Article

Satisfaction with the Work Done in University Employees: A Study from a Developing Country

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Abstract: Job satisfaction is the positive emotional state derived from job appraisal and work experiences and is influenced by factors such as leadership, work engagement, the work done, relationships with co-workers, and salary. On a university level, employee satisfaction and engagement can affect both the performance and success of the institution as well as students' learning. That is why understanding these factors is essential. In this context, this paper sets out to identify the factors of job satisfaction that influence the work engagement of university employees. The study focuses on the Dominican Republic, a developing country with different socio-economic environments. A sample of 468 questionnaires was obtained from university employees. The data collected were analysed using SPSS and Smart-PLS. The results showed that employee job satisfaction was the most significant factor influencing employee engagement. This suggests that when employees are satisfied with their jobs, they are more likely to be engaged with their organisation and show a higher level of dedication and effort in their jobs. However, it was not possible to corroborate the influence of satisfaction with leadership, satisfaction with salary, satisfaction with promotions, and satisfaction with co-workers on the university employee's engagement. The results present implications and future research prospects. Among the main limitations of the study, it is worth noting that the sample was limited to employees of a single university, and other factors were not considered in the proposed model that could influence job satisfaction and commitment in university employees.

Keywords: job satisfaction; salary; work engagement; leadership; university

1. Introduction

Satisfaction is a complex and multidimensional concept that has been studied from various perspectives. It is generally defined as an individual's positive emotional state resulting from the appraisal of their job or workplace experiences (Fisher 2010). Therefore, job satisfaction can be influenced by several factors including leadership, work engagement, relationships with co-workers, or salary (Sang et al. 2019). In this context, work engagement, which refers to the level of engagement, participation, and enthusiasm that employees have towards their jobs and their organisation (Shuck et al. 2014), is intimately related to job satisfaction, as employees who are satisfied with their jobs are more likely to show higher levels of work engagement (Batura et al. 2016). Therefore, job satisfaction positively influences work engagement (Pancasila et al. 2020). However, job satisfaction can be due to different factors (Kurniawaty et al. 2019) such as perceived leadership, salary, satisfaction with the actual job performed, satisfaction with promotions and with turnover, or the relationship with co-workers. Therefore, it is necessary to know which factors most influence job satisfaction and its relationship with work engagement (Dziuba et al. 2020).

The importance of employee satisfaction in the university setting has been widely recognised in the literature (Pongton and Suntrayuth 2019). In this context, it has been

suggested that transformational leadership, characterised by inspiring and visionary leadership behaviours, has a positive impact on job satisfaction among academic staff (Ahmad and Jameel 2021). In addition, opportunities for professional development and growth have been identified as important factors that contribute to employee satisfaction in the university setting (Masum et al. 2015). As a result, higher levels of job satisfaction are associated with higher work engagement among university employees (Adekola 2012; Hanaysha 2016). In this context, it is important to analyse the satisfaction of university employees and its relationship with work engagement due to the impact that these variables have on the performance and success of an academic institution (Adekola 2012; Selesho and Naile 2014; Donglong et al. 2020). Moreover, the relationship between university employees' satisfaction and engagement can influence students' learning and knowledge (Wilkins et al. 2016; Burke 2019).

This paper sets out to discover the factors of work satisfaction that have the greatest influence on the work engagement of university employees. Understanding factors that contribute to university employee satisfaction can help institutions create a positive work environment, improve employee retention, and improve the quality of education and support provided to students (Ansley et al. 2019; Budiharso and Tarman 2020). Furthermore, examining the relationship between job satisfaction and work engagement can provide insight into how to foster a sense of loyalty and dedication among university employees (Mehrad 2020), which can ultimately contribute to the sustainable development of the institution (Herzner and Stucken 2020). The innovation of this study lies in its approach in the context of a developing country, where the training of students is vital for sustainable development. This study can also contribute to the current literature by broadening the understanding of factors affecting employee satisfaction and engagement in diverse cultural and socio-economic settings. But, above all, the main contribution of this study is based on the university model that is being analysed. The University is made up of a Senate Board, but it has seven campuses spread throughout the country, and each of them has a Rector and two Vice-Rectors (Academic and Financial). In addition, each Campus has its own Academic Faculty, and all decisions made individually in each Faculty must be brought for final approval to the Senate Board, which is made up of a Chancellor and President, and five Vice-Chancellors or Vice Presidents, and is where the Rectors of each campus participate. The importance of analysing this type of university system is due to the fact that other universities in the Dominican Republic and the Caribbean region are considering adopting this system.

2. Literature Review

This section is split into five parts. In each of them, the background of satisfaction has been presented from the five approaches of this research (leadership, salary, work done, promotions, and co-workers) and their influence on employee engagement. However, and although this section focuses on the relationship of satisfaction with variables in the social environment, the physical work environment, possible teleworking practices, and equipment at work could have some explanatory power in satisfaction.

2.1. Satisfaction with Leadership and Employee Engagement

A review of the literature on the relationship between satisfaction with leadership and its influence on employee engagement reveals several key findings, all from different leadership perspectives. Authentic leadership has been linked to greater confidence in management, empowerment, and work engagement (Laschinger et al. 2012). Charismatic leadership has stronger effects on employee job satisfaction and work engagement when employees have a strong need for leadership (Breevaart et al. 2016). Transformational leadership positively relates to employee engagement, job satisfaction, and work engagement (Mencl et al. 2016; Sahu et al. 2017; Mon et al. 2021). Servant leadership positively relates to job satisfaction, job engagement, and affective engagement (Kaur 2018; Aboramadan et al. 2020). Ethical leadership positively influences engagement and job satisfaction (Özsungur

2019; Yuan et al. 2022). Engaged leadership, including inspiring, strengthening, empowering, and connecting behaviours, positively relates to job engagement and is mediated by satisfying basic psychological needs (Rahmadani et al. 2019; Robijn et al. 2020). Participatory leadership positively relates to engagement and job satisfaction, especially when employees experience a high level of fun at work (Chan 2019). Therefore, regardless of the leadership style exercised, leadership satisfaction plays an important role in influencing employee engagement and job satisfaction, which are important factors for organisational success (Barasa and Kariuki 2020; Mirda and Prasetyo 2022). Based on the above, the following hypothesis is put forward:

H₁: *Satisfaction with leadership influences employee engagement.*

2.2. Satisfaction with Salary and Employee Engagement

Satisfaction with salary has been positively related to achieving employee engagement (Tentama et al. 2019; Raralio 2022; Tugade and Arcinas 2023). In other words, monetary rewards, including salary, have been identified as important factors that influence job satisfaction and employee motivation (Chinyio et al. 2018). Moreover, research has shown that satisfaction with salary is positively related to employee performance (Ngabonzima et al. 2020; Ewool et al. 2021). Other factors such as organisational support, leadership, and working environment have also been found to mediate the relationship between satisfaction with salary and employee engagement (Majid et al. 2020; Wen and Liu-Lastres 2021). However, it is important to note that the relationship between satisfaction with salary and job satisfaction may vary depending on individual and contextual factors (Hsiao and Lin 2018). However, in general, satisfaction with salary plays an important role in influencing employee engagement (Leider et al. 2021; Bartolome et al. 2023). Based on the above, the following hypothesis is put forward:

H₂: *Satisfaction with salary influences employee engagement.*

2.3. Job Satisfaction and Employee Engagement

The relationship between job satisfaction due to the work performed and its influence on employee engagement has been extensively studied (Susanto et al. 2023). Therefore, job satisfaction is considered to have a positive impact on employee engagement (Orgambídez-Ramos et al. 2014; Eldor and Harpaz 2016; Pieters 2018). In this regard, factors such as working environment, leadership style, and organisational support have been identified as important factors of job satisfaction and engagement with the institution (Hanaysha 2016; Chan 2019; Ofei-Dodoo et al. 2020). Furthermore, studies have shown that employee job satisfaction plays a role in the relationship between several factors and engagement with the institution, such as human resource practices, psychological empowerment, and the development of one's own job (Pradhan et al. 2019; Hossen et al. 2020). Also, the importance of organisations focusing on improving employee job satisfaction has been highlighted, in order to promote engagement with the institution, as it can lead to better performance and increase organisational results (Arifin et al. 2019; Kaur et al. 2020; Aziez 2022). Based on the above, the following hypothesis is put forward:

H₃: *Satisfaction with work done influences employee engagement.*

2.4. Satisfaction with Job Promotion and Employee Engagement

Previous studies have suggested that employees' promotion prospects are a factor that positively influences job engagement (Yalabik et al. 2017). In this regard, promotions generally come with better compensation, benefits, and status within an organisation (Haryono et al. 2020). This can work as a major motivator for employees to continue their engagement with and dedication to their company (Asaari et al. 2019). The prospect of further advancement may inspire them to invest more effort and energy into their jobs, leading to higher levels of engagement (Ogbonnaya and Valizade 2018). In addition, high-quality work and customer satisfaction have been associated with job satisfaction and

employee engagement (Rinny et al. 2020). Organisational justice has also been identified as a predictor of job satisfaction and employee engagement (Pieters 2018). Furthermore, it has been suggested that employee engagement mediates the relationship between job satisfaction and turnover and promotion intentions (Nasution and Maas 2022). In general, promotion plays an important role in influencing employee engagement (Haryono et al. 2020), which in turn can affect job performance and organisational results (Arifin et al. 2019; Risdayanti and Sandroto 2020). Based on the above, the following hypothesis is put forward:

H$_4$: *Satisfaction with promotions influences employee engagement.*

2.5. Satisfaction with Co-Workers and Employee Engagement

Satisfaction with co-workers has a positive impact on employee engagement (Bowling et al. 2010; Anitha 2014; Abdullatif and Anindita 2021). Positive relationships with co-workers have been identified as constituting an important factor influencing both job satisfaction and employee engagement (Taylor 2008; Sharp 2008; Murangi and Bailey 2022). Co-worker support relationships have been linked to higher levels of psychological safety and engagement (Rana et al. 2014). In addition, it has been suggested that satisfaction with co-workers mediates the relationship between labour resources and employee performance (Bhatti et al. 2018). It has also been suggested that the quality of relationships with co-workers influences job satisfaction and turnover intentions (Golden 2007; Abugre 2017). Therefore, positive relationships with co-workers play an important role in influencing employee engagement (Maleka et al. 2017). Based on the above, the following hypothesis is put forward:

H$_5$: *Satisfaction with co-workers influences employee engagement.*
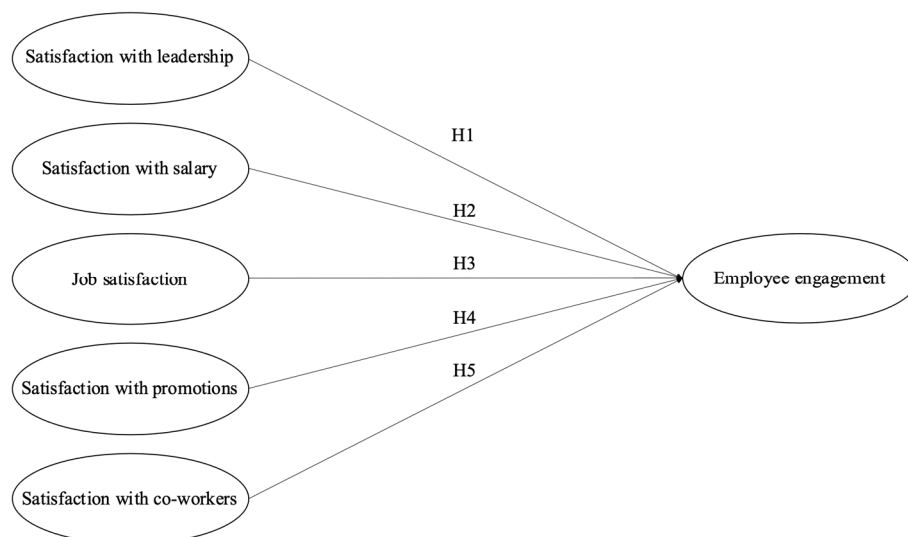
Figure 1 shows the proposed structural model.

Figure 1. Proposed structural model. Source: prepared by the authors.

3. Methodology

3.1. Geographical Context of the Study

The research was carried out in the Dominican Republic with a sample of personnel from the Technological University of Santiago (UTESA). This university was selected for the following reasons:

(1) It is the largest private university in the Dominican Republic (and second overall) in number of graduates (+138,000), active students (+40,000), and administrative and

academic employees (+2000). Therefore, UTESA can be considered a representative sample of the Dominican university population in terms of size and diversity.

(2)   It is a university with classroom-based learning, but is located in seven provinces of the country (Santo Domingo, Santiago de los Caballeros, Moca, Mao, Dajabón, Puerto Plata, and Gaspar Hernández) (Figure 2). Therefore, UTESA has a presence in seven provinces of the country, including important cities such as Santo Domingo and Santiago de los Caballeros. This geographical diversity means that the research could capture different perspectives and regional characteristics, which enriches the external validity of the findings and prevents the clustering of results in a single geographical area.
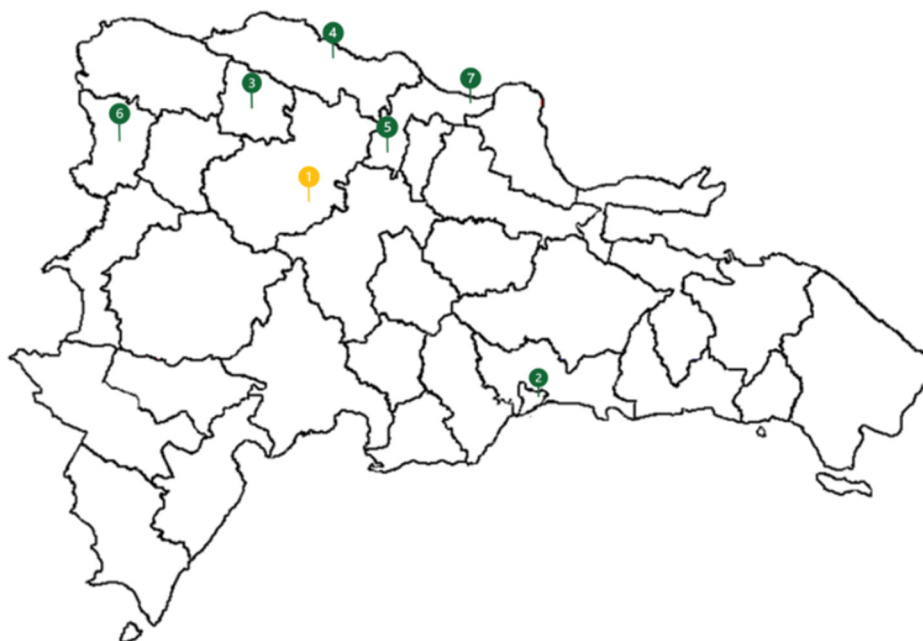

Figure 2. Areas where the UTESA university is located. Source: Prepared by the authors. Notes: 1. Santiago de los Caballeros; 2. Santiago de los Caballeros; 3. Mao; 4. Puerto Plata; 5. Moca; 6. Dajabón; 7. Gaspar Hernández.

Regarding the seven campuses, the main headquarters is located in Santiago de los Caballeros. In this place is the Senate Board (made up of a Chancellor-President and five Vice-Chancellors and Vice Presidents), which is the highest governing body of the University, in charge of establishing and complying with the philosophy, objectives, educational policies, and lines strategic and normative. Furthermore, on this Campus, as on each of the others, there is a Board of Directors (made up of the Rector and the Vice-Chancellors) and a University Senate (made up of the Board of Directors and the departmental directorates of services and teaching). Therefore, the University has a Rector and the Academic and Financial Vice-Rectors on each Campus. This structure, created and established in 2016, has the objective of simplifying academic–administrative processes and eliminating bureaucratic processes that previously had to be carried out at the main headquarters in Santiago de los Caballeros. Consequently, currently, each Campus applies its administrative and academic processes specifically, always under the guidelines set by the Senate Board.

3.2. Means

A questionnaire with five-point Likert scale was used (1 = strongly disagree; 3 = neither disagree nor agree; 5 = strongly agree). The items in the questionnaire were designed following a review of the relevant literature (Cervera et al. 2012; Martínez-Carrasco Pleite et al. 2013; Zhu et al. 2014; Barakat et al. 2016; Penha et al. 2016; Polo-Vargas et al. 2017;

Ahakwa et al. 2021). A five-step procedure was followed to adapt the original scales to Spanish.

(1)　First, two native Spanish-speaking translators (Dominicans) carried out the direct translation from English into Spanish.
(2)　Secondly, the two translations were compared, and a preliminary draft was produced.
(3)　The preliminary draft was translated from Spanish into English by a native English-speaking translator.
(4)　All the translations made during the process were checked and the final version of the survey was designed in Spanish.
(5)　Fifth, to ensure the comprehension of the questionnaire and the appropriateness of its structure, a pilot test was carried out with 25 university employees, and no problems were detected.

Simple and concise language was used, avoiding syntactic complexity to mitigate possible biases (Podsakoff et al. 2012). In addition, respondents' anonymity was guaranteed, it was explained that there were no right or wrong answers, and the questionnaire was kept as short as possible to encourage accurate responses (Podsakoff et al. 2012).

3.3. Data Collection and Sample Profile

Data were collected via a structured questionnaire self-administered in Spanish, which was physically handed out to a sample of university employees. The workforce consisted of 2193 direct employees. These employees are categorized into various roles, starting with a "Lecturer", who is a contracted teacher who teaches part-time or full-time. "Administrative assistant" is an employee who has been hired to perform only administrative functions such as finance, research management, and faculty management, among others. For his part, the "Lecturer and administrative assistant" performs the administrative functions, generally from 8:00 a.m. to 5:00 p.m. or 6:00 p.m., and teaching functions after 6:00 p.m. (The University offers teaching in three time periods: morning—7:00 a.m. to 12:30 p.m., afternoon—12:30 p.m. to 6:00 p.m., and night—6:00 p.m. to 10:00 p.m.) "Other" comprises support personnel, such as consultants, cleaning, and maintenance among others.

From August 2022 to February 2023 (inclusive), trained interviewers distributed and, where necessary, assisted respondents in completing the questionnaire. A sample of 468 questionnaires was obtained, which established a sampling error of ±4.02%. The sample consisted of female employees (59.1%), with an age between 18 and 49 years (66.2%) who were administrative assistants (41.8%) or lecturers (32.9%). A total of 82.1% were university graduates. Of them, 56.8% had worked at the university for 7 or more years. Overall, 46.3% of the sample were from Santiago de los Caballeros and 26.1% from the city of Santo Domingo. The complete profile of the sample is shown in Table 1.

Table 1. Profile of the sample.

Variable		Percentage (%)
Gender	Male	40.9
	Female	59.1
Role at the university	Lecturer	32.9
	Administrative assistant	41.8
	Lecturer and administrative assistant	16.0
	Other	0.2
Age	18 to 29	24.8
	30 to 39	18.2
	40 to 49	23.2
	50 to 59	18.0
	60+	15.8

Table 1. *Cont.*

Variable		Percentage (%)
	No school certificate	0.7
Education	Primary	4.1
	Secondary	13.2
	University	82.1
	Less than 1 year	17.0
Time at the university	1 to 3 years	13.2
	4 to 6 years	13.0
	7 years or more	56.8
	Santiago	46.3
	Santo Domingo	26.1
	Moca	0.5
Campus	Mao	9.5
	Dajabón	11.8
	Puerto Plata	5.4
	Gaspar Hernández	0.5

Source: prepared by the authors.

3.4. Verification Strategy and Preliminary Data Analysis

The data were tabulated in Microsoft Excel. During this process, quality controls were carried out to ensure the validity of the hypotheses before testing the hypotheses. First, outliers and incorrect responses (e.g., answering the same item with several options) were identified, resulting in the elimination of 2 questionnaires, leaving a total of 468 valid questionnaires, as mentioned above. Subsequently, the preliminary analysis of the items (Table 1) was carried out using SPSS software (v.28.0), where the means, standard deviation, Cronbach's alpha, and Kolmogorov–Smirnov normality test were obtained in order to determine the normality or non-normality of the indicators that make up the different constructs of the model. The Cronbach's alpha of the research items was 0.897.

The results obtained in Table 2 show the non-normality of the indicators of each of the variables that make up the proposed model. This implies that non-parametric tests such as confidence intervals have to be used when testing structural relationships between variables (hypothesis testing). The reliability of the scale was optimal, both at the global level (0.964) and at the construct level, where the value of the minimum Cronbach's alpha obtained was 0.863 ('Satisfaction with work done'), while the highest was 0.928 ('Satisfaction with leadership').

Table 2. Preliminary data analysis.

	Mean	S.D.	K–S Test	Cronbach
Employee engagement—EE				0.909
EE1—I normally do more than is expected to help the university achieve its goals	4.59	0.686	0.000[C]	
EE2—I would accept almost any position in order to continue working at this university	4.12	1.054	0.000[C]	
EE3—I find that my values and the organisation's values are very similar	4.41	0.887	0.000[C]	
EE4—I am proud to say that I form part of this university	4.64	0.687	0.000[C]	
EE5—I am very happy to have chosen this university to work at and not another one	4.54	0.794	0.000[C]	
EE6—When I wake up in the morning, I look forward to going to work	4.45	0.879	0.000[C]	
EE7—I feel full of energy at work	4.51	0.850	0.000[C]	
EE8—My job inspires me	4.56	0.834	0.000[C]	

Table 2. *Cont.*

	Mean	S.D.	K–S Test	Cronbach
Satisfaction with leadership—SL				0.928
SL1—My superior always makes it clear what they expect from my work	4.44	0.897	0.000^{C}	
SL2—I feel free to contribute criticism and suggestions to my superior	4.36	0.919	0.000^{C}	
SL3—The requests and guidance of my superior make my work easier	4.41	0.900	0.000^{C}	
SL4—My superior knows their field very well	4.55	0.774	0.000^{C}	
SL5—I trust what my superior says	4.52	0.816	0.000^{C}	
SL6—Superiors know how to show how we can contribute to the university's objectives	4.49	0.795	0.000^{C}	
Satisfaction with salary—SS				0.892
SS1—The salary paid by this university to its employees is fair	3.51	1.226	0.000^{C}	
SS2—I consider that my work is organized and valued by the university	3.92	1.136	0.000^{C}	
SS3—I am rewarded fairly for the quality of the work I do	3.71	1.201	0.000^{C}	
Satisfaction with work done—SW				0.863
SW1—I receive all the information I need to do my job well	4.33	0.895	0.000^{C}	
SW2—I feel that the time I dedicate to my work is appropriate to the needs of the university and my needs	4.41	0.828	0.000^{C}	
SW3—I like the work I do at this university today	4.61	0.734	0.000^{C}	
SW4—I have all the equipment and material necessary to do my job well	4.19	1.046	0.000^{C}	
SW5—The processes, procedures and work routines of this university are organized and efficient	4.20	0.966	0.000^{C}	
SW6—I know what I need to do to grow professionally at this university	4.40	0.940	0.000^{C}	
SW7—I feel like my work is important for this university to be successful	4.60	0.768	0.000^{C}	
SW8—My tasks at the university are well designed	4.55	1.540	0.000^{C}	
SW9—I enjoy my job	4.65	0.736	0.000^{C}	
Satisfaction with promotions—SP				0.882
SP1—I know what I need to do to grow professionally at this university	4.34	0.941	0.000^{C}	
SP2—I believe that working at this university will give me the chance to build my career and grow	4.30	1.047	0.000^{C}	
SP3—The university uses fair criteria for promotions and career development	4.19	1.011	0.000^{C}	
Satisfaction with co-workers—SC				0.910
SC1—The working environment at the university facilitates the relationship between co-workers	4.33	0.931	0.000^{C}	
SC2—The working environment in my department facilitates the relationship between team members	4.44	0.858	0.000^{C}	
SC3—At this university people are always willing to help each other	4.28	0.984	0.000^{C}	
SC4—I am always well taken care of when I need a co-worker	4.43	0.797	0.000^{C}	
SC5—At this university we can trust co-workers	4.15	1.016	0.000^{C}	
SC6—I feel like my team works like a real team	4.42	0.881	0.000^{C}	

Notes: C: Lilliefors Signification Correction. Source: Prepared by the authors.

A methodology based on partial least squares (PLS-SEM) was used to evaluate the hypotheses through a structural equation model. PLS-SEM is a composite-based approach that focuses on the prediction of hypothesised relationships that maximise the variance explained in the dependent variables (Hair et al. 2020). First, the reliability and validity of the constructs are analysed, and then, the structural model is run to test the hypotheses (Hair et al. 2020). For this, the SmartPLS software (v.3.3.7) was used. Due to the explanatory nature of the research (Henseler 2018), the focus will be on both the predictive power of the model as well as the effect size and statistical inference of structural relationships or hypothesis testing. This will be addressed in the results of the structural model.

4. Results and Discussion

The results section is divided, on one hand, into the reliability and validity analysis of the measurement model and, on the other, the analysis of the structural model. For the former, the factor loadings will be addressed for the individual reliability analysis and the composite reliability, convergent validity, and discriminant validity for the analysis at the internal consistency or construct level.

4.1. Reliability and Validity Analysis of the Measurement Model

The reliability and validity analysis of the measurement model was carried out at a double level. On the one hand, at the individual level, factor loadings were analysed, and at the construct level, they were analysed by means of composite reliability (Rho_A and Rho_C), convergent validity (Mean Extract Variance) and discriminant validity (Heterotrait–Monotrait Ratio) (Henseler et al. 2016). At the individual level, the factor loadings must present values equal to or greater than 0.7 (Ali et al. 2018); however, Barclay et al. (1995) point out that in the initial stages of scale development, this limit must be more basic and can be lower than 0.70, although never lower than 0.40, and should be eliminated if it is lower than the latter value (Hair et al. 2017). Regarding reliability at the construct level, values of Rho_A and Rho_C that are equal to or greater than 0.7 must be presented (Henseler et al. 2016), while values of Average Variance Extracted (AVE) must be equal to or greater than 0.50 (Fornell and Larcker 1981) to show the existence of convergent validity. Table 3 shows the results of the reliability and validity analysis at the individual level and the analysis at the construct level (composite reliability and convergent validity), showing the optimal reliability and validity of the measurement model both at the indicator level and at the construct level.

Table 3. Reliability and validity analysis. Individual level and internal consistency.

	Loadings	Rho_A	Rho_C	AVE
Satisfaction with leadership—SL		0.933	0.945	0.740
SL1	0.882			
SL2	0.814			
SL3	0.898			
SL4	0.876			
SL5	0.882			
SL6	0.868			
Satisfaction with salary—SS		0.930	0.932	0.822
SS1	0.861			
SS2	0.924			
SS3	0.932			

Table 3. *Cont.*

	Loadings	Rho_A	Rho_C	AVE
Satisfaction with work done—SW		0.908	0.913	0.546
SW1	0.807			
SW2	0.759			
SW3	0.807			
SW4	0.627			
SW5	0.776			
SW6	0.780			
SW7	0.776			
SW8	0.618			
SW9	0.811			
Satisfaction with promotions—SP		0.807	0.927	0.810
SP1	0.849			
SP2	0.931			
SP3	0.918			
Satisfaction with co-workers—SC		0.913	0.932	0.695
SC1	0.797			
SC2	0.813			
SC3	0.847			
SC4	0.862			
SC5	0.839			
SC6	0.844			
Employee engagement—EE		0.931	0.933	0.640
EE1	0.572			
EE2	0.541			
EE3	0.854			
EE4	0.851			
EE5	0.857			
EE6	0.854			
EE7	0.896			
EE8	0.883			

Source: Prepared by the authors.

To verify the existence or absence of discriminant validity, Henseler et al. (2016) indicate that the best method to demonstrate the absence of discriminant validity is the Heterotrait–Monotrait Ratio. Thus, Heterotrait–Monotrait Ratio values equal to or greater than 0.90 (Gold et al. 2001) would indicate an absence of discriminant validity. In this regard, Table 4 shows the optimal results of the discriminant validity analysis.

Table 4. Discriminant validity. Heterotrait–Monotrait ratio.

	EE	SL	SS	SW	SP	SC
EE						
SL	0.740					
SS	0.519	0.505				
SW	0.892	0.794	0.606			
SP	0.689	0.650	0.724	0.829		
SC	0.710	0.749	0.542	0.761	0.631	

Source: Prepared by the authors.

4.2. Analysis of the Structural Model

Due to the explanatory nature of the research (Henseler 2018), the analysis of the structural model will focus mainly on the predictive power of the model, the effect size, and the statistical inference of structural relationships or hypothesis testing. Table 5 shows the results of the predictive power and effect size of the structural model. The moderate predictive power of the 'Employee engagement' endogenous variable can be observed (Chin 1998). Likewise, the role of the 'Job satisfaction' variable should be highlighted as it is responsible for 50.36% of the variance of the 'Employee engagement' endogenous variable. This has an impact on effect size (Cohen 1998), highlighting a large and significant effect of 'Satisfaction with work done' on 'Employee engagement'. The rest of the observable variables do not generate any significant effect on 'Employee engagement'.

Table 5. Predictive power and effect size.

	B	R^2	Correl.	Exp. Var.	f^2 (Sig.)
Employee engagement		0.691			
H_1: Satisfaction with leadership	0.157		0.690	10.83%	0.032 (0.441)
H_2: Satisfaction with salary	0.007		0.478	0.33%	0.000 (0.982)
H_3: Satisfaction with work done	0.618		0.815	50.36%	0.367 (0.002)
H_4: Satisfaction with promotions	−0.004		0.617	−0.24%	0.000 (0.997)
H_5: Satisfaction with co-workers	0.119		0.654	7.78%	0.020 (0.377)

Notes—Correl.: Correlation; Exp. Var.: Explained Variance. Source: prepared by the authors.

In terms of hypothesis contrast, this was performed using a Bootstrap of 10,000 sub-samples (Streukens and Leroi-Werelds 2016), thereby obtaining the associated confidence intervals. This is a non-parametric test that was used due to the non-normality of the variables used in the model. Table 6 shows the results of the hypothesis contrast, where the importance of the 'Satisfaction with work done' variable in relation to 'Employee engagement' is observed, confirming this hypothesis (H_3). This suggests that when employees are satisfied with their jobs, they are more likely to be engaged with their organisation (Aziez 2022) and show a higher level of dedication and effort in their tasks (Hossen et al. 2020). These findings are consistent with previous research (Pradhan et al. 2019; Arifin et al. 2019; Ofei-Dodoo et al. 2020; Susanto et al. 2023), which underlined the importance of job satisfaction in employee engagement and its impact on organisational performance and results (Kaur et al. 2020).

Table 6. Hypothesis testing.

Hypothesis	b	IC95%	
		2.5%	97.5%
H_1: Satisfaction with leadership → Employee engagement	0.157[NS]	−0.023	0.330
H_2: Satisfaction with salary → Employee engagement	0.007[NS]	−0.071	0.081
H_3: Satisfaction with work done → Employee engagement	0.618[SIG]	0.471	0.795
H_4: Satisfaction with promotions → Employee engagement	−0.004[NS]	−0.113	0.091
H_5: Satisfaction with co-workers → Employee engagement	0.119[NS]	−0.012	0.234

Notes: NS: not supported; SIG: significant. Source: Prepared by the authors.

However, it was not possible to corroborate the influence of satisfaction with leadership (H_1), satisfaction with salary (H_2), satisfaction with promotions (H_4), and satisfaction with co-workers (H_5) on employee engagement. This suggests that these variables did not have a significant impact on employee engagement, unlike in other studies where significant influences were found between such variables and employee engagement. For example, Mirda and Prasetyo (2022) indicated that satisfaction with leadership plays an important role in influencing employee engagement; however, in this study, the leadership

was analysed from a general approach, and, in terms of leadership satisfaction, the leadership style exercised is a relevant factor in the influence of employees' participation and job satisfaction.

Likewise, Bartolome et al. (2023) found that satisfaction with salary plays an important role in influencing employee engagement. However, in this research study, there was no influence, and this was due to the fact that employees prioritize their professional growth over their salary, taking into account that wages can be improved according to the acquired academic range and experience. Risdayanti and Sandroto (2020) indicated that satisfaction with promotions plays an important role in influencing employee engagement (Haryono et al. 2020), with it being key to improving organisational results. However, aspects such as the lack of promotion opportunities, the injustice perceived in the promotion processes, or focusing on intrinsic motivation could influence employee perceptions and, for this reason, generate results other than what has been established by other authors, who found that satisfaction with promotion influences commitment in university employees (Yalabik et al. 2017; Asaari et al. 2019; Haryono et al. 2020). For their part, Abdullatif and Anindita (2021) had suggested that positive relationships with co-workers influence employee engagement. In the present study, this relationship was not confirmed due to factors such as the work stress of each department of the university or the lack of support between departments (Foy et al. 2019).

In general, the results generated in this research may be so due to the specific context of the study, because it was set in a culture and university work environment that is different from the conventional one, where there is usually a more hierarchical structure. In this context, the satisfaction of university employees with a job well done has been considered vital in the commitment of the employees themselves to their university, and this could be due to the fact that their opinions and work are taken into account from a decision-making approach. There are democratic decisions, wherein each employee on each campus can make decisions autonomously, always following the institutional policies and regulations approved by the Senate Board.

5. Conclusions

This paper examined the factors of job satisfaction that have the greatest influence on the work engagement of university employees. The results show that employee job satisfaction was the most significant factor influencing employee engagement. This suggests that when employees are satisfied with their jobs, they are more likely to be engaged with their organisation and show higher levels of dedication and effort in their tasks. This underlines the importance of the employee's own job satisfaction in relation to work engagement, which could impact the performance and results of their institution.

From a theoretical point of view, this research contributes to the understanding of the factors influencing job satisfaction and work engagement in the university setting. The identification of satisfaction with the work performed as the most predominant factor provides a solid theoretical basis for future research and theories in this field. From a practical point of view, this research has important implications for university institutions because understanding factors that contribute to university employee satisfaction can help institutions create a positive working environment and improve employee retention. In addition, improving employee job satisfaction could have a positive impact on the quality of education and support provided to students. Therefore, universities must pay attention to their employees' job satisfaction and take steps to improve it such as providing opportunities for professional development and growth, promoting transformational leadership, and fostering positive relationships among co-workers.

It is important to note some limitations of this study. First, the sample was limited to employees of a single university, which may limit the generalisation of results to other settings and populations. In addition, a quantitative approach was achieved, which cannot fully capture the complexity and individual experiences of university employees. Future research could use mixed approaches combining quantitative and qualitative methods to

gain a more complete understanding of these phenomena. Longitudinal studies could also be conducted to examine the relationship between job satisfaction and work engagement over time. Other factors that could influence job satisfaction and the engagement of university employees could even be explored, such as social support, work–life balance, physical work environment, teleworking practices, the team at work, and university's social responsibility. It would also be interesting to analyse how the factors studied may vary in different cultural and socio-economic contexts.

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