Fair Treatment, Job Involvement, and Turnover Intention of Professional Employees in Government: The Importance of Organizational Identification as a Mediator

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ABSTRACT

Although fairness is critical to effective human resource management, little effort has been made to assess the role fairness plays in facilitating positive and preventing negative employee outcomes in government agencies. Using data collected through a survey of 764 professional employees from a large state agency, this study examined the relationship between perceived organizational justice and employees’ organizational identification, job involvement and turnover intention. The findings indicated that perceptions of procedural and distributive justice have positive effects on employees’ job involvement and negative effects on their turnover intention, though these relationships are mediated by identification with the agency. Implications of these findings for theory and practice are discussed.
INTRODUCTION

Justice--a term that often is interchangeably used with fairness by social scientists--is a core principle upon which legal and political institutions are designed and operate in the United States. Fairness also is fundamental to the administration of government agencies (Battaglio and Condrey 2009). Existing civil service procedures concerning the selection, evaluation, promotion, and termination of employees in government agencies largely are guided by principles of fairness (Rubin 2009). Nevertheless, we know little about the role, if any, that fairness plays in facilitating positive outcomes and preventing negative consequences in government agencies.

The limited amount of research that has been completed in government work settings suggests that fair treatment can improve employees’ trust in management, increase satisfaction with their jobs, supervisors and organizations, strengthen their organizational commitment, and reduce their intention to leave their agency (Alexander and Ruderman 1987; Choi forthcoming; Hassan and Rohrbaugh forthcoming; Kurland and Egan 1999; Noblet and Rodwell 2009; Rubin 2009). Clearly, these findings highlight the importance of fairness in public administration, but they do not elucidate the underlying psychological mechanism through which organizational fairness perceptions may influence employee outcomes in public agencies.

The present study examined the role of procedural and distributive justice with respect to two important outcomes--job involvement and turnover intention. This study focused on job involvement because it is closely associated with employees’ work motivation and goal-directed behaviors (Kanungo 1982; Lawler, 1992; Lodahl and Kejner 1965; Paullay et al. 1994). It is well known that public sector employees are engaged by a concern for their community and

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1 Job involvement refers to the degree to which individuals are cognitively preoccupied with, engaged in, and concerned with their present job (Paullay et al. 1994: 224). It is a cognitive state pertaining to an individual’s psychological connection to the current job (Lawler and Hall 1970).
desire to serve the public interest (Houston 2000; Perry and Wise 1990). A positive relation between public service motivation and job involvement also has been shown (Moynihan and Pandey 2007). Further, related research has indicated that a variety of organizational and job-related factors can influence government employees’ motivation and involvement in their work (see, for example, Pandey, Moynihan, and Wright 2008; Ward and Park, 2010; Wright 2004, 2007). While this research has provided valuable insight, little effort has been made to assess whether fairness experiences may motivate employees in government agencies to become more involved in their jobs.

Additionally, this study focused on professional employees’ turnover intention because of the strategic value of their intellectual capital in government agencies, as well as the significant direct and indirect costs involved in replacing skilled professional employees (Moynihan and Pandey 2008). Previous research has shown that turnover of skilled employees can have serious negative consequences, including a decline of organizational performance (Meier and Hicklin 2008). Further, when skilled employees leave, agencies lose the source of valuable institutional knowledge, requiring resources to be spent on recruiting and training new employees rather than invested in sustaining important public programs (Moynihan and Pandey 2008).

Fair treatment can be an effective mechanism for lowering professional employees’ intention to leave their current agency. Several previous studies have found a negative relation between perceptions of procedural and distributive justice and federal employees’ turnover intention (Choi forthcoming; Rubin 2009). The present study built upon this research by clarifying the underlying process through which fairness perceptions may affect professional employees’ turnover intention. This effort was guided by the social identity perspective (Tajfel and Turner 1979, 1986; Turner 1985) and group-oriented organizational justice theories (Lind and Tyler 1988; Tyler and Lind 1992; Tyler and Blader 2000, 2003). According to these theories,
fair treatment provides employees with important feedback about their social status and standing in their organization. Further, this positive feedback increases their organizational identification (Ashforth and Mael 1989; Ashforth, Harrison, and Corley 2008), which, in turn, motivates them to become more involved in their jobs and influences their continuing work in their present organization. Using data collected through a survey of 764 professional employees from a state agency, this study relied on structural equation modeling to assess the role organizational identification as a mediator in the relation between procedural and distributive justice perceptions and professional employees’ job involvement and turnover intention.

THEORY AND HYPOTHESES

The specific pattern of relationships among the five variables examined in this study is shown in Figure 1, and the theories on which they are based are reviewed below. First, an overview of organizational justice and its importance in managing employees in government agencies is provided. Second, the social identity perspective (Tajfel and Turner 1979, 1986; Turner 1985) and the concept of organizational identification (Ashforth and Mael 1989; Ashforth et al. 2008) are reviewed. Third, based on the group-oriented organizational justice theories (Lind and Tyler 1988; Tyler and Lind 1992; Tyler and Blader 2000, 2003), seven research hypotheses that were empirically tested in this study are presented.

INSERT FIGURE 1

Organizational Justice

Organizational justice generally is conceptualized in terms of employees’ perceptions of fairness in their workplaces (Colquitt, Greenberg, and Zapata-Phelan 2005). Organizational justice is a multidimensional construct that consists primarily of two components—distributive and procedural justice. While distributive justice refers to fairness in the allocation of
organizational rewards and resources among employees (Adams 1965; Homans 1961), procedural justice concerns the fairness of formal policies and procedures used in making those allocation decisions (Leventhal, 1980; Lind and Tyler, 1988). Moreover, an additional component of organizational justice known as interactional justice has been proposed recently, that is, the quality of interpersonal treatment employees receive from authorities during the implementation of formal procedures (Bies 2000). ²

The present study focused on distributive and procedural justice due to their close association with a variety of beneficial employee outcomes (Colquitt et al. 2001; Cohen-Charash and Spector 2001). Procedural and distributive justice are related but different concepts. It has been shown in previous research that employees develop perceptions about distributive and procedural fairness in different ways (Colquitt 2001). Employees consider the allocation of work rewards to be fair when it is consistent with expected norms such as equity, equality, and need (Colquitt et al 2005). Further, decision-making processes are perceived to be fair when they are accurate, consistent, unbiased, correctable, representative, and ethical (Leventhal 1980; Leventhal, Karuza, and Fry 1980; Thibaut and Walker 1975).

**Importance of Justice in Government Agencies**

Justice serves a normative function in government agencies by providing legitimacy to decisions made by government authorities (Rubin 2009). Legitimacy of government actions is an important issue in both classical and contemporary public administration scholarship (Mosher 1968; Waldo 1948). Citizens’ perception of legitimacy of government actions partly depends on their personal experiences with street-level bureaucrats as they seek various public services. Fairness during those interactions can inform citizens about the appropriateness of government

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² Although recent research has shown international justice can be empirically distinguishable from procedural justice (Colquitt 2001), there still remains disagreement whether interactional justice is conceptually distinct from procedural justice.
decisions and can influence them to accept and comply with those decisions (Tyler and Degoe 1995). Moreover, fair treatment by government authorities sends important signals about positions and social worth of underprivileged groups in a society (Lens 2009).

Justice also is critical for effectively managing employees in government agencies. It is a guiding principle for cooperative social actions in the workplace (Barnard 1938). Individuals care deeply about how they are treated in their workplaces, and their perceptions of organizational justice may largely influence the nature of their relationship with and feelings about their organizations (Folger and Cropanzano 1998). Previous research has shown that perceptions of organizational justice are important predictors of job satisfaction, organizational commitment, turnover intention, job performance, and organizational citizenship behaviors (Colquitt et al. 2001; Cohen-Charash and Spector 2001).

Despite its relevance, organizational justice has not received substantial attention in public administration scholarship. Further, although the larger community of organizational researchers already have engaged in considerable study of organizational justice, only a small amount of that work has been completed in government agencies (Alexander and Ruderman 1987). The limited amount of research that has been completed in public sector settings has provided some evidence about the importance of fairness in managing employees in government agencies. For instance, Choi (forthcoming) and Rubin (2009) have found that federal employees’ perceptions of procedural and distributive fairness are closely related to their job satisfaction, trust in management, and turnover intention. In another recent study, Hassan and Rohrbaugh (forthcoming) have shown that the perception of organizational justice is an important predictor of organizational commitment of employees in state agencies. Further, Kurland and Egan (1999) have found that procedural and distributive justice perceptions are positively linked with local government employees’ satisfaction with their supervisors. These
findings indicate that employees in all levels of government value fair treatment, but they do not explain how fairness perceptions lead to such outcomes.

The group value model (Lind and Tyler 1988), relational model of authority (Tyler and Lind 1992) and group engagement model (Tyler and Blader 2000, 2003) provide important insight about why employees value fair treatment in the workplace. These group-oriented organizational justice theories are based on the social identity perspective (Tajfel and Turner 1979, 1986; Turner 1985) and suggest that employees value fairness because it provides them with important information about their social status and standing in their organization. According to these perspectives, the positive feedback employees receive from their experiences with procedural and distributive justice enhances their collective self-esteem and helps them to develop a positive social identity (Tyler and Blader 2000). Identification with the organization, from this perspective, plays a mediating role in the relation between fair treatment and employees’ cooperative attitudes and behaviors towards their organization.

**Organizational Identification**

Organizational identification refers to perception of oneness with or belongingness to the organization, where individuals define themselves in terms of the organization of which they are a member (Ashforth and Mael 1989; Ashforth et al. 2008). This definition has roots in the social identity perspective, which comprises theories of social identity (Tajfel 1978; Tajfel and Turner 1979, 1986) and self-categorization (Turner 1985). Social identity from this perspective is defined as “the individual’s knowledge that he belongs to certain social groups together with some emotional and value significance to him of the group membership” (Tajfel, 1972: 292). Additionally, identification is a socio-cognitive process through which individuals categorize themselves and others as members of particular groups because they need to simplify and make
sense of the complex social world (Hogg and Terry 2001). Social categorization provides individuals with a means to clarify who they are (Turner 1985) and, subsequently, guide their interactions with members of their own and other groups (Hogg and Terry 2001).

An organization can be a primary source of an individual’s social identity (Hogg and Terry 2001). Further, organizational identification has important implications for both employees and the organizations in which they work. Identification with an organization helps individuals to enhance collective self-esteem (Ashforth et al. 2008). Additionally, when employees identify strongly with their organization, the differences between their personal and their organizational identities become blurred (Dutton, Dukerich, and Harquail 1994). Consequently, employees assimilate into their self-concepts the distinctive, central, and enduring attributes that define their organization (Dutton et al. 1994). Employees feel the successes and failures of their organization as their own, and they engage in behaviors that help the organization to achieve its goals.

Organizational identification is a multidimensional construct that consists of a cognitive and an evaluative component. The cognitive component captures the extent to which individuals’ organizational membership is self-defining and how they see themselves in relation to their organization (Ashforth et al. 2008). The evaluative component encompasses the value that individuals attach to their organizational membership (Ashforth et al. 2008). Specifically, it indicates what individuals think and feel about their organizational membership (e.g., pride versus shame). It is closely associated with individuals’ emotional reactions to their organization that can be both positive and negative (Dutton et al. 1994).

Much of past research on organizational identification focused on the effects of its cognitive component on employees’ work attitudes and behaviors. The evaluative component of organizational identification has received only limited attention in previous research (Blader and
Tyler 2009). This is quite surprising, given that the impact of individuals’ social identity on their attitudes and behavior is determined largely by the extent to which their identity fosters personal and collective self-esteem and contributes positively to their self-image (Haslam, Powell, and Turner 2000). Focusing on the evaluative component, therefore, appears to be critical for a better understanding of the impact of organizational identification on work attitudes and behaviors (Ashmore, Deaux, and McLaughlin-Volpe 2004; Blader and Tyler 2009).

This study focused on the role of the evaluative component of organizational identification—pride in organizational membership—as a mediator of the relationship between public sector employees’ perceptions of procedural and distributive justice and their job involvement and turnover intention. Pride in organizational membership refers to employees’ evaluation of the general worth and status of their employing organization (Blader and Tyler 2009). It is an intergroup evaluative judgment that directly captures the evaluative aspect of group identification (Blader and Tyler 2009). While making such judgments, employees pay close attention to the values, beliefs, and goals that they perceive as commonly held by themselves and their organization (Blader and Tyler 2009; Tyler 2001).

**Hypothesis for Procedural Justice and Organizational Identification**

This study expected that perceptions of procedural fairness would have a positive effect on professional employees’ organizational identification. According to the group-oriented organizational justice theories (Lind and Tyler 1988; Tyler and Lind 1992; Tyler and Blader 2000), an important basis of employees’ evaluation of the status of their organizational membership is likely to be their perceptions of fairness in the formal policies and procedures used in the decision-making processes of their organizations. Procedural justice provides feedback on which employees rely to determine the nature of their relationship with their
organization (Lind and Tyler 1988; Tyler and Blader 2000; Tyler and Lind 1992). This feedback specifically indicates employees’ social status and standing in an organization, whether they can develop and maintain satisfying social identity based on their organizational membership (Tyler and Blader 2000, 2003). From this perspective, professional employees’ pride in their organizational membership is expected to flow directly from their perception of procedural justice. Past research also has provided support for this argument (Blader and Tyler 2009; Tyler and Blader 2000; Tyler and Degoe 1995). These studies, however, did not focus on employees in a public sector setting.

**H₁** Procedural justice will have a positive influence on organizational identification.

**Hypothesis for Distributive Justice and Organizational Identification**

Another important basis of employees’ evaluation of the status of their organizational membership is their perception of the extent to which work-related rewards are allocated fairly in their organization (Blader and Tyler 2009). Employees generally expect that the distribution of organizational rewards will be proportional to their work efforts (Adams 1965; Homans 1961). Further, it is widely acknowledged that equity in the allocation of rewards is an important source of employees’ work motivation (Greenberg 1982; Latham and Pinder 2005). There also is a growing body of work that indicates that rewards and resources have symbolic value beyond their instrumental effects (Jenkins, Mitra, Gupta, and Shaw 1998; Porter, Bigley, and Steers 1996). The group engagement model suggests that distributive justice provides information similar to that conveyed through procedural justice (Tyler and Blader 2000, 2003). It also indicates to employees whether they can safely make identity-related investments in their organization (Blader and Tyler 2009). Hence, distributive justice is likely to have a positive effect on professional employees’ organizational identification. Two recent field studies have
found a positive relation between distributive justice and organizational identification (Blader and Tyler 2009; Olkkonen and Lipponen 2006), but this linkage has not been tested in a government work setting. Thus, the present study examined the following hypothesis:

\[ H_2 \] Distributive justice will have a positive influence on organizational identification.

**Hypothesis for Organizational Identification and Job Involvement**

The present study anticipated that organizational identification will have a positive influence on professional employees’ job involvement. The social identity perspective suggests that, when individuals’ make status judgments about their group membership, they focus on their feelings about the prototypical characteristics that define the group (Tajfel 1978). Positive evaluation of group membership increases individuals’ collective self-esteem and contributes positively to their self-concept (Ellemers, Kortekaas, and Ouwerkerk 1999; Smith and Tyler 1997). Positive assessment of group membership, therefore, is likely to result in the blurring of differences between individuals’ personal and group identities (Hogg and Terry 2001). Hence, pride in organizational membership may lead employees to act in accordance with their organization’s values, beliefs, norms, and goals (Hogg and Terry 2001). Following this perspective, one might argue that, when professional employees take pride in their organizational membership, they are likely to internalize the goals and values of their organization as their own which, in turn, may motivate them to become more involved in their jobs (Van Knippenberg 2000). Hence, the following hypothesis was tested in the present study:

\[ H_3 \] Organization identification will have a positive influence on job involvement.

**Hypothesis for Organizational Identification and Turnover Intention**

The present study anticipated that, when professional employees take pride in their organizational membership, they are more likely to remain with their organization. The social
identity perspective suggests that identification is a socio-cognitive process in which individuals evaluate the status of their own group by comparing it with other groups on several value dimensions (Tajfel and Tuner 1979, 1986). Favorable comparisons between the in-group and out-groups provide in-group members with a sense of prestige and positive social identity. In contrast, unfavorable comparisons between the in-group and out-groups provide in-group members with a sense of low prestige and negative social identity. Additionally, the social identity perspective suggests that enhancing self-esteem is a fundamental human motivation (Tajfel and Turner 1979, 1986). The need for positive self-esteem motivates individuals to enhance the image of their own group in comparison with other groups. Further, when a group lacks a positive image, its members may attempt to disassociate themselves cognitively from that group and seek membership in a higher status group (Tajfel and Tuner 1979, 1986). From this perspective, when membership with a public agency helps employees to maintain a positive social identity, they are less likely to disassociate themselves from that agency. Several previous studies have found a negative relation between organizational identification and turnover intention (Abrams, Ando, and Hinkle 1998; Moura, Abrams, Retter, Gunnersdottir, and Ando 2009; Olkkonen and Lipponen 2006). However, this research focused on the cognitive rather than the evaluative aspect of organizational identification.

H₄ Organizational identification will have a negative influence on turnover intention.

**Hypothesis for the Mediating Role of Organizational Identification**

When professional employees in a government agency perceive that their work outcomes, as well as the administrative procedures leading to the decisions about those outcomes, are fair, they are likely to become more involved in their jobs and continue working in that agency. This study anticipated that these positive influences would be mediated by their organizational
identification. The group engagement model (Tyler and Blader 2000, 2003) suggests that employees’ cooperative attitudes and behaviors in the workplace largely are determined by their social identification with their organization. Further, individuals develop such identification through feedback about whether their work efforts are valued by their organization and whether they have high social status and standing in their organization (Tyler and Blader 2000, 2003). Additionally, this identity-relevant feedback originates from employees’ procedural and distributive justice experiences in their organization (Tyler and Blader 2000, 2003). Following these assertions, this study anticipated that perceptions of procedural and distributive justice would indirectly affect employees’ job involvement and turnover intention through their organizational identification. These indirect relationships have not been thoroughly examined in previous research. In a recent study, Olkonnen and Lipponen (2006) surveyed 270 professional employees in a Finish research institute and found the only existing support for the mediating role of organizational identification in the relation between justice perceptions and turnover intention. Also, the relations between job involvement and both procedural justice and distributive justice have not been thoroughly examined. Neither has the role of organizational identification as a mediator in the relationship between perceptions of organizational justice and job involvement been investigated in previous research.

**H₅** The effects of procedural justice on job involvement and turnover intention will be mediated by organizational identification.

**H₆** The effects of distributive justice on job involvement and turnover intention will be mediated by organizational identification.
Hypothesis for Job Involvement and Turnover Intention

The final hypothesis that this study examined concerns the effect of job involvement on professional employees’ intention to leave their agency. When employees in an organization find their work important, meaningful, and intrinsically rewarding, they generally become highly engaged in their work. Additionally, when employees are highly engaged in their job, they are more likely to stay in that job and in that organization. Past research also consistently found a moderate relationship between job involvement and turnover intention. A meta-analysis of job involvement by Brown (1996) reported a significant negative correlation between job involvement and actual turnover, as well as between job involvement and turnover intention. Given these results, a similar pattern of connection was expected in the present study:

\[ H_7 \] Job involvement will have a negative influence on turnover intention.

METHOD OF THE STUDY

The present study was conducted with an organizational survey of all employees in geographically dispersed offices of a New York State agency with twelve distinct divisions of operation. Before initiating the study, the state agency was experiencing a high level of turnover of professional and technical employees.\(^3\) This survey was conducted as part of a long-term research project undertaken by the state agency with a goal of assessing and improving its work climate and increasing employees’ organizational identification and reducing turnover. Data were gathered through the design and use of a unique, eight-page survey of 2614 employees in 2008. Responsibility for internal distribution and collection of surveys was assigned to division managers of the state agency. Prior to distributing surveys, the division managers clearly communicated to all participants about the purpose of the study, the voluntary nature of their

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\(^3\) The annual rate of employee turnover in the state agency was estimated to be close to ten percent, a large portion of which included skilled professional and technical employees (e.g., auditors, accountants, lawyers, and information technology professionals).
participation, and the complete anonymity of their responses. Altogether, 2136 usable surveys were returned for an overall response rate of 82 percent; response rates by division ranged from a low of 70 percent to a high of 100 percent.

Because this study focused on the effects of professional employees’ perceptions of distributive and procedural justice on their organizational identification, job involvement, and turnover intention, only employees belonging to occupational groups classified as professional were included in the analysis. This included respondents who identified themselves as technical and managerial employees and were at and above the salary grade 18 and below salary grade 27. Using these criteria, data from 764 professional employees were included in the analysis. The professional employees in this agency primarily were auditors, lawyers, and information technology specialists. Demographic data for the sample are summarized in Tables 1 and 2.

Respondents completed a 130-item survey designed in large part to examine employees’ perceptions of their work climate, job characteristics, and work attitudes. The survey included items to assess employees’ perceptions of distributive and procedural justice, as well as their organizational identification, job involvement, and turnover intention. In addition to the variables that were relevant for the present study, data were collected for other agency, office and individual-level variables, the analysis of which is beyond the scope of this study. Most of the survey items were measured on a six-point (coded 1-6) strength of agreement (strongly disagree to strongly agree) or a five-point (coded 0–4) frequency of occurrence (never to almost always) scale except for the items for distributive justice, which are discussed below.  

4 Employees at the salary grade level 27 and above in New York State agencies are considered to be senior managers/executives and were not included in the data analysis.

5 A complete list of study items is provided in Table 4.
In organizational research, measures of distributive justice typically focus on employees’ perceptions of equity in the allocation of work-related rewards (Colquitt 2001). Distributive justice in this study was measured with three items that specifically focused on perceptions of equity in the allocation of work-related rewards among employees. These three items were measured on a six-point (coded 0-5) level of fairness scale (not fair at all to very fair). The reliability coefficient (i.e., Cronbach’s α) for these three items was 0.74.

Procedural justice in organizational research generally is assessed with either a direct or an indirect measurement approach (Colquitt and Shaw 2005). Direct measures of procedural justice explicitly ask participants about fairness of a particular decision-making process, and they are predominantly used in experimental design (Colquitt and Shaw 2005). Indirect measures of procedural justice are used more frequently in field studies. Further, items of an indirect measure do not explicitly focus on the fairness of a particular procedure; instead, such items focus on one or more determinants of procedural justice, such as the Leventhal’s (1980) procedural justice rules (Colquitt and Shaw 2005). This study relied on an indirect measurement approach. Six items were used to assess employees’ perceptions of procedural fairness that correspond with three of Leventhal’s (1980) six procedural justice rules: representation (i.e., voice opportunity), bias suppression, and ethicality. Cronbach’s α for these six items was 0.83.

Multiple items also were used to assess the three outcome measures. Organizational identification was measured with three items that focused on the evaluative aspect of organizational identification. These items were very similar to items previously used by Tyler and Blader (2000) to measure pride in group membership. The reliability coefficient for these three items was high (Cronbach’s α = 0.84). Further, job involvement was measured with three items that focused on the degree to which employees’ are engaged in their jobs or find carrying out their jobs in the present work environment as engaging (Paullay et al. 1994). Several recent
studies also have used similar items to measure employees’ job involvement in a public sector setting (Hassan and Rohrbaugh forthcoming; Ward and Park 2009). Cronbach’s α for these three items was 0.71. Further, turnover intention was measured with three items based on a measure developed by Sager, Griffeth, and Hom (1998). Cronbach’s α for these three items was 0.75

RESULTS

Univariate and Bivariate Analyses Results

Table 3 reports the univariate and bivariate statistics for the five measures used in the present study. The potential range of values for each scale varied depending on the number of items or questions used to create each measure. Distributions for four of the five measures were somewhat negatively skewed, with a greater number of respondents reporting a relatively high degree of procedural and distributive justice, organizational identification, and job involvement. Further, the distribution of the measurements of turnover intention was positively skewed with a greater number of professional employees reporting a relatively low level intention to leave their current organization. Although composite scores for all five measures were either positively or negatively skewed, the differences between the average scores and the scale midpoints were not very large. Further, the standard deviations for all of the measures were relatively high, indicating adequate variability in the data sufficient for further analysis.

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INSERT TABLE 3
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All ten correlations among the five measures were moderate and statistically significant ($p<0.05$). The highest observed correlation was between job involvement and turnover intention ($r = -0.60$) and the lowest was between distributive justice and job involvement ($r = 0.37$). The median correlation between study measures was .50. This indicates that, on average, the variance typically shared between two measures was limited to one-quarter of the total variance,
and no measure shared more than 36 percent of the variance with any other measure. Nevertheless, a considerable degree of interrelatedness between the study measures was expected with four hypothesized direct relationships, as well as the corresponding indirect relationships.

**Structural Equation Modeling Results**

Following the two-step process recommended by Kline (1998), the research hypotheses were tested with structural equation modeling. Confirmatory factor analyses (CFA) were conducted in the first step to assess the fit of the measurement model. The second step assessed fit of structural model with hypothesized relationships among the latent constructs. This study relied on one measure of absolute fit (i.e., the chi-square test), one measure of parsimony fit (i.e., RMSEA—the root mean square error of approximation), and two measures of relative fit (i.e., CFI—the comparative fit index—and NNFI/TLI—the non-normed fit index) to assess the fit of the measurement and structural models. A reasonably fit is indicated by CFI and NNFI values of .90 or above and RMSEA value of .08 or less (Hu and Bentler 1995; Schumacker and Lomax 2004).

**The Measurement Model**

Construct validities of the five measures were assessed with CFA. Table 4 summarizes CFA results for the full measurement model. As shown in Table 4, all of the scale items were found to have statistically significant factor loadings ($p<0.05$) for their respective latent constructs ($\lambda s = 0.54$ to 0.93 for distributive justice, $\lambda s = 0.54$ to 0.78 for procedural justice, $\lambda s = 0.70$ to 0.89 for organizational identification, $\lambda s = 0.59$ to 0.81 for job involvement, and $\lambda s = 0.56$ to 0.79 for turnover intention). Additionally, the composite reliabilities for all five factors were above the minimum threshold value of 0.70 (Hair, Anderson, Tatham, and Black 1998).
Further, the variance extracted estimates for all five constructs were very close to or higher than the recommended 50 percent value (Fornell and Larcker 1981).

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The fit indices obtained from SEM results indicated the measurement model provided good fit to the data. Three of the four fit indices indicated that the proposed measurement model provided a good fit to the data. The CFI for the full measurement model was 0.97, and the NNFI/TLI was 0.96. Both of these values were well above the minimum threshold that generally is necessary for a good fit. In addition, the RMSEA was 0.04, well below the maximum threshold value necessary for a satisfactory fit (i.e., 0.08). Only the maximum likelihood chi-square was inconsistent with a good model fit ($\chi^2 = 287.26$, $df = 125$, $p<0.05$). However, the lack of fit found by the chi-square test was not of particular concern because this index is sensitive to sample size, with larger samples inflating the chi-square and decreasing the likelihood of achieving a good model fit (Kline 1998). Overall, these results provided empirical support for the validities of the five latent constructs.\(^6\)

**The Structural Model**

Similar to the measurement model, the overall fit of the proposed structural model was assessed using the four fit indices discussed earlier. Three of the four fit indices indicated that the proposed structural model provided good fit to the data (CFI = 0.97, NNFI/TLI = 0.96, and RMSEA = 0.05).\(^7\) Only the maximum likelihood chi-square ($\chi^2 = 320.68$, $df = 129$, $p<0.05$) was

\(^6\) To assess discriminant validity of the procedural and distributive justice measures, an additional CFA was conducted in which distributive and procedural justice items loaded on two separate factors. The chi-square statistic of this two-factor solution then was compared with that of a solution in which distributive and procedural justice items loaded on a single factor. The difference between the chi-square statistics of these alternative models was found to be statistically significant ($\Delta \chi^2 = 189.76$, $df = 1$, $p<0.05$). A comparison of other fit indices indicated that the two-factor organizational justice solution (CFI = 0.97, NNFI/TLI = 0.95 and RMSEA = 0.06) provided a better fit to the data than the one-factor solution (CFI = 0.89, NNFI/TLI = 0.85 and RMSEA = 0.12).

\(^7\) Additional tests of the structural model were conducted by including a number of demographic variables. No significant differences in the results were found for participants' age, gender, race, job and organizational tenures.
inconsistent with a good model fit. However, the lack of fit found by the chi-square test was not of particular concern because this index is sensitive to sample size (Kline 1998). Figure 2 presents summary results of the structural model as standardized regression coefficients.

As shown in Figure 2, the $t$ statistics for path coefficients for all of the direct relationships were statistically significant ($p<0.05$) and in the predicted direction. As anticipated, perception of procedural fairness were found to have a strong effect on professional employees’ organizational identification ($\beta = 0.60$). Similarly, professional employees who reported that organizational rewards were fairly distributed showed a greater sense of identification with their agency ($\beta = 0.16$). When taken together, procedural and distributive perceptions explained half of the variance in organizational identification. In addition, the results indicated that professional employees who strongly identified with their agency also felt highly involved in their jobs ($\beta = 0.56$). They also were more inclined in continuing their work ($\beta = -0.33$) than those who weakly identified with their agency. Additionally, professional employees who felt highly involved in their work were less likely to leave their agency ($\beta = -0.42$). These findings provided strong empirical support for hypotheses one through four and hypothesis seven.

\[ \text{INSERT FIGURE 2} \]

\textbf{Mediation Analysis}

To assess whether organizational identification mediated the effects of procedural and distributive justice on professional employees’ job involvement and turnover intention, an additional structural model was run.\textsuperscript{8} This structural model incorporated both the direct and indirect paths to test the mediation effects specified in hypotheses five and six. Specifically, four

\textsuperscript{8} Figure 2 summarizes the results of the final structural model (partial mediation model). Two different structural models were run and tested in this study. The first was a full mediation model in which organizational identification was hypothesized to fully mediate the effects of procedural and distributive justice on job involvement and turnover intention. The data provided a good fit to this full mediation model ($\text{CFI}=0.97$, $\text{NNFI/TLI}=0.96$, $\text{RMSEA}=0.05$, $\chi^2 = 320.68$, $\text{df} = 129$, $p<0.05$). An alternative, partial mediation, model also was run, and the results indicated that the partial mediation model provided a better fit to the data than the full mediation model ($\text{CFI}=0.97$, $\text{NNFI/TLI}=0.96$, $\text{RMSEA}=0.05$, $\chi^2 = 287.27$, $\text{df} = 125$, $p<0.05$).
additional direct paths (procedural justice $\rightarrow$ job involvement, distributive justice $\rightarrow$ job involvement, procedural justice $\rightarrow$ turnover intention, and distributive justice $\rightarrow$ turnover intention) were added to the full mediation model (shown as dotted arrows in Figure 2). To draw a conclusion about mediation effects, this study relied on effect decomposition breakdowns for each independent measure, a process in which the total effect of an independent measure on a dependent measure is divided into its indirect and direct effects (Brown 1997). A significant indirect effect in the structural model indicates that a significant amount of the independent measure’s total effect on the dependent measure occurred through the mediating measure. Sobel’s Z statistic (1982) for each indirect path coefficient was calculated to determine whether the indirect effects were statistically significant. The significance (or non-significance) of the direct paths in the additional structural model was used as a basis to determine whether there was full versus partial mediation. Table 5 summarizes the results of these mediation analyses.

The results indicated that organizational identification fully mediated the effect of procedural justice on professional employees’ job involvement. As shown in Table 5, the coefficient for the indirect path connecting procedural justice with job involvement through organizational identification was significant (Sobel’s $Z = 6.58, p<0.05$), whereas the coefficient for the direct path was not significant (see Figure 2). In addition, the effect of procedural justice on professional employees’ turnover intention was partially mediated by their organizational identification. The coefficient for the indirect path connecting procedural justice with turnover intention through organizational identification was statistically significant (Sobel’s $Z = 4.65, p<0.05$). Procedural justice also was found to have a direct influence on professional employees’ turnover intention ($\beta = -0.16, p<0.05$). These results provided support for hypothesis five.
Empirical support also was found for hypothesis six. The coefficient for the indirect path from distributive justice to job involvement through organizational identification was statistically significant (Sobel’s Z = 2.80, p < 0.05), as was the coefficient for the direct path from distributive justice to job involvement (β = 0.14, p < 0.05). Hence organizational identification partially mediated the effect of distributive justice on professional employees’ job involvement. Organizational identification also was found to partially mediate the effect of distributive justice on professional employees’ turnover intention. As indicated in Table 5, the coefficient for the indirect path from distributive justice to turnover intention through organizational identification was statistically significant (Sobel’s Z = 2.57, p < 0.05). Distributive justice also was found to have a direct influence on employees’ turnover intention (β = -0.10, p < 0.05).

**DISCUSSION**

**Implications for Research and Practice**

The results of this study indicated that fairness perceptions play an important role in government agencies in terms of increasing employees’ organizational identification and job involvement and lowering their intention to leave their agency. This study also indicated that the effects of justice perceptions on professional employees’ job involvement and turnover intention were mediated by their identification with their agency. These findings are important because they provide a better understanding of how fairness perceptions may facilitate positive and prevent negative employee outcomes in government agencies. These findings also have extended previous research on organizational justice in government agencies (Choi forthcoming; Hassan and Rohrbaugh forthcoming; Kurland and Egan 1999; Rubin 2009). Specifically, no public management research to date has examined indirect effects of procedural and distributive justice on government employees’ job involvement and turnover intention. Additionally, this is
the first public sector study to examine how employees in government agencies think and feel about their organizational membership from the social identification perspective.

The results of this study also have implications for research and theory concerning organizational fairness. This study primarily relied on the group engagement model (Tyler and Blader 2000, 2003) to examine how fairness perceptions influence employee outcomes in a government agency. The group engagement model is a relatively new theory, and its arguments have not been thoroughly examined in different organizational contexts, especially in government agencies. This study provides further empirical evidence about this emerging domain of research. As indicated by the results, fair treatment may provide a symbolic message to employees about the extent to which their work efforts are valued by their organization, and this, in turn, may increase their organizational identification, job involvement, and intention to continue to work for their organization.

Procedural justice in this study was found to have greater impact than distributive justice on professional employees’ identification with their agency. This finding corroborates the assertion of the group engagement model (Tyler and Blader 2000, 2003) that fairness of decision-making procedures is the key source of employees’ organizational identification. Nevertheless, as indicated by this study, distributive justice also plays a significant role in the development of employees’ identification with their organization, although procedural justice has the stronger influence in increasing professional employees’ job involvement and reducing their turnover intention. These findings are consistent with previous research that has indicated that procedural justice is more strongly related to employees’ affective reactions toward their job and organization, whereas distributive justice has a stronger effect on employees’ satisfaction with outcomes such as pay and promotion (see, for example, Sweeney and McFarlin 1993; Masterson et al. 2000).
The present study also offers practical insight about how to increase professional employees’ job involvement and lessen their turnover intentions in government agencies. As indicated by the results, fostering organizational identification would be an effective strategy to increase professional employees’ job involvement and lower their intention to leave their agency. This study also indicated ways to enhance public sector employees’ organizational identification. Specifically, to foster employees’ organizational identification, public agencies should place a considerable effort in institutionalizing fair decision-making processes. Managers in public agencies can play an active role in establishing a fair work climate by making reward and resource allocations decisions in a visibly impartial manner. Further, managers can increase their subordinates’ perception of procedural fairness by providing them with opportunities to voice their concerns in decisions that affect their work, ensuring consistency in decision-making procedures, and making decisions based on accurate and timely information. Further, managers also can increase their subordinates’ perception of fairness by treating them with dignity and respect while implementing formal policies and procedures.

This study also found that distributive justice plays an important role in enhancing organizational identification and job involvement and reducing turnover intention. Government agencies, therefore, should pay greater attention to developing specific human resource policies that ensure equitable distribution of rewards and resources among employees (e.g., a performance-based reward scheme). However, any such initiative would need to be implemented with great care and guidance. Distributing rewards and resources among employees based on their efforts is likely to have a positive impact on their work motivation, involvement and performance (Greenberg 1982; Latham and Pinder 2005). However, relying on the equity principle alone may not be adequate for increasing an agency’s performance, because
it requires one to differentiate between organizational members, thereby undermining harmony
and interpersonal cooperation in work groups (Leventhal 1976).

**Limitations and Directions for Future Research**

The contribution of this research should be acknowledged in light of its limitation. The
study relied on a cross-sectional design and, thus, conclusions regarding causality should be
made with great caution. Further, data for this study were collected from employees in one large
state agency in New York. Although this organization was charged with diverse public
responsibilities and was widely dispersed geographically, the results reported in this study may
have somewhat limited generalizability. Hence, additional empirical tests of the findings with
samples taken from a broader range of public organizations and geographic areas would provide
more validity for the hypothesized research model.

This study shares the potential problem of common method bias (Campbell and Fiske
1959) with all prior studies that have focused on organizational justice using self-report data
from a single source such as an interview protocol or a questionnaire. In brief, the measurement
of multiple variables through a common method may overestimate the actual magnitude of their
interrelations due to the contribution of a pattern of response covariance evoked solely by use of
one assessment form. Self-reports in organizational research, for example, may induce patterns
of response set such as social desirability, acquiescence, or deviation that can increase observed
correlations between measures.

Statistical remedies for common method bias remain problematic (Podsakoff,
MacKenzie, Lee, and Podsakoff 2003). A variety of non-statistical procedures were introduced
in the design of the present study to reduce potential common method bias. Anonymity of
response was assured repeatedly in all correspondence and evidenced in every aspect of data
collection. Questionnaires were completed at different times and in multiple office locations. Further, the particular items used in the present study were interspersed widely over seven pages and nine distinct sections within the larger 130-item questionnaire. These items also were almost evenly split in the directionality of their wording (i.e., both positive and negative statements). Varied response formats were presented. Although no items for “marker” variables were inserted strategically in the questionnaire to allow for the statistical control of common method bias (Podsakoff et al. 2003), the results of the present study produced some evidence that the design procedures (discussed above) may have been at least somewhat effective. For example, bivariate analysis indicated that variance shared on average between two measures was limited to one-quarter of the total variance, despite an expectation in research design of a high degree of relatedness between the measures. Further, findings of this study were strengthened somewhat by the use of structural equation modeling, as it allows testing of the hypothesized model in the absence of measurement errors and other extraneous influences through simultaneous estimation of both the measurement and theoretical models (Hoyle 1995). These steps successfully attenuated, if not eliminated, common method bias in the results. Nevertheless, future research should rely on longitudinal designs and multiple sources of data to test the hypothesized relationships.

This study primarily examined the evaluative aspect of organizational identification as a mediator of the relationship between justice perceptions and government employees’ work attitudes. However, the cognitive aspect of organizational identification also plays an important role in shaping employees’ cooperative work attitudes and behaviors (Riketta 2005; Ashforth et al. 2008). Hence, a logical extension of this study would be to focus on both the cognitive and evaluative components of organizational identification while assessing the effects of justice perceptions on government employees’ job involvement and turnover intention. Additionally, to
fully assess the theoretical impact of this research, future studies should consider examining alternative variables as mediators in the relation between fairness perceptions and government employees’ cooperative attitudes and behaviors. Recently, Choi (forthcoming) and Rubin (2009) have found that trust in management is an important outcome of federal employees’ perceptions of organizational justice. Emerging research also indicates that trust in management plays an important role in government employees’ satisfaction with their job and organization and their perception of work unit performance (Cho and Ringquist 2011). It will be worthwhile to examine whether organizational identification and trust in management differentially mediate the effects of justice perceptions on government employees’ in-role (e.g., job performance) and extra-role behaviors (e.g., voluntary learning behavior and interpersonal helping behavior).
Figure 1
Research Framework

Organizational Identification

Procedural Justice

H1

H2

Distributive Justice

H5-H6

H3

Job Involvement

H4

Turnover Intention

H7
Figure 2
Results of the Final Structural Model

Model Fit Statistics: CFI = .97, NNFI/TLI = .96, RMSEA = .04, \( \chi^2 \) (df = 125) = 287.26, \( p < .05 \)
*Standardized path coefficients significant at \( p < .05 \)
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>4.7%</td>
</tr>
<tr>
<td>African American</td>
<td>6.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.6%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.5%</td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>86.5%</td>
</tr>
<tr>
<td>Other</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>45.4%</td>
</tr>
<tr>
<td>Male</td>
<td>54.6%</td>
</tr>
<tr>
<td><strong>Nature of Position</strong></td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td>85.1%</td>
</tr>
<tr>
<td>Managerial</td>
<td>14.9%</td>
</tr>
<tr>
<td>Measures</td>
<td>Minimum</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Age</td>
<td>23</td>
</tr>
<tr>
<td>Years in Current Position</td>
<td>1</td>
</tr>
<tr>
<td>Years in Agency</td>
<td>1</td>
</tr>
<tr>
<td>Years in State Government</td>
<td>1</td>
</tr>
<tr>
<td>Measures</td>
<td>Means</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>1. Procedural Justice</td>
<td>24.68</td>
</tr>
<tr>
<td>2. Distributive Justice</td>
<td>11.77</td>
</tr>
<tr>
<td>3. Organizational Identification</td>
<td>15.28</td>
</tr>
<tr>
<td>4. Job Involvement</td>
<td>13.76</td>
</tr>
<tr>
<td>5. Turnover Intention</td>
<td>7.37</td>
</tr>
</tbody>
</table>

*Cronbach’s α for the five measures are shown in parentheses*
### Table 4
Properties of the Full Measurement Model

<table>
<thead>
<tr>
<th>Constructs and Indicators</th>
<th>Standardized Factor Loadings</th>
<th>Indicator Reliability</th>
<th>Composite Reliability</th>
<th>Variance Extracted Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procedural Justice</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.83 0.45</td>
</tr>
<tr>
<td>Upper level managers are courteous to employees</td>
<td>0.70*</td>
<td>0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are treated fairly</td>
<td>0.78*</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are encouraged to raise issues and concerns at work</td>
<td>0.65*</td>
<td>0.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Important decisions are made top down without any consultation (R)</td>
<td>0.60*</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel decisions are influenced by factors like ethnicity, age, or gender of employees (R)</td>
<td>0.54*</td>
<td>0.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assignments are given on the basis of favoritism without regard to merit (R)</td>
<td>0.74*</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Distributive Fairness</strong></td>
<td>0.77 0.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How fair and equitable do you consider promotion examinations to be?</td>
<td>0.67*</td>
<td>0.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How fair and equitable do you consider career opportunities to be?</td>
<td>0.93*</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How fair and equitable do you consider training opportunities to be?</td>
<td>0.54*</td>
<td>0.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Organizational Identification</strong></td>
<td>0.84 0.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I speak positively about this organization to outsiders</td>
<td>0.79*</td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am embarrassed to say that I work in this organization (R)</td>
<td>0.70*</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am proud to tell others that I am part of this organization</td>
<td>0.89*</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Job Involvement</strong></td>
<td>0.71 0.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is hard for me to get very involved in my current job (R)</td>
<td>0.61*</td>
<td>0.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At the end of the day, I feel good about the work I do in this organization</td>
<td>0.59*</td>
<td>0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time seems to drag while I am on the job (R)</td>
<td>0.81*</td>
<td>0.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Turnover Intention</strong></td>
<td>0.76 0.52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I plan to be working here three years from now (R)</td>
<td>0.56*</td>
<td>0.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would quit this organization tomorrow if it were possible</td>
<td>0.79*</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think about getting a different job outside this organization</td>
<td>0.79*</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model Fit Statistics: $\chi^2$ (125) = 287.26, p < .05, CFI = 0.97, NNFI/TLI = 0.96 and RMSEA = 0.04

* p < 0.05
Table 5
Coefficients for the Standardized Direct, Indirect and Total Effects

<table>
<thead>
<tr>
<th>Paths</th>
<th>Direct Effects</th>
<th>Indirect Effects</th>
<th>Total Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural Justice → Organizational Identification</td>
<td>0.60*</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Distributive Justice → Organizational Identification</td>
<td>0.16*</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>Procedural Justice → Job Involvement</td>
<td>0.02</td>
<td>0.34</td>
<td></td>
</tr>
<tr>
<td>Procedural Justice → Turnover Intention</td>
<td>-0.16*</td>
<td>-0.50</td>
<td></td>
</tr>
<tr>
<td>Distributive Justice → Job Involvement</td>
<td>0.14*</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>Distributive Justice → Turnover Intention</td>
<td>-0.10*</td>
<td>-0.24</td>
<td></td>
</tr>
<tr>
<td>Organizational Identification → Turnover Intention</td>
<td>-0.33*</td>
<td>-0.57</td>
<td></td>
</tr>
<tr>
<td>Procedural Justice → organizational identification → Job Involvement</td>
<td>0.34* (6.58)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural Justice → organizational identification → Turnover Intention</td>
<td>-0.20* (4.65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributive Justice → organizational identification → Job Involvement</td>
<td>0.09* (2.80)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributive Justice → organizational identification → Turnover Intention</td>
<td>-0.05* (2.57)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributive Justice → Job Involvement → Turnover Intention</td>
<td>-0.06* (2.74)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Identification → Job Involvement → Turnover Intention</td>
<td>-0.24* (5.90)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sobel’s Z statistics are shown in parenthesis next to the indirect effects
*p<0.05
REFERENCES


Hassan, S., and J. Rohrbaugh. forthcoming. The role of psychological climate on public sector employees' affective commitment: An empirical assessment for three occupational groups. *International Public Management Journal*


