



## STUDY OF MEDIATOR EFFECT OF WORK PRESSURE ON EMPLOYEE'S SELF-EFFICACY AND JOB SATISFACTION

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### Abstract

This study helped to understand work pressure as mediating factor and its impact on employees' self-efficacy and job satisfaction. To understand this, a causal relational model was developed in the study. The respondents for the study were the employees working in the IT industries in and around Pune city in India within the year of 2020-2021. Convenient sampling was used to identify the respondents for the study. Structured questionnaire was developed for data collection. The correlational along with mediating effect among job-satisfaction, work pressure with employees' self efficacy convictions using Structural Modelling was studied. Study showed that employees' self-efficacy (creative behaviour, coping behaviour) shows positive impact with job satisfaction, work pressure shows negative impact with job satisfaction. In addition, work pressure acting as mediator between employees' self efficacy resulting their job satisfaction.

**Keywords:** IT Industry, Job Satisfaction, Mediation Effect, Self-Efficacy, Work Pressure.

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## **1. Introduction**

Job characteristic is generally associated with the employee's satisfaction while performing that job. Job satisfaction is associated with individual Job performance [1], employees' expectation [2], participation or involvement [3]. For an employee, job satisfaction is additionally associated with employees' competence [4]. For all above reasons, employees' self efficacy convictions with job satisfaction are used for the study. Self-efficacy theory was initially mentioned by Albert Bandura. Self-efficacy may be defined as an individual's strength to perform the activities [5]. Self-efficacy isn't about how skilled a person is, but how they accept their capacity's influence on their performance and execution. Employee self-efficacy is characterized as the convictions that an employee has to perform task [6]. In addition, in case an employee has a sense of certainty in their job performance capabilities and control, likely to have job satisfaction [7]. And therefore, job satisfaction and self-efficacy are critical factors in keeping employee's performance level high [8]. Employees self efficacy with job satisfaction appear as imperative towards employees work performance along with efficiency development [9]. Self-efficacy conviction influences the individual's job satisfaction [10]. Moreover, they pointed out that employee' self-efficacy influences various positive factors within the workplace such as low work pressure, employee satisfaction, and long-term careers. Employees having high job satisfaction, self-efficacy convictions generally shows low work pressure. Employees having good self-efficacy convictions don't melt down easily by issues they confront. People having less self-efficacy convictions experience more work pressure, anxiety, and no satisfaction as compared to the people who have high self-efficacy convictions while performing their job. Additionally, self-efficacy convictions

are characterized with conviction with their capacity to manage with work pressure and challenging tasks. [11]. whereas work pressure is a critical factor lowering employees' effectiveness, decreasing job satisfaction, and impacting performance [12]. On similar lines, self-efficacy improvement, and work pressure reduction contributes to improvement of job performance [13]. Few studies showed, there's a critical and inverse association of job satisfaction with work pressure [14]. There are literatures which says, there's a critical with inverse association of self-efficacy with work pressure [15], [16], [17], [18] and self-efficacy is the determinant of work pressure [19], [20]. Thus, it can be said that employee competence positively influences employees' job satisfaction. Self-efficacy play basic defensive part for avoiding work pressure [21]. But we could not find any literature which analyses simultaneously effect of job satisfaction, employee self efficacy, along with work pressure utilizing work pressure's mediating effect. Here we emphasised to see influence of work pressure and self-efficacy on employees' job satisfaction. This study is conducted for the employees working in IT industries. Initially fundamental understanding was developed which illustrates interactions of self efficacy conviction, work pressure along with job satisfaction. After this, impact of self efficacy on work pressure and job satisfaction was tested. Then we studied the interaction between work pressure and job satisfaction. After that mediation effect of work pressure on employees' self-efficacy convictions and job satisfaction was studied.

## **2. Methodology**

This study tried to establish the interaction among the employees Job satisfaction, employee's self efficacy and work pressure as a factor. Following Problem statement and hypothesis were framed for the study.

Table I : Discriminant validity

Discriminant validity						
Factor	AVE	CR	Squared Interconstruct Correlation			
			WP	IB	CB	JS
WP	0.864	0.812				
IB	0.822	0.796	0.48			
CB	0.834	0.592	0.52	0.41		
JS	0.852	0.634	0.28	0.09	0.13	

### Research Problem and Hypothesis

**Research Problem:** Does the work pressure influence employee's self efficacy along with job satisfaction.

**Hypothesis 1:** Job efficacy is positively influenced by Employees' self-efficacy.

**Hypothesis 2:** Job satisfaction is negatively associated with work pressure.

**Hypothesis 3:** Work pressure is negatively affected by Employees' self-efficacy.

### Population and Sample for the study

Pune city being one of the IT hubs in India, there are huge number of employees working in small, medium, national and multinational IT firms having their operative setups in and around Pune city. The population for the study were the employees working in these IT firms.

Convenient sampling was used to contact the respondents. Data was collected using structured questionnaire from these employees. Questionnaire was sent on mails, out of 1364 received responses, 37 incomplete responses were rejected and thus the final count of responses selected for the further study were 1327. The critical sample size calculated for the study to perform SEM was 201.17. Thus, the minimum sample size was well achieved for the study. 58 % (n = 770) of the employees consisted of female and 42% (n = 557) male, 46% (n = 610) sample consisted single and 54% (n = 717) married, 82% (n = 1088) were graduates and 18% (n = 239) were postgraduates. 63% (n = 836) of the employees belonged to Junior employees and 37% (n = 491) were senior employees.

### Instrument development and data collection

We utilised the 'Work Pressure', 'Job Satisfaction', along with 'Employee Self-Efficacy' scales for data collection. Work pressure scale was prepared from the scale prepared by Karakus [22] with little modification considering the scope of study. The job Satisfaction scale was developed with the reference from scale developed by Hackman [23] with the required modification done wherever needed based on the scope of the study. Similarly, employee's self-efficacy scale was adopted from the scale used by Schmitz and Schwarzer

with two dimensions as Coping behaviour and Innovative behaviour. Five-point Likert scale was used to frame the questions for data collection. All scales were tested for the construct validity. The Goodness of fit indices were well within the range confirming the scale was fit for further analysis. The internal consistency coefficient calculated for all three scale were as .86, .92 and .94 respectively.

### Data Analysis

Analysis of data was done using IBM SPSS 22 and AMOS 21. Firstly, the descriptive analysis was carried out using SPSS. Reliability and Validity was also checked. The Ch-alpha achieved with all variables under study was .912 which is well above 0.7 and which is acceptable for further study. From table I, Composite Reliability value for construct is close to 0.6 which indicates that the composite reliability requirement for all

construct of the model is accomplished Hair [26] which also indicates that there exists internal consistency. The average variance extracted was more than the squared inter construct correlation for all construct, which indicates that observed variable of all construct are more closely associated with that construct than the other. Thus, the Discriminant validity for model is proved. Model developed with the help of this study was checked and verified using AMOS. Structural Equation Modelling (SEM) was used. It not only gives the causal relationship but along with that we can also test the measurement errors which helps us to understand both direct and indirect effect in the structural model along with estimation and testing of multivariate model. For this study we used simple mediation effect model which includes one independent, one mediator and one dependent factor. Fig. 1 shows the model created for the study. As it is seen from Fig. 1 dependent variable is employees Job satisfaction and independent variable is work pressure. Employees self-efficacy is an external latent (Independent) variable. To test the model, we used maximum likely hood estimation which is mostly recommended for conducting SEM.  $\chi^2/df$  ratio should be less for the model to be good fit [24]. The ratio calculated for the

study was between 2 to 3 indicating the acceptability of model. The other goodness of fit indices viz RMSEA, AGFI, NFI, CFI, GFI, SRMR and IFI were checked for their values. For most of the indices values initially were not in the range of acceptance. To resolve this, we tried and identified the variables with correlation bit high with their error variances (SE1, SE2 and WP3, WP4) and then the same were combined to reduce this error. With these changes, the model fit indices were checked again for their values and the values were found to be well within the range confirming the good model fit. Table II show the model fit indices values. As showed in the table II, the fit indices are well within range. The RMSEA value needs to be equal to or less than 0.05 [25], also for the other indices viz NFI, CFI, GFI, AGFI, and NNFI the values should be between 0 to 1 [26]. Once this was achieved the mediation effect was studied. To show that there exists a mediation effect, we studied the indirect influence of two factors in presence of third extrinsic factor. We used Sobel test which is one of the recommended tests out of several others [27]. This test calculates the uncorrected  $\beta$  coefficient for independent variable, dependent variable and mediator variable along with standard error values.

Table II : Indices Results of Measurement Model

Paths	$\beta$	$\chi^2/df$	RMSEA	NNFI	NFI	CFI	GFI	IFI	AGFI	SRMR
CB --> JS	0.82									
IB --> JS	0.83									
WP --> JS	-0.63	2.11	0.051	0.98	0.99	0.98	0.94	0.99	0.90	0.048
CB --> WP	-0.53									
IB --> WP	0.51									
	Fit	Good fit	Acceptable	Good fit	Good fit	Good fit	Acceptable	Good fit	Acceptable	Good fit

### Mediation effect

Different mediation models were tested to establish this relationship. In the first model the direct relationship of employee's self-efficacy with their job satisfaction was established. Second step tested direct effect between work pressure and job satisfaction.

The third model tested direct interaction between employee self-efficacy and work pressure. In fourth step, simultaneous testing of effect of employee self-efficacy on job satisfaction and work pressure on job satisfaction was done and in the final model employee self-efficacy was tested using

work pressure as a mediator on job satisfaction. The above model explains the interaction effect of independent, dependent along with mediating variable. Fourth and fifth model explain the mediation effect of employee's self-efficacy on job satisfaction. Table III. explains the fit Indices for the same. As shown in table III, we can see the direct relationship between dimensions of employee's self-efficacy i.e., CB ( $\beta=0.52$ ,  $p < 0.01$ ) and IB ( $\beta=0.40$ ,  $p < 0.01$ ) with the Job Satisfaction. Relationship is statistically significant which shows that employee self-efficacy can predict job satisfaction. In another model it is observed that work pressure has statistical but negative relationship with job satisfaction ( $\beta= -0.63$ ,  $p<0.00$ ) thus work pressure can also predict job satisfaction is proved. In the next model the two dimensions of employee's self-efficacy were having statically significant effect on work pressure [ CB; ( $\beta=0.23$ ,  $p<0.01$ ), IB; ( $\beta=0.31$ ,  $p<0.01$ )] which proves that self-efficacy can predict work pressure. Model 4 and 5 were used to determine the mediating influence of work pressure. For model 4, path between Job Satisfaction and Work Pressure was not consider but in model 5 the same was established and the fit indices

were calculated as shown in Table 2, ( $\chi^2/ sd = 2.02$ , GFI = 0.94, IFI = 0.99, CFI = 0.98, NFI = 0.99, AGFI = 0.90, NNFI = 0.98 and SRMR = 0.048) the fit indices values clearly indicates that the work pressure acts as a mediator variable as shown in the fig.2.

From fig. 2 it is observed that the regression coefficient of two dimensions of self-efficacy i.e. CB ( $\beta = 0.82$ ,  $p < 0.00$ ) and IB ( $\beta = 0.83$ ,  $p < 0.01$ ) with the job satisfaction decreases once the model is established (CB;  $\beta=0.46$ , IB;  $\beta=0.31$ ). This indicates that self-efficacy decreases employees work pressure and in turn decrease the effect of work pressure. Therefore, it can be said that employee's Self Efficacy reduces not only the level of work pressure but also the negative effect of it with Job Satisfaction ( $\beta = -0.38$ ,  $p < 0.01$ ). Results from table IV shows that CB dimension ( $\beta=0.46$ ) and IB dimension ( $\beta=0.31$ ) shows direct effect on job satisfaction but the effect increases ( $\beta= 0.56$ ) in presence of work pressure variable [ CB; ( $\beta= 0.52$ , and IB ( $\beta= 0.40$ )). Hence, we can say that work pressure has mediating influence on the impact of employee's self efficacy with their job satisfaction.

Table III: Fit indices for tested Model

Model	Paths	$\beta$	$\chi^2/df$	p	RMSEA	GFI	NFI	NNFI	CFI	IFI	SRMR	AGFI
Model 1	CB --> JS	0.52	2.44	0.01	0.064	0.93	0.99	0.98	0.99	0.99	0.027	0.91
	IB --> JS	0.40										
Model 2	WP --> JS	-0.63	1.83	0.00	0.051	0.95	0.98	0.99	0.98	0.99	0.041	0.93
Model 3	CB --> WP	-0.23	1.76	0.01	0.048	0.96	0.99	0.98	0.99	0.99	0.051	0.92
	IB --> WP	0.31										
Model 4	CB --> JS	0.55	2.43	0.00	0.061	0.92	0.99	0.98	0.98	0.99	0.057	0.89
	IB --> JS	0.39										
	CB --> WP	-0.32										
	IB --> WP	-0.26										
Model 5	CB --> JS	0.46	2.02	0.01	0.051	0.94	0.99	0.98	0.98	0.99	0.048	0.90
	IB --> JS	0.31										
	WP --> JS	-0.38										
	CB --> WP	-0.18										
	IB --> WP	-0.31										

From above results, we can say that exist a positive effect of employee's self-efficacy on job satisfaction. Work pressure influence job satisfaction inversely. Work pressure

influences employee's self-efficacy effect on Job Satisfaction which confirms that work pressure partially mediates effect of employee's self-efficacy.



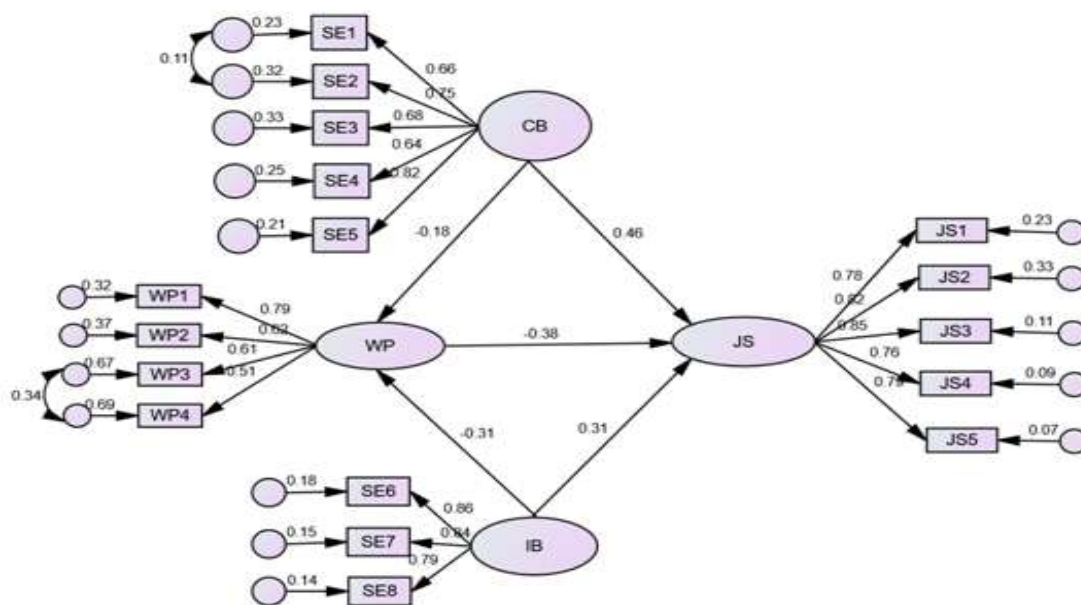


Fig.2 Mediation effect of work pressure among employee's self-efficacy and Job Satisfaction.

### 3. Conclusion

From the results, it is seen that employee self-efficacy has positive influence on job satisfaction (hypothesis 1) also employees work pressure effects job satisfaction negatively (hypothesis 2). Also, employee's self-efficacy effects the work pressure negatively (hypothesis 3). Two dimensions of employee's self-efficacy (Coping behavior, Innovative behavior) influences job satisfaction which changes in presence of

work pressure. Therefore, it can be said that employee's self-efficacy can predict job satisfaction and work pressure can also predict job satisfaction. With further addition it is seen that work pressure influence the effect employee's self-efficacy. It is seen that work pressure is partially mediates the effect of employee's self-efficacy. Thus, the above results show employee self-efficacy exhibits direct along with indirect influence on job satisfaction.

Table IV : Direct, Indirect and total effect coefficients between dependent and independent variables.

	WP	CB	IB	CB	IB	CB	IB	
	Direct Effect	Direct Effect	Direct Effect	Indirect Effect	Indirect Effect	Total Effect	Total Effect	Total Effect
JS	-0.38	0.46	0.31	0.06	0.09	0.52	0.40	0.56

#### **4. Discussion**

The results of study done by Buluc [9] shows that employee Self Efficacy shares a positive correlation with their job satisfaction have. In another study conducted by Caprara [4] it is observed that the job satisfaction has positive effect of self-efficacy on it. Thus, the results from previous studies are very much similar with the present study. This study shows employees self-efficacy belief influences work pressure levels and in turn job satisfaction. The result confirms that work pressure is negatively influenced with self efficacy and job satisfaction gets positively influenced with self-efficacy. The study conducted by Caprara [4] also shows that self-efficacy positively influences job satisfaction and negatively influence work pressure. Further, Ipek [28] showed employees work pressure as a good predictor of their satisfaction. As the work pressure increases the job satisfaction decreases. in another study conducted by Gamsız [29] shows that there exist and negative and moderate relation between job satisfaction and work pressure. Reilly [30] in their study showed that work pressure levels are good predictor of job satisfaction. Thus, it can be said that job satisfaction is associated with high self-efficacy and lower work pressure have high. Employees self-efficacy belief Influence positively to their job satisfaction and negatively to their work pressure levels.

#### **Recommendations**

Employee self-efficacy influence job satisfaction positively and also decreases their work pressure level. Therefore, employers who expects to improve their employee's satisfaction should work on improving employee's professional self-efficacy by providing good professional training and self-development environment which in turn can help them reducing their work pressure. As seen in the study work pressure negatively influences job satisfaction and also effect their self-efficacy, Employers can work on reducing their work

pressure by identifying the areas contributing towards their work pressure and subsequently working on some measures to reduce it. As the study was restricted to the employees working in IT industry in and around Pune city, we propose to extend this study in various locations in India. Also, the study model developed in this research can be adopted for similar research in other industries.

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