The impact of job stress and job satisfaction on employee performance: The case of the Software Companies in Palestine أثر ضغوط العمل والرضا الوظيفي على أداء الموظف في قطاع شركات البرمجيات في فلسطين

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### **Abstract**

Objective: This study aims to investigate the effects of job stress and job satisfaction on employee performance considering emotional intelligence as a mediating variable. The study focuses on the factors that affect job stress and job satisfaction such as interpersonal relationships, management support, the relations between management and employees, the function of the group, and work related to employees. Method: The data were collected using online questionnaires from participants working on software projects in Palestine. Based on a sample of 250 responses with a 62.5% effective response rate, and using partial least squares structural equation modeling. Result: The results confirm that the job satisfaction, job stress, and emotional intelligence is a key enabler of employee performance. Moreover, emotional intelligence mediates the relationship between job stress and employee performance. The results also confirm that job stress and job satisfaction are important factors affecting employee performance and productivity. Conclusion: This study contributes to the

literature on performance management by addressing the role of emotional intelligence in improving employee performance and productivity.

**Keywords:** Job Stress, Job Satisfaction, Employee Performance, Emotional Intelligence, Software Projects.

## ملخص

يهدف هذا البحث إلى دراسة أثر الإجهاد الوظيفي والرضا الوظيفي على أداء الموظف، من خلال الذكاء العاطفي كمتغيرًا وسيطًا. حيث ركزت الدراسة على العوامل التي تؤثر على ضغوط العمل والرضا الوظيفي مثل العلاقات الشخصية، ودعم الإدارة، والعلاقات بين الإدارة والموظفين، ومجموعة العمل، والعمل المرتبط بالموظفين. تم جمع البيانات باستخدام مسح استبياني عبر الإنترنت من المشاركين العاملين في مشاريع شركات البرمجيات في فلسطين حيث شملت العينة على 250 إجابة بنسبة استجابة بلغت 62.5٪. تم تحليل البيانات باستخدام طريقة نمذجة المعادلات الهيكلية للمربعات الجزئية الصغرى. اكدت نتائج الدراسة أن الرضا الوظيفي والتوتر الوظيفي والذكاء العاطفي والذكاء العاطفي والتراب النتائج أن الذكاء العاطفي يتوسط العلاقة بين ضغوط العمل وأداء الموظف. كما اكدت النتائج أيضًا أن ضغوط العمل والرضا الوظيفي من العوامل المهمة التي تؤثر على أداء الموظف وإنتاجيته. تسهم هذه الدراسة في اثراء البيات ادارة الأداء من خلال تناول دور الذكاء العاطفي في تحسين أداء الموظف وإنتاجيته.

الكلمات المفتاحية: ضغوط العمل، الرضا الوظيفي، أداء الموظف، الذكاء العاطفي، مشاريع البرمجيات.

### Introduction

Job satisfaction is one of the important factors, that increase performance and productivity and causing positive opinions of the individual about his job, which is has a relation with salary level, conditions of the work environment and social value of the job (Khalatbari, Ghorbanshiroudi, & Firouzbakhsh, 2013). However, according to (Yozgat, Yurtkoru, & Bilginoğlu, 2013), one of the common problems that employees confront with increasing frequency is job stress, and this became an epidemic in the work environment. Job stress is a state of psychological stress, which means all types of physical, mental, and social forces and pressures. In this regard, job stress has become common and many employees complain about stress as a result of work overload, job insecurity, and the increasing pace of life.

One of the most important concepts introduced to psychology and management in the last decade is emotional intelligence. It is defined as the knowledge of the internal parts of a person includes access to one's emotions, one's range of feelings, the capacity to affect differentiation among these emotions and ultimately to label them and to draw upon them as a means of comprehension and point one's behavior (Shooshtarian, Ameli, & Amini Lari, 2013). Such studies indicate that the studies related to job performance should be applied to various sectors. However, employees in the software sector usually exposed to tremendous stress when working silently for long hours of sitting in front of their computers. This study examines the performance of employees and its relationship with job stress and job satisfaction in one of the most prominent sectors in Palestine which is the software sector.

This study aims to explain the effects of job stress, job satisfaction, and emotional intelligence on employee performance. It focuses on the factors that affect job stress, job satisfaction, and emotional intelligence. This study comes to answer the following questions:

- 1. What is the effect of job stress, job satisfaction, and emotional intelligence on employee performance in software projects?
- 2. Does emotional intelligence mediate the relation between job stress and job performance?
- 3. Does emotional intelligence mediate the relation between job satisfaction and job performance?

Based on the research questions, the following hypotheses are drawn following the theoretical

H1: job stress has a significant positive effect on employee performance in software projects.

Previous research found that job stress is negatively related to in-role performance in police employees (Nisar & Rasheed, 2019). In the workplace, Stress is inescapable, moreover, employees who feel stress in daily work are more probably to be less motivated, less satisfied, show less productivity, and ill performance. Other research conducted in

telecommunication centers in Shah Alam concludes that job stress measured by workload, work anatomy and interpersonal relationship significantly influence job performance (Yunus et al., 2018). Siu (2003) shows that job stress has a direct negative effect on job performance in work values which are the work-related Confucian values of Chinese societies. As for (Khuong & Yen, 2016) Employee job stress has a negative and directly significant effect on employee job performance at Dong Xuyen Industrial Zone in Vietnam.

**H2:** job satisfaction has a significant positive effect on employee performance in software projects.

Job satisfaction is an important factor that offers a positive contribution to employees' performance(Yvonne, Rahman, & Long, 2014). Research conducted on the Faculty of Science and Humanity Studies employees, University of Salman Bin Abdul-Aziz-Al Aflaj, indicate there is a statistically significant relationship between job satisfaction factors include (general working conditions - pay and promotion potential - working relationships) and employee performance (Wahid & Fadlallh, 2015). Netemeyer and Maxham (2010) investigated the relationship between job satisfaction, job performance, and customer contact. The outcomes expose a positive relationship between job satisfaction and job performance. Moreover, Siengthai and Pila-Ngarm (2016) examine the effect of job redesign and job satisfaction on employee performance, and they find that job satisfaction is positively and significantly related to employee performance in all models.

*H3:* Emotional intelligence moderates the relationship between job stress and employee performance.

*H4:* Emotional intelligence moderates the relationship between job satisfaction and employee performance.

In an earlier study on over 200 UK retail managers (Slaski & Cartwright, 2003), it was concluded that individuals with a high level of EI scores experienced less stress, had significantly preferable levels of health and well-being, and were evaluated by their line managers as higher performers than those with moderate to low-level of EI scores. The study

explains that the experience of stress is the appearance of negative emotions triggered by risk, threat, or challenge and which indication to the body the need to prepare for actions of defense and protection. Magnano, Santisi, and Platania (2017) highlighted that emotional intelligence improves the relationship between burnout and organizational outcomes, providing interesting suggestions for intervention in organizations. So, EI determines as a mediator variable in this relationship. However, to improve relationships that meet the anticipation of the firm, leaders use EI where the emotional bonds are determined to help the individuals to be persistent in any case of any changes and uncertainties they have to go through (Badri-Harun, Radzi Zainol, Amar, & Shaari, 2016).

Nina Ogińska-Bulik (2005) found a negative relationship between emotional intelligence and job stress. The higher the degree of emotional intelligence the lower the experienced stress. Considering factors related to job stress, one may observe that the higher the degree of emotional intelligence the lower the sense of lack of control and lack of support. Additionally, the obtained correlation coefficients were weak, which shows a weak relationship between emotional intelligence and job stress. A study conducted in a group of Australian community nurses assessed the effects of emotional intelligence, emotional labor, and the moderating effects of emotional intelligence on well-being and job stress. The result showed that the nurses with a high ability to deal with their emotions and feelings mean they have high emotional intelligence, demonstrated lower levels of job stress (Karimi, Leggat, Donohue, Farrell, & Couper, 2014).

**H5:** job stress has a significant positive effect on employee satisfaction in software projects.

A study that was conducted in the United Kingdom police and found that job stress has a negative effect on job satisfaction in police personnel and this research helps their government to design policy guidelines, that may help them to reduce the negative effect on job performance (Allisey, Noblet, Lamontagne, & Houdmont, 2014). Also, the results showed from a study of the police region in China are facing high stress and this impacts negatively on their career satisfaction and job performance. This theoretical evidence assumes that job stress decreases job satisfaction and

job performance of police employees (Wang, Zheng, Hu, & Zheng, 2014). Another study discusses the hypothesis of occupational stress which has a negative relationship with the job satisfaction of police employees, and the results of the study have supported this hypothesis (Nisar & Rasheed, 2019).

Both satisfaction and dissatisfaction are seen as a function of a relationship between what one wants from a job and what one perceives to be getting from the job (Wang et al., 2014). However, they support that job stress related to basic-level police officers is negatively associated with job satisfaction. On the other hand, a study conducted in the Nursing Sector of DHQ Hospital of Okara in Pakistan, shows that there is a significant positive relationship between job stress and employee job satisfaction (Riaz et al., 2016). Nisar & Rasheed (2019) concluded that occupational stress is negatively related to career satisfaction.

### Literature review

This section provides discussions of previous researchers on the theoretical background of the variables being observed and tested in this study. These variables include job stress, job satisfaction, and emotional intelligence.

Recent studies have indicated that job stress has a major effect on individual physiology, psychology, behavior, and job performance. According to (Khalatbari et al., 2013), employees think and worry more about their job, job stress is a state of psychological stress that means, all types of physical, mental, and social forces and pressures. Deng, Guo, Ma, Yang, & Tian (2019) define Job stress as an individual's response to external stimuli in the environment. They study the relationship between job stress and turnover, and their results indicate the positive association of both variables. However, previous studies have mostly focused on the negative effects of job stress on performance, which argue that higher pressures can make individuals perform less effectively on tasks that call for tolerance and concentration, subsequently resulting in lower productivity and job quality (Deng et al., 2019).

Job satisfaction is defined as a positive emotional state resulting from a review of one's job or job experience (Akdol & Arikboga, 2015). It was conceptualized as a multidimensional construct consisting of intrinsic and extrinsic satisfaction. Intrinsic satisfaction is related to the internally mediated rewards obtained from the job—particularly the work itself, growth opportunities, and a sense of accomplishment. Extrinsic satisfaction is related to the externally mediated rewards bestowed by the firm, such as pay, managerial support, promotions, and peers (Kwak, Anderson, Leigh, & Bonifield, 2019). It also defined an attitude that individuals have about their jobs which results from their perception of the jobs and the degree to which there is a good fit between the individual and the organization.

Job satisfaction can determine as one of the important factors that increase performance and productivity and causing positive opinions of the individual about his job, which has relations with salary level, conditions of the work environment, and social value of the job (Khalatbari et al., 2013).

Emotional intelligence (EI) has gained the attention of researchers as an important concept in organizational settings as it has been reported to facilitate survival in today's unfriendly, competitive, and dynamic environment (Aqqad, Obeidat, Tarhini, & Masa'Deh, 2019).

There are various definitions of emotional intelligence (EI) in the literature. Matsumoto, (2009) defines EI as the ability of someone to understand the way that people feel and react and use these skills to make judgments also to avoid/solve problems faced in life. In addition to this, EI is also defined as a subcategory of social intelligence that includes the ability to supervise one's own and others' feelings and emotions, to distinguish among them to use it to guide one's thinking and actions (Lebowitz, 2018).

However, organizations represent places where individuals are organized in some way to work effectively. Most, if not all, of the jobs in organizations, require some form of interaction between individuals. Here emotions are utilized to facilitate the cooperation required for such

interaction. As a result, employees who are intelligent about their emotions will be more efficient and effective in their interactions, not just with coworkers but also with the work environment in general (Aqqad et al., 2019).

According to (George & Zakkariya, 2015), human resources are the most imperative component that affects productivity in an organization. In this modern era of rapid change and complexities, employees are the competitive edge of any organization. But employees face various problems in their work environment due to these changes. Stressful, depressed, and dissatisfied employees would not be able to obtain the same quality level of work and productivity as those employees with low stress and high satisfaction. Employers can create a safe and reduced stress environment to work. However, when employees would be more developed, they would be more satisfied with the job, more committed to the job and the performance would be increased. When employee performance would increase, this will lead to the organization's effectiveness(Hameed, Abdul, 2011).

# Theoretical model and variables

This research proposes the following model which is determined in Figure 1, this model consists of four constructs: job stress, job satisfaction, emotional intelligence, and employee performance. Each construct has some reflective indicators.

Emotional intelligence moderates the relationship between job stress and employee performance and between job satisfaction and employee performance.

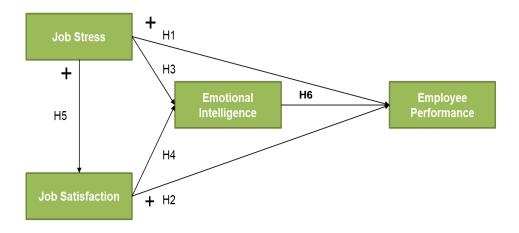


Figure (1): Theoretical framework.

### Job stress

Job stress is one of the factors that affect and measures the employee's psyche negatively or positively, so negatively it can cause psychological and physical illnesses of employees and therefore this may lead to job dissatisfaction then leaving work, and its positive side effect lies in the completion of work as short as possible.

This study comes to measure job stress through a group of indicators: coworkers, interpersonal relationships, nature of work, and occupational organization .

## Job satisfaction

Job satisfaction measures a sense of the individual toward his work, it is linked with individual productivity, when the employee satisfaction is high this reflected positively on productivity, also increases his loyalty to the company and his desire to achieve its strategic objectives. Thus, it can be measured by several indicators such as pay rate, contingent rewards, motivation (promotion, incentive, fringe benefits), leadership and social relationships, and performance feedback).

# Emotional intelligence

Emotional Intelligence measures the ability of the project manager, the leader, or any responsible person in the project to understand the feelings and emotions of others and to use these feelings to optimize the prediction of problems and risks and solve them to achieve project objectives as planned.

According to literature emotional intelligence can measure through several factors: empath, self-awareness, and self-control.

# Employee performance

Measurement of employee performance may help the manager to decide whether the employee will continue with the company or not, also it indicates if an employee needs training or motivation.

Previous literature defines the factors used for measuring employee performance, which include: training culture, leadership, social relationship, knowledge, skills, work environment, and work tools.

Table 1 shows the proposed constructs and indicators which have been established based on the previous studies from the literature. The references for each variable and indicator are shown in the last column.

Variable / construct	Indicator	Symbol	Based on references
Job stress	Coworkers	JS1	(Horowitz, Blackburn, Edington, & Kloss, 1988) and judgmental
	Interpersonal relationship	JS2	(Yunus, Mansor, Hassan, Zainuddin, & Demong, 2018)
	Nature of work	JS3	(Nabirye, Brown, Pryor, & Maples, 2011)

...continue table (1)

Variable / construct	Indicator	Symbol	Based on references
	Occupational organization	JS4	(Koo & Kim, 2006)
Job satisfaction	Pay	JSF1	(Bartram, Joiner, & Stanton, 2004; Islam, 2016; Nazim, 2008; Parvin & Karbin, 2011)
	Contingent rewards	JSF2	(Nazim, 2008)
	Motivation (Promotion, incentive, Fringe benefits)	JSF3	(Bartram et al., 2004; Islam, 2016; Nazim, 2008; Parvin & Karbin, 2011)
	Leadership and social relationships	JSF4	(Islam, 2016; Parvin & Karbin, 2011)
	Performance feedback	JSF5	(Joo & Park, 2010)
Emotional	Empathy	EI1	(Zhang & Fan, 2013)
intelligence	self-awareness	EI2	(Zakarevičius & Župerka, 2010)
	self-control	EI3	(Zakarevičius & Župerka, 2010)
Employee performance	Training culture	EP1	(Diamantidis & Chatzoglou, 2019)
	Leadership and social relationship	EP2	(Zhang & Fan, 2013)
	Knowledge and skills	EP3	(Al-Ahmadi, 2009; Diamantidis & Chatzoglou, 2019)
	Environment and tools	EP4	(Al-Ahmadi, 2009; Diamantidis & Chatzoglou, 2019)

## Research Methodology

# Survey Questionnaire

An online survey questionnaire was developed using a forced Likert scale (i.e. four-point Likert-scale). The questionnaire consists of 24 questions divided into five parts. The first part of the survey instruments requested demographic information about participants including age, marriage, employee status, and education. The other parts contain questions regarding the basic variables that include job stress, job satisfaction, emotional intelligence, and job performance. The mean values, standard deviation, and correlation were used to conduct data screening.

# Sample and procedures

In this study the relationship between job stresses, job satisfaction, with examining emotional intelligence as a mediating variable, the target population will be selected from the software project teams. The data will be collected by surveys and analyzed by statistics techniques.

The sample includes employees from the software project team in Palestine. The distribution process of the questionnaire was done by Email, LinkedIn, and visit the companies.

Email invitations are more likely to be considered spam and less legitimate because of the ease of rigging the identity of researchers on the web, which eventually translates into lower response rates (Manfreda, Bosnjak, Berzelak, Haas, & Vehovar, 2008).

The recommended response rate for the online survey is between 25% to 40% (Petchenik & Watermolen, 2011). In this study, the response rate is 62.5%, the percentage in which there are 250 responses out of 400 were collected.

Results

Partial least squares structural equation modeling PLS-SEM was used to analyze the data. PLS-SEM is appropriate when the model has a small sample size, many constructs, and a considerable number of indicators (Jr.,

Matthews, Matthews, & Sarstedt, 2017; Rönkkö, McIntosh, & Antonakis, 2015). This study utilizes the PLS-SEM system in which the examination and analysis included two stages, firstly the assessment of measurement model, which implies reliability and validity analysis; secondly assessment of the structure model and fitting of the model, which implies path analysis, and estimation of the model parameters (Hair, Risher, Sarstedt, & Ringle, 2018). The data analysis included the use of Smart PLS 3.

# Reliability and Validity Analysis

Reliability can be measured by using Cronbach's alpha and composite reliability coefficients. The reliability for explanatory research that relies on established measures has to be 0.70 or higher because it indicates that the construct explains more than 50 percent of the indicator's variance, thus providing that item reliability is acceptable(Hair et al., 2018).

	R square	Cronbach's Alpha	Composite reliability	Average Variance Extracted(AVE)
Job Stress		0.691	0.811	0.517
Job	0.289	0.715	0.824	0.543
Satisfaction				
Emotional	0.171	0.600	0.787	0.555
Intelligence				
Employee	0.606	0.740	0.836	0.561
Performance				

The results show that job satisfaction and employee performance are reliable constructs (i.e. both Cronbach and composite reliability values are greater than 0.70 thresholds).

Convergent validity and discriminant validity are used to assess and analyze each construct and indicator in the model. The metric used to evaluate a construct's convergent validity is the average variance extracted (AVE) for all indicators on all constructs. To calculate the AVE, one has to square the loading of each indicator on a construct and compute the

mean value. According to (Hair et al., 2018), AVE has to be 0.50 or higher, which indicates that the construct explains 50% or more of the indicators variance that makes up the construct which means that the construct has good validity. The results shown in Table.2 confirm that the AVE of Job stress is equal to 0.517, AVE for job satisfaction is equal to 0.543, AVE for Emotional intelligence is 0.555, and for Employee performance equal to 0.561, this indicates that convergent validity for employee performance is confirmed, but other constructs are not convergent.

**Table (3):** Discriminant validity results.

Variable	(1)	(2)	(3)	(4)
(1) Job Stress	0.719			
(2) Job Satisfaction	0.538	0.737		
(3) Emotional Intelligence	0.414	0.219	0.745	
(4) Employee Performance	0.625	0.712	0.373	0.749

Dwaikat et al. (2018) highlight that discriminant validity is established when the correlations within each construct exceed the correlations with all other constructs. This condition holds for all indicators, mentioning that the constructs themselves have a high degree of discriminant validity, however, the result reported in Table.3 shows that acceptable discriminant validity is evidenced.

The mean value of the item correlations across constructs is defined as HTMT. According to Dwaikat et al. (2018), discriminant validity also used HTMT, the value ranges from 0 to 1 where values less than 1 indicate good reliability. Table 4 shows the values of HTMT did not exceed 1. Therefore, discriminant validity is well established.

**Table (4):** Discriminant validity using HTMT.

Variable	(1)	(2)	(3)	(4)
(1) Job Stress				
(2) Job Satisfaction	0.760			
(3) Emotional Intelligence	0.626	0.323		
(4) Employee Performance	0.846	0.953	0.547	

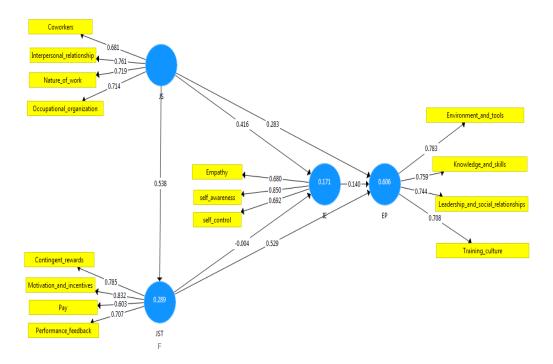
The results of the outer loadings of the reflective indicators, shown in Table 5, indicate an acceptable level of validity of the outer model since the value equal to or greater than 0.7 (Hair et al., 2018). The outer loading is the estimated relationships in reflective measurement models (which arrows from the latent variable to its indicators) determine an item's absolute contribution to its named construct, However, all indicators that have a factor loading value equal to 0.4 or less will be deleted and then check the effect of deletion on AVE and composite reliability. If these increases measure above the threshold, then a reflective indicator should be deleted. Moreover, reflective indicators must be retained. But other indicators that have a factor loading value more than 0.4 and less than 0.7 should analyze (Cepeda-Carrion, Cegarra-Navarro, & Cillo, 2019).

After analyzing the factor loading of each indicator, results found that the composite reliability and AVE have been improved after omitting these indicators.

**Table (5):** Outer loadings results.

Constructs	Indicators	Outer loading	T- statistics
Job Stress	Coworkers	0.681	13.647
	Interpersonal relationship	0.761	20.274
	Nature of work	0.719	15.468
	Occupational organization	0.714	17.522
Job	Contingent rewards	0.785	25.206
Satisfaction	Motivation and incentives	0.832	32.185
	Pay	0.603	10.499
	Performance feedback	0.707	18.235
Emotional	Empathy	0.680	8.383
Intelligence	self-awareness	0.850	24.677
	self-control	0.692	9.402
Employee	Environment and tools	0.783	21.964
Performance	Knowledge and skills	0.759	18.575
	Leadership and social	0.744	18.846
	relationships		
	Training culture	0.708	15.196

The results also show that the indicators have loaded properly on their factors. In addition, the results indicate that the outer loadings are significant since the values of T-statistics are larger than 1.96 (Hair et al., 2018).



**Figure (2):** PLS path modeling estimation of the research model.

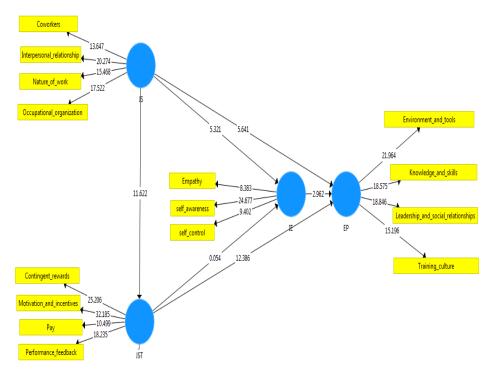
# Structural Model

As shown in Figure 2, with the coefficient of determination, R square, of 0.606, this implies that 60.6% of the variance in the employee performance' Latent variables can be explained by the three latent variables 'job Stress', 'job satisfaction' and 'Emotional intelligence'. The results show that 'Job Satisfaction' has the strongest effect on 'Employee

Performance' (0.529), followed by 'Job Stress' (0.283), and 'Emotional Intelligence' (0.140).

According to (Cepeda-Carrion et al., 2019), it is important to consider and verify how the significance test for path coefficients was performed, and the statistical significance of the relationships between the latent variables in the structural model. This verification was performed by observing the standardized path coefficient (B values) equal to or greater than 0.1.

The results of the bootstrapping procedure are shown in Figure 3.



**Figure (3):** Model fit estimation using bootstrapping procedures.

The results confirm that 'Job Stress' has a significant positive impact on 'Job Satisfaction' (B-value = 0.538 and t-value =11.696), also significant on 'Emotional Intelligence' (B-value = 0.416 and t-value

=5.333) and 'Employee Performance' (B-value = 0.283 and t-value = 5.66), but, 'Job Satisfaction' has not a significant impact on 'Emotional Intelligence' (B-value =-0.004 and t-value= -0.049) because the t-value is -0.049 (i.e. between -1.96 and 1.96 is not significant) and significant on 'Employee Performance' (B-value = 0.529 and t-value = 12.302). At last, 'Emotional Intelligence' has a positive significant impact on 'Employee Performance' (B-value = 0.140 and t-value = 2.979). The t-Value was calculated by the following equation: t-value = B-value / STDEV.

**Table (6):** Result of the hypothesis testing.

Hypothesis direction	Original Sample (B value)	Standard Deviation/Error (STDEV)	t-value	T Statistics	P Values	Conclusion
$H1: JS \Rightarrow EP$	0.283	0.050	5.66	5.641	0.000	Supported
$H2: JST \Rightarrow EP$	0.529	0.043	12.302	12.386	0.000	Supported
H3: JS => EI	0.416	0.078	5.333	5.321	0.000	Supported
H4: JSF => EI	-0.004	0.082	-0.049	0.054	0.957	Not Supported
$H5: JS \Rightarrow JSF$	0.538	0.046	11.696	11.622	0.000	Supported
H6: $EI \Rightarrow EP$	0.140	0.047	2.979	2.962	0.003	Supported

Based on the results of the structural model, it can be concluded that 'Job Satisfaction', 'Emotional Intelligence', and 'Job Stress' are strong predictors of 'Employee Performance'. However, 'Job satisfaction' data does not predict 'Emotional Intelligence'.

The results shown in Table 7, confirm that H1, H2, H5, H6 are supported. However, the relation between job satisfaction and EI is not supported.

**Table (7):** Specific Indirect Effects

Direction of Indirect Effects	Original Sample (B value)	Standard Deviation/Error (STDEV)	t-value	T Statistic	P Values	Conclusion
JS=>EI=>EP	0.058	0.021	2.762	2.810	0.005	Supported
JSF=>EI=>EP	-0.001	0.012	-0.048	0.051	0.960	Not Supported
$JS \Rightarrow JSF \Rightarrow EI$	-0.000	0.007	-0.000	0.050	0.960	Not Supported
JS=>JSF=> EP	0.284	0.037	7.676	7.733	0.000	Supported
JS=>JSF=> EI	-0.002	0.045	-0.045	0.053	0.957	Not Supported

**Table (8):** Total Indirect Effects.

Direction of Total Indirect Effects	Original Sample (B value)	Standard Deviation/Error (STDEV)	t-value	T Statistics	P Values	Conclusion
$JS \Rightarrow EP$	0.342	0.041	8.341	8.255	0.000	Supported
$JSF \Rightarrow EP$	-0.001	0.012	-0.083	0.051	0.960	Not Supported
JS => EI	-0.002	0.045	-0.044	0.053	0.957	Not Supported

The results, shown in Table 8 and Figure.2, indicate that EI improves the relationship between job stress and employee performance, which means EI can be determined as a mediating variable on this relation (H3 supported). However, EI does not consider as a mediating variable on the relationship between job satisfaction and employee performance (H4 not supported).

### **Discussion**

In this study, the results show that the increase of job stress has a positive effect to increase employee performance, while the 250 employees from the software sector answered the questionnaire and the conceptual model show that the positive relationship between job stress and employee performance, while the hypothesis of our study is the positive effects of job stress on employee performance, and the result of the model supported the hypothesis 1. In addition to this using EI as a mediator on this relation improve the relationship and make a significant indication.

Some researchers have shown and indicated that the relationship between stress and performance can be a positive linear or an inverted-U shape, most have found a negative stress-performance relationship (Gilboa, Shirom, Fried, & Cooper, 2013; Siu, 2003; Wu, 2011). From Bashir's (2010) point of view Stress positively affects employees of any firm but up to a certain extent up to which an employee can adapt to stress, especially it exceeds the bearable limits and has a negative outcome on employees. However, a correlational design was used to investigate the relationship between stress and performance. The results showed a

negative linear relationship between stress and job performance; when job stress increased, job performance decreased(Green, 2010; Westman, Eden, & Eden, 2007).

Additionally, job stress can also affect employees' performance. The influence of work stress on performance can be positive or negative, rely on the level of job stress experienced by employees. If job stress is at a low to moderate level, it can indeed increase the employees' performance. But, when the level of stress being experienced constantly is over the extreme limit, the employee's performance can decline (Noermijati & Primasari, 2015).

However, the increase of job satisfaction has positive effects to increase employee performance, while the answered to the questionnaire and the conceptual model show that the positive relationship between job satisfaction and employee performance, the hypothesis of our study is the positive effects of job satisfaction on employee performance, and the result of the model has supported the hypothesis 2. In addition to this using EI as a mediator in this relationship does not have a significant effect or improve the relation.

According to (Arab, 2016 as cited in Mira, Choong, & Thim, 2019), low job satisfaction reinforces low employee performance which leads to inadequate human resources in the cargo field at Saudi Ports Authority. To achieve a high level of satisfaction and performance of workers many practices should be built-in through the human resources department include training and development, reward, job analysis, recruitment and selection, social support, employee relationship, and employee empowerment (Albrecht, Bakker, Gruman, Macey, & Saks, 2015; Majumder, 2012).

The increase in job stress has positively affected increase job satisfaction, while the answers to the questionnaire and the conceptual model show that the positive relationship between job stress and job satisfaction, the hypothesis of our study is the positive effect of job stress on job satisfaction, and the result of the model has supported hypothesis 5.

Noermijati (2015) summarized that Tunjungsari (2011) and Dania (2012) tested the relation between job stress and job satisfaction, as for Tunjungsari there is a significant and positive correlation between job stress and job satisfaction. But Dania shows that there is a negative correlation between job stress and job satisfaction, but the effect is not significant.

Meanwhile, the results indicate that emotional intelligence not considered as a mediator in the relationship between job satisfaction and employee performance because the analysis outcome found that this relation is not supported.

# Conclusions and further researches

In answering the research questions introduced in this study, the results confirm that job satisfaction and job stress have a significant relationship with the performance of employees working in software projects in Palestine, also it indicates that emotional intelligence does not mediate in the first relationship but mediate the other.

The study revealed that the coworkers, interpersonal relationship, nature of work, and occupational organization are important indicators of job stress constructs, with loadings of 0.681, 0.761, 0.719, and 0.714, respectively. As a result, the increasing job stress of employees can have a significant impact on increasing job satisfaction and employee performance in software employees.

From a theoretical perspective, the study emphasized the significant impact of job satisfaction on employee performance. As shown in the analysis, job satisfaction has important indicators includes contingent rewards, motivation and incentives, salaries, and performance feedback. With loadings of 0.785, 0.832, 0.603, and 0.707, respectively. As well, this study also showed that empathy, self-awareness, and self-control are indicators of emotional intelligence as a mediation construct, with loadings of 0.680, 0.850, and 0.692, respectively.

Finally, employee performance has important indicators that include the environment and tools, knowledge and skills, leadership and social relationship, and training culture with loadings of 0.783, 0.759, 0.744, and 0.708, respectively.

This study determined the effects of job stress, job satisfaction, and emotional intelligence on employee performance in the software industry in Palestine. Managers of software companies should focus on these factors as enablers for their employees to increase their performance and thus their productivity, which may eventually increase their company performance. Therefore, companies should invest in employee reward programs to increase their employee satisfaction, especially those who work under stressful conditions. In addition, management should continuously conduct training programs to develop emotiopal intelligence skills for those employees. Future studies should undertake a more critical analysis by including other important outcomes, such as burnout, conflicts, well-being, and uncertainty issues. In addition to this, future research is needed to determine what types of training are most efficient for improving emotional intelligence for all employees in software projects workplace that influence employee's performance.

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