Contents lists available at Science-Gate



International Journal of Advanced and Applied Sciences

Journal homepage: http://www.science-gate.com/IJAAS.html

# Factors influencing job satisfaction among academic and nonacademic staff: The case of SIMAD University



CrossMark

Ahmed Hassan Mohamud \*, Galad Mohamed Barre, Ibrahim Hassan Mohamud

Faculty of Management Sciences, SIMAD University, Mogadishu, Somalia

#### ARTICLE INFO

Article history: Received 2 January 2024 Received in revised form 28 August 2024 Accepted 21 October 2024 Keywords: Job satisfaction Higher education Academic staff Nonacademic staff Physical environment

#### ABSTRACT

A gap in empirical research has been identified regarding job satisfaction in Somalia's higher education sector, specifically at SIMAD University. To address this gap, this study aims to evaluate job satisfaction among both academic and nonacademic staff at the university. Data were collected from SIMAD University staff using purposive sampling, with 208 participants completing a structured questionnaire. The analysis was conducted using descriptive statistics and correlation analysis to assess job satisfaction levels, and Cronbach's alpha was used to test the reliability of the data. The findings show that, overall, staff have a high level of job satisfaction, though they expressed lower satisfaction in two areas: appointment and promotion processes and the physical work environment (organizational conditions). Additionally, all factors were positively correlated with job satisfaction. This study highlights areas where employee satisfaction could be improved, especially in the areas of promotions and the physical environment, and discusses the implications of these findings for university management.

© 2024 The Authors. Published by IASE. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

# 1. Introduction

Job satisfaction refers to employees' happiness with their work and their organizations (Jameel and Ahmad, 2019). It also measures how fulfilled you are with your job (Khan et al., 2021a). Education is one of the most essential institutions in a country. It deals with issues that affect the national interest. It needs to align with the public expectations to function well. Effective education relies on teachers' and other academic staff's efforts, dedication, and professionalism. They are more satisfied with their work when they have a positive and supportive environment in their institutions (Noordin and Jusoff, 2009). A positive university climate can enhance the academic quality and productivity, as well as the work satisfaction of the academic staff. Job satisfaction needs a supportive environment that fosters shared values and goals and generates positive energy for achievement. Deans and university department heads should engage with respectfully, transparently, lecturers and constructively, informing them about organizational

\* Corresponding Author.

Email Address: axgurey@simad.edu.so (A. H. Mohamud) https://doi.org/10.21833/ijaas.2024.11.005

Corresponding author's ORCID profile:

https://orcid.org/0000-0002-9959-6865

2313-626X/© 2024 The Authors. Published by IASE. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/) decisions and processes (Horoub and Zargar, 2022). This will improve participation and work satisfaction by increasing inclusivity. Various studies define job satisfaction as employees' evaluations of their jobs' intrinsic and extrinsic aspects (Jameel and Ahmad, 2019). It reflects the extent of an employee's job satisfaction and covers specific satisfaction domains compensation, related to promotion, work conditions, supervision, and coworker relations. The academic staff is the greatest asset of the University. Universities should pay more attention to staff satisfaction to achieve success. According to the expectation discrepancy theory, work satisfaction is an effective employee response to the gap between study expected and actual outcomes. This conceptualizes job satisfaction as an effective employee reaction to their work, organizational culture, or individual engagement. Job motivation has a significant impact on the level of job satisfaction (Omar et al., 2021).

Herzberg's (1968) Two-Factor theory is a widely used framework for understanding work motivation (Mehrad, 2020). According to this theory, some aspects of work lead to satisfaction, while others prevent dissatisfaction (Herzberg, 1968). These work-related factors are classified into motivators and hygiene factors. Motivators include achievement, recognition, work, responsibility, growth, and personal development. Hygiene factors company policy, supervision, salary, include interpersonal relations, and working conditions (Herzberg, 1968). There have been many studies on the job satisfaction of academic and nonacademic staff around the world (Mehrad, 2020; Mwesigwa et al., 2020; Szromek and Wolniak, 2020). However, there has been no study on the job satisfaction of academic and nonacademic staff in Somalia. This study explores how satisfied academic and nonacademic staff are with their jobs at the University. This study will add to the existing knowledge in this area and help academic and nonacademic staff achieve higher levels of job satisfaction. It can also guide the University's senior management in improving staff satisfaction.

# 2. Literature review

# 2.1. Job Satisfaction

Job satisfaction is widely used in management science, especially human resource management (Smagina, 2020). It refers to the feeling of satisfaction or enjoyment that people experience from their work (O'Leary et al., 2009). Job satisfaction has been extensively studied in psychology, mainly in terms of individual and organizational behavior (Chen et al., 2012). It is defined as the psychological, physical, and environmental well-being employees obtain from the workplace (Williams and Hazer, 1986). Previous research showed a consistent link between job satisfaction and positive work outcomes such as productivity, organizational commitment, reduced absenteeism and turnover, customer satisfaction, and organizational performance (Opatha, 2019). Job satisfaction is often used to assess employees' job attitudes as affected by organizational events such as organizational change (Tong et al., 2013). A study that focused on 418 bank staff in the Peshawar region suggested that job satisfaction is influenced by two groups of factors: intrinsic and extrinsic (Mehrad, 2020). It is also positively associated with employee growth and well-being (Khan et al., 2021b). Job satisfaction occurs when an employee is adequately rewarded and assigned challenging and exciting tasks (Bateman and Organ, 1983). This implies that top management should regularly update and redesign job duties to increase employee interest and satisfaction (Harter et al., 2002). This study uses the following important variables:

# 2.2. Salaries and benefits

Many studies often link Employee satisfaction to salary and other material benefits (Scarpello and Vandenberg, 1992; Witt and Nye, 1992). Pay is a primary factor of satisfaction for different types of employees and organizations (Khalid et al., 2012). However, the effect of pay on job satisfaction is not apparent. Some studies find a significant relationship between pay, rank, and satisfaction (Oshagbemi, 2000), while others do not (Bassett, 1994; Young et al., 1998). The financial needs of employees may also influence their satisfaction and attitude. Therefore, this study examines the level of satisfaction among academic and nonacademic staff of SIMAD University in order to evaluate the employee's satisfaction with the university.

# 2.3. Institutional integrity

Integrity is a critical factor for enhancing the quality of service and the moral values of society and nations in the globalized world. It also affects the affective commitment of employees, which reflects their emotional attachment, identification, and involvement with the organization. This study shows that social intelligence, integrity, self-efficacy, and affective commitment significantly impact job satisfaction. Researchers and practitioners can use this model to improve job satisfaction among teachers. The study also confirms the positive relationship between integrity, organizational commitment, and job satisfaction (Karim and Nadeem, 2019).

# 2.4. Appointment and promotion

Some researchers say promotional opportunities are crucial to job satisfaction. They found a positive and significant correlation between satisfaction with promotion and overall job satisfaction (Ellickson and Logsdon, 2002). However, public sector organizations often lack such opportunities, which may discourage qualified employees from staying (Khalid et al., 2012). Rewarding employees financially and non-financially can improve business outcomes such as profit, customer service, and employee retention (Ahmad and Jameel, 2018). As long as appointment and promotion are important factors that can contribute to the satisfaction of staff, this study examines the level of satisfaction of employees in terms of appointment and promotion in the university.

# 2.5. Job security

Job security is the likelihood of keeping one's job, according to Wilczyńska et al. (2016). Previous studies have explored how job security affects job satisfaction, which is the emotional attachment to one's organization (Allen and Meyer, 1990). However, the healthcare sector has received less attention in this regard. Job security can be seen as a positive or negative evaluation of one's current and future work situation (Ahmad and Jameel, 2018). Job security increases job satisfaction, while job insecurity decreases it (De Cuyper et al., 2009; Reisel et al., 2010). Job insecurity can also weaken the bonds between employees and their organizations (Buitendach and De Witte, 2005). Job security is important for employees because it assures them that they will not lose their jobs. Providing job security is, therefore, crucial for enhancing staff satisfaction.

# 2.6. University management (administration) satisfaction

The influence of supervisors on employee satisfaction is well-documented in many studies, highlighting their impact on employee performance and career development (Hackman and Oldham, 1975; Jenkins, 1993; Judge, 1993; Scarpello and Vandenberg, 1992; Wall and Payne, 1973). These studies examine various aspects of satisfaction with higher management, such as their understanding, support, care, and accessibility for employees. However, most of this research focuses on the direct relationship between employees and their immediate supervisors, making the influence of higher-level management more difficult to measure and often overlooked. Nevertheless, satisfaction with higher management is a crucial element in overall job satisfaction and workplace environment. Therefore, studies on employee satisfaction, particularly in universities, should address both senior management and departmental leadership, as both have a direct impact on employees. Staff satisfaction with management is essential for their job performance and motivation. Hence, university management should prioritize enhancing employee satisfaction to boost overall performance.

# 2.7. Faculty/department management (administration) satisfaction

Colleague satisfaction is vital for employee satisfaction and work environment quality. It depends on how well the employees get along with each other, how competent and skilled they are, and how much they support and cooperate (Hackman and Oldham, 1975; Jenkins, 1993; Judge, 1993; Scarpello and Vandenberg, 1992; Tang and Talpade, 1999; Wall and Payne, 1973). Colleague satisfaction can influence work's competitive and collaborative aspects. Many researchers have found that having friendly and supportive colleagues can increase job satisfaction (Hitt et al., 2017; Ting, 1997). On the other hand, a lack of colleague support can lead to job dissatisfaction. Therefore, colleague satisfaction is a crucial element for job satisfaction.

# 2.8. Physical environment (organizational conditions) satisfaction

The physical environment in which people work significantly impacts their performance and productivity, regardless of their motivation and efficiency. Hence, the quality of the physical environment (e.g., library conditions, laboratory and computer facilities, work area, and canteen conditions) is often a critical factor in employee satisfaction studies (Chacko, 1983; Pearson and Seiler, 1983; Scarpello and Vandenberg, 1992; Wall and Payne, 1973). The satisfaction of the staff with the environment is also crucial for their job performance. Thus, developing a physical and nonphysical environment is crucial for the performance of the staff.

# 2.9. Good governance

Governance is a complex and multidimensional concept that can be understood and applied in various ways. Some researchers define governance as exercising economic, political, and administrative authority to manage a country at all levels. Others describe governance as the organization and management of resources, human capital, and work groups within different institutions using economic, administrative, political, and social methods. Governance can also be studied in terms of quality and effectiveness, which are influenced by several relevant public and private dimensions (Hijazi, 2020). For example, good corporate governance can enhance organizational performance and employee behavior and increase employee job satisfaction (Sandika et al., 2016). Therefore, a sound governance system is essential for achieving positive outcomes and impacts in various domains and contexts. Several studies suggest that good governance influences job satisfaction among university employees. For example, Alamrew et al. (2016) surveyed academics and administrators at the University of Gondar in Ethiopia. They found poor governance was associated with low job satisfaction and high turnover intention. They recommended that the university should enhance its governance practices. Similarly, Shahin (2016) examined the effect of good governance indicators on job satisfaction among faculty and staff of Lorestan University in Iran and found that good governance improved job satisfaction. Finally, Lakshika and Privanath (2018) reported a positive relationship between governance and job satisfaction of Supportive Staff at Sabaragamuwa University in Sri Lanka. In any industry, effective governance plays a key role in worker productivity; however, in academia, it is especially crucial because most employees are highly educated. Upper management should emphasize fairness and equality in their interactions with staff. All employees, whether academic or nonacademic, should be treated equitably in accordance with the university's policies and procedures.

# 2.10. Theoretical framework

Herzberg's (2015) Two-Factor Theory, also known as the Motivation-Hygiene Theory, posits that two sets of factors drive job satisfaction and dissatisfaction, identifying the motivators and hygiene factors. Incentives, which include the content of the job as well as achievement and recognition aspects of the job, bring about job satisfaction. Hygiene factors such as the rate of pay, relations with supervisors and colleagues, and job security are instrumental and, if unsatisfactory, can lead to dissatisfaction; however, they cannot on their own create satisfaction (Herzberg, 2015). This theory has been thoroughly tested and used in different fields, and education in particular; it offers a sound theoretical model of job satisfaction. Since Herzberg's (2015) theory considers maintenance and motivation factors, analyzing their correlations in specific organizational contexts, it is highly applicable to research on job satisfaction in an academic environment. Part of assessing job satisfaction among the academic and nonacademic employees at SIMAD University involves analyzing several factors using Herzberg's (2015) Two-Factor Theory. Among these, the study focuses on aspects like salary/mobile and other incentives, job security/ promotion opportunities, and relations with the manager, which directly reflect Herzberg's (2015) motivator factors/hygiene factors. However, incentives such as institutional reputation and promotion are discussed as other factors that can influence whistleblower decisions. Therefore, our paper, grounded in Herzberg's (2015) theory, not only reveals specific motivational factors associated with satisfaction and expressed dissatisfaction but offers recommendations for enhancing also employee morale at SIMAD University. In this application of Herzberg's (2015) theory, we enhance the scholarly value of our work by emphasizing the appropriateness of Herzberg's (2015) theory on the investigated higher learning institution engulfing a Somali University, particularly given previous studies by Bassett-Jones and Lloyd (2005) and Rahman et al. (2017).

# 3. Methodology

This study focused on SIMAD University, examining both academic and nonacademic staff across its various departments. The unit of analysis comprised individuals from ten (10) departments within the university. A purposive sampling method was employed, targeting a total of 208 academic and nonacademic staff members for data collection.

To ensure the quality and privacy of the survey, were established specific criteria for the respondents. Firstly, respondents needed to be proficient in reading, writing, and understanding either Somali or English, as the questionnaire was presented in both languages. Secondly, they were required to be University employees, either in academic or nonacademic roles. Lastly, respondents were asked to indicate their department. The survey utilized filtered questions based on these criteria. Additionally, the survey employed a five-point Likert scale (1 = strongly agree to 5 = strongly disagree) to measure responses to the items.

The researchers distributed the questionnaires in person, courteously requesting University employees to complete them. Additionally, various online platforms such as Facebook, WhatsApp, responder emails, and other social media channels were utilized to share the Google document form survey. The questionnaires were designed with cover pages and content pages in both Somali and English. Data collection took place in Mogadishu, the capital of Somalia, where the University's campuses are situated. In this research, data analysis was conducted using the Statistical Package for Social Sciences (SPSS). A descriptive analysis and correlation analysis was used to examine and summarize the data collected.

# 4. Results

# 4.1. Respondents' demographic profile results

The demographic details of the respondents are presented in Table 1. There was a notable gender imbalance, with 91.8% of respondents being male and 8.2% female. Regarding age distribution, 27.4% of respondents were under 30 years old, 53.4% were between 31 and 40 years, 11.1% were between 41 and 50 years, and 8.2% were over 50 years. In terms of marital status, 76% were married, 22.1% were single, and 1.9% were divorced. Regarding educational attainment, 3.8% held a secondary certificate, 24% held a Bachelor's degree, 55.3% had a Master's degree, 7.2% had a PhD, and the remaining were categorized as "other." For job positions, 12.5% were in management, 33.2% were in administrative roles, 9.6% were supportive staff, and 48.1% were lecturers. In terms of employment contracts, 69.7% were on full-time contracts, 15.9% were on part-time contracts, and 14.4% held special contracts. Regarding divisions, 7.7% of respondents were in the Faculty of Arts, and similarly, 7.7% were in the Faculty of Economics and Commerce.

# 4.2. Overall satisfaction

Table 2 presents the general satisfaction levels of staff at SIMAD University through four questions. For the first question, 75.9% of respondents agreed or strongly agreed that the university demonstrates fairness and transparency in recognizing subordinates, while 11.5% disagreed or strongly disagreed. Regarding the second question, 81.2% agreed or strongly agreed that the university ensures access to needed information, whereas 5.3% disagreed or strongly disagreed. When asked about satisfaction with the university's recruitment and promotion policies, 66.3% of respondents expressed satisfaction, while 14% were dissatisfied. Overall, 88% of respondents indicated a high level of with only 3.9% satisfaction, expressing dissatisfaction. These findings suggest that staff at SIMAD University are generally very satisfied.

# 4.3. Managerial relations

Table 3 illustrates the quality of the relationship between employees and their managers and supervisors at SIMAD University based on four questions. In response to the first question, 78.8% of participants agreed or strongly agreed that their supervisors uphold honesty and integrity, while 5.7% disagreed or strongly disagreed. For the second question, 83.7% agreed or strongly agreed that their direct supervisors treat them with respect, fairness, transparency, and integrity, while 6.3% disagreed or strongly disagreed. Regarding the third question, 79.3% felt that the information provided by managers about their work was sufficient and clear, with 6.3% expressing disagreement. For the fourth question, 73.1% agreed or strongly agreed that managers support cross-departmental collaboration to achieve business goals, while 10.1% disagreed or strongly disagreed. Overall, these responses suggest a positive relationship between employees, supervisors, and managers at the university.

Demographics attributes	uphic profile of the respondents (N=208) Frequency	Percent
	Gender	
Male	191	91.8
Female	17	8.2
	Marital status	
Single	46	22.1
Married	158	76
Divorced	4	1.9
	Age	
Less than 30 years	57	27.4
31 - 40 years	111	53.4
41 - 50 years	23	11.1
Above 50	17	8.2
	Level of education	
Secondary	8	3.8
Bachelor	50	24
Master	115	55.3
PHD	15	7.2
Other	20	9.6
	Position	
Management	26	12.5
Administrative	69	33.2
Supportive	13	6.3
Lecturer	100	48.1
	Contract	
Full time	145	69.7
Part time	33	15.9
Special contract	30	14.4
	Division	
FA	16	7.7
FECO	16	7.7
FENG	5	2.4
FASS	6	2.9
FMS	61	29.3
FLAW	6	2.9
FMED	14	6.7
FoC	29	13.9
FoE	15	7.2
IML	40	19.2

FA: Faculty of Arts; FECO: Faculty of Economics and Commerce; FENG: Faculty of Engineering; FASS: Faculty of Applied Social Sciences; FMS: Faculty of Management Sciences; FLAW: Faculty of Law; FMED: Faculty of Medicine; FoC: Faculty of Computing; FoE: Faculty of Education; IML: Institute of Modern Languages

No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD
1	The university shows fairness and transparency in the appreciation of subordinates	41.3	34.6	12.5	7.7	3.8		1.98	1.094
2	The university provides availability and ease of access to information when needed	37	44.2	13.5	3.4	1.9	.737	1.89	.897
3	I am satisfied with the current recruitment and promotion rules at the university	31.7	34.6	19.7	10.6	3.4		2.19	1.100
4	I am totally satisfied with my job	52.4	35.6	8.2	2.9	1.0		1.64	.827

1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation

#### **Table 3:** Level of relationship with managers and supervisors at SIMAD University

No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD
1	My supervisors at the university are committed to honesty and integrity	38.9	39.9	15.4	3.8	1.9		1.90	.930
2	My direct supervisor at the university deals with me with respect, fairness, transparency, and integrity	50.5	33.2	10.1	3.4	2.9	.806	1.75	.971
3	The information we receive from the managers at the university about the job is sufficient and clear	35.1	44.2	14.4	3.4	2.9	.806	1.95	.944
4	Managers support cross-departmental collaboration to achieve business goals	30.8	42.3	16.8	7.7	2.4	4	2.09	.999

1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation

# 4.4. Salaries and benefits

Table 4 presents respondents' views on employee salaries and benefits at SIMAD University, based on six questions. In the first question, 62.9% of respondents agreed or strongly agreed that their salary compared to their colleagues at the university was satisfactory, while 18.3% disagreed or strongly disagreed. When asked about satisfaction with their salary relative to market rates, 51% of respondents agreed or strongly agreed, while 26.5% expressed dissatisfaction. For the third question, 51.4% believed that their salary aligned with their job responsibilities, whereas 31.8% disagreed. The fourth question addressed the timeliness of salary payments, with 97.1% agreeing or strongly agreeing that they receive their salaries on time, while 1.9% disagreed. Regarding annual incentives, 47.1% of respondents felt that they were fair and satisfactory, while 23.1% disagreed. Finally, 62% of respondents expressed overall satisfaction with the financial services provided by the university, including salaries, bonuses, and allowances, while 14.9% were dissatisfied. These results indicate that SIMAD

University generally compensates its employees in line with their duties and provides timely rewards.

### 4.5. Institutional integrity

Table 5 shows four questions were utilized to reveal the institutional integrity. 64.40% agreed or strongly agreed that the university administration handles concerns with integrity and institutionalism, whereas 13.5% disagreed or strongly disagreed. 77.4% agreed or strongly agreed that university personnel are typically satisfied with the institutional integrity implemented at the university, whereas 8.70% opposed or strongly disagreed. In response to the third question, 73.10% agreed or strongly agreed that any line manager at the institution provides a clear job description, whereas 9.10% disagreed or strongly disagreed. When asked if the university administration treats all employees, regardless of status, with the same standards, 61% agreed or strongly agreed, while 19.2% disagreed or strongly disagreed. In general, the results demonstrate that most employees are satisfied with the university's integrity.

	Table 4. Salaries	o una o	enenco						
No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD
1	My current salary compared to my colleagues at the university is satisfactory to me	21.6	41.3	18.8	13.5	4.8		2.38	1.110
2	My current salary compared to the local market is satisfactory to me	14.9	36.1	22.6	17.8	8.7		2.69	1.180
3	My salary at the university, compared to the size of my duties and responsibilities, is satisfactory	14.9	36.5	16.8	26	5.8	701	2.71	1.173
4	I receive my monthly salary at the university on time immediately	84.6	12.5	1.0	1.9	0	.791	1.20	0.545
5	The annual incentive I receive at the university is fair and satisfactory to me	22.6	24.5	29.8	17.8	5.3		2.59	1.172
6	I feel generally satisfied with the financial services (salary, bonuses, allowances, incentives) provided to me by the university	26.9	35.1	23.1	12.0	2.9		2.29	1.078

1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation

	Table 5: Institutional integrity												
No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD				
1	The university administration deals with complaints with integrity and institutionalism	24.0	40.4	22.1	10.6	2.9		2.28	1.035				
2	I feel generally satisfied with the institutional integrity applied at the university	35.6	41.8	13.9	7.7	1.0	701	1.97	0.945				
3	A clear job description was provided by my line manager at the university	33.2	39.9	17.8	6.7	2.4	.791	2.05	.999				
4	The university administration deals with all employees at the university with the same standards	26.4	34.6	19.7	14.9	4.3		2.36	1.150				
	university with the same standards	a (%)· 5·	Strongly	7 disagro	a (%)· ST	). Stand	ard deviation						

1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation

### 4.6. Appointment and promotion

Table 6 examines university appointment and promotion processes through four questions. Of the respondents, 49.1% agreed or strongly agreed that the university follows clear and publicly announced policies and procedures for appointments and promotions, while 18.3% disagreed or strongly disagreed. When asked whether promotions are conducted according to applicable regulations with fairness and transparency, 47.6% agreed or strongly agreed, whereas 14.8% expressed dissatisfaction. Regarding the hiring process, 82.7% of respondents reported being hired after completing tests, interviews, and legal paperwork, while 7.2% disagreed. Finally, 70.7% of respondents indicated general satisfaction with the university's recruitment and promotion policies, while 13% were dissatisfied. These findings suggest that the university has policies and guidelines for hiring and promotion, which most employees view positively.

#### 4.7. Assessment of job security and satisfaction

Table 7 addresses job security at the university through two questions. In response to the first question, 84.1% of respondents agreed or strongly agreed that the level of job security at the university was satisfactory, while 5.7% disagreed or strongly disagreed. When asked if they were generally satisfied with job security at the university, 85% of respondents agreed or strongly agreed, while 5.3%

expressed dissatisfaction. These findings suggest that job security at the university is perceived as high and satisfactory by the majority of employees.

# 4.8. University management (administration) satisfaction

Table 8 examines employee satisfaction with university management (administration) based on five questions. In the first question, 78.4% of respondents agreed or strongly agreed that they were satisfied with those in administrative positions at the university, while 4.8% disagreed. For the second question, 56.3% felt that administrators understood employees' problems and needs, while 15.9% disagreed or strongly disagreed. Regarding whether university administrators consider employees' suggestions when making decisions, 59.4% agreed or strongly agreed, while 13.4% disagreed. On the fourth question, 81.3% believed that university administrators have the experience, knowledge, and ability to help the institution achieve its goals, with only 4.8% expressing disagreement. Finally, 74% of respondents agreed or strongly agreed that they could easily reach top administrators when necessary, while 6.3% disagreed. Overall, these results indicate that employees generally have confidence in and are satisfied with the university's top administrators.

#### 4.9. Faculty/department management (administration) satisfaction

Table 9 examines employee satisfaction with faculty/departmental management (administration) based on six questions. In response to whether they were generally satisfied with administrators in their faculty or department, 88.4% of respondents agreed or strongly agreed, while 4.3% disagreed or strongly disagreed. Regarding whether faculty/departmental administrators understood employees' problems and needs, 77.4% agreed or strongly agreed, while 6.3% disagreed. For the third question, 68.8% felt faculty/departmental that administrators considered their suggestions in decision-making. while 10.1% disagreed. When asked if administrators have the experience, knowledge, and ability to help their faculty/department achieve goals, 84.6% agreed or strongly agreed, while 3.9% disagreed. Additionally, 88% of respondents felt they could easily reach top faculty/departmental administrators when necessary, with 1.9% Finally, expressing disagreement. 71.6% of respondents agreed or strongly agreed that their direct managers contribute to their performance development, while 10.1% disagreed. These results indicate high levels of satisfaction with faculty/departmental management among employees.

#### **Table 6:** Assessment of appointment and promotion policies

No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD
1	The university follows clear policies and mechanisms for appointment and promotion, which are announced to all	18.3	30.8	32.7	12.5	5.8		2.57	1.101
2	Promotions at the university take place following the applicable regulations, with fairness and transparency	15.9	31.7	34.6	13.5	4.3	.818	2.59	1.046
3	I was hired at the university after completing tests, interviews, and legal paperwork	52.9	29.8	10.1	7.2	0		1.72	.018
4	I am generally satisfied with the recruitment and promotion policies of the university	33.2	37.5	16.3	12.0	1.0		2.10	1.028
1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation									

Table 7: Job security and employee satisfaction

No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD		
1	The level of job security at the university is satisfactory	47.1	37	10.1	4.3	1.4	.892	1.76	.906		
2	I feel generally satisfied with job security at the university	48	37	8.7	4.3	1.0	.092	1.71	.870		
	1. Strongly agree (%): 2. Agree (%): 3. Neutral (%): 4. Disagree (%): 5. Strongly disagree (%): SD. Standard deviation										

1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation

Table 8: University management (administration) satisfaction											
No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD		
1	I am very happy with those who have administrative positions at our university	34.6	43.8	16.8	4.8	0		1.92	.839		
2	The administrators at our university understand our problems and needs	21.2	35.1	27.9	13	2.9		2.41	1.051		
3	Our university administrators generally consider our suggestions when making decisions	18.8	36.1	31.7	11.5	1.9	.852	2.42	.984		
4	Our university administrators have the experience, knowledge, and ability to help the university reach its goals and objectives	36.1	45.2	13.9	3.8	1.0		1.88	.855		
5	We can easily reach the top administrators of the university when necessary	37	37	19.7	2.9	3.4		1.99	.995		

1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation

#### 4.10. **Physical environment (organizational** conditions) satisfaction

Table 10 evaluates employees' satisfaction with the organization's environmental conditions through five questions. In response to whether equipment facilities in their departments are adequate, 36.2% of respondents agreed or strongly agreed, while 26.9% disagreed. Regarding laboratory facilities, 29.3% agreed or strongly agreed that these met their needs, while 22.2% disagreed. Additionally, 58.6% of employees felt that librarians possess the required knowledge and skills, with 6.7% disagreeing. For the adequacy of work areas in terms of size, comfort, and environment, 61.5% of respondents agreed or strongly agreed, while 17.3% disagreed. Finally, 82.7% of employees agreed or strongly agreed that their faculties/departments are consistently clean.

# 4.11. Assessment of good governance practices

Table 11 examines the university's good governance practices through six questions posed to employees. In response to the first question, 77.9% of staff agreed or strongly agreed that the institution encourages employee participation, while 9.1% disagreed. Regarding transparency in decision-making, 64.4% of respondents agreed or strongly agreed that the university administration is transparent, while 12.9% disagreed. For the third question, 81.7% agreed or strongly agreed that the administration is effective and efficient in its operations, with 7.7% expressing disagreement. Concerning whether the administration has a clear strategic vision for the future, 84.7% agreed or strongly agreed. When asked

if the university administration treats all employees equitably, 65.3% agreed or strongly agreed, and 14% disagreed. Finally, 68.3% of respondents agreed or strongly agreed that the administration adheres to the rule of law in decision-making, while 9.6% disagreed.

# **4.12.** Correlation analysis of job satisfaction factors

 
 Table 12 presents a correlation analysis showing
 strong relationships between the dependent satisfaction, variable, overall several and independent variables. Among these, institutional integrity and good governance exhibit particularly strong correlations with OS, with coefficients of .743 and .677, respectively, indicating their significant impact on overall satisfaction among SIMAD University staff. Managerial relations also show a high positive correlation with OS at .681, highlighting the importance of good relationships with managers for overall staff satisfaction. management University and appointment/promotion are also positively correlated with OS, with coefficients of .665 and .643, respectively, underlining their importance.

**Table 9:** Faculty/department management (administration) satisfaction

No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD
1	I am generally satisfied with the administrators working in our faculty	41.8	46.6	7.2	3.8	0.5		1.92	0.839
2	Our faculty administrators understand our problems and needs	30.3	47.1	16.3	5.8	0.5		2.41	1.051
3	Our faculty administrators generally consider our suggestions when making decisions	31.3	37.5	21.2	8.7	1.4		2.42	0.984
4	Our faculty administrators have the experience, knowledge, and ability to help the faculty reach its goals and objectives	38.9	45.7	11.5	3.4	0.5	.854	1.88	0.855
5	We can easily reach the top administrators of the faculty when necessary	52.9	35.1	10.1	1.4	0.5		1.99	0.995
6	My direct manager at the university contributes to my performance development	28.8	42.8	18.3	8.2	1.9		1.92	0.839

1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation

No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD		
1	The computer facilities in our faculty are adequate for our needs	15.4	30.8	26.9	20.2	6.7		2.72	1.150		
2	The laboratory facilities in our faculty are adequate for our needs	9.6	19.7	48.6	15.9	6.3		2.89	0.992		
3	The librarians have the knowledge and skills required to do their work	13.9	44.7	34.6	5.3	1.4	.747	2.36	0.839		
4	Our work area in the faculties is adequate in size and comfort and provides the necessary work environment	22.6	38.9	21.2	15.4	1.9		2.35	1.053		
5	Our faculty is always clean	35.1	47.6	10.6	4.3	2.4		1.91	0.918		
	1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation										

 Table 10: Physical environment (organizational conditions) satisfaction

Table 11. Co	od governance	a factors and	employee satisfaction	

No.	Statement	1	2	3	4	5	Cronbach's alpha (a)	Mean	SD
1	The university encourages participation from all employees	31.7	46.2	13.0	6.7	2.4		2.02	0.968
2	The university administration practices transparency in its decision-making processes	27.4	37.0	22.6	11.5	1.4		2.23	1.022
3	The university administration is effective and efficient in carrying out its operations	34.6	47.1	10.6	6.3	1.4	.911	1.93	0.911
4	The university administration has a clear strategic vision for the future	40.9	43.8	10.6	3.8	1.0	.911	1.80	0.848
5	The university administration treats all employees equitably	28.8	36.5	20.7	10.6	3.4		2.23	1.083
6	The university administration adheres to the role of law in its decision-making processes	30.8	37.5	22.1	9.1	0.5		2.11	0.964

1: Strongly agree (%); 2: Agree (%); 3: Neutral (%); 4: Disagree (%); 5: Strongly disagree (%); SD: Standard deviation

Other factors, including faculty/department management, physical environment, and job security, have moderate correlations with OS, with coefficients of .530 for FDM, .512 for PHE, and .459 for JS. This suggests that while these factors are influential, they are less impactful than institutional

integrity, good governance, and managerial relations. The significant correlations at the 0.01 level for all variables imply that these factors collectively play a strong role in influencing job satisfaction at SIMAD University, and enhancing them could further increase staff satisfaction.

Table 12: Correlation analysis of job satisfaction variables
--

Items	OS	MR	SB	II	AP	JS	UM	FDM	PHE	GG
OS	1									
MR	.681**	1								
SB	.511**	.535**	1							
II	.743**	.716**	.567**	1						
AP	.643**	.630**	.539**	.753**	1					
JS	.459**	.467**	.452**	.476**	.461**	1				
ÚM	.665**	.672**	.623**	.767**	.699**	.631**	1			
FDM	.530**	.646**	.506**	.596**	.522**	.459**	.680**	1		
PHE	.512**	.404**	.370**	.551**	.520**	.346**	.541**	.418**	1	
GG	.677**	.715**	.570**	.804**	.775**	.562**	.802**	.644**	.579**	1

OS: Overall Satisfaction; MR: Managerial Relations; SB: Salaries and Benefits; II: Institutional Integrity; AP: Appointment and Promotion; JS: Job Security; UM: University Management; FDM: Faculty/Department Management; PHE: Physical Environment; GG: Good Governance; \*\*: Correlation is significant at the 0.01 level (2-tailed)

# 5. Discussion and conclusion

The study found that most respondents reported a high level of overall job satisfaction, with the majority falling into the higher satisfaction category, followed by high and moderate levels. The findings indicate that SIMAD University staff generally experience high levels of satisfaction. In terms of relationships with managers and supervisors, employees expressed a high degree of satisfaction, demonstrating strong and positive interactions with their supervisors.

The results also showed high levels of satisfaction regarding salaries and benefits, with both academic and nonacademic staff expressing contentment with their compensation and benefits. For institutional integrity, while most respondents were satisfied, a minority noted inconsistencies in how the university administration treats staff, indicating a need for consistent and fair standards to enhance institutional integrity.

Regarding appointment and promotion, many staff members felt that the university does not always follow clear, transparent, and fair policies. It is recommended that management improve clarity and fairness in these processes to boost staff satisfaction. Satisfaction with university administration was generally high, with employees feeling that their problems and needs were well understood by the administration.

In terms of faculty management, employees were also satisfied with their departmental administrators, noting that they understood staff needs and challenges. However, concerning the university's environmental conditions, staff reported dissatisfaction with computer and laboratory facilities, as well as librarians' skills. Despite this, the workspaces were generally considered adequate in terms of size and cleanliness. It is recommended that the university address these issues, focusing on improving facilities and staff skills. Finally, the majority of respondents were highly satisfied with the university's governance, reflecting strong agreement with positive statements regarding good governance practices.

Hence, the results of this study are in congruence with the studies done in other universities and strategic sectors, especially within African higher learning institutions. For instance, several studies done at universities in both Ethiopia and Nigeria indicated that the level of managerial relationship and the institution's integrity features were deemed to be relevant factors affecting job satisfaction, the same as in SIMAD University (Salami, 2010). However, in contrast to the current study's findings of respondents' high satisfaction with salaries and henefits previous research conducted on universities in Kenva and South Africa indicates that remunerations remain a more sensitive issue which organizations range from being critical sources of dissatisfaction (Pienaar and Bester, 2008). Further, the discontentment with environmental factors perceived in SIMAD University, mostly with facilities and resources, supports the findings from other African universities where infrastructural deficiencies are believed to influence job satisfaction negatively (Tettey, 2006). In contrast, the highly positive sentiment regarding governance at SIMAD University is evident in various works from other regions where governance-related issues are often cited as demotivating factors among employees. Such comparisons indicate that context plays a vital role in determining job satisfaction factors. Thus, it can be concluded that although SIMAD University seems relatively successful in some areas, there is ample room for improvement, especially regarding environmental and infrastructural support. The findings of this study provide several practical implications for university management at SIMAD University. Due to the high correlation value established between managerial relations and job satisfaction, enhancing managers' communication and leadership skills might further improve employee satisfaction. The entrenching of concerns on institutional integrity and transparency in appointment and promotion processes is paramount; clear and consistent policies at all departments might allay these concerns. Furthermore, the dissatisfaction with the environmental conditions shows the urgent need to improve infrastructures, especially computer facilities, laboratories, and librarian training. Various limitations exist within this study, the most important being that it is cross-sectional; hence, no causal inferences may be drawn. The research is limited to only one institution, which may affect the results' generalizability. Future studies could consider a longitudinal approach and include multiple institutions to strengthen the findings. Further, self-reported data in this study may introduce bias. Qualitative methods in future research would bring depth into understanding factors that create job satisfaction.

### Acknowledgment

We sincerely acknowledge SIMAD University for their generous funding of this research paper.

#### **Compliance with ethical standards**

#### **Ethical considerations**

Participants were informed about the study's purpose and voluntarily consented to participate. Their responses were anonymized to ensure confidentiality, and they were given the option to withdraw at any time. Data was used only for this research, with access limited to the research team.

### **Conflict of interest**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### References

- Ahmad MAA and Jameel AS (2018). Factors affecting on job satisfaction among academic staff. Polytechnic Journal, 8(2): 119-128. https://doi.org/10.25156/ptj.2018.8.2.161
- Alamrew Y, Belay H, and Shishigu AD (2016). The effect of governance on employees' job satisfaction, intention to leave and task performance (a case of University of Gondar). Research Journal of Commerce and Behavioural Science, 6(2): 1-6.
- Allen NJ and Meyer JP (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. Journal of Occupational Psychology, 63(1): 1-18. https://doi.org/10.1111/j.2044-8325.1990.tb00506.x
- Bassett G (1994). The case against job satisfaction. Business Horizons, 37(3): 61-69.
- https://doi.org/10.1016/0007-6813(94)90007-8 Bassett-Jones N and Lloyd GC (2005). Does Herzberg's motivation
- theory have staying power? Journal of Management Development, 24(10): 929-943. https://doi.org/10.1108/02621710510627064
- Bateman TS and Organ DW (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship." Academy of Management Journal, 26(4): 587-595. https://doi.org/10.5465/255908 PMid:32636664
- Buitendach JH and De Witte H (2005). Job insecurity, extrinsic and intrinsic job satisfaction and affective organisational commitment of maintenance workers in a parastatal. South African Journal of Business Management, 36(2): 27-37. https://doi.org/10.4102/sajbm.v36i2.625

- Chacko TI (1983). Job and life satisfactions: A causal analysis of their relationships. Academy of Management Journal, 26(1): 163-169. https://doi.org/10.5465/256143 PMid:10260567
- Chen XH, Zhao K, Liu X, and Wu DD (2012). Improving employees' job satisfaction and innovation performance using conflict management. International Journal of Conflict Management, 23(2): 151-172. https://doi.org/10.1108/10444061211218276
- De Cuyper N, Notelaers G, and De Witte H (2009). Job insecurity and employability in fixed-term contractors, agency workers, and permanent workers: Associations with job satisfaction and affective organizational commitment. Journal of Occupational Health Psychology, 14(2): 193-205. https://doi.org/10.1037/a0014603 PMid:19331480
- Ellickson MC and Logsdon K (2002). Determinants of job satisfaction of municipal government employees. Public Personnel Management, 31(3): 343-358. https://doi.org/10.1177/009102600203100307
- Hackman JR and Oldham GR (1975). Development of the job diagnostic survey. Journal of Applied Psychology, 60(2): 159-170. https://doi.org/10.1037/h0076546
- Harter JK, Schmidt FL, and Hayes TL (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. Journal of Applied Psychology, 87(2): 268-279. https://doi.org/10.1037//0021-9010.87.2.268 PMid:12002955
- Herzberg F (1968). One more time: How do you motivate employees? Volume 65, Harvard Business Review, Boston, USA.
- Herzberg F (2015). Motivation-hygiene theory. In: Herzberg F (Ed.), Organizational behavior 1: 61-74. Routledge, Oxfordshire, UK.
- Hijazi HA (2020). The impact of applying good governance principles on job satisfaction among public sector employees in Jordan. Open Journal of Business and Management, 9(1): 104679. https://doi.org/10.4236/ojbm.2021.91001
- Hitt MA, Miller CC, Colella A, and Triana M (2017). Organizational behavior. John Wiley and Sons, Hoboken, USA.
- Horoub I and Zargar P (2022). Empowering leadership and job satisfaction of academic staff in Palestinian universities: Implications of leader-member exchange and trust in leader. Frontiers in Psychology, 13: 1065545. https://doi.org/10.3389/fpsyg.2022.1065545 PMid:36619068 PMCid:PMC9812660
- Jameel AS and Ahmad AR (2019). The effect of transformational leadership on job satisfaction among academic staff. In the 34<sup>th</sup> International Business Information Management Association (IBIMA) Conference, Madrid, Spain: 13-14.
- Jenkins JM (1993). Self-monitoring and turnover: The impact of personality on intent to leave. Journal of Organizational Behavior, 14(1): 83-91. https://doi.org/10.1002/job.4030140108
- Judge TA (1993). Does affective disposition moderate the relationship between job satisfaction and voluntary turnover? Journal of Applied Psychology, 78(3): 395-401. https://doi.org/10.1037//0021-9010.78.3.395
- Karim S and Nadeem S (2019). Understanding the unique impact of dimensions of ethical leadership on employee attitudes. Ethics and Behavior, 29(7): 572-594. https://doi.org/10.1080/10508422.2019.1580582
- Khalid S, Irshad MZ, and Mahmood B (2012). Job satisfaction among academic staff: A comparative analysis between public and private sector universities of Punjab, Pakistan. International Journal of Business and Management, 7(1): 126-136. https://doi.org/10.5539/ijbm.v7n1p126
- Khan AJ, Bashir F, Nasim I, and Ahmad R (2021b). Understanding affective, normative and continuance commitment through

the lens of training and development. IRASD Journal of Management, 3(2): 105-113. https://doi.org/10.52131/jom.2021.0302.0030

- Khan AJ, Bhatti MA, Hussain A, Ahmad R, and Iqbal J (2021a). Employee job satisfaction in higher educational institutes: A review of theories. Journal of South Asian Studies, 9(3): 257-266. https://doi.org/10.33687/jsas.009.03.3940
- Lakshika L and Priyanath H (2018). Effect of relational governance on job satisfaction: Empirical evidence of supportive staff of the Sabaragamuwa University of Sri Lanka. American Journal of Humanities and Social Sciences Research, 2(1): 163-169.
- Mehrad A (2020). Evaluation of academic staff job satisfaction at Malaysian universities in the context of Herzberg's motivation-hygiene theory. Journal of Social Science Research, 15(1): 157-166. https://doi.org/10.24297/jssr.v15i.8725
- Mwesigwa R, Tusiime I, and Ssekiziyivu B (2020). Leadership styles, job satisfaction and organizational commitment among academic staff in public universities. Journal of Management Development, 39(2): 253-268. https://doi.org/10.1108/JMD-02-2018-0055
- Noordin F and Jusoff K (2009). Levels of job satisfaction amongst Malaysian academic staff. Asian Social Science, 5(5): 122-128. https://doi.org/10.5539/ass.v5n5p122
- O'Leary P, Wharton N, and Quinlan T (2009). Job satisfaction of physicians in Russia. International Journal of Health Care Quality Assurance, 22(3): 221-231. https://doi.org/10.1108/09526860910953502 PMid:19537184
- Omar MS, Idrus IM, and Jamal NA (2021). The influence of job motivation on job satisfaction: A case study of polytechnic academic staff. Malaysian Journal of Social Sciences and Humanities (MJSSH), 6(1): 206-213. https://doi.org/10.47405/mjssh.v6i1.624
- Opatha H (2019). Sustainable human resource management. Lap Lambert Academic Publishing, Saarbrucken, Germany.
- Oshagbemi T (2000). Correlates of pay satisfaction in higher education. International Journal of Educational Management, 14(1): 31-39. https://doi.org/10.1108/09513540010310387
- Pearson DA and Seiler RE (1983). Environmental satisfiers in academe. Higher Education, 12(1): 35-47. https://doi.org/10.1007/BF00140270
- Pienaar C and Bester CL (2008). The retention of academics in the early career phase: Empirical research. SA Journal of Human Resource Management, 6(2): 32-41. https://doi.org/10.4102/sajhrm.v6i2.171
- Rahman KU, Akhter W, and Khan SU (2017). Factors affecting employee job satisfaction: A comparative study of conventional and Islamic insurance. Cogent Business and Management, 4(1): 1273082. https://doi.org/10.1080/23311975.2016.1273082
- Reisel WD, Probst TM, Chia SL, Maloles CM, and König CJ (2010). The effects of job insecurity on job satisfaction, organizational citizenship behavior, deviant behavior, and negative emotions of employees. International Studies of Management and Organization, 40(1): 74-91. https://doi.org/10.2753/IM00020-8825400105
- Salami SO (2011). Job stress and burnout among lecturers: Personality and social support as moderators. Asian Social Science, 7(5): 110-121. https://doi.org/10.5539/ass.v7n5p110

- Sandika AL, Rupasena LP, and Abeywickrama LM (2016). Effect of good governance perception towards job satisfaction: A case study of the agriculture professionals attached to the Department of Agriculture Sri Lanka. Tropical Agricultural Research and Extension, 19(3): 254-273. https://doi.org/10.4038/tare.v19i3-4.5357
- Scarpello V and Vandenberg RJ (1992). Generalizing the importance of occupational and career views to job satisfaction attitudes. Journal of Organizational Behavior, 13(2): 125-140. https://doi.org/10.1002/job.4030130203
- Shahin M (2016). The effect of good governance mixture in governmental organizations on promotion of employees' job satisfaction (case study: Employees and faculty members of Lorestan University). Asian Social Science, 12(5): 108-117. https://doi.org/10.5539/ass.v12n5p108
- Smagina O (2020). Gender and job satisfaction in higher education institution: Case study from Uzbekistan. Journal of Eastern European and Central Asian Research (JEECAR), 7(2): 219-229. https://doi.org/10.15549/jeecar.v7i2.392
- Szromek AR and Wolniak R (2020). Job satisfaction and problems among academic staff in higher education. Sustainability, 12(12): 4865. https://doi.org/10.3390/su12124865
- Tang TL and Talpade M (1999). Sex differences in satisfaction with pay and co-workers: Faculty and staff at a public institution of higher education. Public Personnel Management, 28(3): 345-349. https://doi.org/10.1177/009102609902800302
- Tettey WJ (2006). Staff retention in African universities: Elements of a sustainable strategy. World Bank, Washington D.C., USA.
- Ting Y (1997). Determinants of job satisfaction of federal government employees. Public Personnel Management, 26(3): 313-334. https://doi.org/10.1177/009102609702600302
- Tong C, Tak WIW, and Wong A (2013). The impact of knowledge sharing on the relationship between organizational culture and job satisfaction: The perception of information communication and technology (ICT) practitioners in Hong Kong. International Journal of Human Resource Studies, 3(1): 9-37. https://doi.org/10.5296/ijhrs.v3i1.3112
- Wall TD and Payne R (1973). Are deficiency scores deficient? Journal of Applied Psychology, 58(3): 322-326. https://doi.org/10.1037/h0036227
- Wilczyńska A, Batorski D, and Sellens JT (2016). Employment flexibility and job security as determinants of job satisfaction: The case of Polish knowledge workers. Social Indicators Research, 126: 633-656. https://doi.org/10.1007/s11205-015-0909-6
- Williams LJ and Hazer JT (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structural equation methods. Journal of Applied Psychology, 71(2): 219-231. https://doi.org/10.1037//0021-9010.71.2.219
- Witt LA and Nye LG (1992). Gender and the relationship between perceived fairness of pay or promotion and job satisfaction. Journal of Applied Psychology, 77(6): 910-917. https://doi.org/10.1037//0021-9010.77.6.910 PMid:1468995
- Young BS, Worchel S, and Woehr DJ (1998). Organizational commitment among public service employees. Public Personnel Management, 27(3): 339-348. https://doi.org/10.1177/009102609802700304