 1986; Trevino and Nelson, 2007; Trevino et al., 1998). Other more programmatic approaches include the creation of codes of conduct. Ethics codes are "generally perceived as the main road map, the ground rules for ethical conduct within the organization" (Trevino and Nelson, 2007, p. 332), and when the presence, awareness, and internalization of such codes is enhanced, there is often an increase in organizational ethics (Adams et al., 2001; Schwepker and Hartline, 2005; Valentine and Barnett, 2002).

Similar to mindfulness, the process of organizational ethics seeks to unify employees under a common set of normative behavioral guidelines and expectations. These guidelines likely result in a more consistent understanding of work roles, as well as increased organizational learning and adaptation based on the requirements specified in ethical values, codes of conduct, and other ethics programs. When companies adopt an ethical orientation, employees are likely assigned more consistent work directives that serve to reduce the conflicts associated with questionable behavior (Krayer, 1986; Schwepker et al., 1997). Indeed, "empirical evidence and theory suggest that ethics is a significant source of role conflict" in the workplace (Schwepker et al., 1997, p. 101), so that reinforcing organizational ethics should subsequently decrease role conflict (Chonko and Burnett, 1983; Schwepker et al., 1997).

From a conceptual standpoint, role theory indicates that frustrations are mitigated when "chain of command" and "unity of command" principles are emphasized (Rizzo et al., 1970), and the development of an overarching philosophy of ethics that emanates from top leadership should provide a more consistent and unified definition of role requirements, thus reducing role conflict. In other words, increasing employees' collective understanding of the expectations related to ethical behavior should decrease the role stress and conflict commonly experienced when such normative guidelines are not provided. Empirical research appears to support this claim. For instance, Schwepker et al. (1997), based on a sample of sales professionals, determined that ethical climate was negatively related to ethical disagreements with sales managers, and that such ethical conflict was positively related to role conflict. With the help of a sample of Taiwanese marketing man-

agers, both Tsai and Shih (2005) and Shih and Chen (2006) concluded that ethical culture was associated with decreased role conflict. Schwepker and Hartline (2005) also offered evidence that ethical climate and codes could be utilized to decrease role conflict among service workers. Finally, Jaramillo et al. (2006) found that ethical climate was negatively related to sales professionals' perceived role conflict. The following hypothesis is, therefore, presented:

*Hypothesis 2*: There will be a significant negative relationship between organizational ethics and role conflict. That is, individuals who perceive increased ethical values and receive an ethics code will experience decreased levels of perceived role conflict.

Since mindfulness enhances organizations through a unified sense of awareness and decision-making, there is a reason to believe that organizational ethics should be related to such sensemaking. Organizational ethics brings together employees under a common set of behavioral norms and expectations, making the process conceptually similar to mindfulness. In addition, ethical companies are acutely aware of stakeholder interests, as well as the ethical business approaches needed to develop long-term positive relationships with these groups. This suggests that organizational ethics is positively related to employee mindfulness, and that both factors work in concert to influence employees' perceptions of the work context.

As a consequence, it appears likely that organizations concerned about ethical practices would also avoid actions that negatively impact stakeholders, focus on quality/reliability, and utilize contingency planning. The reduced employee dissonance resulting from perceived organizational ethics (Viswesvaran and Deshpande, 1996; Viswesvaran et al., 1998) should facilitate other positive outcomes such as mindfulness because (1) employees prefer organizations that focus on ethics (Jose and Thibodeaux, 1999), and (2) they often reciprocate with positive job attitudes (Hunt et al., 1989; Trevino et al., 1998; Valentine and Barnett, 2003; Vitell and Davis, 1990). In addition, institutional theory suggests that "firms morph to reflect core stakeholder preferences and values, as well as certain socially desirable characteristics of aspirational firms and competitors" (Martin and Johnson, 2008, p. 106), so ethical and mindful

strategies should be appealing because such practices are viewed favorably. Based on these ideas, the following hypothesis is offered:

*Hypothesis 3*: There will be a significant positive relationship between organizational ethics and mindfulness. That is, individuals who perceive increased ethical values and receive an ethics code will report significantly higher levels of mindfulness.

## Method

### Data collection

Information was compiled from employees working for an education-based regional health science institution located in the southwestern United States. A self-report survey containing measures of role conflict, mindfulness, organizational ethics, and various individual differences was used to collect data, and the surveys (bundled with return envelopes, instructions, and statements of research protocol) were delivered or mailed to individuals. Completed questionnaires were received though mail at the main campus over a period of approximately 10 weeks. An approximate overall response rate of 19.4% was obtained after receiving 781 of the 4,025 questionnaires distributed to individuals.

Women comprised nearly 73% of the sample, 68.2% of individuals were white, and 66.8% were married at the time they completed the survey. The average age of the individuals was approximately 43 years, and persons had an average of over 8 years of tenure in their current positions. Slightly more than 22% of sample members had completed high school, 14% had completed an associate degree, 21.1% had completed a bachelor's degree, 16% had completed a master's degree, 6.6% had completed a doctoral degree, and 9.7% had completed a medical degree (MD). Of those who responded, 17.5% of subjects functioned as administrators in the organization, 38.3.7% were employed as supervisors, and 22.6% were teaching professionals. Many individuals indicated they were businesspeople (e.g., marketing, finance) (23.7%), while many others indicated that they were directly involved in the delivery of patient care as physicians (11%) or nurses (8.2%). Slightly

more than 43% of subjects indicated that their professional classifications should be placed into an ''other'' group not listed on the questionnaire.

*Measures*

In order to effectively measure the focal variables, this study utilized several scales developed in previous research. These scales are presented in the Appendix.

*Role conflict*
Role conflict was evaluated with an eight-item scale used by Perrewé et al. (2004), which was originally developed by Rizzo et al. (1970). Other studies have used the same or similar measures (Ho et al., 1997; Jaramillo et al., 2006; Shih and Chen, 2006; Tsai and Shih, 2005). These items assess the degree to which employees believe that their jobs are adversely affected by a lack of resources, incompatible practices, and ineffective situations. Sample items include ''I must do things that I think must be done differently'' and ''I work under incompatible policies and guidelines.'' Item responses were given on a seven-point scale (1 = strongly, 7 = strongly agree) with higher scores showing increased role conflict.

*Mindfulness*
Organizational mindfulness was assessed with an eight-item scale developed by Weick and Sutcliffe (2001), which targets individual opinions about a company's dedication to stakeholder interests, quality assurance, managing uncertainty, and other positive business practices. Sample items include ''We pay attention to when and why our employees, or customers, or other interested parties might feel peeved or disenfranchised from our organization,'' and ''We spend time identifying how our activities potentially harm our organization, employees, our customer, other interested parties, and the environment at large.'' Items were rated with a three-point scale (1 = not at all, 2 = to some extent, 3 = a great deal) with higher scores indicating increased mindfulness.

*Organizational ethics*
Two separate measures of were used to assess organizational ethics. A five-item instrument developed by Hunt et al. (1989) measured individuals' perceptions of corporate ethical values. The scale targets the degree to which organizations take active steps to support ethical business practices and is used in previous research (e.g., Baker et al., 2006; Singhapakdi et al., 1999; Valentine and Barnett, 2007; Valentine et al., 2006). Example items include ''In order to succeed in my company, it is often necessary to compromise one's ethics'' and ''Top management in my company has let it be known in no uncertain terms that unethical behaviors will not be tolerated.'' Item responses were given on a seven-point scale (1 = strongly, 7 = strongly agree), and two items were reverse coded so that higher scores indicated increased ethical values. Subjects also indicated whether their organization had offered them an ethics code with one item: ''Has your company ever shared with you an ethics code that governs work conduct in the organization?'' (1 = no, 2 = yes). Other studies have utilized similar dichotomous scale formats to determine the presence and awareness of different ethics programs (e.g., Valentine and Barnett, 2002, 2003; Valentine and Fleischman, 2004, 2008).

*Controls*
Several variables were used to account for individual differences. For instance, sex (1 = male, 2 = female) and position tenure (in years) were included as controls. In addition, a 10-item social desirability scale (Crowne and Marlowe, 1960; Fischer and Fick, 1993; Strahan and Gerbasi, 1972) was used to account for biased responding (Randall and Fernandes, 1991). After reverse coding five items, dichotomous responses (1 = true, 2 = false) were combined so that scores ranged from 10 to 20 with higher values suggesting increased social desirability.

*Analysis*

An initial confirmatory factor analysis with maximum likelihood estimation (to control for missing data) was specified with AMOS software to determine the measurement properties of the mindfulness, corporate ethical values, and role conflict scales. After making adjustments to the measurement framework, item scores for each of these variables were averaged using SPSS software so that variable descriptive statistics, correlations, and reliability estimates could be generated and evaluated. A pairwise deletion tech-

nique was specified in the correlation analysis to account for any missing data. Finally, a full structural model containing the focal and control variables was specified in AMOS to test the study's proposed relationships.

## Results

### Confirmatory factor analysis

The initial confirmatory factor analysis indicated that the model fit the data relatively well: $\chi^2$ = 1217.902, d.f. = 186, $p < 0.001$, $\chi^2$/d.f. = 6.548, NFI = 0.968, IFI = 0.973, CFI = 0.973, RMSEA = 0.084 (Arbuckle and Wothke, 1999; Hair et al., 1998).[1] The measurement model showed that the observed items were related to their associated latent variables ($p < 0.05$), and the focal variables were all interrelated in the proper direction ($p < 0.001$). However, examination of the standardized parameter estimates indicated that one item associated with mindfulness ("There is organization-wide sense of susceptibility to the unexpected") and one item associated with corporate ethical values ("In order to succeed in my company, it is often necessary to compromise one's ethics") had correlations below 0.50 (Steenkamp and Van Trijp, 1991), and so these items were deleted, and another measurement model was specified.

The second confirmatory factor analysis indicated that the model fitted the data well ($\chi^2$ = 799.241, d.f. = 149, $p < 0.001$, $\chi^2$/d.f. = 5.364, NFI = 0.976, IFI = 0.981, CFI = 0.981, RMSEA = 0.075). The observed items were positively related to the unobserved variables ($p < 0.001$), the standardized parameter estimates were all above 0.50, and the latent variables were all associated ($p < 0.001$). Mindfulness was positively related to corporate ethical values (covariance = 0.410, correlation = 0.611), role conflict was negatively related to corporate ethical values (covariance = −0.876, correlation = −0.446), and mindfulness was negatively related to role conflict (covariance = −0.274, correlation = −0.540).

The measurement properties of the focal variables were assessed by calculating composite reliability and variance extracted statistics with the standardized path estimates (Hair et al., 1998). The composite reliability scores for corporate ethical values, mind-

fulness, and role conflict were 0.84, 0.85, and 0.88, respectively, and the variance-extracted estimates were 0.57, 0.45, and 0.48, respectively; these values suggested that measurement was generally adequate (Bagozzi and Yi, 1988; Hair et al., 1998). The variance-extracted statistics were also higher than the associated squared correlations between each of the focal variables, showing adequate discriminant validity (Fornell and Larcker, 1981). Finally, all the items were loaded on one latent construct (single-factor test) to check for common method bias (Podsakoff et al., 2003). The findings indicated that the observed items loaded properly on the latent construct ($p < 0.001$); however, the fit statistics indicated that the model did not fit the data well ($\chi^2$ = 2454.527, d.f. = 152, $p < 0.001$, $\chi^2$/d.f. = 16.148, NFI = 0.927, IFI = 0.931, CFI = 0.931, RMSEA = 0.139). Therefore, common method bias was likely not an issue.

### Variable descriptive statistics, correlations, and reliability estimates

The variable descriptive statistics, correlations, and reliability estimates are presented in Table I. The mean score for mindfulness showed that subjects believed that the healthcare organization was aware of stakeholder interests, quality assurance, and contingency planning. The mean values for role conflict and corporate ethical values suggested that subjects believed that role conflict was a moderate challenge at work, and that the healthcare organization had modest ethical practices. Finally, the composite score for social desirability suggested that subjects were susceptible to impression-based responding. Evaluation of the correlations indicated that being a woman was negatively related to role conflict. Role conflict was also negatively related to mindfulness, perceived ethical values, and sharing an ethics code, which finding provides some preliminary support to two of the study's hypotheses. Perceived ethical values and sharing an ethics code were positively related to mindfulness, which suggest that organizational ethics might be used to enhance sensemaking and provides preliminary support for the remaining hypothesis. The measures of organizational ethics were positively related, which implies that codes can strengthen corporate

TABLE I

Results of correlation analysis

| Variable | M | SD | $n$ | α | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Sex | 1.73 | 0.47 | 768 | – | – | | | | | | |
| 2. Position tenure | 8.19 | 8.04 | 755 | – | −0.02 | – | | | | | |
| 3. Social desirability | 17.02 | 1.95 | 744 | – | 0.05 | 0.06 | – | | | | |
| 4. Mindfulness | 2.11 | 0.48 | 747 | 0.85 | 0.01 | 0.04 | 0.12★★ | – | | | |
| 5. Corporate ethical values | 4.54 | 1.58 | 753 | 0.82 | −0.04 | 0.03 | 0.04 | 0.60★★★ | – | | |
| 6. Shared ethics code | 1.76 | 0.43 | 744 | – | −0.03 | −0.03 | 0.04 | 0.23★★★ | 0.19★★★ | – | |
| 7. Role conflict | 3.05 | 1.36 | 760 | 0.88 | −0.07★ | −0.01 | −0.11★★ | −0.47★★★ | −0.46★★★ | −0.24★★★ | – |

Sex (1 = male, 2 = female); position tenure (in years); shared ethics code (1 = no, 2 = yes).
★★★$p < 0.001$; ★★$p < 0.01$; ★$p < 0.05$.

ethical values. Finally, social desirability was weakly related to both mindfulness and role conflict, which suggested that social desirability was an issue. The mindfulness, corporate ethical values, and role conflict measures had acceptable coefficient alphas of 0.85, 0.82, and 0.88, respectively.

### Structural model

The full structural model containing both measurement and structural frameworks was then specified, which included the ethics code and control variables as covariates (the factors were inter-correlated with bidirectional arrows). The model exhibited adequate model fit ($\chi^2 = 922.205$, d.f. = 213, $p < 0.001$, $\chi^2$/d.f. = 4.330, NFI = 0.978, IFI = 0.983, CFI = 0.983, RMSEA = 0.065), and the observed items loaded well on each of the latent variables ($p < 0.001$). A summary of the structural relationships is provided in Table II. With regard to the control variables, being a woman was negatively related to role conflict, and social desirability was positively related to mindfulness. Sharing an ethics code was also positively related to corporate ethical values, which supports the notion that ethics programs strengthen various ethical practices (Adams et al., 2001; Schwepker and Hartline, 2005; Valentine and Barnett, 2002; Valentine and Fleischman, 2004, 2008). Mindfulness was associated with decreased role conflict, which provided adequate support for Hypothesis 1. Sharing an ethics code and perceived corporate ethical values were associated decreased role conflict, which provided adequate

support for Hypothesis 2. Finally, the shared ethics code and corporate ethical values variables were positively related to mindfulness, which provided convincing support for Hypothesis 3.

Since the control variables were not interrelated, and only two controls were related to the focal variables, a revised structural model was specified. This "trimmed" model contained only the significant structural relationships identified in the first model, and so many of the relationships between the control and focal variables were not specified, and position tenure was dropped from the model completely. The trimmed model generated acceptable fit statistics ($\chi^2 = 897.554$, d.f. = 201, $p < 0.001$, $\chi^2$/d.f. = 4.465, NFI = 0.978, IFI = 0.983, CFI = 0.983, RMSEA = 0.067), a significant change or reduction in chi-square was identified (Δ chi-square = 24.651, d.f. = 12, $p < 0.05$), and the paths between the observed items and latent variables were significant ($p < 0.001$). A summary of the structural relationships is provided in Table III. Besides slight changes in parameter estimates, the relationships among the variables were consistent with the first structural model. The "Discussion" section explores the practical implications of these findings, as well as the research limitations and suggestions for future inquiry.

### Discussion

The results indicated that mindfulness was negatively related to role conflict, so that as job responsibilities and work roles are approached mindfully, perceptions of role conflict should

TABLE II

Summary of structural relationships

| Path | Estimate | SE | Std. estimate |
|---|---|---|---|
| Shared ethics code → corporate ethical values | 0.68★★★ | 0.15 | 0.18 |
| Hypothesis 1 | | | |
|   Mindfulness → role conflict | −1.16★★★ | 0.16 | −0.39 |
| Hypothesis 2 | | | |
|   Shared ethics code → role conflict | −0.33★★ | 0.10 | −0.11 |
|   Corporate ethical values → role conflict | −0.14★★★ | 0.04 | −0.19 |
| Hypothesis 3 | | | |
|   Shared ethics codes → mindfulness | 0.14★★★ | 0.03 | 0.14 |
|   Corporate ethical values → mindfulness | 0.15★★★ | 0.01 | 0.58 |
| Controls | | | |
|   Sex → corporate ethical values | −0.17 | 0.14 | −0.05 |
|   Sex → mindfulness | 0.03 | 0.03 | 0.03 |
|   Sex → role conflict | −0.21★ | 0.09 | −0.08 |
|   Position tenure → corporate ethical values | 0.01 | 0.01 | 0.05 |
|   Position tenure → mindfulness | 0.00 | 0.00 | 0.01 |
|   Position tenure → role conflict | 0.00 | 0.01 | 0.02 |
|   Social desirability → corporate ethical values | 0.04 | 0.03 | 0.05 |
|   Social desirability → mindfulness | 0.02★★ | 0.01 | 0.09 |
|   Social desirability → role conflict | −0.03 | 0.02 | −0.04 |

| | Covariances | SE | Correlations |
|---|---|---|---|
| Sex ↔ position tenure | −0.08 | 0.13 | −0.02 |
| Sex ↔ social desirability | 0.04 | 0.03 | 0.05 |
| Sex ↔ shared ethics code | −0.01 | 0.01 | −0.03 |
| Position tenure ↔ social desirability | 0.95 | 0.58 | 0.06 |
| Position tenure ↔ shared ethics code | −0.09 | 0.13 | −0.03 |
| Social desirability ↔ shared ethics code | 0.03 | 0.03 | 0.03 |

$n = 781$; sex (1 = male, 2 = female); position tenure (in years); shared ethics code (1 = no, 2 = yes).
★★★$p < 0.001$; ★★$p < 0.01$; ★$p < 0.05$.

decrease. This relationship stands up to intuitive and theoretical logic because, as noted earlier, perceptions of stress rest on how one assesses the moment and makes sense of external events. Mindfulness, as measured in this study, centers on ''identifying,'' ''paying attention to,'' and being held ''accountable for'' the external environment which includes the organization and a broader stakeholder constituency. Since mindfulness requires this form of responsible vigilance, perceived role conflict should be a negligible co-variant, as was the case here. The findings also indicated that perceived corporate ethical values and a shared ethics code were negatively related to role conflict and positively related to mindfulness. Therefore, as organizations craft a unified set of ethical guidelines through ethical values and codes, employees should experience fewer role frustrations and more effective sensemaking can be encouraged.

The results are particularly important given that role conflict can decrease satisfaction and performance (Jaramillo et al., 2006; Rizzo et al., 1970; Schwepker and Hartline, 2005), thus firmly positioning mindfulness and organizational ethics as mechanisms for improving employee job response. Mindfulness is also known to augment individuals' information processing in a manner that prompts increased self-control and subsequent positive behavior (Brown and Ryan, 2003; Brown et al., 2007b), as well as increased persistence and lowered stress levels (Brown et al., 2007a). Organizational

TABLE III

Summary of structural relationships (trimmed model)

| Path | Estimate | SE | Std. estimate |
| --- | --- | --- | --- |
| Shared ethics code → corporate ethical values | 0.69★★★ | 0.15 | 0.18 |
| Hypothesis 1 | | | |
|   Mindfulness → role conflict | −1.19★★★ | 0.16 | −0.40 |
| Hypothesis 2 | | | |
|   Shared ethics code → role conflict | −0.33★★★ | 0.10 | −0.12 |
|   Corporate ethical values → role conflict | −0.14★★★ | 0.04 | −0.18 |
| Hypothesis 3 | | | |
|   Shared ethics codes → mindfulness | 0.14★★★ | 0.03 | 0.14 |
|   Corporate ethical values → mindfulness | 0.15★★★ | 0.01 | 0.58 |
| Controls | | | |
|   Sex → role conflict | −0.22★ | 0.09 | −0.08 |
|   Social desirability → mindfulness | 0.02★★ | 0.01 | 0.10 |

| | Covariances | SE | Correlations |
| --- | --- | --- | --- |
| Sex ↔ social desirability | 0.04 | 0.03 | 0.05 |
| Sex ↔ shared ethics code | −0.01 | 0.01 | −0.03 |
| Social desirability ↔ shared ethics code | 0.03 | 0.03 | 0.04 |

$n = 781$; sex (1 = male, 2 = female); shared ethics code (1 = no, 2 = yes).
★★★$p < 0.001$; ★★$p < 0.01$; ★$p < 0.05$.

ethics also conveys to employees the expectations associated with acceptable business conduct, thus reducing the potential for ethical conflicts (Schwepker et al., 1997). As such, organizational leaders have in their possession several key "triggers" that might reduce role conflict and its associated outcomes, and the findings suggest that the management of work roles and organizational ethics can facilitate this aim.

The findings also generate several important managerial implications. Companies might decrease role inconsistencies through a mindful (or reflective) administration of jobs, as well as through the institutionalization of ethics. In particular, health care organizations should reduce the conflicting work roles that healthcare professionals face, including the unequal distribution of resources, the lack of preventative measures, and the presence of unsafe medical practices. On an operational level, healthcare and other organizational managers should also consider using various workplace interventions to increase role awareness and mitigate role conflict. These interventions could include increased autonomy for employees, as well as input into managerial

decisions. Further, when policies, procedures, and guidelines are introduced or changed, employees should review such practices for inconsistencies and compliance with laws or existing policies. Managers should give written directions and orders that detail what is expected of the employees, as well as provide clear job descriptions that employees understand. The resulting decreased role conflict should reduce the incidence of work setbacks, increase the quality of patient care, and enhance the well-being of healthcare organizations and stakeholders.

Mindfulness might also be improved by encouraging healthcare professionals to more readily understand their organization's position on ethics, which requires a greater understanding of the work environment as a whole. Mindfulness could be an internalization of organizational ethics, implying that such introspection should be managed through corporate ethics policy. For example, employees of hospitals and healthcare organizations might internalize a sense of social responsibility for medical issues through a collective mindfulness stemming from ethics policies. In addition, introduction of ethical values to employees, and building of aware-

ness and support of such values, provides strong normative guidance that might reduce the presence of role conflict (Babin et al., 2000; Chonko and Burnett, 1983). In the long run, managers can institutionalize these values by using both rewards to motivate ethical behavior and reprimands to deter unethical conduct (Hunt et al., 1989; Trevino and Nelson, 2007). Such actions should also work in concert to further prompt an organization-wide culture of mindfulness and sensemaking.

This research project had a number of limitations. For instance, single source data obtained from just one institution was used, which increases the likelihood of common method bias and limits the generalization of results to other organizations, both profit and not-for-profit. Sampling employees in just one organization also raises concerns about the adequacy of measurement variations found in the ethics variables, and the scale used to measure corporate ethical values was designed for corporations rather than healthcare institutions, which could have affected the findings. In addition, the study's cross-sectional design weakens conclusions about causality, and it could be argued that perceptions of role conflict result in decreased mindfulness and organizational ethics. Finally, the social desirability measure was weakly correlated to both the role conflict and mindfulness scales, implying that individual survey responses were partly influenced by impression management. Social desirability might have been prompted by the self-selection of subjects who were overly altruistic and willing to complete the survey; the results should, therefore, be viewed with a degree of caution. However, social desirability was related only to mindfulness in the path analysis, which suggests that bias was not an overriding concern when the control and focal variables were assessed together in one comprehensive model.

Future research needs to address these limitations and stretch the literature beyond its current state. For example, new investigations should collect multi-source data from individuals employed in a variety of institutions. Research should also explore the specific interventions that might be used to reduce role conflict in prescribed work roles; the data generated by these interventions could be analyzed and compared with this study. The

negative relationship between mindfulness and role conflict might be substantially strengthened by utilizing some of these suggestions. Additional research should also determine whether mindfulness and ethical practices in healthcare organizations are linked to patient safety practices, client advocacy, and risk assessment/management because all these issues have ethical implications.

As stated previously, role conflict and stress impact job satisfaction and performance (Jaramillo et al., 2006; Knight et al., 2007; Schwepker and Hartline, 2005), so mindfulness and organizational ethics might operate through the reduction of conflict to influence the trajectory of many important work outcomes. In addition, previous study implies that tenure moderates the relationship between role stressors and job performance (Jackson and Schuler, 1985; Leong et al., 1989; Walker et al., 1975, 1977), and so new research should more fully explore the degree to which organization-based tenure influences how organizational ethics, mindfulness, and role conflict relate to ethical conduct. Finally, researchers have recognized, for decades, that control over noxious stimuli can be stress reducing (i.e., Avrill, 1973; Greenberger and Strasser, 1986; Karasek, 1979; Miller, 1979). Recent study has further evidenced that a sense of personal control has an ambient effect over noxious stimuli, again reducing strain effects (i.e., Frese, 1989; Varca, 2002). To the extent that mindfulness urges individuals to make sense of their work settings and assume responsibility for their environment, a sense of personal control might influence the negative mindfulness–role conflict linkage. This logic, not fully demonstrated within the present data, does fit the results and lays the groundwork for further theoretical and empirical development. Through an exploration of these issues, research might provide new insights into the management of organizational ethics, mindfulness, and role conflict.

## Note

[1]    Even though the goal in structural equation modeling is to obtain an insignificant chi-square statistic, large sample sizes ($> N = 500$) can sometimes make it difficult to obtain an acceptable chi-square score.

## Appendix: Measures

Role conflict
  1. I must do things that I think must be done differently
  2. I work under incompatible policies and guidelines
  3. I have to oppose a rule or policy in order to carry out an assignment
  4. I receive assignments without the manpower to complete them
  5. I receive incompatible requests from two or more people
  6. I have to work under vague directions or orders
  7. I receive assignments without adequate resources and materials to execute them
  8. I work on many unnecessary things
Mindfulness

  1. There is an organization-wide sense of susceptibility to the unexpected
  2. Everyone feels accountable for reliability
  3. Leaders pay as much attention to managing unexpected events as they do to achieving formal organizational goals
  4. People at all levels of our organization value quality
  5. We spend time identifying how our activities potentially harm our organization, employees, our customer, other interested parties, and the environment at large
  6. We pay attention to when and why our employees, or customers, or other interested parties might feel peeved or disenfranchised from our organization
  7. There is widespread agreement among the firm's members on what we don't want to go wrong
  8. There is widespread agreement among the firm's members about how things could go wrong

Corporate ethical values
  1. Managers in my company often engage in behaviors that I consider to be unethical (R)
  2. In order to succeed in my company, it is often necessary to compromise one's ethics (R)
  3. Top management in my company has let it be known in no uncertain terms that unethical behaviors will not be tolerated
  4. If a manager in my company is discovered to have engaged in unethical behavior that results primarily in *personal gain* (rather than corporate gain), he or she will be promptly reprimanded
  5. If a manager in my company is discovered to have engaged in unethical behavior that results primarily in *corporate gain* (rather than personal gain), he or she will be promptly reprimanded

(R) = reverse coded

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