

# PUBLIC MANAGERS AND JOB SATISFACTION: EXPLORING AN EFFECTIVE WAY TO IMPROVE THEIR JOB SATISFACTION

Yongbeom HUR

Yongbeom HUR

Professor, Department of Government and Justice Studies,  
Appalachian State University, Boone, North Carolina, United  
States of America  
Tel.: 001-828-262.8328  
E-mail: hury@appstate.edu

## Abstract

Extensive research indicates that enhancing employee satisfaction and motivation leads to improved organizational performance. Given the crucial role public managers play in delivering quality public services, ensuring their satisfaction becomes paramount. This study, based on survey data from approximately half a million U.S. federal government employees, explores the factors influencing public managers' job satisfaction and investigates whether managerial positions moderate these effects.

The findings reveal that overall job satisfaction is positively impacted by satisfaction with both intrinsic and extrinsic job aspects, irrespective of managerial status. However, the influence of intrinsic and extrinsic factors on overall job satisfaction undergoes significant changes when a public employee assumes a managerial position.

**Keywords:** job satisfaction, public managers, intrinsic/ extrinsic aspects of a job.

## **1. Introduction**

Public organizations are frequently criticized for their perceived lower performance compared to for-profit counterparts (Perry, Hondeghem and Wise, 2010; Rainey, 2009). A contributing factor to this diminished performance is often attributed to low job satisfaction among employees (Hsieh, 2016; Kjeldsen and Hansen, 2018). Research indicates that increased job satisfaction correlates with enhanced employee motivation, ultimately leading to higher levels of work performance (Bowling, 2013; Jalagat, 2016; Wofford, 1971).

Job satisfaction stands out as a widely explored theme in organizational research, and the field of public administration is no exception (Cantarelli, Belardinelli and Belle, 2016; Ellickson and Logsdon, 2002). Recognized as a reliable predictor of work productivity (Choi and Ha, 2018; Petty, McGee and Cavender, 1984) and organizations' success (Daley, 1986; Eggerth, 2015), job satisfaction is linked to heightened employee motivation and improved work performance (Jalagat, 2016; Springer, 2011). Despite the extensive research over 45 years, Cantarelli, Belardinelli and Belle (2016) highlight in their recent meta-analysis a lack of comprehensive quantitative reviews on job satisfaction correlates in public administration literature, stating that the absence of clear agreement on basic questions leaves our field without a clear direction (p. 117). Moreover, considering the pivotal role public managers play in delivering quality public services, it is surprising that empirical research systematically examining job satisfaction among public managers is notably scarce (Igalens and Roussel, 1999). Any decline in job satisfaction among public managers could potentially lead to a decrease in departmental (or organizational) performance, ultimately impacting citizens' access to the quality public services they rightfully deserve.

This study aims to expand our understanding of job satisfaction among public managers. Utilizing a substantial sample size (approximately half a million), the research systematically compares job satisfaction across managers and non-managers, considering various facets such as intrinsic and extrinsic components. Additionally, the study investigates whether managerial status acts as a moderating factor in job satisfaction among public employees. The outcomes of this research are anticipated to contribute to the development of effective human resource management practices tailored for public managers. This, in turn, is expected to enhance the motivation of public managers, leading to improved organizational performance.

## **2. Theoretical background**

### ***2.1. General determinants of job satisfaction***

Job satisfaction is a key determinant in enhancing work motivation (Igalens and Roussel, 1999). While there is no universally agreed-upon definition, job satisfaction can be interpreted as an overall affective orientation individuals hold toward their current work (Kalleberg, 1977). It may be a concept encompassing both job features and the job-related

environment (Igalens and Roussel, 1999). Providing a more comprehensive perspective, Locke (1969) characterizes job satisfaction as a pleasurable emotional state resulting from the evaluation of one's job as aligning with or facilitating the accomplishment of one's job values. Researchers have elucidated the link between employees' job satisfaction and their motivation (Jalagat, 2016; Van Scheers and Botha, 2014; Wright, 2001).

Since the initial exploration of job satisfaction by Hoppock in 1935, researchers have extensively examined various factors influencing job satisfaction and have identified work environments (including the job itself) and individual characteristics as two major contributors (Agho, Mueller and Price, 1993; Ellickson and Logsdon, 2002). Prominent situational factors affecting job satisfaction in the work environment include job characteristics, rewards, organizational size, organizational structure, and organizational climate (Keller and Semmer, 2013; Ronan, 1970). Key individual characteristics or dispositional factors influencing job satisfaction encompass age, race, gender, educational backgrounds, tenure in an organization, and managerial status (Furnham *et al.*, 2002; Ronan, 1970). While empirical findings may not consistently align, a general prediction suggests that older, white, female, less educated individuals with longer tenures or holding managerial positions tend to exhibit higher job satisfaction. Conversely, younger, non-Caucasian, male, more educated individuals with shorter tenures or in non-managerial positions may experience lower job satisfaction.

## ***2.2. Work orientations and job satisfaction***

Job satisfaction tends to be high when employees receive what they desire from their jobs (deLeon and Taher, 1996; Zou, 2015). It is a significant factor contributing to increased work motivation. Work orientations, encompassing the rewards employees prefer and the feelings they seek to experience at work, play a crucial role in this context. Job satisfaction is more likely when employees' work orientations align with their workplace experiences (Furåker, 2019; Schomburg, 2007; Zou, 2015). For instance, if employees prioritize intrinsic rewards over extrinsic ones in their work orientations, they will find satisfaction in receiving expected intrinsic rewards, even if their extrinsic rewards differ from those received by others. Among various approaches to work orientations, Herzberg's (1968) differentiation between intrinsic and extrinsic orientations has been predominant in research on work orientations (De Vaus and McAllister, 1991). According to Herzberg (1968), intrinsic factors are linked to the work itself, such as recognition, responsibility, achievement, and self-development opportunities, while extrinsic factors are associated with working conditions and environments, including salary, benefits, interpersonal relationships, and company policies. Some researchers contend that job satisfaction is more closely tied to the intrinsic aspects of a job than its extrinsic aspects (Decker, Harris-Kojetin and Bercovitz, 2009; Hegney, Plank and Parker, 2006; Herzberg, Mausner and Snyderman, 1959).

### ***2.3. Job satisfaction among public employees***

Researchers have undertaken comparative analyses of job satisfaction, specifically examining differences between public sector employees and those in other sectors, aiming to gain a nuanced understanding of public employees' job satisfaction (Emmert and Taher, 1992). These comparative studies have explored job satisfaction in various contexts, such as between public and private employees/ managers (Andrade and Westover, 2023; Markovits *et al.*, 2010; Schneider and Vaught, 1993; Tsigilis, Zachopoulou and Grammatikopoulos, 2006), and between public and nonprofit employees/ managers (Borzaga and Tortia, 2006; Lee, 2016). Despite diligent efforts in these comparative studies, the findings have been perplexing. When comparing job satisfaction between public and private employees, some studies reported higher job satisfaction among private employees (Rainey and Bozeman, 2000; Wang, Yang and Wang, 2012), while others found no significant difference (Schneider and Vaught, 1993) or even presented contrasting results – indicating that public employees were more satisfied at work than their private counterparts (Cho and Lee, 2001).

Comparative studies between public and private employees have also delved into the major factors influencing their job satisfaction. Focusing on intrinsic and extrinsic aspects of the job, some researchers found that public employees' job satisfaction was more significantly influenced by intrinsic factors than their private counterparts (Wang, Yang and Wang, 2012). In contrast, other studies reported that intrinsic factors had a positive impact on job satisfaction for both public and private employees (Maidani, 1991). Diverse approaches were employed, revealing that public employees' job satisfaction was positively affected by various factors, including a 'sense of being able to make a difference' (Falcone, 1991) and 'organizational commitment' (Agarwal and Sajid, 2017). Despite the varied findings across different research studies, it remains challenging to conclusively assert that certain factors exert a greater influence on public employees' job satisfaction than others. However, in a general sense, both public and private employees tend to be positively affected by variables such as a pleasant atmosphere, friendly coworkers, task variety, and having a meaningful job (e.g., Agarwal and Sajid, 2017; DeSantis and Durst, 1996; Wang, Yang and Wang, 2012).

Extensive studies have investigated the determinants of job satisfaction for public employees, particularly focusing on intrinsic and extrinsic aspects of the job, yielding mixed results. Some studies have reported that intrinsic aspects of a job exhibit positive and significant effects on public employees' job satisfaction (Ayalew *et al.*, 2021; Durst and DeSantis, 1997). On the other hand, alternative research suggests that public employees' job satisfaction is positively influenced by both intrinsic and extrinsic aspects of a job (Ellickson and Logsdon, 2002; Yang and Wang, 2013). Drawing on the job characteristics theory proposed by Hackman and Oldham (1975), Reiner and Zhao (1999) found that skill variety and task significance exerted positive influences on public employees' job satisfaction when examining five categories of intrinsic aspects of a job.

Nonetheless, there has been limited research exploring the determinants of job satisfaction specifically among public managers. Su and Bozeman (2009) discovered that public managers' job satisfaction was influenced by intrinsic factors, including career advancement and public service motivation, rather than extrinsic factors such as salary, job security, or low conflict working environments. While the determinants of job satisfaction were not explicitly tested, West and Berman (2009) conducted a survey revealing that public managers in special districts expressed satisfaction or high satisfaction with key factors influencing job satisfaction, such as pay, job security, and the meaningful impact they make on communities.

In this study, three hypotheses are proposed to investigate potential differences in job satisfaction between public managers and non-managerial public employees, considering the moderating effects of managerial status. It is well-established that managers experience higher levels of stress due to increased responsibilities (Cavanaugh *et al.*, 2000; Turnage and Spielberger, 1991). However, managers also typically receive better pay and benefits compared to non-managers. This study hypothesizes that public managers' job satisfaction is influenced equally by both higher stress and higher pay/ benefits. Consequently, no significant difference is anticipated in job satisfaction between public managers and non-managerial public employees.

- Hypothesis 1: Public managers and non-managerial public employees have a similar level of job satisfaction.

Researchers have observed that public employees' job satisfaction is more influenced by intrinsic aspects of a job compared to private employees, attributed to elevated levels of public service motivation (Bright, 2009; Durst and DeSantis, 1997). This study posits that there is no compelling reason to differentiate the level of public service motivation between public managers and non-managerial public employees. Accordingly, two hypotheses are proposed as follows.

- Hypothesis 2: Public employees' job satisfaction is more affected by intrinsic aspects of a job than extrinsic aspects of a job, regardless of managerial status.
- Hypothesis 3: Public employees' job satisfaction is not moderated by managerial status.

### **3. Methods**

Three distinct statistical tests were executed in this study. Initially, correlation analysis was undertaken among various aspects of a job and demographic variables to assess the extent of their correlation. Subsequently, t-tests were employed to compare the mean value of job satisfaction regarding various aspects of a job between managers and non-managers. Finally, regression analyses were conducted to investigate whether managerial status had a moderating effect on job satisfaction and to ascertain how public employees' job satisfaction was influenced by intrinsic and extrinsic aspects of a job.

### **3.1. Data**

This study utilized data from the Federal Employee Viewpoint Survey (FEVS), administered by the U.S. Office of Personnel Management in 2018. The FEVS, conducted biennially since 2002, serves as an organizational climate survey. The 2018 iteration was administered to full-time and part-time permanent employees across 82 U.S. departments and agencies. Among the 1,473,870 individuals sampled for the survey, 598,003 completed it, resulting in a response rate of 40.6% (The U.S. Office of Personnel Management, n.d.). Of the 577,101 survey participants who provided information on their current managerial positions, 17.5% held managerial positions, while 82.5% did not. Individuals holding managerial positions, including team leaders, supervisors, managers, or executives, were coded as managers in this dataset.

### **3.2. Main variables**

#### *(1) Dependent variable*

In this study, overall job satisfaction was assessed using a single item that asked participants ‘Considering everything, how satisfied are you with your job?’. Responses were rated on a scale from 1 (very dissatisfied) to 5 (very satisfied). While multiple-item measures are typically recommended, single-item measures are considered acceptable for gauging overall job satisfaction (Lepold *et al.*, 2018; Nagy, 2002).

#### *(2) Independent variables*

For independent variables, seven facets of job satisfaction were chosen, encompassing four intrinsic aspects of a job [(1) – (4)] and three extrinsic aspects of a job [(5) – (7)], as in Hur (2023): (1) Involvement in decision making; (2) Information sharing; (3) Recognition for a good job; (4) Received training; (5) Policies and practices of senior leaders; (6) Opportunities to get a better job in an organization; and (7) Pay. Survey participants were queried about their satisfaction levels with each of these job aspects, with responses rated on a scale from 1 (very dissatisfied) to 5 (very satisfied).

While Herzberg’s two-factor theory has been widely used, the categorization of job aspects into intrinsic and extrinsic elements has faced criticism for its simplicity (e.g., House and Wigdor, 1967; Judge, Heller and Mount, 2002). In order to explore the underlying dimensions or factors, a factor analysis was conducted using the seven selected variables (Cattell, 1965). The eigenvalue for one factor was 4.4, and all other factors had eigenvalues less than one in this study. Following Kaiser’s criterion (Kaiser, 1960), which suggests retaining factors with eigenvalues greater than one, it was found that one dimension adequately represented these seven variables, irrespective of whether they were intrinsic or extrinsic. To assess internal consistency or reliability of these seven variables, Cronbach’s alpha value was computed. A Cronbach’s alpha value greater than 0.7 is typically recommended for internal consistency or reliability (Cronbach, 1951; Nunnally, 1978). In this study, the calculated Cronbach’s alpha value was 0.9, indicating high internal consistency and reliability for these seven intrinsic and extrinsic factors.

### *(3) Demographic factors*

In the OLS regression and correlation analyses, several demographic factors were considered. These included sex (female: 1, male: 0), managerial status (manager/supervisor: 1, non-manager: 0), racial/ethnic status (racial/ethnic minority: 1, non-minority: 0), education level, and tenure with the federal government. Education level was coded as follows: 1 for 'less than bachelor's degree', 2 for 'bachelor's degree', and 3 for 'beyond bachelor's degree'. Tenure with the federal government was coded as 1 for fewer than 10 years, 2 for 10–20 years, and 3 for more than 20 years.

## **4. Findings**

### ***4.1. Descriptive statistics and correlations***

As depicted in Table 1, federal employees exhibited job satisfaction slightly above the midrange across all intrinsic and extrinsic aspects of a job (mean: 3.36 out of 5), with an overall job satisfaction score of 3.75 out of 5. Notably, the highest satisfaction was observed in the 'pay' category (mean: 3.58 out of 5), while the lowest satisfaction was reported for 'opportunities to get a better job in an organization' (mean: 3.04 out of 5). Among the survey participants, 44% were female employees (code: 1), while male employees (code: 0) constituted 56%. Additionally, 17% held managerial positions (code: 1), and 83% were non-managers (code: 0). Racial/ethnic minorities (code: 1) comprised 28%, while non-minorities (code: 0) constituted 72%. On average, the education level was at the bachelor's degree level (mean: 2.08 out of 3), and the average tenure with the federal government ranged between 10–20 years (mean: 1.85 out of 3).

All intrinsic and extrinsic variables demonstrated significant and positive correlations, suggesting that satisfaction with one aspect of a job was associated with satisfaction in other aspects. Conversely, dissatisfaction with one aspect corresponded to lower satisfaction in other aspects. Additionally, all intrinsic and extrinsic aspects of a job exhibited significant and positive correlations with overall job satisfaction.

Regarding correlations between intrinsic/extrinsic variables and demographic factors, all correlations were significant at a 5% or lower significance level, except for three correlations: between pay (PA) and sex ( $p = 0.60$ ), between involvement in decision making (ID) and minority status ( $p = 0.22$ ), and between received training (RT) and minority status ( $p = 0.15$ ). Notably, negative correlations were observed between sex and most intrinsic and extrinsic aspects of a job, as well as between sex and overall job satisfaction. This indicated that female employees (code: 1) were less satisfied with work conditions compared to their male counterparts (code: 0), contrary to a general prediction (e.g., Clark, 1997; Sloane and Williams, 2000; Sousa-Poza and Sousa-Poza, 2003). Similarly, positive correlations were found between education level and satisfaction with both intrinsic and extrinsic aspects of a job, including overall job satisfaction, which contradicted general predictions. However, positive correlations were consistent with predictions between tenure and job satisfaction, as well as between managerial status and job satisfaction (e.g., Oshagbemi,

1999). In other words, federal employees reported higher job satisfaction with increased organizational tenure or when holding managerial positions.

**Table 1:** Descriptive statistics

Variable	Mean	SD
Involvement in decision making (ID)	3.42	1.14
Information sharing (IS)	3.35	1.15
Recognition for a good job (RG)	3.40	1.18
Received training (RT)	3.46	1.13
Policies and practices of senior leaders (PP)	3.26	1.14
Opportunities to get a better job in org (OB)	3.04	1.23
Pay (PA)	3.58	1.14
Sex (SE) (0 or 1) (1: Female)	0.44	0.50
Education (ED) (1-3)	2.08	0.80
Tenure (TE) (1-3)	1.85	0.82
Manager (MA) (0 or 1) (1: manager)	0.17	0.38
Minority (MI) (0 or 1) (1: racioethnic minority)	0.28	0.45
Overall job satisfaction (OS)	3.75	1.07

Source: The author

#### ***4.2. Job satisfaction comparison***

T-tests were conducted to assess whether public managers and non-managerial public employees exhibited a similar level of job satisfaction (Hypothesis 1). The t-test results, as presented in Table 2, revealed that public managers demonstrated a significantly higher

**Table 2:** Satisfaction level comparison between managers and non-managers

Factor category	Variables	Satisfaction levels (out of 5)		T-statistic
		Managers	Non-Managers	
Intrinsic factors	Involvement in decision making (ID)	3.68	3.37	80.29***
	Information sharing (IS)	3.60	3.29	77.79***
	Recognition for a good job (RG)	3.63	3.36	68.08***
	Received training (RT)	3.67	3.42	65.60***
Extrinsic factors	Policies and practices of senior leaders (PP)	3.43	3.22	51.35***
	Opportunities to get a better job in org (OB)	3.40	2.97	99.98***
	Pay (PA)	3.81	3.53	73.06***
Overall job satisfaction		3.93	3.71	59.22***
Number of observations		167,378	409,757	

\* p < .05, \*\* p < .01, \*\*\* p < .001

Source: The author

overall job satisfaction level compared to non-managerial public employees. Furthermore, public managers' satisfaction levels with all intrinsic and extrinsic aspects of a job were also significantly higher than those of non-managerial public employees at the 0.1% significance level. Consequently, Hypothesis 1 was not supported. However, upon examining the effect size in each t-test, it was observed that the effect size was small. This conclusion was drawn based on Cohen's d value, where all comparisons yielded values less than 0.2. According to Cohen (1969; 1988), the effect size measures the magnitude of a treatment effect, and an effect size is considered small if Cohen's d is less than 0.2.

### 4.3. Determinants of job satisfaction

Hypothesis 2 was tested through regression analyses conducted separately for managers and non-managers using the data (see Table 3). The results in Table 3 indicate a strikingly similar pattern in the job satisfaction of both managers and non-managers. Involvement in decision making (ID) exhibited the largest coefficient for both groups, while information sharing (IS) showed the smallest coefficient for both managers and non-managers. Importantly, all intrinsic and extrinsic aspects of a job had significant and positive effects on overall job satisfaction for both managers and non-managers ( $p < 0.001$ ). Consequently, Hypothesis 2 was not supported.

To address the potential issue of multicollinearity due to high correlations among intrinsic aspects of a job, extrinsic aspects of a job, and between intrinsic and extrinsic aspects of a job (as observed in Table 1), Variance Inflation Factors (VIFs) were examined during regression analyses. Multicollinearity can undermine the statistical significance of independent variables in regression analysis, leading to less reliable results (Blalock Jr., 1963; Smith and Sasaki, 1979). Upon examination of VIFs, no evidence of multicollinearity was found in this study. According to the general rule for interpreting VIFs (O'Brien, 2007;

**Table 3:** Job satisfaction factors for managers and non-managers

Factor category	Variables	Dependent Variable: Overall Job Satisfaction	
		Managers	Non-managers
Intrinsic factors	Involvement in decision making (ID)	.24***	.25***
	Information sharing (IS)	.04***	.04***
	Recognition for a good job (RG)	.10***	.10***
	Received training (RT)	.14***	.16***
Extrinsic factors	Policies and practices of senior leaders (PP)	.12***	.11***
	Opportunities to get a better job in org (OB)	.12***	.11***
	Pay (PA)	.11***	.12***
Number of observations		99,084	464,879
Adjusted R-squared		.60	.58

**Note:** unstandardized coefficients are displayed. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**Source:** The author

Robinson and Schumacker, 2009), multicollinearity is considered present if the largest individual VIF is greater than 10, and if the mean of all VIFs is considerably larger than one (e.g., 10 or 30). In all regression analyses conducted in this study, both individual and mean VIFs were between 1 and 2, indicating the absence of multicollinearity.

#### ***4.4. Effects of managerial status***

In the regression analysis conducted with a combined dataset of public managers and non-managerial public employees, hypothesis 3 was tested. The analysis included intrinsic and extrinsic aspects of a job, demographic variables, and interaction terms between managerial status and intrinsic/ extrinsic aspects of a job, as well as between managerial status and demographic variables (see Table 4). The results revealed that satisfaction with all intrinsic and extrinsic aspects of a job demonstrated significant and positive effects on overall job satisfaction. Among the demographic variables, tenure and sex had significant and positive effects, indicating that public employees reported higher job satisfaction with increased organizational tenure and when they were female. On the other hand, education level and managerial status had significant and negative effects, suggesting that public employees reported lower job satisfaction with higher education levels and when holding managerial positions.

Concerning the interaction terms between intrinsic/extrinsic aspects of a job and managerial status, one intrinsic aspect of a job (i.e., RT) and all extrinsic aspects of a job demonstrated significant effects on job satisfaction. Specifically, interaction terms with PP and OB exhibited a significant and positive effect on job satisfaction, suggesting that managers placed more value on PP and OB in their job satisfaction compared to non-managers. In other words, when public managers are satisfied with PP or OB, they would experience significantly higher job satisfaction than non-managers. Conversely, interaction terms with RT and PA showed a significant and negative effect on job satisfaction, indicating that non-managers placed more value on RT and PA than managers. Therefore, when non-managerial public employees are satisfied with RT or PA, they would experience significantly higher job satisfaction than public managers. Regarding the interaction terms between demographic variables and managerial status, minority status, education level, and tenure demonstrated significant and positive effects. Although the effect of education level was negative (see the left column of Table 4), this negative effect became weaker if a public employee held a managerial position. Similarly, the effect of tenure was positive (see the left column of Table 4), and this positive effect became stronger if a public employee was a manager.

In summary, the effects of all extrinsic aspects of a job and one intrinsic aspect of a job significantly changed if a public employee was a manager. Additionally, the effects of most demographic variables on job satisfaction also significantly changed if a public employee was a manager. Therefore, Hypothesis 3 was not supported.

**Table 4:** Regression analysis results (dependent variable: overall job satisfaction)

Categories	Variables	Coefficients (Stand. Error)	Interaction terms with Manager (MA)	Coefficients (Stand. Error)
Intrinsic aspects	Involvement in decision making (ID)	.245*** (.002)	MA*ID	-.003 (.004)
	Information sharing (IS)	.040*** (.002)	MA*IS	.000 (.004)
	Recognition for a good job (RG)	.105*** (.001)	MA*RG	-.002 (.003)
	Received training (RT)	.165*** (.001)	MA*RT	-.021*** (.003)
Extrinsic aspects	Policies and practices of senior leaders (PP)	.104*** (.001)	MA*PP	.017*** (.003)
	Opportunities to get a better job in org (OB)	.111*** (.001)	MA*OB	.006+ (.003)
	Pay (PA)	.122*** (.001)	MA*PA	-.013*** (.003)
Demographic factors	Minority (MI)	-.002 (.002)	MA*MI	.028*** (.006)
	Education level (ED)	-.035*** (.001)	MA*ED	.007* (.003)
	Tenure (TE)	.005*** (.001)	MA*TE	.014*** (.003)
	Sex (SE)	.009*** (.002)	MA*SE	.008 (.005)
	Managerial status (MA)	-.099*** (.011)		
Number of observations		503,206		
F-statistic		30,475***		
R-squared		.582		

**Note:** unstandardized coefficients are displayed. +  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Source: The author

## 5. Summary and discussion

Given that public organizations are dedicated to providing quality public services, and recognizing the crucial role public managers play in this process, the motivation of public managers becomes increasingly vital. This study represents one of the initial efforts to comprehensively explore the determinants of job satisfaction for public managers, offering a comparison between job satisfaction among public managers and non-managerial public employees. With a substantial sample size exceeding half a million, this study addresses a significant gap in the literature by investigating how public managers attain job satisfaction and whether managerial status moderates job satisfaction in public organizations. The findings of this study also provide insights into the specific aspects of a job that should be emphasized to enhance job satisfaction of public managers.

This study yielded several key findings. Firstly, contrary to the prediction in Hypothesis 1, public managers exhibited a higher level of overall job satisfaction and were more satisfied with all aspects of their jobs (comprising all seven aspects in this study) compared to non-managerial public employees (refer to Table 2). This result aligns with previous research findings (Ellickson and Logsdon, 2002; Oshagbemi, 1999), suggesting that the positive impact of enhanced pay and benefits for public managers may outweigh the potential negative effects of the higher stress associated with managerial responsibilities. Further research is warranted to delve into the specific reasons behind the heightened job satisfaction among public managers.

Secondly, the job satisfaction of public employees, regardless of managerial status, was found to be similarly influenced by both intrinsic and extrinsic aspects of a job (refer to Table 3). This contrasts with the general argument that public employees are more affected by intrinsic aspects (Baard, Deci and Ryan, 2004; Herzberg, Mausner and Snyderman, 1959; Khojasteh, 1993; Vansteenkiste *et al.*, 2007). In fact, this finding aligns with previous research (Ellickson and Logsdon, 2002; Yang and Wang, 2013). Although both public managers and non-managerial public employees demonstrated similar determinants of job satisfaction, there was no evident indication that they were more influenced by intrinsic aspects of a job than extrinsic aspects. This suggests that human resource practices should encompass considerations for both intrinsic and extrinsic aspects of a job to enhance job satisfaction for public managers.

Thirdly, job satisfaction was found to be moderated by managerial status. In other words, the effects of certain intrinsic/extrinsic factors and demographic variables on job satisfaction significantly increased or decreased when public employees held managerial positions (refer to Table 4).

This study provides valuable insights that can contribute to the development of effective human resource management (HRM) policies tailored for public managers. Based on the study findings, it is recommended to design customized HRM policies that consider the specific preferences and priorities of public managers. For instance, the study highlights that policies and practices of senior leaders (PP) and opportunities to advance in the organization (OB) have a significantly higher impact on job satisfaction for public managers compared to non-managerial public employees, as indicated by the interaction terms in Table 4. This implies that public managers place greater importance on PP and OB in their job satisfaction. On the other hand, caution is advised in interpreting the study's findings, as they may not necessarily be applicable to public managers in different settings. Work orientations and the moderating effects of managerial status on overall job satisfaction may vary for public managers working at different levels of government in the U.S. or in other countries. Therefore, further research in diverse settings is needed to validate the effectiveness of the strategies suggested by this study in making public managers more satisfied at work.

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