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Nonprofit Organizational and Work Unit Identification and the Occupational Stress Process

Abstract

Research investigating the transactional approach to the work stressor-employee adjustment relationship has described many negative main effects between perceived stressors in the workplace and employee outcomes. A considerable amount of literature, theoretical and empirical, also describes potential moderators of this relationship. Organizational identification has been established as a significant predictor of employee job-related attitudes. To date, research has neglected investigation of the potential moderating effect of organizational identification in the work stressor-employee adjustment relationship. On the basis of identity, subjective fit and sense of belonging literature it was predicted that higher perceptions of identification at multiple levels of the organization would mitigate the negative effect of work stressors on employee adjustment. It was expected, further, that more proximal, lower order identifications would be more prevalent and potent as buffers of stressors on strain. Predictions were tested with an employee sample from five organizations ($N = 267$). Hierarchical moderated multiple regression analyses revealed some support for the stress-buffering effects of identification in the prediction of job satisfaction and organizational commitment, particularly for more proximal (i.e., work unit) identification. These positive stress-buffering effects, however, were present for low identifiers in some situations. The present study represents an extension of the application of organizational identity theory by identifying the effects of organizational and workgroup identification on employee outcomes in the nonprofit context. Our findings will contribute to a better understanding of the dynamics in nonprofit organizations and therefore contribute to the development of strategy and interventions to deal with identity-based issues in nonprofits.

Human service nonprofit organizations (HSNP) are often characterised by multiple and strong identities due to their humanitarian focus. They also represent stressful places to work. Contextual moderators of the work stressor-employee adjustment relationship have emerged adding to the potential complexity, but necessary relevance, of many occupational stress theories. However, the role of different identities in this relationship has received almost no attention by researchers. This study will explore the relationship between different identifications with programs and the organization overall, and their relative potential to reduce the effects of work stressors on employee adjustment.

Occupational stress is costly; having implications for employees, organizations, and ultimately the economy (Atkinson, 2000; Siegrist, 1998). There is substantial empirical evidence to show that psychosocial risk factors at work predict undesirable physiological conditions (e.g., gastrointestinal malfunction, muscular-skeletal problems, and cardiovascular morbidity and mortality; see Van der Doef & Maes, 1999) and psychological responses (anxiety, depression, somatization, and burnout; see Van der Doef & Maes, 1999) among employees. In addition to the negative implications for physiological and psychological health, occupational stressors also have been shown to influence employee attitudes (e.g., decreasing job satisfaction and organizational commitment) and employee behaviors that have implications for organizational effectiveness (e.g., absenteeism, turnover, and reduced job performance; see Kahn & Byosiere, 1992).

This has led researchers to further investigate the different factors that might influence the work stressor-employee adjustment relationship. One particular aspect of research that has yet to be explored fully is the effect of identification with different levels of the organization and their potential to act as a buffer of strain in the workplace. This study seeks to address this research caveat.

WORK STRESSORS, ORGANIZATIONAL IDENTIFICATION AND EMPLOYEE ADJUSTMENT

A myriad of work stressors have been investigated with respect to their impact on employee adjustment. A considerable body of literature has focused on job stressors related to characteristics of the role and specific tasks being performed. There are a large number of empirical studies that have investigated role stressors and employee outcomes, along with several meta-analytic reviews (see Abramis 1994; Jackson & Schuler 1985; Kahn, Wolfe, Quinn, Snoek & Rosenthal 1964). Most recently, Örtqvist and Wincent (2006) conducted a meta-analysis of 295 studies that involved role ambiguity (uncertainty about what is required to perform a role), role conflict (conflicting information about the same role or job), and role overload (too much work to complete) and their effects on employee outcomes. Generally consistent with conclusions in existing occupational stress research, role ambiguity was related to increased tension (reduced psychological health) and indicators of burnout (i.e., emotional exhaustion, depersonalization, and personal accomplishment) and less favorable levels of job-related attitudes (i.e., job satisfaction, organizational commitment, and propensity to quit). Role conflict also was related to higher levels of emotional exhaustion and lower job-related attitudes and psychological health. Lastly, role overload was related to higher tension, exhaustion, depersonalization, and propensity to quit, as well as reduced commitment to the organization and psychological health.

Hypothesis 1: Less favorable levels of job stressors (role conflict, role clarity, role overload) will be related to (a) less favorable job-related attitudes (job satisfaction, intentions to leave, organizational commitment, and work unit commitment) and (b) lower levels of psychological health.

In response to research outlining the negative consequences of job stressors for an organization and its employees, researchers have investigated factors that may moderate their negative effects. Such moderation effects occur via a 2-way interaction in which the presence of an additional variable attenuates, or buffers, the negative effects of work stress on employee adjustment by allowing the employee some means of coping with the demanding situation. The stress-buffering hypothesis is commonly used to describe the effects of a range of different variables that may protect individuals from the negative effects of stressful life events (Cohen & Edwards, 1989). Several moderating (or stress-buffering models) have been proposed in the occupational stress literature, and the Job Demand-Control Model (Karasek, 1979) has been particularly influential in this regard. It proposes that job control acts as a buffering variable in the stressor-strain relationship. More specifically, this model proposes that control over daily tasks ameliorates the negative impact of job demands on levels of employee adjustment. Additionally, this model was extended by Karasek and Theorell (1990) to include support (see also Theorell & Karasek, 1996), predicting that job strain (i.e., high job demands and low control) will be most marked when employees also have low levels of social support at work. In other words, employee strain should be greatest under high work stress combined with low levels of both work control and social support.

Research has also identified other moderators of the work stressor-adjustment relationship. For instance, these include type A behavior (Kushnir & Melamed, 1991), locus of control (e.g., Daniels & Guppy, 1994; Vahtera, Pentti, & Uutela, 1996), self-efficacy (Jimmieson, 2000), self-esteem (Makikangas & Kinnunen, 2003), proactivity (Parker & Sprigg, 1999), trust in management (Harvey, Kelloway, & Duncan-Leiper, 2003), and subjective fit with the organization's values and culture (Newton, 2006; Newton & Jimmieson, 2008, 2009). Further, perceptions of the balance between effort and rewards for providing the effort have been identified as moderators of the work stressor-adjustment

process (Siegrist, 2002). From a task level perspective, high role clarity has also been found to buffer the negative effects of stressors on adjustment (Bliese & Castro, 2000). While it is relatively clear that research has identified that task and individual difference variables can moderate, or buffer, the negative effects of stressors on strain, there is an absence of the study of identification-related variables as potential moderators. In the present study, the stress-buffering role of identification is given further theoretical and empirical consideration.

Organizational Identification

Social Identity Theory (SIT: Tajfel & Turner, 1986) states that a person has not one personal self, but rather several selves that correspond to widening circles of group membership. Different social contexts may trigger an individual to think, feel, and act on the basis of a personal, family or national level of self. The concepts underlying SIT have been applied to organizations resulting in the development of organizational identity and identification (Ashforth & Mael, 1989). Organizational identification refers to a member's feeling of a sense of oneness with an organization and it is proposed that individuals who identify strongly with their organization are more likely to act in accordance with the organization's values and culture (Ashforth & Mael, 1989).

Identification in the workplace is not confined to an organizational level--one may identify with their particular work group or a social group comprised of employees drawn from different workgroups. As such, some types of identification within a workplace might be nested within other types of workplace identification. Ashforth and Johnson (2002) discuss the concept of nested identity (where certain identities are nested in others). Nested identities can vary on three dimensions: inclusive/exclusive, abstract/concrete, and distal proximal. Higher order identities (e.g., organizational identity) are generally more inclusive--including lower order identities (such as workgroup, department, and job). Lower order identities tend to be more exclusive as they do not include higher order identities and membership is

restricted to those who meet certain criteria. Higher order identities are considered to be more abstract as they can potentially include many diverse lower order identities. On the other hand, lower order identities, (e.g., workgroup identity) are considered to be more concrete as they represent the local means or action levers by which higher order identities are put into play. Lastly, higher order identities are more distal as their impact on an individual tends to be more indirect and delayed (Ashforth & Johnson, 2002). Conversely, lower order identities are more proximal--their impact is more direct and immediate for individuals.

Identification research generally demonstrates positive outcomes for employees. Organizational identification has positively associated with job satisfaction and intentions to stay, and workgroup identification positively related to job satisfaction and negatively related to intentions to leave (van Knippenberg & van Schie, 2000). Various facets of organizational identification have been shown to positively predict job satisfaction (van Knippenberg & van Schie, 2000) and intentions to stay (Mael & Ashforth, 1995; van Knippenberg & van Schie, 2000). Similarly, workgroup identification has been positively related to job satisfaction and negatively related to intentions to leave (van Knippenberg & van Schie, 2000). Recently, Rikketa (2005) conducted a meta-analysis based on 96 separate samples. The author found that organization identification was strongly correlated with job-related variables. More specifically, organizational identification was significantly and positively related to job satisfaction ($r = .54$), organizational satisfaction ($r = .59$), job involvement ($r = .61$), affective organizational commitment ($r = .78$), occupational attachment ($r = .47$) and workgroup attachment ($r = .52$). Similarly, organizational commitment was negatively and significantly related to intentions to leave ($r = -.48$). Lastly, van Dick, Wagner, Stellmacher, and Christ (2004) have shown that multi-foci identification with own career, team, organization, and occupation was also significantly positively related to levels of job satisfaction.

Hypothesis 2: Higher levels of organizational and work unit identification will be related to (a) more favourable job-related attitudes (job satisfaction, intentions to leave, organizational commitment, and work unit commitment) and (b) higher levels of psychological health.

While researchers have shown many main effects of identification on employee outcomes, the effects of identification in the context of the work stressor-employee adjustment relationship are unclear. Within the context of stress research, identification, or more correctly, a shared social identity, represents the basis for social support and coping. Indeed, considerable literature has demonstrated that a shared social identity leads to a greater provision of social support to other ingroup members (see Levine, Cassidy, Brazier & Reicher, 2002). The stress-strain relationship is of particular importance for managers of non-profit employees as the funding vagaries often increase the difficulty of dealing with day-to-day demands.

Haslam, Postmes, and Ellemers (2003. see also Gioia, Schultz, & Corley, 2002) propose that organizational identification is potentially an extension of social (collective) identification. Social identity theory allows us to understand how individuals can be part of a social group (such as an organization), via processes of self-categorization and psychological commitment (e.g., Tajfel & Turner, 1979; Haslam, 2001). It highlights the causes of ties between individual(s) and an organization, assists in understanding the relative strength of these ties in different circumstances, and enables prediction of consequences for group behavior (Haslam et al., 2003). Within the context of stress research, a social identity, or more correctly, a shared social identity, represents the basis for social support and coping. Indeed, considerable literature has demonstrated that a shared social identity (incorporating a process of categorizing oneself with a group) leads to a greater provision of social support to

other in-group members (see Levine, Cassidy, Brazier, & Reicher, 2002; Levine, Prosser, Evans, & Reicher, 2005). Further, researchers also have demonstrated that a shared social identity can lead to the dissolution of the potential negative personal effects of stressors, via a process of redefining the stressors to be a source of collective eustress (Branscombe, Schmitt, & Harvey, 1999; Suedfeld, 1997).

Two studies relating to identification (in its various forms) provide some support for the present study. First, Elovainio and Kivimaki (2001), with a rather homogenous sample of newly employed females, found that occupational identification significantly mediated the effect of role ambiguity on psychic strain (i.e., concentration, nervousness, and depression). More precisely, the relationships between occupational identity and role ambiguity with strain were opposing and significant. Further, negative relationships were revealed between identity and role ambiguity, and organizational identity and strain. These negative relationships suggest that higher feelings of occupational identity potentially decrease the experience of strain-related symptoms. Lastly, and in line with stress research, role ambiguity was positively associated with strain indicating that higher levels may increase symptoms of strain. The results of study by Elovainio and Kivimaki are important to the current study as they are indicative of a more complex role relating to identification in the work stressor-adjustment relationship.

Witt, Patti, and Farmer (2002) also provide some broad support for the potential moderating effect of identification. The authors investigated the potential moderating influence of occupational and organizational identification on the relationship between organizational politics (a potential stressor; Vigoda, 2002) and organizational commitment (an indicator of employee adjustment). The results revealed that perceptions of politics were less adverse to commitment amongst workers that primarily identified with their occupations.

When identification was low employees identifying high levels of politics within the organization were less committed.

The sense of belonging and subjective fit literatures also provides insight into potential buffering effects of identification on the work stressor-employee adjustment relationship. First, components of the definition of a 'sense of belonging' include a valued involvement (or feeling of being valued), and a fit of the person's perception that their characteristics complement the environment (Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier, 1992). This definition has similar characteristics to identification that it is partially about values and a match of the person to the environment. Indeed, Sargent, Williams, Hagerty, Lynch-Sauer and Hoyle (2002) investigated the potential stress-buffering effect of a sense of belonging with navy recruits and found that high levels of a sense of belonging had a significant buffering effect on the effects of 'new recruit stress' on depressive symptoms for both depressed and non-depressed recruits with a family history of alcohol abuse. As such, a variable similar to subjective fit (a sense of belonging) was found to buffer the negative effects of stress on strain in an extremely homogenous and clinical, yet organizational sample. This result provides another perspective from which to draw expectations regarding the effect of subjective fit on the work stressor-adjustment relationship.

Second, subjective fit with organizational culture has been found to moderate the work stressor-employee adjustment relationship. This literature is important to the present hypotheses as the concepts underlying identification and subject fit with organizational culture have similarities with both concepts relying to differing degrees on an identification or oneness with the organization. In particular, Newton and Jimmieson (2009) found stress-buffering properties of subjective fit in relation to job satisfaction, organizational commitment and physical symptoms. It should be noted, however, that this study did not find effects for psychological health. However, such effects were found in another study by

Newton (2006). The results revealed considerable support for the buffering effects of high subjective fit on the negative impacts of work stressors on psychological health, physiological symptoms, job satisfaction, and intentions to leave. Interestingly, some results also revealed that the buffering effect favoured those perceiving low subjective fit on psychological health although these results were related to a lack of training as a stressor as opposed to a response to job stressors under investigation in the present study.

Based on this literature a number of research questions were posited. First, we were interested in the potential of organizational and program identification to mitigate the negative effects of work stressors on nonprofit employee adjustment (strain). We were also interested in whether there was a difference in the moderating potential of these identifications in the stressor-employee adjustment relative to lower or higher order identifications.

Hypothesis 3: Higher levels of identification (organizational and work unit) will be associated with (a) more favorable job-related attitudes and (b) psychological health.

Hypothesis 4: More proximal identification (i.e., work unit identification) will have a greater moderating potential on the job stressor-employee adjustment relationship than higher order identifications (i.e., organizational).

Overview of the Study and Hypotheses

This study was designed to explore the joint effects of job stressors and identification on levels of employee adjustment in an organizational setting. Previous research has documented the direct relationships between identification and a variety of different indicators of employee adjustment (e.g., Verquer et al., 2003). In this study, it was first expected that perceptions of job stressors would have negative main effects on levels of job-

related attitudes (H1a) and employee health (H1b). Second, it was expected that higher perceptions of organizational and program identification would have a favorable influence on levels of employee job-related attitudes (H2a) and psychological health (H2b). On the basis of organizational identification and subjective fit and sense of belonging literature, it was proposed that the negative effects of work stressors would be less for employees who perceived high levels of organizational and work unit identification in the prediction of job-related attitudes (H3a) and employee psychological health (H3b). Lastly, it was expected that work unit identification would have greater buffering properties than organizational (a more distal) identification in the job stressor-employee adjustment process (H4).

METHODS

Participants and Organizations

Purposeful (maximum variation) sampling was employed (see Patton, 1990). As such, a diverse range of organizations were approached to enable investigation of patterns relating to individual perceptions of work stressors, and employee adjustment. Five organizations (A, B, C, D, and E) agreed to participate in the research. All organizations were operating in the human services domain, providing deaf services, aged care, assistance for autistic children and parents, and care for the severely disabled. Responses from all organizations were pooled ($N = 267$) to assess individual level hypotheses proposed in this paper. The ages of participants ranged from 19 to 70 ($M = 37.37$, $SD = 18.24$). Of the participants that reported their gender, 23% were male, and 77% were female. Overall, 54% were employed fulltime and 31% employed on a part time or casual basis.

Procedure

The same procedure was concurrently employed in all organizations. Employees were informed that a survey of employees was taking place one month prior to distribution. For all organizations, the researcher visited and spoke directly to supervisors and employees about

the survey within the month preceding its distribution. Email reminders were sent to all employees encouraging participation in the survey prior to distribution, and one week into the 2-week survey period. Employees received their invitation to participate via email which included a link to the survey which was stored on a secure University server. Participants had the opportunity to request a paper-based survey however no employees opted to complete the survey in this way.

Measures

The focal variables of the study included job stressors (role conflict, role ambiguity, and role overload), identification (organizational, program, work unit), and employee adjustment assessed in terms of employee psychological health and job-related attitudes (job satisfaction, organizational and work unit commitment, and intentions to leave). Constructs are reviewed below.

Role conflict. Perceptions of role conflict were measured using Caplan, Cobb, French, Harrison, and Pinneau's (1980) 3-item scale (e.g., "People in equal rank and authority over you ask you to do things which conflict"). Responses were rated from 1 (*very little*) to 7 (*a great deal*).

Role ambiguity. Perceptions of role ambiguity were measured using Caplan, et al.,'s (1980) 4-item scale (e.g., "I am often clear about what my job responsibilities are"). Responses were rated from 1 (*very little*) to 7 (*a great deal*). All four items were recoded so that high scores reflected higher levels of role ambiguity.

Role overload. Perceptions of role overload were measured by using a slightly modified version of Caplan et al.,'s (1980) 4-item scale that included "My job requires me to work very fast". Responses were rated from 1 (*very little*) to 7 (*a great deal*).

Organizational identification. Three items were adapted from Mael's (1988) measure of organizational identification for this study. An example item is 'I feel a strong

sense of belonging to the organization' was rated from 1 (*strongly disagree*) to 5 (*strongly agree*).

Program identification. Three items were adapted from Mael's (1988) measure of organizational identification to assess program-level identification. An example item is "This program is characterised by the same principles that I also hold" was rated from 1 (*strongly disagree*) to 5 (*strongly agree*).

Work unit identification. Three items were adapted from Mael's (1988) measure of organizational identification for this study. An example item is "When someone praises this work unit's approach I take the compliment personally" was rated from 1 (*strongly disagree*) to 5 (*strongly agree*).

Psychological health. Perceptions of psychological well-being were assessed using the 12-item version of the General Health Questionnaire (GHQ-12, Goldberg, 1972). Respondents were asked how their health had been in general over the last few weeks by responding to a 5-point scale (e.g., "Have you been able to enjoy your day-to-day activities?"). Response options ranged from 1 (*much less than usual*) to 5 (*much more than usual*). Items responses were recoded such that high average ratings indicated more favorable health.

Job satisfaction. Perceptions of job satisfaction were measured using Warr, Cook and Wall's (1979) 3-item scale. The scale was designed to measure how people generally felt about their jobs, their level of enjoyment, their satisfaction and level of happiness. Responses ranged from 1 (e.g., *I am not happy*) to 5 (e.g., *I am extremely happy*).

Intentions to leave. Respondent's intentions to leave the organization were assessed using a 3-item scale adapted from Fried, Tieg, Naughton, and Ashforth (1996). Items included 'do you seriously intend to transfer to another job in the near future?' and "Do you

seriously intend to apply for another job in a different occupation in the near future?” Items were rated on a 5-point scale from 1 (*definitely not*) to 5 (*definitely yes*).

Control variables in this study included organization type (via dummy coding, as in Study 2b), gender and age in order to minimize the influence of these factors on focal variables in the study.

Gender. Gender of respondents was assessed as a dichotomous variable 1 (*male*) and 2 (*female*). Gender was controlled for in all individual perception analyses in light of research demonstrating gender differences in perceptions of some work stressors and outcomes assessed in this study (e.g., Nelson & Burke, 2002). Gender was also controlled for in this study as preliminary analyses revealed differences in some stressor and adjustment variables between males and females.

Age. Age was measured in years and months, representing a continuous scale. Previous research (e.g., Chandraiah, Marimuthu, & Manoharan, 2003) has identified that older employees sometimes perceive and experience different levels of stressors and strain compared to younger people. Further, age was significantly related to a number of adjustment and stressor variables and, as a result, was controlled for in analyses in this study.

Negative affectivity. Watson and Pennebaker (1989) reported that negative affectivity can potentially act as a ‘nuisance’ variable; especially in cross-sectional research that is based on single-source measures of stress and strain (see also Williams, Cote, & Buckley, 1989). Brief, Burke, George, Robinson, and Webster (1988) highlight that a way to limit this effect is to control for the impact of negative affectivity on stress and well-being measure in the organizational context. Negative affectivity was assessed using an 11-item scale developed by Agho, Price, and Mueller (1992). Items include “I am too sensitive for my own good” and were rated on a 5-point Likert scale from 1 (*not at all*) to 5 (*all the time*).

RESULTS

Preliminary Data Analyses

Descriptive data (means and standard deviations) and inter-correlations among the focal variables for the whole sample are displayed in Table 1. Overall, most correlations were low to moderate, indicating that multicollinearity was not a serious threat to the analyses (Tabachnick & Fidell, 2001). It should be noted that program and work unit identification were highly correlated, $r = .88, p < .001$, indicating that the variables were picking up on similar concepts. As a result, program identification was excluded from the remaining analyses.

Insert Table 1 about here

Due to individual responses being nested within five departmental groupings, the extent to which the proportion of variance in each of the focal variables was due to differences between groups was examined. This possibility was examined by computing the intraclass correlation coefficient (ICC(1)) which represents the proportion of total variance that can be explained by group membership (Bryk & Raudenbush, 1992). From a one-way random-effects ANOVA model, the ICC(1) was calculated (Bliese, 2000). A minimum value of at least .10 is generally required for aggregation of a variable to the group-level (Bliese, 2000). In only one instance did the ICC(1) value exceed .10. Given that the effect of the group is unlikely to influence the results, it was considered appropriate to examine the data at the individual-level of analysis and not control for departmental membership in the analyses.

Main Effects

To test main effects hypotheses 10 hierarchical multiple regression analyses were performed on the data. One regression for each set of role stressors (including role conflict, role clarity, and role overload) and identification (including organizational and work unit

identification) was conducted for each dependent variable. For all analyses, the control variables (i.e., age, gender, negative affectivity) were entered on Step 1 and the main effects (stressor identification variables) were entered on Step 2.

It was predicted that job (role ambiguity, role conflict, and role overload) stressors would have a negative impact on job-related attitudes (H1a) and employee health (H1b). Supporting H1a and H1b, entry of stressor and identification variables accounted for a significant increment in variance on job satisfaction, $R^2 ch. = .20$, $F(3,215) = 21.57$, $p < .001$ and intentions to leave, $R^2 ch. = .10$, $F(3,214) = 8.60$, $p < .001$, organizational commitment, $R^2 ch. = .12$, $F(3,216) = 10.60$, $p < .001$, work unit commitment, $R^2 ch. = .16$, $F(3,216) = 14.86$, $p < .001$, and psychological health, $R^2 ch. = .14$, $F(3,215) = 21.25$, $p < .001$.

With respect to job stressors, analyses revealed that role clarity was a significant predictors of higher reports of job satisfaction, $\beta = .42$, $p < .001$, organizational commitment, $\beta = .39$, $p < .001$, program commitment, $\beta = .39$, $p < .001$, and psychological health, $\beta = .20$, $p < .001$, and lower intentions to leave, $\beta = -.26$, $p < .001$. Role conflict was related to lower levels of job satisfaction, $\beta = -.18$, $p < .05$ and psychological health, $\beta = -.15$, $p < .05$. Lastly, role overload was also related to lower levels of psychological health, $\beta = -.22$, $p < .001$, and interestingly, higher levels of program commitment, $\beta = .17$, $p < .05$.

It was predicted the higher levels of identification would we associated with more favorable job-related attitudes (H2a) and psychological health (H2b). Following entry of covariates on Step 1, entry of identification variables on Step 2 revealed support for H2 a and b. These analyses revealed that the identification variables as a set positively predicted job satisfaction, $R^2 ch. = .12$, $F(2,216) = 16.39$, $p < .001$, organizational commitment, $R^2 ch. = .31$, $F(2,217) = 51.95$, $p < .001$, program commitment, $R^2 ch. = .27$, $F(2,217) = 43.26$, $p < .001$, intentions to leave, $R^2 ch. = .09$, $F(2,215) = 12.58$, $p < .001$, and psychological health, $R^2 ch. = .04$, $F(2,215) = 7.12$, $p < .05$.

Supporting H2a, organizational identification was significant related to higher job satisfaction, $\beta = .33, p < .001$, organizational commitment, $\beta = .47, p < .001$, program commitment, $\beta = .22, p < .05$, and lower intentions to leave, $\beta = -.26, p < .001$. Partially supporting H2a, program identification was significantly related to higher organizational commitment, $\beta = .23, p < .001$, program commitment, $\beta = .41, p < .001$, and lower intentions to leave, $\beta = -.11, p < .10$. Organizational identification only was significantly and positively related to psychological health, $\beta = .17, p < .05$, providing only partial support for H2b.

Identification and the Work Stressor-Employee Adjustment Relationship

To test hypotheses relating to the stress-buffering effects of organizational and work unit identification five hierarchical multiple regression analyses were performed on the data (i.e., one regression for each dependent variable). Predictor variables were mean-centered in order to circumvent problems relating to multicollinearity between the main effects and two-way interactions (see Aiken & West, 1991). For all analyses, the control variables were entered on Step 1, the main effects (stressor and identification variables) entered on Step 2, and interaction terms (i.e., stressor x identification) on entered Step 3.

Entry of all six interactions as a set in each regression explained significant variance on job satisfaction, $R^2 \text{ ch.} = .04, F(6,206) = 2.45, p < .05$, and , organizational commitment, $R^2 \text{ ch.} = .06, F(6,207) = 3.82, p < .05$ (see Table 2). This, support was not received for H3b. Overall, six significant interactions were evident. As per Aiken and West (1991), these significant interactions were plotted at 1 SD below and above the mean.

First, providing partial support for H3a, the interaction of role overload x organizational identification accounted for further significant variance on job satisfaction, $\beta = .14, p < .05$. Visual inspection of Figure 1 shows that as role overload increased, those with high organizational identification reported higher levels of job satisfaction whereas those with a low identification reported low satisfaction. Simple slopes tests revealed that the

negative effects of role overload on job satisfaction were marked for employees reporting low organizational identification, although the slope of this line was not significant; $B = -.08$, $t(267) = -1.04$, *ns*. Further, employees reporting high identification were protected from the negative effects of high role overload, and possibly motivated, with a significant increase in job satisfaction; $B = .14$, $t(267) = 2.03$, $p < .05$ (see Figure 1).

Insert Figure 1 about here

The interactions of role conflict x work unit identification and role overload and work unit identification were both significant on job satisfaction, $\beta = .22$, $p < .05$, and $\beta = -.17$, $p < .05$. Supporting H3a, simple slope tests revealed that the negative effect of role conflict on levels of job satisfaction was particularly marked for employees reporting low work unit identification, $B = -.27$, $t(267) = -3.52$, $p < .01$. In further support of this hypothesis, employees reporting high work unit identification were protected from the negative effects of role conflict on job satisfaction, $B = .07$, $t(267) = .83$, *ns*.

Interestingly, and contrary to H3a, the effect of the interaction of role overload and work unit identification was not as expected. The simple slopes analyses shows that job satisfaction increased for those reporting a low work unit identification, $B = .16$, $t(267) = 4.14$, $p < .001$ and decreased for those reporting a high identification, $B = .11$, $t(267) = -2.23$, $p < .01$. 05, as role overload increased.

Insert Figures 2 and 3 about here

Figure 4 shows the interaction of role conflict and organizational identification on organizational commitment. Partially supporting H3a, those with higher organizational

identification were protected against the negative effects of increased role conflict, $B = -.04$, $t(267) = -.44$, *ns*. Unexpectedly, however, low identifiers reported significantly higher organizational commitment as role conflict increased, although this level did not exceed those with high identification, $B = .25$, $t(267) = 3.01$, $p < .01$.

Insert Figure 4 about here

Figure 5 reveals the significant interactive effect of work unit identification and role clarity on organizational commitment. Simple slopes analyses revealed that, failing to support H3a, organizational commitment did not decrease for low work unit identifiers as role clarity decreased, rather it stayed the same, $B = .08$, $t(267) = .99$, *ns*. Conversely, for those reporting a high work unit identification, levels of organizational commitment decreased significantly as role clarity decreased, $B = .36$, $t(267) = 4.39$, $p < .001$.

Insert Figure 5 about here

Lastly, Figure 6 shows that those with work unit identification were not impacted by the negative effects of role conflict, with levels of organizational commitment not significantly changing, $B = -.06$, $t(267) = -.85$, *ns*. On the other hand, for those reporting a high work unit identification, levels of organizational commitment increased significantly as role conflict increased, $B = .27$, $t(267) = 3.27$, $p < .01$.

Insert Figure 6 about here

Hypothesis 4

The fourth hypothesis of this study was that work unit identification would have a greater significance in the buffering of the negative effects of job stressors on employee adjustment. A review of Table 2 reveals that more interaction effects were associated with work unit identification providing some support for this hypothesis.

Overview of Results

Overall, the analyses revealed several significant results. First, entry of stressors and identification variables significantly predicted less favorable reports of job-related attitudes and psychological health. Second, analyses revealed support for the buffering effects of high identification on the negative impacts of job stressors on job satisfaction and organizational commitment only. Furthermore, these interactions were not completely as hypothesized. Lastly, supporting H4, greater significance was associated with the more proximal identification (i.e., work unit identification) than the more distal, organizational, identification.

DISCUSSION AND IMPLICATIONS

This study extended the scope of identification theory and research that has primarily focused on main effects, and has provided evidence that the relationship between subjective fit and employee adjustment extends beyond simple main effects. First, it was hypothesized that job stressors would exert negative main effects on levels of employee adjustment. Additionally, it was hypothesized that different types of workplace identification would be positively related to employee adjustment. Lastly, it was predicted that higher levels of identification would act to buffer the negative effects of work stressors on employee adjustment, especially for more proximal identification.

Main Effects

For the most part, the results supported findings of previous researchers regarding main effects of job stressors on employee adjustment. Job stressors as a set explained

significant variance in all employee adjustment variables assessed. In particular, and in line with H1a, role clarity was related to more favorable adjustment, and role conflict was related to less favorable levels of employee adjustment. Interestingly, though, role overload, while negatively related to psychological health, was positively related to work unit commitment.

This latter, positive, relationship was not in line with H1a. It is important to note, however, that results relating to a negative effect of overload on strain are not conclusive. For instance, Chang and Hancock (2003) found role overload not to be significantly related to job satisfaction with new nursing recruits. Other studies have similarly found a positive or non-significant relationship between role overload and commitment (e.g., Blegen, 1993; Duquette, Kerouac, Snadhu, & Beaudet, 1994; Jamal, 1990; Scalzi, 1990). A number of reasons have been proposed to explain a positive relationship between role overload and work unit commitment. Chang and Hancock (2003) commented that this result may reflect greater job knowledge and experience in dealing with workplace issues which results in the employment of effective strategies to deal with the stressor. From another perspective, Spector and Jex (1998), and Lepine, Podsakoff, and Lepine (2005) highlight that having a large amount of work does not automatically result in negative employee outcomes. For instance, many people enjoy having a large amount of work and therefore may not find high work demands a stressor, but rather a source of challenge. This effect may be magnified at the work unit level where the unit can collectively develop both support-based and instrumental strategies for dealing with a large work load.

The hypotheses that both organizational and work unit identification would be related to more favourable employee adjustment were generally supported in the present study (H2a and H2b). In particular, the results revealed that, after controlling for age gender, and negative affectivity, both organizational identification and work unit identification were significantly related to more favourable levels of organizational and work unit commitment

and intentions to leave. Only organizational identification was significantly related to job satisfaction and psychological health when both identifications were entered as a set into the regression equation. It should be noted that when that both identification variables were significant on all outcomes when entered, after covariates, independently. Nevertheless, it is still important to note that when entered as a set, that most of the variance explained in job satisfaction, organizational commitment, intentions to leave, and psychological health was due to organizational and not work unit identification. In fact, work unit identification only had greatest influence over program commitment. This suggests that it is organizational identification that is most influential of the two identifications investigated in this study.

Interactive Effects

The key premise of the present study was to investigate stress buffering properties of different levels of workplace identification. Overall, six significant interactions were found, with two relating to organizational identification and four relating to work unit identification. These interactions were significant on job satisfaction and organizational commitment only (thus, H3b which is related to psychological health was not supported). Nevertheless, several of these significant interactions supported the notion of stress buffering hypothesized in H3a. More specifically, the potential negative effects of role overload were buffered from job satisfaction for those perceiving high organizational identification. Similarly, high work unit commitment buffered the negative effects of role conflict on their job satisfaction. In both these analyses, those perceiving a low identification experienced lower job satisfaction in response to these job stressors. A further two significant interactions displayed some evidence of buffering, partially supporting H3a. First, those perceiving high organizational identification were buffered from the negative effects of role conflict on organizational commitment. Interestingly, those perceiving low organizational identification reported higher levels of organizational commitment as role conflict increased, although still not reaching levels of

high identifiers. From a similar perspective, high work unit identification boosted levels of organizational commitment as role conflict increased, yet low identifiers did not change in terms of their commitment. While these results don't meet the technical definition of the buffering effect, they both represent an annulment of the negative effects of increasing role stressors affording a protection greater than that experienced by low identifiers. Overall, these results are in line with literature demonstrating a buffering effect related to high identification (e.g., Witt et al., 2003), a sense of belonging (e.g., Sargent et al., 2002), and subjective fit with organizational culture (Newton & Jimmieson, 2008; 2009). The importance of these results should not be understated from an individual or organizational perspective. That different levels of workplace identification can mitigate the negative influence of a variety of job stressors on employee adjustment has obvious positive connotations for employees.

It should be noted, however, that two of the six significant interactions did not conform with the stress buffering hypothesis (H3a). In particular, the interaction of role overload and work unit identification on job satisfaction and the interaction of role clarity and work unit identification were the opposite of what was expected. In these graphs (see Figures 3 and 5), high work unit identifiers experienced the negative effects of stressors resulting in lower job satisfaction and organizational commitment. On the other hand, low work unit identifiers were protected or benefitted from increased role stressors in terms of the effects on adjustment. This result is contrary to expectations and requires further unpacking as to why this might occur. It is first important to note that both effects occurred with work unit identification. From an identity perspective, it is possible that high work unit identification means that these employees had to expend more mental energy in dealing with the threat to both themselves and the work unit as a result of an increased role overload or lack of role clarity (more so than those with a low work unit identification). The low work unit

identification buffering result may also be explained in terms of a breach of values and psychological contract. For instance, psychological contract theories depict strain associated with an employee's perceived breach of psychological expectations that develops between the organization (or work unit) and the employee (e.g., Lo & Aryee, 2003; Morrison & Robinson, 1997). It is conceivable that employees reporting high work unit identification may perceive a relative and perceived lack of clarity or overload to represent a breach of values. As such, the employee may then experience greater strain (i.e., reduced satisfaction or organizational commitment). Indeed, this proposition represents an avenue for further research in order to uncover the underlying relationships relating to the stress-buffering effect for those perceiving low work unit identification.

This paper also proposed that a more proximal identification such as work unit identification would be more prevalence and significant as a moderator of the job stressor-employee adjustment relationship. In line with Ashforth and Johnson (2002) these results suggest that organizational identification is less salient in terms of it having an impact on the work stressor-employee adjustment relationship. Program identification (theoretically lower order and more salient) may be more valuable in positively influencing the stressor-adjustment relationship in nonprofit organizations.

These results have the potential for practical importance for nonprofits. Indeed, in recruiting and selecting employees it is vital to consider the match of the applicant to the organization at a program level, rather than just at an organizational level. These results also could carry over to the way volunteers are recruited and assigned to programs--recruiters should ensure that volunteers are assigned to programs with which they identify. Such recruiting principles could mean that personnel come ready equipped with defences to mitigate the potential negative effects of stressors on their satisfaction and psychological health. Nonprofit managers could also permit a greater level of structural flexibility in

developing new programs. In assigning employees to programs that exist in collaboration with partners, it may be prudent to allow the program space to develop its own identity, independent of the main organization.

The results of this study also have implications for identity theory. First, this study provides support for an organizational identification approach to understanding work stressor mitigation in an organizational context. An identity approach to occupational stress identifies that stressors can be redefined, essentially manifesting as a collective coping strategy. This process can lead to the reframing of stressors to the point that they can actually become a source of eustress for that collective (Branscombe et al., 1999). Indeed, the significant interactions in this study support this perspective to explaining stress-buffering, as those who identified generally reported more favorable health and job-related attitudes as job stressors intensified. Conversely, those not part of the collective were not protected against the negative effects of such stressors.

CONCLUSION

Several contributions are note-worthy with respect to this paper. First, while researchers have shown many main effects of organizational and, to a lesser extent workgroup identification on employee outcomes, these effects have not been investigated with respect to the nonprofit context. This represents an extension of the application of organizational identity theory. Second, the effects of identification in the context of the job stressor-employee adjustment relationship have not been investigated. This paper is additionally theoretically significant as it considers two levels of identification and their relative value in mitigating the potential negative effects of stressors on individual adjustment. This will add another dimension to existing occupational stress research.

Third, occupational stress research can be characterised as embarking on a new era driven by varying work environments and job characteristics that have resulted from

increased globalisation, changing socio-political developments, and technological advancement. Researchers have identified the need to investigate the role of broader contextual factors within the dynamic transaction between the individual and the environment in order to understand more fully the occupational stress process (e.g., Cooper, Dewe, & O'Driscoll, 2001). This project represents a response to this call from researchers. Last, the results of this project will contribute to a better understanding of the organizational dynamics in nonprofit organizations and therefore contribute to the development of strategy and interventions to deal with identity-based issues in nonprofits.

Limitations and Future Directions

A number of limitations and future research investigations are provided by this study. This study was cross-sectional. Therefore, participant mood states and dispositional variables could make results related to occupational stress difficult to interpret (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). A longitudinal design should be employed in future research to enable reduction of common method variance and investigate the relationships over time. Additionally, this study investigated hypotheses based on individual perceptions. Future research should consider conducting individual-, workgroup-, and organizational-level analyses, affording the opportunity to compare the meaning of the results from multiple perspectives. A multi-level approach also enables assessment of cultural fit with subcultures within organizations. To further understand the relationships identified in this study, future research should extend investigation to include the potential associations of different coping strategies in the relationships among work stressors, identification, and employee adjustment. Indeed, some researchers have identified that a core component of transactional models of stressor-strain processes is related to the influence of coping strategies (e.g., Lazarus & Folkman, 1984; Moos & Schaefer, 1993).

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Table 1
Descriptive data for focal variables

| Variables | Mean (SD) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---------------------------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 1 Role clarity | 3.92 (0.91) | (.90) | | | | | | | | | | |
| 2 Role conflict | 2.23 (0.94) | -.35** | (.79) | | | | | | | | | |
| 3 Role overload | 2.71 (1.03) | -.22** | .50* | (.70) | | | | | | | | |
| 4 Organizational identification | 3.68 (0.78) | .44** | -.29** | -.24** | (.93) | | | | | | | |
| 5 Program identification | 3.78 (0.64) | .23** | -.11 | .15* | .37** | (.79) | | | | | | |
| 6 Work unit identification | 3.69 (0.64) | .25** | -.12 | .10 | .39** | .88** | (.78) | | | | | |
| 7 Job satisfaction | 3.99 (0.82) | .51** | -.38** | -.21** | .48** | .21** | .24** | (.86) | | | | |
| 8 Organizational commitment | 3.64 (0.79) | .39** | -.11 | -.08 | .55** | .42** | .40** | .35** | (.76) | | | |
| 9 Program commitment | 3.72 (0.82) | .44** | -.21** | .01 | .43** | .50** | .51** | .38** | .65** | (.78) | | |
| 10 Intentions to leave | 2.02 (1.03) | -.38** | .33** | .20** | -.41** | -.19** | -.24** | -.58** | -.32** | -.38** | (.91) | |
| 11 Psychological health | 4.14 (0.51) | .43** | -.51** | -.49** | .40** | .14* | .17** | .49** | .25** | .34 | -.48** | (.81) |

Note. Cronbach's (1951) alpha reliability coefficients appear in the diagonal.

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

Table 2

Hierarchical multiple regression analyses on employee adjustment outcomes

| Independent Variables | Job satisfaction β | Intentions to leave β | Organizational commitment β | Program commitment β | Psychological health β |
|---|-----------------------------|--------------------------------|--------------------------------------|-------------------------------|---------------------------------|
| <i>Step 1 – Control variables</i> | | | | | |
| Gender | -.09 | .08 | -.08 | -.13* | -.05 |
| Age | .12* | -.24** | .14** | .14** | .23*** |
| Negative affectivity | -.33*** | .21** | -.11 | -.09 | -.57*** |
| R ² Change | .15*** | .13*** | .05** | .06** | -.57*** |
| <i>Step 2 – Main effects</i> | | | | | |
| Role clarity | .32*** | -.15** | .20** | .24*** | .14** |
| Role conflict | -.16** | .14* | .12* | -.07 | -.13** |
| Role overload | .06 | .01 | -.04 | .09 | -.25*** |
| Organizational identification | .24** | -.20** | .42*** | .17** | .06 |
| Work unit identification | .04 | -.11 | -.22*** | .37*** | .11** |
| R ² Change | .22*** | .13*** | .34*** | .32*** | .15*** |
| <i>Step 4 – Interaction terms</i> | | | | | |
| Role clarity X Organizational identification | .08 | -.08 | .02 | .03 | .12* |
| Role conflict X Organizational identification | -.07 | .02 | -.17** | .06 | .12* |
| Role overload X Organizational identification | .14** | -.07 | -.04 | -.13* | .01 |
| Role clarity X Work unit identification | -.02 | -.08 | .16** | .02 | .04 |
| Role conflict X Work unit identification | .22** | -.16* | .22** | .07 | .01 |
| Role overload X Work unit identification | -.17** | .14* | -.07 | .07 | -.02 |
| R ² Change | .04** | .03 | .06** | .02 | .02 |

* $p < .10$; ** $p < .05$; *** $p < .001$.

Figure 1. **Two-way interaction** of role overload and organizational identification on job satisfaction.

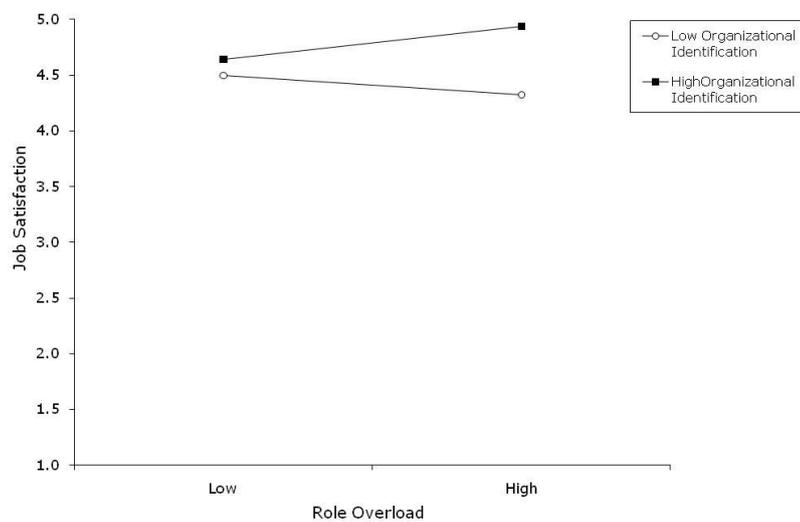


Figure 2. **Two-way interaction** of role conflict and work unit identification on job satisfaction..

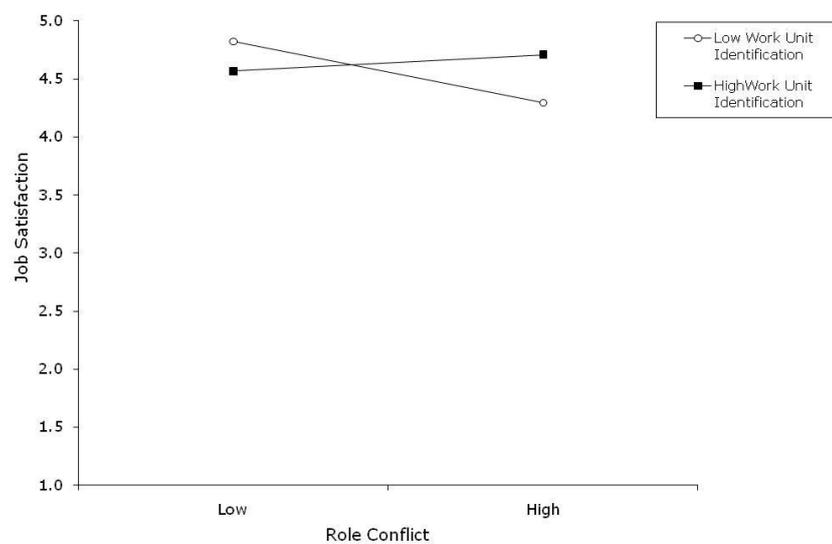


Figure 3. **Two-way interaction** of role overload and work unit identification on job satisfaction.

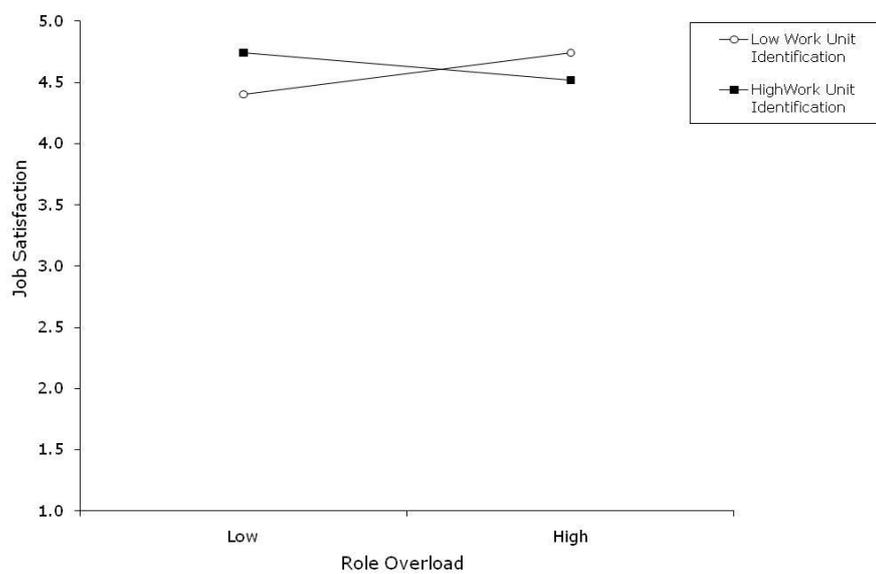


Figure 4. **Two-way interaction** of role conflict and organizational identification on organizational commitment.

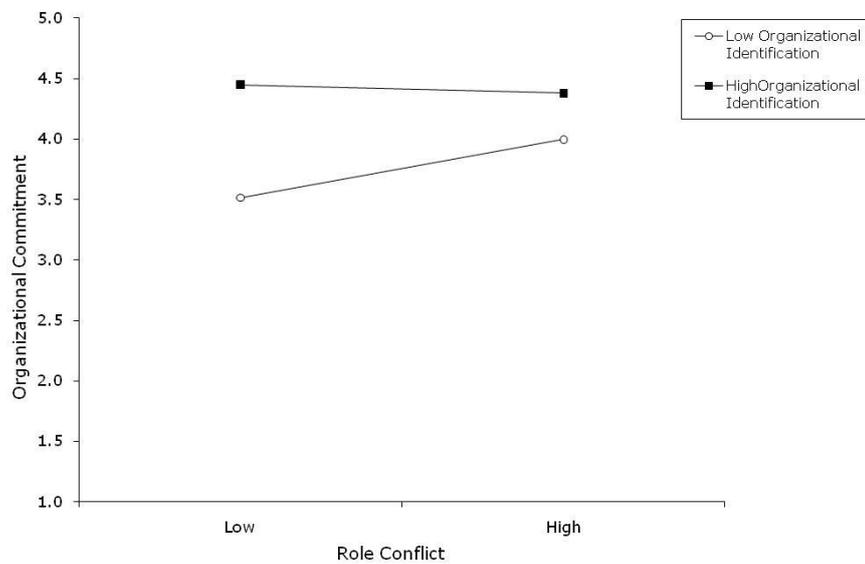


Figure 5. **Two-way interaction** of role clarity and work unit identification on organizational commitment.

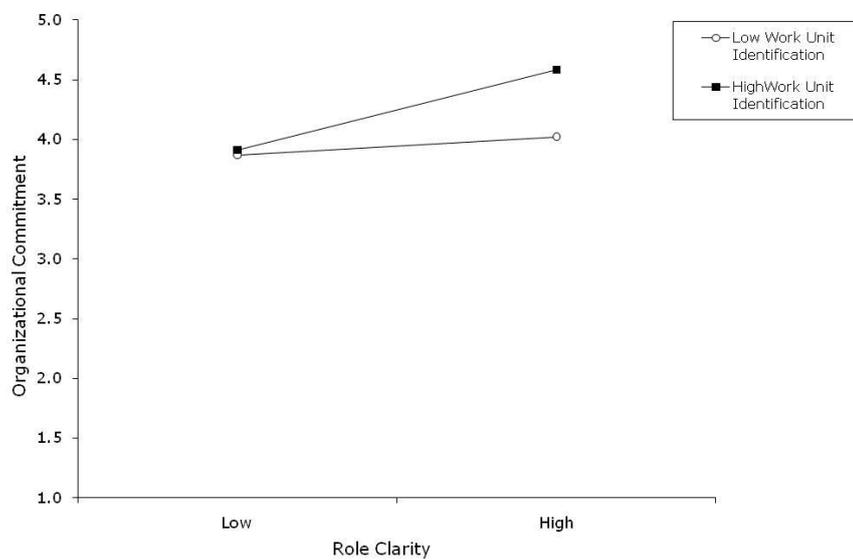


Figure 6. **Two-way interaction** of role conflict and work unit identification on organizational commitment.

