



An Analysis of the Perceived Factors Impacting Employee Satisfaction and Retention in Saudi Arabia's Higher Education Sector

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ABSTRACT

The purpose of the study is to examine the factors that are perceived to have an impact on employee satisfaction and retention. This study employed a survey approach in order to gain the respondents' perceptions of the study. The target respondents of this study are academicians in the educational sector in Saudi Arabia. The source of the sampling based on the Saudi Ministry of Higher Education. A total of 384 respondents participated in this study, and the collection of the data was based on a stratified probability sampling technique. To address the research objectives, the study employed PLS-SEM to test the hypotheses of the study. The study has found that work engagement, co-worker relationships, and a supportive work environment are key to employee satisfaction in the educational sector in Saudi Arabia. Meanwhile, the working environment, perceived organizational support, and a supportive work environment are key to employee retention.

Keywords: employee satisfaction, employee retention, educational sectors, Saudi Arabia

INTRODUCTION

Higher education in Saudi Arabia has suffered from low employee satisfaction and employee retention. The scarcity of academic staff and the failure to retain quality academic staff in Saudi Arabia's higher education system reveal emerging problems. Most Saudi universities are facing challenges to becoming world-class in teaching, research, and services related to the development of academic institutions [1]. Universities need to have committed staff with high intentions to stay in their employment. Job retention for academics in institutions is essential for institutional health and survival as well as for the achievement of conceived missions [2]. However, job retention among academic staff is reported to be low in Saudi universities [3]. The government and the Ministry of Higher Education are concerned about academic staff leaving Saudi Arabian universities, and most academic units are understaffed [4]. That means there is

a high percentage of unfilled teaching posts and understaffing, a high number of students compared to the academic staff ratios, and overdependence on existing lecturers, which are all counterproductive to the functionality of the university.

The determinants of employee satisfaction and retention still have asymmetrical findings within the theoretical basis. This is due to the varied organizational environments and industry types. The higher education sector received less attention in the literature. The most relevant theoretical basis is constructed within the industrial industry, which lacks application in service sectors [5-7]. This study helps to close this gap by looking at employee satisfaction and retention in the higher education sector through a single model.

To address these issues, this study identified factors that have a potential impact on employee satisfaction and employee retention. These factors were retrieved from the related literature, which first found a less concerning response from the Saudi Arabian higher education authorities, and second, these factors were found to have high predictive influence on employee satisfaction and employee retention. Thus, the objective of the study consists of two contexts, which are: 1) to examine the factors perceived to have the impact on employee satisfaction; and 2) to examine the factors perceived to have the impact on employee retention.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Based on literature analysis, this study has identified factors perceived contributed to the employee satisfaction and employee retention. Those factors have discussed in following section.

Work Engagement and Employee Satisfaction

Work engagement is the degree to which one's work execution in an organization has been assimilated [8]. The engagement level of employees resulted from the management decision, which decided to which extent its employees were involved in drafting the organizational objectives and strategies. It occurs when the management commits to allowing employees to craft the organization's orientation [9]. Engaged employees are motivated to show up for work every day and do everything in their power to help their businesses succeed.

Several previous studies, such as Côté, Lauzier [6], Perera, Granziera [10], Ilkhanizadeh and Karatepe [11], confirmed a significant and positive relationship between work engagement and employee satisfaction. These studies examine this relationship from the perspective of employees, unlike other studies that measured this relationship from the perspective of the organization. The organization's perspective based on satisfying employees will lead to high engagement of the employees. Some companies only care that their employees are satisfied. When many of the staff are satisfied with their jobs, they settle for showing up to the office every day and are not actively looking for another job [12]. Because they are satisfied, their companies have a low turnover rate, which in some cases, convinces management that all is well. Based on the above arguments and the findings from past literature, it can be hypothesized:

H1: work engagement has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Co-Worker Relationship and Employee Satisfaction

Sollitto and Myers [13] defined co-worker relationship as relationships between employees at the same hierarchical level who do not have formal responsibility over one other. Synergy is a vital component of co-worker relations in any company [14]. It is the ability of its members to organize their selves when faced with a need. Synergy can be established as a common group dynamic in a company, it is most likely that the goals will take very little time to be achieved. The co-worker relations that occur in a company can be so diverse that you must know them before attempting any change.

Several previous studies such as Valaei and Rezaei [7], Alegre, Mas-Machuca [15], Mohamad Faridthul Azhar [16], found that co-worker relationship has a significant and positive association with employee satisfaction. The employment relationship that occurs when a temporary contract is signed is not the same as the one that occurs in an indefinite-term contract. But despite the existence of different work modalities, classifying them for analysis is not impossible. Based on the above arguments and the findings from past literature, it can be hypothesized:

H2: co-worker relation has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Compensation Package and Employee Satisfaction

Compensation package is payments made by the company to its workers, such as: salaries, awards, social benefits, and opportunities for advancement [17]. An easier way of explanation would be that compensation package are rewards or incentives for the worker to which extent they are satisfied. The scientific management movement initiated the rise of compensation package systems by providing objective standards of performance, by which employee productivity could be measured and rewarded. Mauno and Ruokolainen [18] believed that employees could apply more effort if they were paid a satisfied compensation package based on the number of units they produced. Although the compensation package schemes varied from the system for calculating pay, all were an attempt to relate employee wages more closely to productivity.

Several previous studies such as Alegre, Mas-Machuca [15], Valaei and Rezaei [19], and Mohamad Faridthul Azhar [20] found that compensation package has a significant and positive relationship with the employee satisfaction. The main objective of the compensation package is to satisfy the workers of an organization to improve their performance in activities, which perhaps they do not consider motivating with compensation systems such as hourly, seniority or both at the same time. Based on the above arguments and the findings from past literature, it can be hypothesized:

H3: Compensation package has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Perceived Organizational Support and Employee Satisfaction

Perceived organizational support was defined by Afsar and Badir [21] as an employee's conviction that the organisation values and cares about his or her contribution to the long-term success of the organisation. Eisenberger, Huntington [22] found that the employees of the same organization presented common patterns regarding their perception of how the organization valued their contributions and how it would react to a series of situations whose objective was

to take care of their well-being (e.g., employee illnesses or performance errors). These results suggest that workers in the same organization may share their perceptions regarding the degree to which their organizations are committed to them, there may be a collective perception of organizational support [6]. This assumption is consistent with the "bottom-up" process for the construction of a collective perception, which suggest that the agreement in the perceptions of the members of a group (e.g., organization), is the basis for the conceptualization and operationalization of a construct at higher levels of structure with an isomorphic functioning with respect to lower levels (e.g., individual). This conceptualization perspective spread over the different levels of organization, strengthening the satisfaction level of employees toward their organization.

Perceived organizational support is found to be a significant predictor of employees' behavioral intentions [23]. Several previous studies such as Maan, Abid [24], Chandrakar [25], Feng, Su [26] showed significant positive correlations between perceived organizational support and employee satisfaction. Even though these studies showed a positive result and a significant relationship between perceived organizational support and employee satisfaction, none have the empirically examined mechanisms underlying this relationship, and how it can be transferred to generate higher employee retention. Based on the above arguments and the findings from past literature, it can be hypothesized:

H4: Perceived organizational support has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Supportive Work Environment and Employee Satisfaction

Employees are more likely to stay when there is a positive work environment and vice versa [27]. According to Akintayo [28] supportive work environment can be defined as an immediate task and general environment in which the organization processes its resources as an outcome for their final consumers. Based on Akintayo [28] task and general environment include an external environment of organizations which also believes influencing people's psychological and working behavior. Other than that, the workplace environment according to Agbozo, Owusu [29] is the composition of three significant sub-environments which is the physical, social, and psychological work environment. Meanwhile, the supportive work environment was defined by Kohun [30] as a factor that is currently and, or potentially contending with the employee's activities and performance. Recognition of employees' contributions and concern for their welfare enhance employee satisfaction. Moreover, high level of supportive work environment positively influences the employee satisfaction [22] and stimulates the intention to stay with the organization. Wayne, Shore [31] have found that individuals who perceive greater support from their engaging organizations are more likely to feel obligated to their organizations.

Several previous studies such as Agbozo, Owusu [29], AbuAlRub, El-Jardali [32], Goh and Lopez [33] found that supportive work environment has a significant and positive relationship with employee satisfaction. In this regard, supportive work environment is among the most crucial aspect in the organization that belief will influence the employee satisfaction level. Sze, Tze [34] believed that organizational, physical, and social factors would impact the satisfaction levels of employees. Based on the above arguments and the findings from past literature, it can be hypothesized:

H5: Supportive work environment has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Work Engagement and Employee Retention

Engaged employees are much more likely to experience positive emotions at work and can build enduring psychological resources and trigger upward spirals of emotional well-being [35]. Worker engagement is specified as the preparation of association individuals' selves for their work jobs; at job exhibitions, individuals use and communicate genuinely, psychologically, and sincerely [36]. Moreover, engaged employees are more likely to experience good health and reduced stress at work [37].

Several previous studies such as Arslan and Roudaki [38], Shibiti [39], Jenkins and Sherman [40] found a significant and positive impact of work engagement and employee retention. Employee engagement tends to shift towards the identification of organizational input and employee needs which, in further, add value to the organizational engagement [41]. Work engagement is viewed as the strong association and involvement of employees with employing organization [42]. Employees are more likely to repay the organization if they are highly engaged [23] and are more likely to be empowered in organizational processes if they are engaged. Based on the above arguments and the findings from past literature, it can be hypothesized:

H6: work engagement has a significant and positive effect on employee retention in education sector in Saudi Arabia

Co-Worker Relationship and Employee Retention

According to Tews, Michel [14], coworker relationships are defined as the degree to which employees accept their coworkers' willingness to provide them with business-related support to help them fulfil their administrative duties. The labour relations are the working relationship that exists between businesses, workers, and their representatives. It is important not to confuse the duration of an employment relationship with the activities that an employee performs. In other words, the fact that a worker is from the company does not mean that it is permanent; since it may happen that a worker from the company is hired for an established time or project. Ariani [43] stated that, employees must be optimal working relationships so that all team members can improve their skills.

Several previous studies such as Harischandra and Hettiarachchi [44], Anderson and Haas [45], Gerlach [46] found a significant and positive association between co-worker relationship and employee retention. This association is interpreted by which the employee is tied to the workplace environment, which the employee feels more comfortable, and the employee does not like to leave this workplace society. Based on the above arguments and the findings from past literature, it can be hypothesized:

H7: Co-worker relation has a significant and positive effect on employee retention in education sector in Saudi Arabia

Compensation Package and Employee Retention

Compensation package, according to Mahat and Mathema [47], is a monetary or non-monetary benefit provided by an organisation to a worker in exchange for services rendered to the organisation, which motivates the employees to contribute to the organization's growth,

development, and performance. Benefits that are adequate and flexible can show employees that their employer is supportive and fair, and there is evidence that benefits are one of the top reasons why employees choose to stay with their job or join the company in the first place [48]. Unequal or substandard wage structures fall under this category as well for example, when two or more employees perform similar work and have similar responsibilities, differences in pay rate can drive lower paid employees to quit. If they are paid less than other employers for similar work, employees are likely to quit for higher pay, if other factors are relatively equal [49]. Employees always look for companies that offer more benefits and compensation package. Several previous studies such as Sarkar [50], Michael, Prince [51] revealed that there is a significant and positive relationship exist between compensation package and employee retention. The more an employee is rewarded or compensated, the longer they remain in an organization and there is a positive result exists between compensation package and employee retention. The result of the study again proved that there is a significant relationship exists between employee retention, the more an employee is satisfied with compensation, the longer they remain in an organization such as Mugarura and Kaberuka [52], Chiekezie, Emejulu [53]. Based on the above arguments and the findings from past literature, it can be hypothesized:

H8: Compensation package has a significant and positive effect on employee retention in education sector in Saudi Arabia.

Perceived Organizational Support and Employee Retention

Akgunduz, Alkan [54] state that there are three forms of support from the company, which are most valued by employees and generate higher levels of POS, these are: justice, support from supervisors and organizational rewards and employees' conditions. Perceived organizational support is understood as the general belief that an employee has about the degree to which the organization where he works values his contributions and cares about his well-being [22]. There is a sense of obligation on the part of the employee to the organization, this idea is supported by the belief that; it is appropriate to pay back the interest and recognition that the company provides to its workers [22]. Several studies such as Kundu and Lata [55], Moloney, Boxall [56] and suggest that the perceived organizational support perspective is related to a reciprocity between the employee and the employer.

Several previous studies such as Gigliotti, Vardaman [57], Kim, Hur [58], Liu and Liu [59] found a significant and positive relationship between POS and the employee retention. This relationship is perceived as a norm by both parties, there will be greater acceptance of this correspondence and in turn it will be perceived as a basic element of the employee-employer relationship. This is facilitated by the propensity of employees to assign human characteristics to the company.

The beliefs of the employees regarding the support or malevolence provided by the organization, tends to be fostered by the personification of the company, the employees adjudicate the actions of the representatives of the organization as their own actions. This attribution towards the company is given by the being the ramifications of legal, moral, and financial responsibility that link the actions of the organization with the actions of the private agent. According to Caesens, Marique [60] what has been described, it can be understood that the support that workers perceive from their immediate supervisors, translates into the support they perceive from the organization. In this way, supervisors fulfil the role of agents

within the organization. Based on the above arguments and the findings from past literature, it can be hypothesized:

H9: Perceived organizational support has a significant and positive effect on employee retention in education sector in Saudi Arabia.

Supportive Work Environment and Employee Retention

People try to work for firms that create a pleasant work atmosphere and appreciate employees' efforts appropriately [61]. The supportive work environment, according to Johansen and Cadmus [62], is made up of three sub environments: technical, human, and organizational. Employees' interest in their occupations increases because of a supportive work environment [63]. Further, it serves as a valuable input for desired behavior among employees and therefore, develops the innovative work behavior as well [63].

Previous studies such as Goh and Lopez [33], Arslan and Roudaki [38], Jiang and Shen [64] have revealed that supportive work environment correlates significantly and positively with the employee retention. Supportive work environment is found to have a significant effect on employee retention. Further, the extent to which employees feel that their contributions are valued by their employing organizations and their employers care for their wellbeing is inversely related to voluntary retention. Thus, it can be concluded that perceived work environment reciprocates the employee retention. Therefore, the above literature provides support for the following hypothesis.

H10: Supportive work environment has a significant and positive effect on employee retention in education sector in Saudi Arabia.

METHODS

This study applied a quantitative method because the study variables are clearly defined, and numerical data is present. The quantitative method is used for the study where relational questions are answered for the variables into the research. It begins from the step of finding an issue then formulation of conceptual framework followed by the development of a hypothesis, searching the existing literature for the gap in knowledge, collecting the quantitative data through questionnaire and finally analyse the quantitative data. The intent is to confirm, establish and validate the relationships as well as to generalize the theory under study [65]. In addition, this method also focuses on numeric data collection, analysis and emphasizes on comparatively large-scale of representative data [66]. Furthermore, the quantitative method employs a deductive approach to develop a relationship between theory and research, as well as an emphasis on theories to assess their compatibility.

Sampling of the Study

Based on Saudi Ministry of Higher Education, the total academicians within the Saudi universities is 38,847 academicians. According to the determined population size, the sample size of the present study is 385, which is considered based on Krejcie and Morgan [67] equation as follow:

$$\begin{aligned} S &= X^2NP(1 - P) \div d^2(N - 1) + X^2P(1 - P) \\ S &= 3.841(38,847) * 0.5 * 0.5 / (0.05)^2(38,846) + 3.841 * 0.5 * 0.5 \\ &= 37302.8 / 97.115 + 0.96025 \\ &= 385.07 \approx 385 \\ S &= \text{required sample size.} \end{aligned}$$

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (.05).

However, the researchers increase the sample size deliberately to avoid the non-response rate issues [68-70]. Thus, 770 questionnaires have distributed for academicians in Saudi universities. Due to efforts, 424 questionnaires have been obtained, 39 of them were unusable. Therefore, the valid questionnaires number for analysis was 385.

Moreover, this study considered the probability sampling technique since it is used when each element of the population is known and has a non-zero chance of being included in the sample, also quantitative studies normally use probability sampling [71]. The stratified probability sampling technique is employed for this study. Stratified sampling is suitable for those type of study where the population consists in two or more clusters is known as strata, as per some criterion like age group, grade level, income, geographic location, gender, and subsamples are chosen randomly from every stratum [72]. Therefore, the study has adopted stratified probability sampling technique for the research study. The stratified probability sampling technique process identified in multistage of process as follow:

- Identifying the total population of the study, which is 38,847 academicians as stated in
- **Table 1.**
- The total population of this study was stratified into 28 university spread over the Saudi Kingdom, which is shown in
- **Table 1.**
- The first level of stratifying that comprised 28 university divided into two subgroups that male and female participants
- The sample portion of each university identified based on the percentage of university staff to the total population
- The participation size based on gender identified for each subgroup of each university

Table 1: Sampling Based on Stratified Probability Sampling Technique Process

No	University	Teaching Staff	%	Sample portion	Gender	Participants	%	Sample size
1	Umm Al-Qura Uni.	3,520	9.1%	35	Male	1,839	52.2%	18
					Female	1,681	47.8%	17
2	The Islamic Uni.	722	1.9%	7	Male	722	100.0%	7
					Female	0		0
3	Imam Moh. Bn saud Islamic Uni.	2,812	7.2%	28	Male	1,765	62.8%	17
					Female	1,047	37.2%	10
4	King Saud Uni.	5,820	15.0%	59	Male	3,270	56.2%	33
					Female	2,550	43.8%	25
5	King Abdulaziz Uni.	5,800	14.9%	57	Male	2,601	44.8%	26
					Female	3,199	55.2%	32

No	University	Teaching Staff	%	Sample portion	Gender	Participants	%	Sample size
6	King Fahd Uni. Of Petrol & Min.	384	1.0%	4	Male	384	100.0%	4
					Female	0	0.0%	0
7	King Faisal Uni.	968	2.5%	10	Male	520	53.7%	5
					Female	448	46.3%	4
8	King Khalid Uni.	1,212	3.1%	12	Male	668	55.1%	7
					Female	544	44.9%	5
9	Qassim University	2,098	5.4%	21	Male	1,254	59.8%	12
					Female	844	40.2%	8
10	Princess Noura bint Abdulrahman	1,746	4.5%	17	Male	0	0.0%	0
					Female	1,746	100.0%	17
11	Taibah University	1,245	3.2%	12	Male	643	51.6%	6
					Female	602	48.4%	6
12	Taif University	1,445	3.7%	14	Male	754	52.2%	7
					Female	691	47.8%	7
13	king saud bin abdul aziz for helth Sciences	301	0.8%	3	Male	157	52.2%	2
					Female	144	47.8%	1
14	Jazan University	1,251	3.2%	12	Male	805	64.3%	8
					Female	446	35.7%	4
15	Hail University	966	2.5%	10	Male	470	48.7%	5
					Female	496	51.3%	5
16	AL-jouf University	703	1.8%	7	Male	395	56.2%	4
					Female	308	43.8%	3
17	Tabuk University	981	2.5%	10	Male	466	47.5%	5
					Female	515	52.5%	5
18	ALBaha University	728	1.9%	7	Male	448	61.5%	4
					Female	280	38.5%	3
19	Najran University	537	1.4%	5	Male	351	65.4%	3
					Female	186	34.6%	2
20	University of Northern Border	338	0.9%	3	Male	202	59.8%	2
					Female	136	40.2%	1
21	Shagra University	895	2.3%	9	Male	409	45.7%	4
					Female	486	54.3%	5
22	Princ Satam Bin Abdulaziz University	957	2.5%	9	Male	585	61.1%	6
					Female	372	38.9%	4
23	DAMMAM University	1,576	4.1%	16	Male	561	35.6%	6
					Female	1,015	64.4%	10
24	Majmaah University	776	2.0%	8	Male	493	63.5%	5
					Female	283	36.5%	3
25		219	0.6%	2	Male	148	67.6%	1

No	University	Teaching Staff	%	Sample portion	Gender	Participants	%	Sample size
26	Saudi Electronic University				Female	71	32.4%	1
	Jeddah University	531	1.4%	5	Male	374	70.4%	4
					Female	157	29.6%	2
27	Bisha University	281	0.7%	3	Male	77	27.4%	1
					Female	204	72.6%	2
28	Hafr albatin University	35	0.1%	0	Male	0	0.0%	0
					Female	35	100.0%	0
		38,847		385				

Questionnaire Scaling

According to Sekaran and Bougie [72], during organizing and analyse data, the first step is to deliberate the nature of the scale by which the variable is measured. A scale is used as an instrument for distinguishing different variables of study to the sight of individuals. The variables are commonly measured on one of four possible scales that are a ratio or interval scale, ordinal scale, nominal scale [72]. Nominal scale is used when all variables are classified into categories. An ordinal scale is used when the variables are classified in ordered or ranked. Interval scale is used when the researcher measure distances between values and categories from the variable that has been classified using a scale of measurement, it is also known as Likert scale. Finally, the ratio scale is used when the ratio of the values categorized into a variable which can be classified into determinant.

The study used a nominal, ordinal and interval Likert scale in the development of the study questionnaire. Nominal scale and ordinal scale are used in the questionnaire in section-A where the questions are related to the demographic information of the respondent. A five-point Likert scale range begins from "strongly disagree" (value of 1) to "strongly agree" (value of 5) used for all the variables that are dependent, and independent variables. The usage of this five-point scale increases the reliability of the research [70, 73]. Not only that, but it is also easier to administer, construct, and establish more reliable grading in the case of five-point itemized rating scale [74, 75].

Partial Least Square-Structural Equation Modelling (Pls-Sem)

According to Hair, Ringle [76], Partial Least Square-SEM is commonly employed in exploratory research when a theory needs to be formed, and it is made possible by focusing on illuminating the variance of the dependent variable when it is examined. Astrachan, Patel [77] claims that PLS-SEM can be applied for either theory formulation or confirmation. It is used to investigate the cause-and-effect relationship between two or more variables, whereas path analysis is a subset of PLS-SEM that focuses on measured variables [78]. This technique is useful for SEM in applied experiments, especially when the data distribution is skewed and the number of participants is limited [79]. Smart-PLS are used to create the model for the current study.

ANALYSIS AND DISCUSSIONS

Model Assessment Measurement

Table 2 provides the model measurements assessment based on the indicators of outer loading, Cronbach Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE). These indicator thresholds set the fit introduced by Hair Jr, Sarstedt [80]. The obtained indicators of the model construct met the recommended threshold; the outer loading was higher than 0.50, the CA and CR were higher than 0.70, and the AVE was higher than 0.50.

Table 2 Model Assessment Measurements

Items	Loading	CA	CR	AVE	Items	Loading	CA	CR	AVE
CWR1	0.831	0.835	0.844	0.631	POS4	0.798	0.818	0.837	0.712
CWR2	0.884				POS5	0.817			
CWR3	0.775				POS6	0.87			
CWR4	0.835				POS8	0.862			
CWR5	0.832				POS9	0.848			
CWR6	0.776	0.817	0.835	0.707	POS10	0.867	0.822	0.823	0.634
CWR7	0.733				SWE1	0.885			
CWR8	0.726				SWE2	0.84			
CWR9	0.807				SWE3	0.864			
CWR10	0.726				SWE6	0.824			
CP1	0.825	0.832	0.847	0.748	SWE7	0.791	0.815	0.831	0.658
CP2	0.788				SWE8	0.71			
CP3	0.804				SWE9	0.63			
CP4	0.887				ES1	0.755			
CP7	0.877				ES2	0.785			
CP8	0.859	0.832	0.847	0.748	ES3	0.85	0.815	0.831	0.658
ER1	0.8				ES4	0.801			
ER2	0.928				ES5	0.804			
ER3	0.844				ES6	0.854			
ER4	0.894				ES7	0.83			
ER6	0.836	0.815	0.84	0.787	WE3	0.855			
ER7	0.881				WE4	0.925			
					WE5	0.887			
					WE7	0.903			

Assessing Path Coefficients

The path coefficients are employed in the study for the purpose of analysing the direct effect between the research variables. This test is used to examine the significance of the direct effect hypotheses. This test has been applied to 10 hypotheses of the study with potential direct effect. The following conclusions were drawn based on the results showed in the following Table 2.

The following **Figure 1** and **Figure 2** shows the results of the path coefficients test.

Table 3: Hypotheses Testing

Hypotheses	Path Relationship	Std. Beta	Standard Deviation	T-value >1.96	P Values <0.05	Results
H1	WE -> ES	0.218	0.068	3.193	0.000	Supported
H2	CWR -> ES	0.215	0.062	3.479	0.001	Supported
H3	CP -> ES	-0.081	0.057	1.42	0.171	Not Supported
H4	POS -> ES	-0.043	0.053	0.819	0.387	Not Supported
H5	SWE -> ES	0.430	0.049	8.749	0.000	Supported
H6	WE -> ER	0.276	0.055	5.01	0.000	Supported
H7	CWR -> ER	0.039	0.063	0.621	0.517	Not Supported
H8	CP -> ER	-0.099	0.071	1.398	0.162	Not Supported
H9	POS -> ER	0.395	0.045	8.771	0.000	Supported
H10	SWE -> ER	0.183	0.078	2.335	0.028	Supported

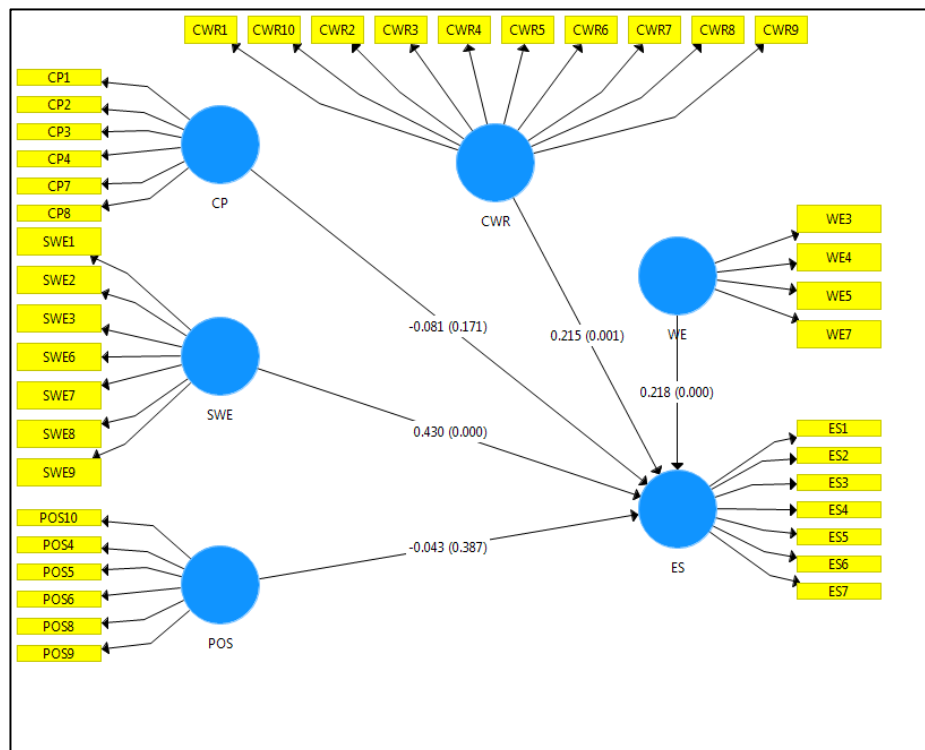


Figure 1: Employee Satisfaction Relationship

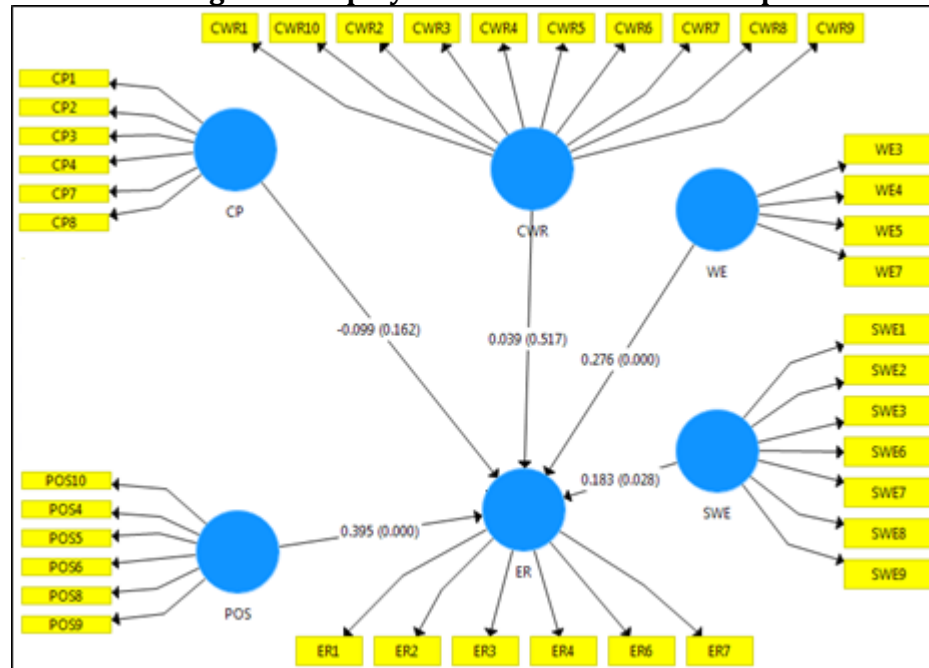


Figure 2: Employee Retention Relationship

DISCUSSIONS

Direct Effect of Work Engagement and Employee Satisfaction

The study proposes that direct effect work engagement and employee satisfaction. Therefore, the study proposes the following hypotheses:

- H1: Work engagement has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Findings have indicated that work engagement has a significant and positive effect on employee satisfaction. This study supports the hypothesis formulation. This result portrayed that work engagement has a substantial influence on employee satisfaction, which means that the more work engagement, its effect would contribute positively increase in employee satisfaction. This study shows that work engagement is an important point to ensure employee satisfaction in the education sector in Saudi Arabia. These findings are consistent with previous studies [e.g., 6, 10, 11] whereby work engagement contributed a positive impact on employee satisfaction.

The measurement of work engagement was presented on a survey questionnaire whereby consists of validated items such as "At my work, I feel bursting with energy", "I find the work that I do full of meaning and purpose", "Time flies when I am working", "At my job, I feel strong and vigorous", "I am enthusiastic about my job". This study suggests the dedication of the employees when they perform their job. This item portrays the engagement in their organizations. These items reflect the positive effect of employee satisfaction in the organization. When employees engage in their job, they enter an interactive mode that includes difficulties, inspirations, and pride [10]. This interaction form of their work involvement contributes significantly to these employees' job satisfaction.

The measurement of employee satisfaction consists of validated items such as "Overall, I am pleased with my work", "My job in this institution has met my expectations", "Overall, I am satisfied in my current practice", "My current work situation is not a major source of frustration in my life", "In general, I like my job". This item portrays that employee satisfaction that reflects the positive relationship of work engagement with the organization. Work engagement is viewed as a dedication of employees (e.g., interaction among employees and employers) to their institution that gives a positive effect on employee satisfaction. It proved that the items measured as employee satisfaction are agreed by the respondents. To conclude this hypothesis, work engagement positively effects employee satisfaction, whereby the more work engagement (employees' dedication to the jobs), the more employee satisfaction will be gained by the organization.

Direct Effect of Co-Worker Relationship on Employee Satisfaction

The study proposes that direct effect co-worker relationship and employee satisfaction. Therefore, the study proposes the following hypotheses:

- H2: Co-worker relationship has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Findings have indicated that there is significant relationship between co-worker relationships and employee satisfaction. This study supports the hypothesis formulation. This result portrays that co-worker relationship has a substantial influence on employee satisfaction. These results are in accord with previous studies [e.g., 7, 15, 16] whereby those studies have found a significant and positive association between co-worker relationships and employee satisfaction. Thereby, this study shows that co-workers give an impact on employee satisfaction in the education sector in Saudi Arabia.

The measurement of a co-worker relationship was presented on a survey questionnaire whereby consists of validated items such as "*My interactions with my co-workers are rewarding*", "*My co-workers value my input*", "*My co-workers listen to what I have to say*", "*My co-workers really know who I am*", "*I believe that my co-workers appreciate who I am*", "*I sense a real connection with my co-workers*". These items reflect the positive effect of employee satisfaction in the organization. This study suggests a co-worker relationship is a form of a social community among employees to share their true feelings to reduce stress. This argument accords with the study by Chung, Quan [81] that stated having individuals around who truly understand and sympathize with the feelings that arise because of both enjoyable and hard experiences may help to minimize the impact of stresses, employees who do not feel co-worker support may be more vulnerable to the impacts of job stresses.

This result contradicted hypothesis 2, whereby the analysis showed insignificant between co-worker relationship and employee retention. This study argued to achieved employee retention, the institution requires to achieve employee satisfaction first. Referring to the validated items measurement in the survey, "*Overall, I am pleased with my work*", "*My job in this institution has met my expectations*", "*Overall, I am satisfied in my current practice*", "*My current work situation is not a major source of frustration in my life*", "*In general, I like my job*". This item portrays that employee satisfaction that reflects the positive relationship of co-workers within the organization. Employees who had a higher positive social form among them were more engaged in their work, happy with their employment be able to achieve satisfaction prior to the

employee retention within the organization. To conclude this hypothesis, the co-worker relationship positively effects employee satisfaction, whereby the more positive relationship among co-workers (positive social form among them), the more employee satisfaction will be gained by the organization.

Direct Effect of Compensation Package on Employee Satisfaction

The study proposes that direct effect compensation package and employee satisfaction. Therefore, the study proposes the following hypotheses:

- H3: Compensation package has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Findings have indicated that there is no significant relationship between compensation package and employee satisfaction. This study does not support the hypothesis formulation. This result does not portray that compensation package has a substantial influence on employee satisfaction. This result is consistent with hypothesis 3 whereby there is no significant relationship between compensation package and employee retention. This result also contradicts findings from previous studies [e.g.,7, 15, 16] whereby those studies have found a positive significant association between compensation package and employee satisfaction. Effective compensation is intended to bring value to employee satisfaction and motivate employees to perform more all the time [82]. However, compensation does not have a direct influence on retention [83]. This study is consistent with Davies, Taylor [84] whereby the institution does not make use of compensation and benefits policies to increase satisfaction. Thereby, this study shows that the compensation package does not give any impact on employee satisfaction in the education sector in Saudi Arabia.

The measurement of compensation package was presented on a survey questionnaire whereby consists of validated items such as "My compensation fits my performance", "The way in which my salary is determined is fully clear to me", "I feel fully appreciated by the total compensation I receive for the work I do", "My salary is good when compared to what I could earn in another institution doing the same job", "I find the compensation system to be fair". These items do not reflect the positive effect of employee satisfaction in the organization. This study argued that reward on its own does not constitute an important satisfaction factor. Improved compensation can only increase satisfaction capability in a short term [85]. To conclude this hypothesis, the compensation package does not have a significant positive effect on employee satisfaction, whereby if the employer offers higher compensation, it does not contribute to employee satisfaction in the education sector in Saudi Arabia.

Direct Effect of Perceived Organizational Support on Employee Satisfaction

The study proposes that direct effect perceived organizational support and employee satisfaction. Therefore, the study proposes the following hypotheses:

- H4: Perceived organizational support has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Findings have indicated that there is no significant relationship between perceived organizational support and employee satisfaction. This study does not support the hypothesis formulation. This result does not portray that perceived organizational support has a substantial influence on employee satisfaction. This result contradicted hypothesis 4 whereby

perceived organizational support has found a positive significant effect on employee retention. This result also contradicted previous studies whereby those studies [e.g., 24, 25, 26, 60] have found a positive significant association between perceived organizational support and employee satisfaction.

The measurement of perceived organizational support was presented on a survey questionnaire whereby consists of validated items such as *"The institution values my contribution to its well-being"*, *"The institution strongly considers my goals and values"*, *"The institution would understand a long absence due to my illness"*, *"Help is available from the institution when I have a problem"*, *"The institution really cares about my well-being"*. This is not reflected in employee satisfaction whereby the measurement items such as *"Overall, I am pleased with my work"*, *"My job in this institution has met my expectations"*, *"Overall, I am satisfied in my current practice"*, *"My current work situation is not a major source of frustration in my life"*, *"In general, I like my job"*. Thereby, this study suggests the employee's perception of the extent to which an institution cares about their well-being rather than they achieve job satisfaction. They put in more effort when there is a clear sign that their contributions will be recognized by the institution [86]. To conclude this hypothesis, perceived organizational support does not have a significant positive effect on employee satisfaction, whereby if they have support from the organization, it does not contribute to employee satisfaction in the education sector in Saudi Arabia.

Direct Effect of Supportive Work Environment on Employee Satisfaction

The study proposes that direct effect supportive work environment and employee satisfaction. Therefore, the study proposes the following hypotheses:

- H5: Supportive work environment has a significant and positive effect on employee satisfaction in education sector in Saudi Arabia

Findings have indicated that a supportive work environment has a significant and positive effect on employee satisfaction in the education sector in Saudi Arabia. This study supports the hypothesis formulation. This result portrayed that a supportive work environment has a substantial influence on employee satisfaction, which means that the more supportive work environment, its effect would contribute positively increase in employee satisfaction. This study shows that a supportive work environment is an important point to ensure employee satisfaction in the education sector in Saudi Arabia. These findings are consistent with previous studies [e.g., 29, 32, 33] whereby a supportive work environment contributed a positive impact on employee satisfaction.

The measurement of supportive work environment was presented on a survey questionnaire whereby consists of validated items such as *"The work environment at my institution is good"*, *"My superiors make me feel like an important team member"*, *"I am treated with respect"*, *"My work supervisor really cares about my well-being"*, *"My supervisor cares about my opinions"*, *"My supervisor strongly considers my goals and values"*. These items reflect the positive effect of employee satisfaction in the organization. Thereby, this study suggests the employees feel supported and encouraged. The work environment factor includes supervisory support, organizational support, and peer support [55].

This is reflected in employee satisfaction whereby the measurement items such as "Overall, I am pleased with my work", "My job in this institution has met my expectations", "Overall, I am satisfied in my current practice", "My current work situation is not a major source of frustration in my life", "In general, I like my job". This item portrays that employee retention that reflects employees feel supported and encouraged by their organization. It proved that the items measured as employee satisfaction are agreed by the respondents. As a result, in order to be respected by the employees, the institution must pay attention to the requirements of workers, maintain a pleasant and safe working environment for employees, and enhance and sustain relationships amongst employees at work. To conclude this hypothesis, a supportive work environment positively affects employee satisfaction, whereby the more positively supportive work environment (e.g., supporting by the employer and good working environment), the more employee satisfaction will be gained by the institution.

Direct Effect of Work Engagement on Employee Retention

The study proposes that direct effect between work engagement and employee retention. Therefore, the study proposes the following hypotheses:

- H6: Work engagement has a significant and positive effect on employee retention in education sector in Saudi Arabia

Findings have indicated that work engagement has a significant and positive effect on employee retention. This study supports the hypothesis formulation. This result portrayed that work engagement has a substantial influence on employee retention, which means that the more work engagement, its effect would contribute positively increase in employee retention. According to the literature, work engagement has been linked strongly with employee retention [87, 88]. This study shows that work engagement is an important point to ensure employee retention in the education sector in Saudi Arabia. These findings are consistent with Arslan and Roudaki [38], Shibiti [39], Jenkins and Sherman [40] whereby work engagement contributed a positive impact on employee retention.

The measurement of work engagement was presented on a survey questionnaire whereby consists of validated items such as "At my work, I feel bursting with energy", "I find the work that I do full of meaning and purpose", "Time flies when I am working", "At my job, I feel strong and vigorous", "I am enthusiastic about my job". This study suggests the dedication of the employees when they perform their job. This item portrays that work engagement in their organizations. These items reflect the positive effect of employee retention in the organization. The measurement of employee retention consists of validated items such as "I'm planning on working for another institution within a period of three years", "Within this institution my work gives me satisfaction", "If I wanted to do another job or function, I would look first at the possibilities within this institution", "I see a future for myself within this institution", "It doesn't matter if I'm working for this institution or another, as long as I have work". These items portray that employee retention that reflects the positive relationship of work engagement. Work engagement is viewed as a dedication of employees to their institution that give a positive effect on employee retention. It proved that the items measured as employee retention are agreed by the respondents. To conclude this hypothesis, work engagement positively effects employee retention, whereby the more work engagement (employees' dedication to the jobs), the more employee retention will be gained by the institution.

Direct Effect of Co-Worker Relationship on Employee Retention

The study proposes that direct effect between co-worker relationship and employee retention. Therefore, the study proposes the following hypotheses:

- H7: Co-worker relationship has a significant and positive effect on employee retention in education sector in Saudi Arabia

Findings have indicated that there is no significant relationship between co-worker relationships and employee retention. This study does not support the hypothesis formulation. This result does not portray that co-worker relationship has a substantial influence on employee retention. This result contradicts findings by previous studies [e.g., 44, 45, 46] whereby those studies have found a significant and positive association between co-worker relationship and employee retention. Thereby, this study shows that co-worker does not give any impact on employee retention in the education sector in Saudi Arabia.

The measurement of a co-worker relationship was presented on a survey questionnaire whereby consists of validated items such as *"My interactions with my co-workers are rewarding"*, *"My co-workers value my input"*, *"My co-workers listen to what I have to say"*, *"My co-workers really know who I am"*, *"I believe that my co-workers appreciate who I am"*, *"I sense a real connection with my co-workers"*. These items do not reflect the positive effect of employee retention in the organization. This study suggests a co-worker relationship is a form of a social community among employees to share their true feelings to reduce stress. This argument accords with the study by Chung, Quan [81] that stated having individuals around who truly understand and sympathize with the feelings that arise because of both enjoyable and hard experiences may help to minimize the impact of stresses, employees who do not feel co-worker support may be more vulnerable to the impacts of job stresses. Hence, co-worker relationship does not necessarily have a relationship with employee retention as stated by previous studies [e.g., 58, 89, 90] that role of co-worker support and proved that it would either significantly or insignificantly affect the employees' job performance, satisfaction, and organizational commitment. To conclude this hypothesis, the co-worker relationship does not have a significant positive effect on employee retention, whereby if the employee has a good relationship among them, it does not contribute to employee retention in the education sector in Saudi Arabia.

Direct Effect of Compensation Package on Employee Retention

The study proposes that direct effect compensation package relationship and employee retention. Therefore, the study proposes the following hypotheses:

- H8: Compensation package has a significant and positive effect on employee retention in education sector in Saudi Arabia

Findings have indicated that there is no significant relationship between compensation package and employee retention. This study does not support the hypothesis formulation. This result does not portray that compensation package has a substantial influence on employee retention. This result contradicts findings by previous studies [e.g., 50, 91] whereby those studies have found a significant and positive association between compensation package and employee retention. For some employees, satisfaction with pay strongly correlates with the employee's decision to stay in the organization. For others, compensation does not have a direct influence on retention [83]. This study is consistent with Davies, Taylor [84] whereby the institution does

not make use of salary and benefits policies to increase retention. Thereby, this study shows that the compensation package does not give any impact on employee retention in the education sector in Saudi Arabia.

The measurement of a compensation package was presented on a survey questionnaire whereby consists of validated items such as "My compensation fits my performance", "The way in which my salary is determined is fully clear to me", "I feel fully appreciated by the total compensation I receive for the work I do", "My salary is good when compared to what I could earn in another institution doing the same job", "I find the compensation system to be fair". These items do not reflect the positive effect of employee retention in the organization. This study argued that reward on its own does not constitute an important retention factor. Improved compensation can only increase retention capability in a short term [83]. To conclude this hypothesis, the compensation package does not have a significant positive effect on employee retention, whereby if the employer offers higher compensation, it does not contribute to employee retention in the education sector in Saudi Arabia.

Direct Effect of Perceived Organizational Support on Employee Retention

The study proposes that direct effect perceived organizational support and employee retention. Therefore, the study proposes the following hypotheses:

- H9: Perceived organizational support has a significant and positive effect on employee retention in education sector in Saudi Arabia

Findings have indicated that perceived organizational support has a significant and positive effect on employee retention in the education sector in Saudi Arabia. This study supports the hypothesis formulation. This result portrayed that perceived organizational support has a substantial influence on employee retention, which means that the more perceived organizational support, its effect would contribute positively increase in employee retention. This study shows that perceived organizational support is an important point to ensure employee retention in the education sector in Saudi Arabia. These findings are consistent with Kim, Hur [58], Gigliotti, Vardaman [92] whereby perceived organizational support contributed a positive impact on employee retention.

The measurement of perceived organizational support was presented on a survey questionnaire whereby consists of validated items such as "*The institution values my contribution to its well-being*", "*The institution strongly considers my goals and values*", "*The institution would understand a long absence due to my illness*", "*Help is available from the institution when I have a problem*", "*The institution really cares about my well-being*", "*The institution is willing to extend itself in order to help me perform my job to the best of my ability*". These items reflect the positive effect of employee retention in the institution. Thereby, this study suggests the employee's perception of the extent to which an institution cares about their well-being and regards its efforts for the institution. They put in more effort when there is a clear sign that their contributions will be recognized by the institution [86]. This is reflected in employee retention whereby the measurement items such as "*I'm planning on working for another institution within a period of three years*", "*Within this institution my work gives me satisfaction*", "*If I wanted to do another job or function, I would look first at the possibilities within this institution*", "*I see a future for myself within this institution*", "*It doesn't matter if I'm working for this institution or another, as long as I have work*". This item portrays that employee retention that reflects employee's perception of their institution. There is a clear positive sign if their

contribution to the institution was recognized by their employers. It proved that the items measured as employee retention are agreed by the respondents. To conclude this hypothesis, perceived organizational support positively affects employee retention, whereby the more perceived organizational support (e.g., recognition of employees), the more employee retention will be gained by the institution.

Direct Effect of Supportive Work Environment on Employee Retention

The study proposes that direct effect supportive work environment and employee retention. Therefore, the study proposes the following hypotheses:

- H10: Supportive work environment has a significant and positive effect on employee retention in education sector in Saudi Arabia

Findings have indicated that a supportive work environment has a significant and positive effect on employee retention in the education sector in Saudi Arabia. This study supports the hypothesis formulation. This result portrayed that a supportive work environment has a substantial influence on employee retention, which means that the more supportive work environment, its effect would contribute positively increase in employee retention. This study shows that a supportive work environment is an important point to ensure employee retention in the education sector in Saudi Arabia. These findings are consistent with previous studies [e.g., 33, 38, 55, 64] whereby a supportive work environment contributed a positive impact on employee retention.

The measurement of supportive work environment was presented on a survey questionnaire whereby consists of validated items such as *"The work environment at my institution is good"*, *"My superiors make me feel like an important team member"*, *"I am treated with respect"*, *"My work supervisor really cares about my well-being My supervisor cares about my opinions"*, *"My supervisor strongly considers my goals and values"*. These items reflect the positive effect of employee retention in the organization. Thereby, this study suggests the employees feel supported and encouraged. The work environment factor includes supervisory support, organizational support, and peer support [93].

This is reflected in employee retention whereby the measurement items such as *"I'm planning on working for another institution within a period of three years"*, *"Within this institution my work gives me satisfaction"*, *"If I wanted to do another job or function, I would look first at the possibilities within this institution"*, *"I see a future for myself within this institution"*, *"It doesn't matter if I'm working for this institution or another, as long as I have work"*. This item portrays that employee retention that reflects employees feel supported and encouraged by their organization. It proved that the items measured as employee retention are agreed by the respondents. To conclude this hypothesis, a supportive work environment positively affects employee retention, whereby the more positively supportive work environment (e.g., supporting by the employer and good working environment), the more employee retention will be gained by the organization.

CONCLUSIONS AND IMPLICATION OF THE STUDY

This study confirms that the working environment, perceived organizational support, and a supportive work environment are key to employee retention in the educational sector in Saudi

Arabia. Meanwhile, work engagement, co-worker relationships, and a supportive work environment are key to employee satisfaction in the educational sector.

As confirmed from this study, managers should right away consider perceived organisational support, compensation package, work engagement, co-worker relationships, and supportive work environment as fundamental tools that can be used to develop employee satisfaction and retention. This is so because this study demonstrates that if an organisation considers work engagement, co-worker relationships, and a supportive work environment, it results in beneficial employee satisfaction. Meanwhile, if an organisation considers work engagement, perceived organisational support, and a supportive work environment, it results in beneficial employee retention.

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