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## Article

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Article

# How Perceived Organizational Support, Identification with Organization and Work Engagement Influence Job Satisfaction: A Gender-Based Perspective

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**Abstract:** The main objective of this study is to analyze the effects of work engagement, identification with an organization and perceived organizational support on job satisfaction and how these issues vary with gender. Data were collected in a public higher education institution with a questionnaire applied to professors and support staff. The data collected from the 171 employees allowed the development of a structural equation model. The results suggest that work engagement constructs have a greater effect on job satisfaction for female employees, whereas the impact of perceived organizational support on job satisfaction is stronger for male workers. The analysis also revealed that identification with the organization does not influence job satisfaction differently in terms of gender. The findings of this study contribute to the body of empirical knowledge on how the influence of factors on job satisfaction, such as engagement at work, perceived organizational support and identification with the organization, varies by gender.

**Keywords:** job satisfaction; work engagement; perceived organizational support; organizational identification; gender



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## 1. Introduction

In recent years, organizations have faced several challenges arising from rapid technological or social changes. Considering these rapid changes, employees turn out to be decisive in the success, efficiency and productivity of any organization. Organizations that want to be competitive need highly motivated, committed, satisfied and innovative human capital.

Employees' experiences in an organization largely determine their attitudes and behaviors. These experiences can lead to positive outcomes such as perceived organizational support, work engagement and/or job satisfaction (Eder and Eisenberger 2008; Koçak and Kerse 2022), as well as negative outcomes such as cynicism (James 2005) and/or stress at work (Bemana et al. 2013). For Zhang et al. (2021), employee job satisfaction is crucial to determine employee performance. This concept was defined by Locke (1969, p. 10) as 'the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values'. Weiss et al. (1967), in turn, see job satisfaction as employees' general assessment of their work environment. One question that studies have sought to answer is what factors influence this state of mind or evaluation by workers. According to the literature, organizational support (AlHashmi et al. 2019), identification with the organization (Dulebohn et al. 2012; Gerstner and Day 1997; Riketta and Van Dick 2005) and work engagement (Harter et al. 2002) affect job satisfaction.

More specifically, the principle of organizational support (Eisenberger et al. 1986; Kurtessis et al. 2017) argues that employees develop more work satisfaction when their organization is willing to meet their socio-emotional needs and reward work-related efforts

(Rhoades and Eisenberger 2002). Eisenberger et al. (1986) understand organizational support as workers' perceptions of how well their organization treats them in return for their hard work, which has a positive impact on organizational commitment and job satisfaction, thereby affecting employee retention and performance (Rhoades and Eisenberger 2002). According to Mael and Ashforth (1992, p. 104), identification with an organization is 'the perception of the unicity or belonging to an organization, in which the individual is defined in terms of [the] organization'. Studies of employee–employer relationships have shown that employees' identification with an organization is positively related to outcomes such as long-term commitment, public praise and organizational support (De Roeck et al. 2016). Harter et al. (2002) report that employee engagement is, in turn, a good predictor of organizational success and financial performance.

As a state of mind, job satisfaction is not experienced in the same way by men and women. According to Clark (1997) and Sloane and Williams (2000), women are more satisfied with the work they perform even when they are subjected to poor job conditions. This finding of an enigmatic relationship between gender and higher work satisfaction cannot, however, be generalized to all countries. According to Sousa-Poza and Sousa-Poza (2000a), women are more satisfied at work than men are in English-speaking countries (i.e., the United States and the United Kingdom), but, in Portugal, for example, women's job satisfaction is lower than that of men.

Previous studies have related job satisfaction to several variables, such as organizational commitment (Marique and Stinglhamber 2011; DeConinck 2011), in-role behavior (Haslam and Ellemers 2005; Van Knippenberg 2000), extra-role behavior (Riketta 2005; Lee et al. 2015), employment stability (Hossen et al. 2020) and job autonomy (Mustafa et al. 2020), among others. However, there is no known study relating job satisfaction with regard to perceived organizational support, identification with the organization and work engagement. Furthermore, the existing literature does not specifically discuss the effects of gender inequality on women and men's identification with the companies in which these individuals work or on their work engagement and perceptions of organizational support.

The present study thus seeks to determine whether the effects of work engagement, identification with an organization and perceived organizational support (POS) on job satisfaction differ according to gender. This research was designed to contribute to a fuller understanding of these constructs in terms of gender, thus enabling organizations to manage their resources better, either through the support provided to employees or by changing the rules and behaviors that may in some way impair these organizations' proper functioning.

This paper is structured as follows. First, we define the research problem, theoretical framework, objective and hypotheses. Next, we describe the method, sample and measurement instrument. We then present and discuss the results and, finally, offer conclusions, theoretical and practical contributions, limitations and suggestions for future research.

## 2. Literature Review

### 2.1. Job Satisfaction

Job satisfaction refers to employees' perceptions of how fulfilling their work is or how it allows their personal values to be expressed in their job-related tasks (Locke 1976; Sokro et al. 2021). According to Evans (2001), job satisfaction is a positive emotional state that arises out of work experiences. Given this subject's importance for organizations, work satisfaction surveys have sought to identify what employees' values are in relation to work and how these individuals perceive the way their organization fulfils those values. Walton (1973), as well as some other authors ex post, as, for instance, Sabonete et al. (2021), identified eight factors that organizations should pay attention to in order to promote job satisfaction: a fair reward system, job security (i.e., working conditions), the use of human skills, growth potential, interpersonal relationships at work, equity, the social relevance of the work and a balance between professional and personal life. Job satisfaction can be considered as an important variable in the organizational context. Understanding its

antecedents and outcomes may contribute to understanding other phenomena within the organization, such as productivity, if we consider that satisfaction is associated with better productivity rates of employees (Elrehail et al. 2019). Job satisfaction is also related to gender (Tabvuma et al. 2015). Women and men may differ in the factors that influence their job satisfaction for several reasons, including workplace ethics, attachment to the labor market and work–life conflict (Tabvuma et al. 2015). Over the past two decades, researchers have found significant gender differences in terms of job satisfaction, with women reporting greater satisfaction than men in some countries (Bender et al. 2005; Hauret and Williams 2017; Mannheim 1993; Sousa-Poza and Sousa-Poza 2000a).

## 2.2. Perceived Organizational Support

Employees' awareness of organizational support is based on the frequency, intensity and sincerity of organizational manifestations of approval, praise and material and social rewards in exchange for these workers' best efforts. A favorable perception of organizational support, seen from this perspective, would strengthen employees' expectations and affective engagement with their organization, motivating them to strive to achieve organizational goals (Eisenberger et al. 1986; Garg and Dhar 2014; Joo 2010; Haar et al. 2016; Wen et al. 2019). High levels of perceived organizational support lead workers to a more positive orientation toward the organization and enhance the organizational environment, job satisfaction and results (Appelbaum et al. 2019). Based on the principle of reciprocity, workers who feel supported in the workplace not only help co-workers but also increase their own job satisfaction and organizational commitment, thereby reducing waivers and absenteeism and encouraging better employee performance (Bohle et al. 2018; Chiang and Hsieh 2012; Rhoades and Eisenberger 2002).

Regarding the difference in POS according to gender, this should be indicative of the dynamics between employees' individual characteristics (i.e., gender), perceived work environment (i.e., POS) and emotional labor process (Giao et al. 2020; Nixon et al. 2011). Overall, women need to perceive higher levels of support in their personal and professional environments and value emotional support more than men do (Aycan and Eskin 2005; Hammer and Avgar 2005; Kurtessis et al. 2017). However, Ling and Nasurdin's (2016) study evidenced that male workers are more engaged at work when they have a strong perception of "organizational support," which can be explained by the fact that men place greater importance on their placement and importance in the organization, as well as being competitive and achievement-oriented. Thus, the first two hypotheses to be tested in the present study were formulated as follows:

**Hypothesis 1 (H1).** *The effects of POS on job satisfaction differ by gender.*

**Hypothesis 2 (H2).** *The effects of POS on work engagement differ by gender.*

## 2.3. Identification with Organization

Social identity theory suggests that organizations' actions have a direct effect on their employees' organizational identification. For example, workers prefer to identify with organizations that have a prestigious image, which enhances employees' self-worth and meets their need for self-enhancement (Ashforth and Mael 1989; Shen et al. 2018). This theory holds that people tend to classify themselves and others as belonging to different social categories, which can be an organization, a religious group, a gender or an age group (Graham et al. 2020). According to Mael and Ashforth (1992), identification with an organization is 'the perception of oneness with or belongingness to an organization, . . . [in which] the individual defines him or herself in terms of the organization in which he or she is a member' (p. 104). Therefore, identification with an organization is an important concept in research concerning employees' affective and behavioral outcomes (Mael and Ashforth 1992; Van Dick 2004).

Despite the importance of this construct regarding the way in which different genders identify with their work organization, only a few studies have addressed this question (Fieseler et al. 2014; Monzani et al. 2015). Given the results of the present literature review, we defined the following research hypotheses:

**Hypothesis 3 (H3).** *The effects of identification with organization on work satisfaction differ by gender.*

**Hypothesis 4 (H4).** *The effects of identification with organization on work engagement differ by gender.*

#### 2.4. Work Engagement

Kanungo (1979) argues that work engagement stresses employees' cognitive and psychological identification with their job, including the idea that work satisfies needs and expectations. Thus, employees' engagement can be strengthened by work environments in which employees recognize that (a) they have the power to make decisions, (b) information is shared throughout the organization, (c) they are provided with the necessary training to do their job and (d) they will be rewarded for participating in decision making (Lawler 1995). Information sharing and training can thus positively influence organizational outcomes (Riordan et al. 2005).

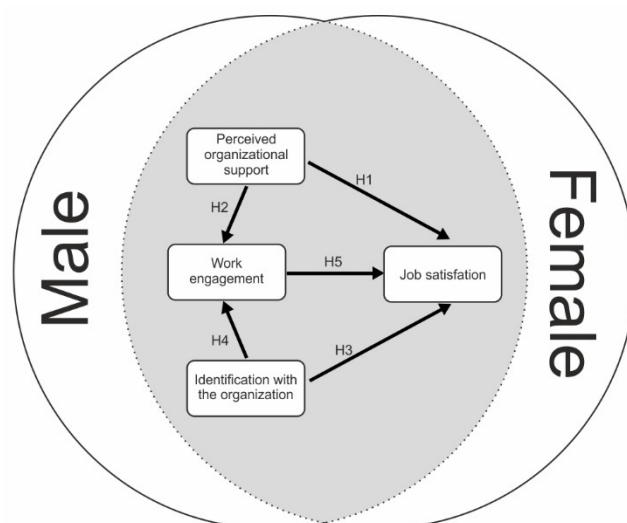
Various researchers have argued that employee engagement with work is a good predictor of employee outcomes, organizational success and financial performance (Bates 2004; Richman 2006; Al-Hamdan and Bani Issa 2021). Engaged workers are satisfied with their jobs (Lu and Gursoy 2016; Paek et al. 2015; Schaufeli et al. 2002) and are highly productive (Demerouti and Bakker 2006). However, scholars have reported that employee engagement is currently declining, with workers showing a profound lack of engagement (Bates 2004; Saks 2006). Overall, work engagement consists of a mental state whereby the professional is immersed and enthusiastic in his or her work activities. It is characterized as a desirable condition that favors the individual and collective performance of teams in their work routines. In principle, it involves three dimensions: vigor, dedication and absorption (Yan and Donaldson 2022).

Regarding gender, some studies have shown that women are more concerned than men are with the emotional aspects of their job and thus put more emphasis on intrinsic motivators, including interpersonal relationships, tasks and, consequently, work engagement (Lefkowitz 1994; González-Romá et al. 2006; Konrad et al. 2000; Rosenblatt et al. 1999; Salas-Vallina and Alegre 2017). Another study, in turn, concluded that the engagement level of male employees was higher than that of female employees (Topchyan and Woehler 2021). Considering the above findings, the following hypothesis was proposed for the present study:

**Hypothesis 5 (H5).** *The effects of work engagement on job satisfaction differ by gender.*

#### 2.5. Conceptual Model

Based on the above review of the relevant literature and the research hypotheses formulated, we were able to develop the conceptual model presented in Figure 1. This model includes the factors that influence employees' satisfaction with their jobs at a public higher education institution.



**Figure 1.** Conceptual model of hypotheses to be tested.

### 3. Methodology

Quite a large number of studies have focused on differences in job satisfaction between men and women (Clark 1997; Zou 2015). However, as mentioned earlier, few researchers have determined which organizational factors underlie gender-based differences in satisfaction or dissatisfaction (Sousa-Poza and Sousa-Poza 2000b). Thus, in the present study, we sought to cover as many constructs as possible that would allow us to perceive the subject under study clearly without making the research model overly fastidious or complex.

#### 3.1. Data Collection and Sample Profile

To study how organizational support, identification with an organization and work engagement influence job satisfaction among male and female employees of a public higher education institution, the quantitative methodology included distributing a questionnaire. According to Cooper and Schindler (2016), questionnaires can reach a large number of people, cover an extensive geographic area, guarantee anonymity and avoid limiting the respondents' response time or influencing their answers.

The higher education institution under study had 1,003 teaching and support staff. Table 1 below breaks down the sample by gender and professional category. Data for this research were collected during February 2022, and the questionnaire was provided on paper. In line with standard research ethics, participation was voluntary and anonymous. The completed questionnaires were collected in sealed envelopes to minimize the risk of identification.

**Table 1.** Study sample.

Gender	Number	Sample	Answer Rate	Average Age	Employees	
					Teachers	Support Staff
Female	469	99	21%	48.7	42	57
Male	484	72	15%	48.5	43	29
Total	953	171	18%	48.6	85	86

According to Table 1, the sample of this study is composed of 171 individuals, which represents a response rate of 18%. The average age of the sample under study is around 48.6 years, with approximately 58% of respondents being female.

### 3.2. Measurement of Variables

The questionnaire comprised scales adapted and translated from Mael and Ashforth's (1992) work on organizational identification, Bacharach's (1983) research on job satisfaction, Eisenberger et al.'s (1986) assessment of POS and Schaufeli et al. (2003) study of work engagement. Items collecting data on sociodemographic control variables were also introduced. The questionnaire was thus divided into two sections. The first dealt with personal data and sociodemographic variables. The second part contained items assessing the factors under study. To construct quantitative measures of organizational identification, work engagement, POS and job satisfaction, a 7-point Likert-type scale was used to ensure responses were given as a numeric value ranging from 1 to 7. The sum of these scores was used as an 'index' for each subsection of the questionnaire's second section.

### 3.3. Data Processing

Smart PLS 3.3.3 software was used to process the data and estimate the proposed structural model (Ringle et al. 2005). This software was selected for its low requirements regarding data distribution and sample size compared with structural equation modelling (SEM) based on a covariance matrix (i.e., CB-SEM), which is more restrictive, especially regarding data type requirements (Haas et al. 2009). The present study thus carefully determined the optimal sample size for the selected methodology. The psychometric properties of the four constructs of the proposed model—Work Engagement (17 items), Job Satisfaction (5 items), Identification with Organization (6 items) and POS—were tested using confirmatory factor analysis.

As the results are practically the same, the next section presents the psychometric evaluation of the model's constructs together with the analysis of the measurement model to avoid redundancy in and duplication of information. The analysis of the measurement model began by defining some of its properties and definitions adopted. Thus, the path weighting scheme was adopted in the partial least squares (PLS) algorithm. The initial value given to the relationships in the measurement model was 1. The data were standardized with a mean of 0 and a variance of 1, a maximum number of 300 iterations and the abortion criterion of a  $p$ -value of less than  $1.0 \times 10^{-5}$ . The evaluation of PLS-SEM-based models relies on bootstrapping—a type of resampling procedure. Regarding the bootstrapping configuration, the number of cases was equal to the sample (i.e., 171), with 5000 replications and no changes at the individual level.

## 4. Analysis Results

### 4.1. Measurement Model (Outer Model)

The measurement model was initially assessed by following Hair et al. (2012, 2013) and Gefen et al.'s (2011) recommendations. The model's convergent validity (Bagozzi and Yi 1988) and discriminant validity were measured using the criterion suggested by Fornell (1998). The indicators' reliability (Hulland 1999), factorial validity and internal consistency reliability (Fornell and Larcker 1981) were also evaluated.

A preliminary analysis showed that, of the POS scale's eight items, the four that had been inverted had factorial weights inferior to 0.45. They were thus removed, leaving the POS scale with four items. According to Hair et al. (2009), an instrument's reliability depends on the consistency and reproducibility of the measures. Table 2 presents two reliability measures—composite reliability (i.e., FC) and Cronbach's alpha ( $\alpha$ )—with  $\alpha$  values ranging from 0.884 to 0.966. The hazard ratio values ranged from 0.919 and 0.969 ( $>0.70$ ), confirming construct reliability and/or internal consistency (Fornell and Larcker 1981).

**Table 2.** Reliability and convergent validity of proposed model's constructs.

Construct	FC	Cronbach's Alpha	AVE
Work Engagement	0.969	0.966	0.653
Organizational Identification	0.938	0.920	0.715
POS	0.919	0.884	0.740
Job Satisfaction	0.962	0.950	0.834

Validity is the measurement instrument's properties that show whether it measures and operationalizes the construct that the instrument is intended to evaluate. The proposed model's latent variables were thus checked for factorial validity, convergent validity and discriminant validity. Factorial validity occurs when the items of a given construct are correctly specified (i.e., the items measure the construct to be measured), and this validity is generally evaluated using standardized factorial weights. Researchers usually assume in PLS-SEM that, if the standardized factor values of all items are greater than or equal to 0.7, the construct has factorial validity (Hair et al. 2011). With the exception of two items from the work engagement scale that presented slightly lower factorial weights, all items of the various constructs had weights greater than 0.7, so factorial validity was verified.

Convergent validity occurs when items that accurately reflect a construct load strongly on this factor. That is, these items' behavior is essentially explained by the construct in question (Fornell and Larcker 1981). The cited authors suggest evaluating convergent validity via average variance extracted (AVE). AVE values greater than 0.5 are indicative of adequate convergent validity. As shown in Table 2 above, the AVE values ranged from 0.653 to 0.834 (>0.50), so convergent validity was confirmed (Bagozzi and Yi 1988).

Discriminant validity evaluates whether the items reflecting a construct are not correlated with other constructs, namely, that the constructs defined by each set of items are distinct (Hair et al. 2009). Discriminant validity can be demonstrated by checking for various conditions. However, Fornell and Larcker (1981) report that the most stringent test consists of comparing the AVE values of any two constructs with the square of the correlation between these constructs, which is the same as comparing the square root of AVE of any two constructs with the value of the correlation between these constructs. Each construct's square root of AVE should be higher than the values of the correlation between the constructs, which was found to be true for the constructs of the proposed model (see Table 3).

**Table 3.** Correlations and descriptive validity of model constructs.

	1	2	3	4
1. Work Engagement	0.808			
2. Organizational Identification	0.475	0.846		
3. POS	0.474	0.522	0.860	
4. Job Satisfaction	0.630	0.466	0.573	0.913

We thus concluded that all the constructs of the model under study have good psychometric characteristics. These include reliability and factorial, convergent and discriminant validity.

#### 4.2. Structural Model (Inner Model)

PLS-SEM does not report the values of any type of index, such as the comparative fit index or root mean square error of approximation, used in CB-SEM. The evaluation of a PLS model is instead based on nonparametric predictive regression (Wynne 1998). Structural models are evaluated mainly by calculating the coefficient of determination (R<sup>2</sup>) of the endogenous latent variables (Wynne 1998), as well as by finding the size of the effect size (f<sup>2</sup>) (Cohen 1988). For the presently proposed model, the R<sup>2</sup> value ranges from 29.6%

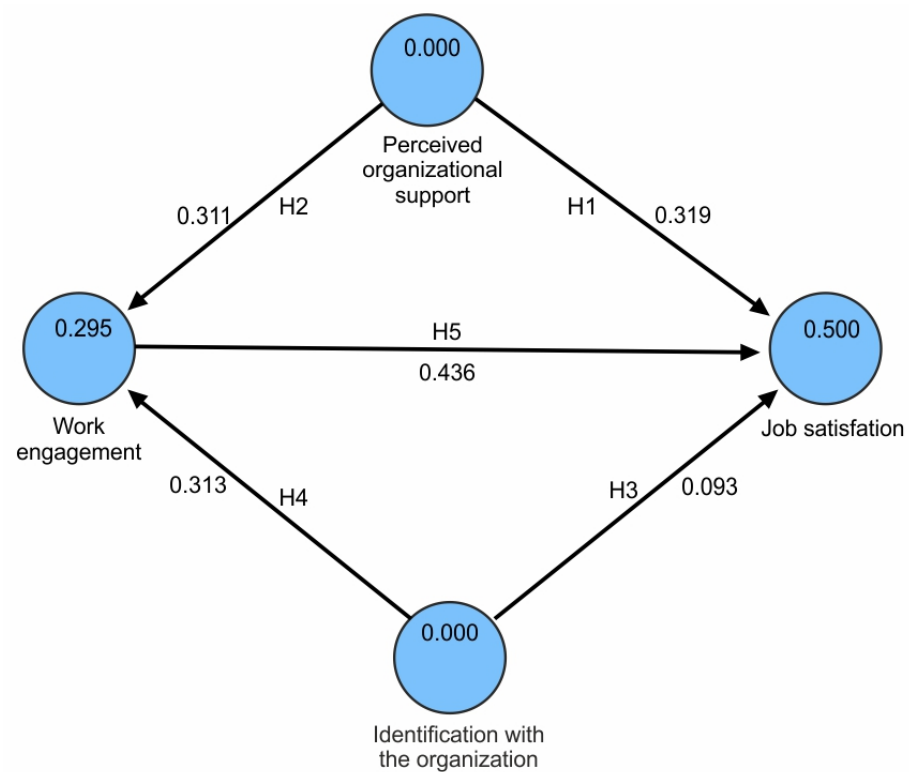


for Work Engagement to 50.0% for Job Satisfaction, so all values were substantially higher than the acceptable cut-off point of 10% (Falk and Miller 1992). The  $f^2$  complements the  $R^2$  and considers the relative impact of a particular exogenous variable on an endogenous variable through changes in  $R^2$  (Cohen 1988). Cohen (1996) suggests  $f^2$  values of 0.02, 0.15 and 0.35 for small, medium and large effects of predictive variables (see Table 4).

**Table 4.**  $R^2$  and  $f^2$  results for proposed model’s constructs.

Hypotheses	$R^2_{inc}$	$R^2_{exc}$	$f^2$	$f^2$ Effect
H1: POS → Job Satisfaction	0.500	0.434	0.132	small
H2: POS → Work Engagement	0.500	0.495	0.012	–
H3: Identification with organization → Job Satisfaction	0.296	0.225	0.100	small
H4: Identification with organization → Work Engagement	0.500	0.366	0.268	medium
H5: Work Engagement → Job Satisfaction	0.296	0.226	0.099	small

Figure 2 reflects the Smart PLS output that represents the  $R^2$  values within the latent endogenous variables. The figure also includes the regression coefficients of the inner model and the factorial weights of each item belonging to the model’s constructs (i.e., outer model).



**Figure 2.** Smart PLS output for structural model.

As can be seen from the final evaluation of the structural model (see Table 5), identification with an organization does not influence job satisfaction. However, all other constructs have significant trajectories.

**Table 5.** Results of proposed hypotheses.

Hypotheses	B	p	Hypothesis Supported?
H1: POS → Job Satisfaction	0.319	<0.001	Yes
H2: POS → Work Engagement	0.311	<0.001	Yes
H3: Identification with organization → Job Satisfaction	0.093	0.235	No
H4: Identification with organization → Work Engagement	0.313	<0.001	Yes
H5: Work Engagement → Job Satisfaction	0.435	<0.001	Yes

#### 4.3. Comparison of Proposed Gender Model

To compare the proposed model in terms of the effect of masculine and feminine genders, we used the R<sup>2</sup> and exogenous constructs' effects on endogenous constructs for the two groups of respondents. The results imply that differences exist between male and female employees in some existing trajectories, especially with regard to the impacts of some constructs (see Table 6). Thus, the data on female employees show a large effect (0.350) of identification with the organization on work engagement, which had only an average effect (0.193) on male workers. Regarding the POS trajectory for job satisfaction, the inverse behavior appeared for males for whom POS has an average effect (0.176), whereas, for females, POS has only a small effect (0.083) on work satisfaction.

**Table 6.** R<sup>2</sup> and f<sup>2</sup> of proposed model's constructs in relation to gender.

Path	Women				Men			
	R <sup>2</sup> <sub>inc</sub>	R <sup>2</sup> <sub>exc</sub>	f <sup>2</sup>	f <sup>2</sup> Effect	R <sup>2</sup> <sub>inc</sub>	R <sup>2</sup> <sub>exc</sub>	f <sup>2</sup>	f <sup>2</sup> Effect
H1: POS → Job Satisfaction	0.519	0.479	0.083	Small	0.511	0.425	0.176	Medium
H2: POS → Work Engagement	0.519	0.510	0.019	–	0.511	0.508	0.006	–
H3: Identification with organization → Job Satisfaction	0.328	0.242	0.129	Small	0.279	0.215	0.088	Medium
H4: Identification with organization → Work Engagement	0.519	0.351	0.350	Large	0.511	0.417	0.193	Medium
H5: Work Engagement → Job Satisfaction	0.328	0.230	0.146	Small	0.279	0.241	0.052	Small

## 5. Discussion

The results described above largely corroborate the theoretical model tested in the study. Given that the model demonstrated satisfactory fit indices and factorial validity, the corresponding structural model was built to test the hypotheses. The results shown in Table 5 above suggest that a relationship exists between gender and the factors studied.

Since POS refers to the degree to which employees perceive how concerned their employers are about the staff's wellbeing and how much the organization values their contributions (Eisenberger et al. 1986), the results validate Hypothesis 1. In fact, employees who perceive a high level of organizational support probably feel greater satisfaction in what they do and, alongside, an obligation to reward the organization with greater commitment (Culver et al. 2020; Crucke et al. 2021). Both genders' job satisfaction is influenced by POS, although job satisfaction in men is more strongly influenced by the way they perceive organizational support (Oshagbemi 2000; Webber and Rogers 2018). As previously stated by Saks (2006), one way for employees to repay their organization is to commit more fully to their work roles and devote a greater amount of their own cognitive, emotional and physical resources to their efforts at work, but the present results show that men pay more attention to organizational support—or a lack of it.

Hypothesis 2 was also validated, with results that are consistent with previous studies. POS is defined as 'the global beliefs developed by the employee . . . [about] the extent to

which the organization values . . . [his or her] contributions and takes care of [his or her] welfare' (Eisenberger et al. 1986; Blatný et al. 2018). There are several studies showing the predictors of work engagement, and POS is one of these positive predictors (Gupta et al. 2016; Jia et al. 2018) Thus, the results obtained show that, although the  $f^2$  for both genders is not significant, women's work engagement is affected by organizational support more than men's work engagement is (Khodakarami and Dirani 2020).

Regarding Hypothesis 3, which was not validated, our research suggests that no differences exist between genders in terms of identification with an organization and job satisfaction. The present study used the definition of identification with the organization developed by Mael and Ashforth (1992), namely, 'the perception of oneness with or belongingness to an organization, where the individual defines him or herself in terms of the organization in which he or she is a member' (p. 104). The results confirm that the degree to which individuals feel a part of—or identify with—the values and goals of the organization for which they work is important for both genders (Miao et al. 2019; Schwarz 2017).

Hypothesis 4 was validated, as this study verified that identification with an organization has a greater influence on women's work engagement than it does for men. Identifying with an organization relates to the affective–cognitive association between individuals and the company for which they work. One of the key drivers of employee engagement includes organizational identification (Albrecht et al. 2015). When workers identify with their firm, this means their personal identity is connected to the organization's identity (Ashforth and Mael 1989; Dutton et al. 1994). The present study's results for this hypothesis suggest that women need to feel more closely identified with their organization to be more engaged in their work.

Schaufeli et al. (2002, p. 74) define work engagement as a positive affective–motivational state of fulfillment characterized by vigor, dedication and absorption. Engaged workers have high levels of energy and enthusiasm about their jobs, thereby becoming more productive (Macey and Schneider 2008; May et al. 2004). Consequently, these employees work more effectively and productively, which leads to more job satisfaction. In the present study, Hypothesis 5 was validated, since women are more engaged with their work, and their work engagement more strongly influences their job satisfaction.

## 6. Conclusions

According to Friedberg (1988), two aspects need to be considered when analyzing individuals' behaviors within an organization. The first is individual characteristics, and the second is organizational constraints. Thus, workers' behavior varies according to their psychic and intellectual capacities, education, social background, age and gender, among other factors related to their personal experiences.

The current study sought to understand how constructs such as POS, work engagement and identification with an organization can influence job satisfaction from a gender-based perspective, using data on a sample made up of the staff of a public higher education institution. This research's results reveal that women pay, in general, more attention to the constructs under study—except for organizational support. In the latter case, men's job satisfaction is more influenced by the way they perceive organizational support.

During the development of this study, some limitations were identified that should be taken into account when interpreting the results as in future investigations. The first limitation is related to the fact that the questionnaire was applied after the restrictions caused by COVID19 were lifted. Another limitation is related to the research focused exclusively on a single institution, so, although our findings contribute fresh insights into the literature on job satisfaction issues, this major limitation means the results need to be interpreted with caution. We believe that conducting similar studies in other institutions could contribute to expanding theoretical knowledge about how job satisfaction is related to gender and provide important guidelines for higher education institutions. More specifically, further studies should be carried out in institutions with different dimensions and financial capacities, in different geographical and cultural contexts. This research may

provide a better understanding of contingency factors that can moderate the influence of the proposed model's constructs on work outcomes and attitudes according to gender. Given the significant differences between private and public institutions, comparative studies of these may also provide fruitful insights.

In addition, our study focused on three specific variables and their impact on job satisfaction, namely, organizational identification, work engagement and POS. These variables are only a few of the relevant work outcomes and attitudes, which indicates that more opportunities exist for researchers to conduct different studies focusing on multiple issues including, among others, employees' organizational commitment, engagement, individual performance or organizational citizenship behavior. These future studies could thus more fully explore the potential relationships between workers' outcomes and attitudes.

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## References

- Albrecht, Simon, Arnold Bakker, Jamie Gruman, William Macey, and Alan Saks. 2015. Employee engagement, human resource management practices and competitive advantage: An integrated approach. *Journal of Organizational Effectiveness: People and Performance* 2: 7–35. [CrossRef]
- Al-Hamdan, Zaid, and Haneen Bani Issa. 2021. The role of organizational support and self-efficacy on work engagement among registered nurses in Jordan: A descriptive study. *Journal of Nursing Management*, 1–11. [CrossRef] [PubMed]
- AlHashmi, Maryam, Fauzia Jabeen, and Avraam Papastathopoulos. 2019. Impact of leader–member exchange and perceived organisational support on turnover intention: The mediating effects of psychological stress. *Policing: An International Journal* 42: 520–36. [CrossRef]
- Appelbaum, Nital, Nathaniel Lee, Michael Amendola, Kelley Dodson, and Brian Kaplan. 2019. Surgical resident burnout and job satisfaction: The role of workplace climate and perceived support. *Journal of Surgical Research* 234: 20–25. [CrossRef] [PubMed]
- Ashforth, Blake, and Fred Mael. 1989. Social identity theory and the organization. *Academy of Management Review* 14: 20–39. [CrossRef]
- Aycan, Zeynep, and Mehmet Eskin. 2005. Relative contributions of childcare, spousal support, and organizational support in reducing work–family conflict for men and women: The case of Turkey. *Sex Roles* 53: 453–71. [CrossRef]
- Bacharach, Samuel. 1983. *The Quality of Working Life of Professional, Technical, and Scientific Employees of New York State: A Report to the Joint Labor-Management Committee on Professional Development and Quality of Working Life*. New York: New York State School of Industrial and Labor Relations.
- Bagozzi, Richard, and Youjae Yi. 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science* 16: 74–94. [CrossRef]
- Bates, Scott. 2004. Getting engaged. *HR Magazine* 49: 44–51.
- Bemana, Simin, Hamideh Moradi, Mohsen Ghasemi, Sayed Mehdi Taghavi, and Amir Hosain Ghayoor. 2013. The relationship among job stress and job satisfaction in municipality personnel in Iran. *World Applied Sciences Journal* 22: 233–38.
- Bender, Keith, Susan Donohue, and John Heywood. 2005. Job satisfaction and gender segregation. *Oxford Economic Papers* 57: 479–96. [CrossRef]
- Blatný, Marek, Petr Květon, Martin Jelínek, Iva Šolcová, Katerina Záborská, Jiri Mudrák, and Katerina Machovcová. 2018. The influence of personality traits on life satisfaction through work engagement and job satisfaction among academic faculty members. *Studia Psychologica* 60: 274–86. [CrossRef]
- Bohle, Sergio, Maria Chambel, Felipe Medina, and Bruno Cunha. 2018. The role of perceived organizational support in job insecurity and performance. *Revista de Administração de Empresas* 58: 393–404. [CrossRef]
- Chiang, Chun-Fang, and Tsung-Sheng Hsieh. 2012. The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behaviour. *International Journal of Hospitality Management* 31: 180–90. [CrossRef]
- Clark, Andrew. 1997. Job satisfaction and gender: Why are women so happy at work? *Labour Economics* 4: 341–72. [CrossRef]
- Cohen, Bruce. 1996. Explaining Psychological Statistics. *Psycritiques* 41: 1224–25.

- Cohen, Jacob. 1988. *The Effect Size. Statistical Power Analysis for the Behavioral Sciences*. Abingdon: Routledge, pp. 77–83.
- Cooper, Donald, and Pamela Schindler. 2016. *Métodos de Pesquisa em Administração-12ª Edição*. São Paulo: McGraw Hill Brasil.
- Crucke, Saskia, Tom Kluijtmans, Kenn Meyfrootd, and Sebastian Desmidt. 2021. How does organizational sustainability foster public service motivation and job satisfaction? The mediating role of organizational support and societal impact potential. *Public Management Review*, 1–27. [\[CrossRef\]](#)
- Culver, K., Ryan Young, and Cassie Barnhardt. 2020. Communicating support: Examining perceived organizational support among faculty members with differing appointment types. *Innovative Higher Education* 45: 299–315. [\[CrossRef\]](#)
- De Roeck, Kenneth, Assaad El Akremi, and Valérie Swaen. 2016. Consistency matters! How and when does corporate social responsibility affect employees' organizational identification? *Journal of Management Studies* 53: 1141–68. [\[CrossRef\]](#)
- DeConinck, James. 2011. The effects of ethical climate on organizational identification, supervisory trust, and turnover among salespeople. *Journal of Business Research* 64: 617–24. [\[CrossRef\]](#)
- Demerouti, Eva, and Arnold Bakker. 2006. Employee well-being and job performance: Where we stand and where we should go. *Occupational Health Psychology: European Perspectives on Research, Education and Practice* 1: 83–111.
- Dulebohn, James, William Bommer, Robert Liden, Robyn Brouer, and Gerald Ferris. 2012. A meta-analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management* 38: 1715–59. [\[CrossRef\]](#)
- Dutton, Jane, Janet Dukerich, and Celia Harquail. 1994. Organizational images and member identification. *Administrative Science Quarterly* 39: 239–63. [\[CrossRef\]](#)
- Eder, Paul, and Robert Eisenberger. 2008. Perceived organizational support: Reducing the negative influence of coworker withdrawal behavior. *Journal of Management* 34: 55–68. [\[CrossRef\]](#)
- Eisenberger, Robert, Richard Huntington, Steven Hutchison, and David Sowa. 1986. Perceived organizational support. *Journal of Applied psychology* 71: 500–7. [\[CrossRef\]](#)
- Elrehail, Hamzah, Ibrahim Harazneh, Mohammad Abuhjeeleh, Amro Alzghoul, Sakher Alnajdawi, and Hussein Ibrahim. 2019. Employee satisfaction, human resource management practices and competitive advantage: The case of Northern Cyprus. *European Journal of Management and Business Economics* 29: 125–49. [\[CrossRef\]](#)
- Evans, Linda. 2001. Delving deeper into morale, job satisfaction and motivation among education professionals: Re-examining the leadership dimension. *Educational Management & Administration* 29: 291–306.
- Falk, Frank, and Nancy Miller. 1992. *A Primer for Soft Modeling*. Akron: University of Akron Press.
- Fieseler, Christian, Miriam Meckel, and Giulia Ranzini. 2014. Professional personae-How organizational identification shapes online identity in the workplace. *Journal of Computer-Mediated Communication* 20: 153–70. [\[CrossRef\]](#)
- Fornell, Claes. 1998. *American Costumer Satisfaction Index. Frontiers in Services Presentation—AMA*. Nashville: Vanderbilt University.
- Fornell, Claes, and David Larcker. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18: 39–50. [\[CrossRef\]](#)
- Friedberg, Errol. 1988. *L'analyse Sociologique des Organisations*. Paris: L'Harmattan.
- Garg, Sheya, and Rajib Lochan Dhar. 2014. Effects of stress, LMX and perceived organizational support on service quality: Mediating effects of organizational commitment. *Journal of Hospitality and Tourism Management* 21: 64–75. [\[CrossRef\]](#)
- Gefen, David, Edward Rigdon, and Detmar Straub. 2011. Editor's comments: An update and extension to SEM guidelines for administrative and social science research. *Mis Quarterly* 35: 3–14. [\[CrossRef\]](#)
- Gerstner, Charlotte, and David Day. 1997. Meta-Analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology* 82: 827–44. [\[CrossRef\]](#)
- Giao, Ha Nam, Bui Nhat Vuong, Doa Duy Huan, Hasanuzzaman Tushar, and Tran Quan. 2020. The effect of emotional intelligence on turnover intention and the moderating role of perceived organizational support: Evidence from the banking industry of Vietnam. *Sustainability* 12: 1857. [\[CrossRef\]](#)
- González-Romá, Vicente, Wilmar Schaufeli, Arnold Bakker, and Susana Lloret. 2006. Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behaviour* 68: 165–74. [\[CrossRef\]](#)
- Graham, Katrina, Christian Resick, Jaclyn Margolis, Ping Shao, Michael Hargis, and Jason Kiker. 2020. Egoistic norms, organizational identification, and the perceived ethicality of unethical pro-organizational behavior: A moral maturation perspective. *Human Relations* 73: 1249–77. [\[CrossRef\]](#)
- Gupta, Vishal, Upasna Agarwal, and Naresh Khatri. 2016. The relationships between perceived organizational support, affective commitment, psychological contract breach, organizational citizenship behaviour and work engagement. *Journal of Advanced Nursing* 72: 2806–17. [\[CrossRef\]](#) [\[PubMed\]](#)
- Haar, Jarrod, Alida de Fluiter, and David Brougham. 2016. Abusive supervision and turnover intentions: The mediating role of perceived organisational support. *Journal of Management & Organization* 22: 139–53.
- Haas, Markus, Stefan Mitnik, and Marc Paoletta. 2009. Asymmetric multivariate normal mixture GARCH. *Computational Statistics & Data Analysis* 53: 2129–54.
- Hair, Joe, Christian Ringle, and Marko Sarstedt. 2011. PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice* 19: 139–52. [\[CrossRef\]](#)
- Hair, Joe, Marko Sarstedt, Christian Ringle, and Jennette Mena. 2012. An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science* 40: 414–33. [\[CrossRef\]](#)

- Hair, Joseph, Christian Ringle, and Marko Sarstedt. 2013. Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning* 46: 1–12. [\[CrossRef\]](#)
- Hair, Joseph, William Black, Barry Babin, Ralph Anderson, and Ronald Tatham. 2009. *Análise Multivariada de Dados*. Porto Alegre: Bookman Editora.
- Hammer, Tove Helland, and Ariel Avgar. 2005. The impact of unions on job satisfaction, organizational commitment, and turnover. *Journal of Labor Research* 26: 241–66. [\[CrossRef\]](#)
- Harter, James, Frank Schmidt, and Theodore Hayes. 2002. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology* 87: 268–79. [\[CrossRef\]](#) [\[PubMed\]](#)
- Haslam, Alexander, and Naomi Ellemers. 2005. Social identity in industrial and organizational psychology: Concepts, controversies and contributions. *International Review of Industrial and Organizational Psychology* 20: 39–118.
- Hauert, Laetitia, and Donald Williams. 2017. Cross-National Analysis of Gender Differences in Job Satisfaction. *Industrial Relations: A Journal of Economy and Society* 56: 203–35. [\[CrossRef\]](#)
- Hossen, Md Monir, Tak Jie Chan, and Nurul Ain Mohd Hasan. 2020. Mediating role of job satisfaction on internal corporate social responsibility practices and employee engagement in higher education sector. *Contemporary Management Research* 16: 207–27. [\[CrossRef\]](#)
- Hulland, John. 1999. Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal* 20: 195–204. [\[CrossRef\]](#)
- James, Matrecia. 2005. Antecedents and Consequences of Cynicism in Organizations: An Examination of Potential Positive and Negative Effects on School Systems. Unpublished doctoral dissertation, The Florida State University College of Business, Tallahassee, FL, USA.
- Jia, Xiao, Jin Chen, Liang Mei, and Qian Wu. 2018. How leadership matters in organizational innovation: A perspective of openness. *Management Decision* 56: 6–25. [\[CrossRef\]](#)
- Joo, Baek-kyoo. 2010. Organizational commitment for knowledge workers: The roles of perceived organizational learning culture, leader–member exchange quality, and turnover intention. *Human Resource Development Quarterly* 21: 69–85. [\[CrossRef\]](#)
- Kanungo, Rabindra. 1979. The concepts of alienation and involvement revisited. *Psychological Bulletin* 86: 119–38. [\[CrossRef\]](#)
- Khodakarami, Nima, and Khalil Dirani. 2020. Drivers of employee engagement: Differences by work area and gender. *Industrial and Commercial Training* 52: 81–91. [\[CrossRef\]](#)
- Koçak, Daimi, and Gokhan Kerse. 2022. How Perceived Organizational Obstruction Influences Job Satisfaction: The Roles of Interactional Justice and Organizational Identification. *SAGE Open* 12: 21582440221079933. [\[CrossRef\]](#)
- Konrad, Alison, Jr., Edgar Ritchie Jr., Pamela Lieb, and Elizabeth Corrigan. 2000. Sex differences and similarities in job attribute preferences: A meta-analysis. *Psychological Bulletin* 126: 593–641. [\[CrossRef\]](#) [\[PubMed\]](#)
- Kurtessis, James, Robert Eisenberger, Michael Ford, Louis Buffardi, Kathleen Stewart, and Cory Adis. 2017. Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management* 43: 1854–84. [\[CrossRef\]](#)
- Lawler, Edward. 1995. *Creating High Performance Organizations: Survey of Practices and Results of Employee Involvement and TQM in Fortune 1000 Companies*. San Francisco: Jossey-Bass.
- Lee, Jin-Soo, Ki-Joon Back, and Eric Chan. 2015. Quality of work life and job satisfaction among frontline hotel employees: A self-determination and need satisfaction theory approach. *International Journal of Contemporary Hospitality Management* 27: 768–89. [\[CrossRef\]](#)
- Lefkowitz, Joel. 1994. Sex-related differences in job attitudes and dispositional variables: Now you see them, . . . . *Academy of Management Journal* 37: 323–49.
- Ling, Suan, and Mohd Nasurdin. 2016. Supervisor support and work engagement of hotel employees in Malaysia: Is it different for men and women? *Gender in Management* 31: 2–18. [\[CrossRef\]](#)
- Locke, Edwin. 1969. What is job satisfaction? *Organizational Behavior and Human Performance* 4: 309–36. [\[CrossRef\]](#)
- Locke, Edwin. 1976. The Nature and Causes of Job Satisfaction. *Handbook of Industrial and Organizational Psychology* 1: 1297–343.
- Lu, Allan Cheng Chieh, and Dogan Gursoy. 2016. Impact of job burnout on satisfaction and turnover intention: Do generational differences matter? *Journal of Hospitality & Tourism Research* 40: 210–35.
- Macey, William, and Benjamin Schneider. 2008. The meaning of employee engagement. *Industrial and Organizational Psychology* 1: 3–30. [\[CrossRef\]](#)
- Mael, Fred, and Blake Ashforth. 1992. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior* 13: 103–23. [\[CrossRef\]](#)
- Mannheim, Bilha. 1993. Gender and the effects of demographics, status, and work values on work centrality. *Work and Occupations* 20: 3–22. [\[CrossRef\]](#)
- Marique, Géraldine, and Florence Stinglhamber. 2011. Identification to proximal targets and affective organizational commitment. *Journal of Personnel Psychology* 10: 107–17. [\[CrossRef\]](#)
- May, Douglas, Richard Gilson, and Lynn Harter. 2004. The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology* 77: 11–37. [\[CrossRef\]](#)
- Miao, Qing, Nathan Eva, Alexander Newman, and Gary Schwarz. 2019. Public service motivation and performance: The role of organizational identification. *Public Money & Management* 39: 77–85.

- Monzani, Lucas, Alina Bark, Rolf van Dick, and José María Peiró. 2015. The synergistic effect of prototypicality and authenticity in the relation between leaders' biological gender and their organizational identification. *Journal of Business Ethics* 132: 737–52. [\[CrossRef\]](#)
- Mustafa, Michael, Hazel Ramos, and Siti Khadijah Zainal Badri. 2020. Determining nonfamily employees' job satisfaction and turnover intentions: The roles of job autonomy and work passion. *Journal of Family Business Management, ahead-of-print*. [\[CrossRef\]](#)
- Nixon, Ashley, Liu-Qin Yang, Paul Spector, and Xichao Zhang. 2011. Emotional labor in China: Do perceived organizational support and gender moderate the process? *Stress and Health* 27: 289–305. [\[CrossRef\]](#)
- Oshagbemi, Titus. 2000. Gender differences in the job satisfaction of university teachers. *Women in Management Review* 15: 331–43. [\[CrossRef\]](#)
- Paek, Soyon, Markus Schuckert, Taegoo Terry Kim, and Gyehee Lee. 2015. Why is hospitality employees' psychological capital important? The effects of psychological capital on work engagement and employee morale. *International Journal of Hospitality Management* 50: 9–26. [\[CrossRef\]](#)
- Rhoades, Linda, and Robert Eisenberger. 2002. Perceived organizational support: A review of the literature. *Journal of Applied Psychology* 87: 698–714. [\[CrossRef\]](#) [\[PubMed\]](#)
- Richman, Amy. 2006. Everyone wants an engaged workforce how can you create it. *Workspan* 49: 36–39.
- Riketta, Michael. 2005. Organizational identification: A meta-analysis. *Journal of Vocational Behavior* 66: 358–84. [\[CrossRef\]](#)
- Riketta, Michael, and Rolf Van Dick. 2005. Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. *Journal of Vocational Behaviour* 67: 490–510. [\[CrossRef\]](#)
- Ringle, Christian, Sven Wende, and Alexander Will. 2005. Smart PLS 2.0 M3. In *Book Smart Pls, 2, M3*. Hamburg: University of Hamburg.
- Riordan, Christine, Robert Vandenberg, and Hettie Richardson. 2005. Employee involvement climate and organizational effectiveness. *Human Resources Management* 44: 471–88. [\[CrossRef\]](#)
- Rosenblatt, Zehava, Ilan Talmud, and Ayalla Ruvio. 1999. A gender-based framework of the experience of job insecurity and its effects on work attitudes. *European Journal of Work and Organizational Psychology* 8: 197–217. [\[CrossRef\]](#)
- Sabonete, Sérgio, Helga Lopes, David Rosado, and João Reis. 2021. Quality of work life according to Walton's model: Case study of the higher institute of defense studies of Mozambique. *Social Sciences* 10: 244. [\[CrossRef\]](#)
- Saks, Alan. 2006. Antecedents and consequences of employee engagement. *Journal of Managerial Psychology* 21: 600–19. [\[CrossRef\]](#)
- Salas-Vallina, Andrés, and Joaquin Alegre. 2017. The role of gender, age, job level and job security on physician's engagement in Spanish public hospitals. *Universia Business Review* 56: 36–51.
- Schaufeli, Wilmar, Arnold Bakker, and Marisa Salanova. 2003. Utrecht work engagement scale-9. *Educational and Psychological Measurement*, 3–60. [\[CrossRef\]](#)
- Schaufeli, Wilmar, Marisa Salanova, Vicente González-Romá, and Arnold Bakker. 2002. The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies* 3: 71–92. [\[CrossRef\]](#)
- Schwarz, Gary. 2017. Transformational leadership and job performance: The role of organizational identification. In *The Palgrave Handbook of Leadership in Transforming Asia*. London: Palgrave Macmillan, pp. 519–39.
- Shen, Jie, Jenny Dumont, and Xin Deng. 2018. Employees' perceptions of green HRM and non-green employee work outcomes: The social identity and stakeholder perspectives. *Group & Organization Management* 43: 594–622.
- Sloane, Peter, and Hector Williams. 2000. Job satisfaction, comparison earnings, and gender. *Labour* 14: 473–502. [\[CrossRef\]](#)
- Sokro, Evans, Soma Pillay, and Timothy Bednall. 2021. The effects of perceived organisational support on expatriate adjustment, assignment completion and job satisfaction. *International Journal of Cross Cultural Management* 21: 452–73. [\[CrossRef\]](#)
- Sousa-Poza, Alfonso, and Andres Sousa-Poza. 2000a. Well-being at work: A cross-national analysis of the levels and determinants of job satisfaction. *The Journal of Socio-Economics* 29: 517–38. [\[CrossRef\]](#)
- Sousa-Poza, Alfonso, and Andres Sousa-Poza. 2000b. Taking another look at the gender/job-satisfaction paradox. *Kyklos* 53: 135–52. [\[CrossRef\]](#)
- Tabvuma, Vurain, Yannis Georgellis, and Thomas Lange. 2015. Orientation training and job satisfaction: A sector and gender analysis. *Human Resource Management* 54: 303–21. [\[CrossRef\]](#)
- Topchyan, Ruzanna, and Carol Woehler. 2021. Do Teacher Status, Gender, and Years of Teaching Experience Impact Job Satisfaction and Work Engagement? *Education and Urban Society* 53: 119–45. [\[CrossRef\]](#)
- Van Dick, Rolf. 2004. My job is my castle: Identification in organizational contexts. *International Review of Industrial and Organizational Psychology* 19: 171–204.
- Van Knippenberg, Daan. 2000. Work motivation and performance: A social identity perspective. *Applied Psychology* 49: 357–71. [\[CrossRef\]](#)
- Walton, Richard. 1973. Quality of working life: What is it. *Sloan Management Review* 15: 11–21.
- Webber, Karen, and Samantha Rogers. 2018. Gender differences in faculty member job satisfaction: Equity forestalled? *Research in Higher Education* 59: 1105–32. [\[CrossRef\]](#)
- Weiss, David, Rene Dawis, and George England. 1967. Manual for the Minnesota Satisfaction Questionnaire. In *MINNESOTA STUDIES in Vocational Rehabilitation*. Minneapolis: University Of Minnesota.

- Wen, Ji, Songsham Huang, and Pingping Hou. 2019. Emotional intelligence, emotional labor, perceived organizational support, and job satisfaction: A moderated mediation model. *International Journal of Hospitality Management* 81: 120–30. [[CrossRef](#)]
- Wynne, Chin. 1998. Issues and opinion on structural equation modelling. *MIS Quarterly* 22: 7–16.
- Yan, Qing, and Stewart Donaldson. 2022. What are the differences between flow and work engagement? A systematic review of positive intervention research. *The Journal of Positive Psychology*, 1–11. [[CrossRef](#)]
- Zhang, Fang, Ying Liu, and Tongqi Wei. 2021. Psychological Capital and Job Satisfaction Among Chinese Residents: A Moderated Mediation of Organizational Identification and Income Level. *Frontiers in Psychology* 12: 719230. [[CrossRef](#)] [[PubMed](#)]
- Zou, Min. 2015. Gender, work orientations and job satisfaction. *Work, Employment and Society* 29: 3–22. [[CrossRef](#)]