Chapter IV

Analysis and Discussion

CHAPTER IV

ANALYSIS AND DISCUSSION

In this chapter, analysis is carried out in line with the objectives of the study and the chapter is presented in six sections. All hypotheses framed are tested and results discussed in detail. Appropriate statistical tools like Percentage analysis, Descriptive statistics, Correlation analysis, Regression analysis, Discriminant analysis, Analysis of variance, t-test and Partial Least Squares-Structural Equation Modeling are performed to analyze the data. SPSS and Warp PLS are used for data analyses. The results are presented in tables with detailed explanation and discussions.

- Section 1: This section presents the demographic profile of the respondents. Further, it presents the perception of Job Demands, Job Resources, Occupational Self Efficacy, Job Crafting, Work Meaningfulness and Job Performance among the employees. To meet the first objective descriptive statistics is performed. Descriptive statistics is performed on the study variables to find out the level of perception of the respondents.
- Section 2: This section investigates the influence of Job Demands and Job Resources on Occupational Self Efficacy and the influence of Occupational Self Efficacy on Job Performance. For testing the second objective Correlation and Regression analysis are performed. Correlation analysis is performed to identify the relationship among Job Demands, Job Resources and Occupational Self Efficacy and also to identify the relationship between Job Demands, Job Resources, Occupational Self Efficacy and Job Performance. Two regression analysis are performed i) Job Demands and Job Resources as independent variable and Occupational Self Efficacy as dependent variable ii) Occupational Self Efficacy as independent variable and Job Performance as dependent variable.
- Section 3: This section examines the mediating role of Job Crafting on the relationship between Occupational Self-Efficacy and Job Performance.
- Section 4: This section examines the moderating role of Work Meaningfulness on the relationship between Occupational Self-Efficacy and Job crafting.

- Section 5: To identify the factors that discriminate employees with low Job Performance and high Job Performance, discriminant analysis is performed.
- Section 6: This section presents the significant differences in the perception of respondents with regard to the study variables Job Demands, Job Resources, Occupational Self Efficacy, Job Crafting, Work Meaningfulness and Job Performance across employees of varied demographic profile. To meet the sixth objective, ANOVA and t-test are performed. ANOVA is performed to compare, whether there is significance difference in the means of study variables with respect to age and education of the respondents and t-test is performed for gender, marital status and nature of job of the respondents.

4.1 Demographic Profile of the Respondents and Perception of the Respondents on the Study Variables

To map the demographic profile of the respondents' descriptive statistics is presented as frequency and percentage. The demographic factors included in the research are age, gender, marital status, education, experience and designation. This is the initial step in the data analysis and gives an overview of the characteristics of the respondents. Table 4.1 depicts the demographic profile of the respondents.

Table 4.1: Demographic profiles of the respondents

Demographic profile	Description	Frequency	Percentage
Age (years)	Below 25	88	21.3
	25-35	230	55.6
	36-45	63	15.2
	46-55	23	5.6
	Above 55	10	2.4
Gender	Male	333	80.4
	Female	81	19.6

Demographic profile	Description	Frequency	Percentage
Marital Status	Married	234	56.5
	Unmarried	180	43.5
Education	ITI/Diploma	133	32.1
	Engineering	214	51.7
	Arts and Science	67	16.2
Nature of Job	Technical	332	80.2
	Managerial	82	19.8
Experience (years)	Less than 1 year	30	7.2
	1-5	102	24.6
	6-10	137	33.1
	11-15	96	23.2
	16-20	33	8.0
	Above 21	16	3.9

Source: Primary data

From the table 4.1, it is inferred that, 55.6 % of the employees are in the age group of 25- 35 years, 21.3% of the employees are in the age group of below 25 years, 15.2 % of the employees are in the age group of 36-45 years, 5.6 % of the employees are in the age group of 46-55 years and only 2.4% of the employees are above 55 years. It is observed that most of the employees (55.6%) working in engineering industry are in the age group of 25 - 35 years. Thus, the major development of an organization is resting on young engineers, who work smarter with lots of energy and adequate knowledge. It is inferred that maximum 80.4% of the employees are male and the remaining 19.6% of the employees are females. It is observed that most of the employees working in engineering industry are males. In engineering industry due to tight schedule and heavy work count of female

employees is lesser when compared to male employees. In future, female ratio in engineering industry will increase since organization are moving towards automation and this is likely to pave the way to employ women.

It is also inferred from the table 4.1 that 56.5% of the respondents are married and 43.5% of the respondents are unmarried. In engineering industry, employees have to work hard without any time limit. It is quite natural that for unmarried employees there won‘t be any commitment and they can able to spend most of their time at work. It paves a way for their career development as well as organizational development. Further, regarding education levels, it is inferred that maximum 51.7 % of the employees are engineering graduates, 32% of respondents working in engineering sector are ITI/ Diploma holders and 16.2% of the respondent’s qualification is Arts and Science degree. This could be due to the reason that the respondents belong to a technically oriented organisation (Engineering Industries). Regarding nature of job, 80.2% of the respondents fall in the technical level and 19.8% of the respondents occupy the managerial level.

Table 4.1 shows that 33.1% of the respondents have experience between 6-10 years, 24.6% of the respondents have experience between 1-5 years, 23.2% of the respondents have experience between 11-15 years, 8% of the respondents have experience between 16-20 years, and only 3.9% of the respondents have experience above 21 years. This segment also indicates that the proportion of young people is more than elders. In a nutshell, the study considers this demographic profile as a healthy environment, since a majority of the respondents are youngsters who are technically qualified and will bring in more effectiveness in the organization.

Next descriptive statistics is performed to identify the respondent’s level of opinion regarding the study variables.

Table 4.2: Descriptive Statistics

	Variables	Mean	Std. Deviation
Job Demands	Work Pressure	3.2953	.89957
	Cognitive Demand	3.2766	.87137
	Emotional Demand	2.7222	.91845
	Role Conflict	2.5749	.93322
	Hassles	2.6522	.92508
Job Resources	Autonomy	3.2585	.91414
	Social Support	3.1457	.93361
	Feed Back	3.2882	.83417
	Opportunities for Development	3.4689	.89733
	Coaching	3.4986	.77463
Occupational Self-Efficacy		3.4879	.73242
Job Crafting	Task Crafting	3.3509	.74833
	Cognitive Crafting	3.2454	.89630
	Relational Crafting	3.0997	.77514
Work Meaningfulness		3.4401	.79662
Job Performance		3.5068	.69822

Source: Primary data

From the table 4.2, it is inferred that among the Job Demand dimensions, Work Pressure (M=3.2953) has the highest mean value indicating that employees are able to handle the amount of work within the time available and perform better in their job (M=3.5068). Cognitive demand (M=3.2766) has the second highest mean value demonstrating that cognitive individual have great attention skills, which includes the capability of multi-tasking and working through distractions. Cognitive Demand is defined as the mental action or process of acquiring knowledge and understanding through thought, experience,

and the senses. Employees who possess excellent cognitive skillsets show more concentration and care on their work to achieve goals. Cognitive skillsets include to think critically, act logically and effectively apply information. It could be inferred that employees in engineering industry make cognitive changes that bring new meaning and significance to work.

Among the Job Demand dimensions, low mean value is perceived for the dimensions namely Role conflict (M= 2.5749), Hassles (M= 2.6522) and Emotional demands (M=2.7222). With respect to the role conflict dimension, employees did not receive contradictory requests from different people to achieve the goals. Since the variable is always seen with a negative perspective in all aspects, conflict ends with misunderstanding among work group and it may leads to discarding the performance process, which could be the reason for respondents placing low value for Conflict. Hassles is also perceived less important, this may be due to the reason that employees did not get any disturbances from supervisors or colleagues to complete the projects or assignments. Similarly Respondents have rated low for the variable emotional demands, implying that work is not emotionally disturbing.

The mean value of all Job Resource Dimensions is above 3, which is an indication that the respondents feel that the resources required for pursuing the job is provided by the organization. The results are in line with the study carried by Xanthopoulou et al. (2007); that all indicators of job and personal resources were positively related to each other, to a moderately high extent. Employees who perceived high job resources such as coaching, feedback, social support, etc., had more positive beliefs about themselves and their abilities. Among the Job Resource Dimensions coaching (M=3.4986) has the highest mean value indicating that coaching helps employees in problem solving and also guides an employee's long-term growth and development on the job. Opportunities for development (M=3.4689) has the next highest mean value demonstrating that employees have the opportunity to learn and develop new things. Likewise, Feedback (M= 3.2882), Autonomy (M= 3.2585) and Social Support (M= 3.1457) are valued more by the employees. This implies that they share accurate information with employees about the quality and quantity of their work, employees are more likely to understand what is needed to continue good performance and correct poor performance. It could be inferred that Continuous

feedback is required for multiple opportunities in job and also increased productivity. Further, for doing any kind of activity, freedom is more important, for example: flexibility in work and in decision making process. Social support is also perceived important since they are the people who are very close like a friend in the organizational set up. Employees seek guidance and support if any difficulties arise in the work.

The mean value of Occupational self-efficacy (M=3.4879) is above 3, indicating that employees believe that they have the required skills to do the job. Self-Efficacy is an important factor which needs to be possessed by the employees, because being efficacious about a particular activity/task will lead to the success of the activity since they are likely to possess broad knowledge in carrying out the activity/task.

Among the Job Crafting dimensions, Task Crafting (M=3.3509) has the highest mean value indicating that employees initiate or introduce new tasks that can help employees to simplify their work and also better suit one's skills or interests to attain their goals. Task crafting helps them to enhance person-job fit. Cognitive Crafting (M=3.2454) has the second highest mean value demonstrating that employees broaden their perceptions of their job's scope and purpose, and reframe their job to develop their interests, relationships, desired outcomes, and overall identity thus creating meaningful work. It could be inferred that employees in engineering sector make intellectual changes that bring new meaning and importance to work. Relational Crafting (M=3.0997) has the third highest mean value indicating that employees reframe or build the social relationships at the workplace and make their work more meaningful.

The mean value of Work Meaningfulness (M=3.4401) is above 3, indicating that employees recognize their work as more meaningful. It could be inferred that employee are able to see the purpose of his/her work fits in the whole production process and also employees are engaged in their work and also seem to have the characteristics that are desirable within organizations, namely less risk of employee turnover, greater commitment to the organization, greater involvement in organizational citizenship behaviors and also enhance job performance.

The mean value of Job Performance (M=3.5068) value is also above 3, which is an indication that the respondents are able to accomplish the expected work related activities.

The Influence of Job Demands and Job Resources on Occupational Self Efficacy and Influence of Occupational Self Efficacy on Job Performance

To examine the second objective, Correlation and Regression analysis are performed. Correlation analysis is performed to identify the relationship among Job Demands, Job Resources and Occupational Self Efficacy and also to identify the relationship between Job Demands, Job Resources, Occupational Self Efficacy and Job Performance. Two regression analysis are performed i) Job Demands and Job Resources as independent variable and Occupational Self Efficacy as dependent variable ii) Occupational Self Efficacy as independent variable and Job Performance as dependent variable.

Correlation analysis reveals the degree and type of relationship between any two or more quantities (variables) in which they vary together over a period; for example, variation in the level of expenditure or savings with variation in the level of income. A positive correlation exists where the high values of one variable are associated with the high values of the other variable(s). A 'negative correlation' means association of high values of one with the low values of the other(s). Correlation can vary from +1 to -1. Values close to +1 indicate a high-degree of positive correlation, and values close to -1 indicate a high degree of negative correlation. Values close to zero indicate poor correlation of either kind, and 0 indicates no correlation at all. While correlation is useful in discovering possible connections between variables, it does not prove or disprove any cause-and-effect (causal) relationships between them.

Table 4.3: Correlation analysis- Job Demands, Job Resources and Occupational Self Efficacy

		WP	CD	ED	RC	HS	AT	SS	FB	OD	CG	OSE
WP	Pearson Correlation	1										
CD	Pearson Correlation	.684**	1									
	Sig. (2-tailed)	.000										
ED	Pearson Correlation	.431**	.493**	1								
	Sig. (2-tailed)	.000	.000									
RC	Pearson Correlation	.319**	.290**	.733**	1							
	Sig. (2-tailed)	.000	.000	.000								
HS	Pearson Correlation	.256**	.245**	.627**	.700**	1						
	Sig. (2-tailed)	.000	.000	.000	.000							
AT	Pearson Correlation	.305**	.311**	.272**	.274**	.297**	1					
	Sig. (2-tailed)	.000	.000	.000	.000	.000						
SS	Pearson Correlation	.364**	.412**	.309**	.278**	.265**	.542**	1				
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000					
FB	Pearson Correlation	.261**	.210**	.178**	.230**	.239**	.571**	.522**	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000				
OD	Pearson Correlation	.301**	.186**	.178**	.186**	.238**	.448**	.297**	.596**	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000			
CG	Pearson Correlation	.288**	.219**	.289**	.181**	.175**	.299**	.315**	.503**	.573**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		
OSE	Pearson Correlation	.278**	.307**	.306**	.260**	.141**	.423**	.299**	.432**	.438**	.578**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.004	.000	.000	.000	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.3 presents the correlation analysis results. The results show that correlation among Job Demand dimensions and Job Resource dimensions and Occupational self-efficacy among engineering industry employees. Cohen's (1988) effect size evaluation criterion, was used for correlational coefficients which state that < + .28 are small effects; medium effects range from + .28 - .49; and, large effects are greater than + .49.

In Job Demand dimension, Cognitive Demand ($r=0.307$ $p<0.000$) followed by Emotional demand ($r=0.306$ $p<0.000$) are positively and moderately correlated with Occupational self-efficacy. Work pressure ($r=0.278$ $p<0.000$), Role conflict ($r=0.260$ $p<0.000$) and Hassles ($r=0.141$ $p<0.000$) have positive and low correlation with Occupational self-efficacy.

In Job Resource dimension, Coaching ($r=0.578$ $p<0.000$) followed by Opportunities for Development ($r=0.438$ $p<0.000$), Feedback ($r=0.432$ $p<0.000$) and Autonomy ($r=0.423$ $p<0.000$) are positively and highly correlated with Occupational self-efficacy. It can be understood that there exists a high correlation among the variables according to Cohen's (1988). Social support ($r=0.299$ $p<0.000$) has positive and low correlation with Occupational self-efficacy. All the Correlation are significant.

Among the 5 dimensions of Job Demand considered for correlation with Occupational self-efficacy, Cognitive demand is moderately correlated with occupational self-efficacy. This implies that employees who display excellent cognitive abilities can make all the difference in the job (i.e., it allows them to effectively use technology, instruments, tools and information). Especially to increase employee's self-efficacy, cognitive demands of the workplace communication, thinking, and learning is important. Moderate correlation exists between occupational self-efficacy and emotional demand. This implies that high emotional task demands, including work that is emotionally disturbing or requires high emotional involvement lead to enhance employee's self-efficacy at work.

Role conflict, hassles and work pressure are having positive and low correlation with Occupational self-efficacy. Even though, receiving conflicting requests from two or more people brings healthy discussions among employees, most of the time employees try

to avoid conflict. Similarly Speed in work, inadequate time and resources to complete jobs satisfactorily, working too hard or too fast and difficult targets is likely to decrease employees self-efficacy beliefs.

Among the 5 dimensions of Job Resource considered for correlation with Occupational self-efficacy, Coaching is positively and highly correlated with Occupational self-efficacy. This implies that employees build and maintain effective employee and supervisory relationships and identify employee growth opportunities and develop new skills. It could be inferred that coaching increases productivity, the quality of work and the effectiveness of the work group and also encourage employees to take more initiative in their professional development. Supervisory coaching helps in enhancing employees self-efficacy beliefs. The next highest correlation exists between Opportunities for development and Occupational self-efficacy. This implies that providing employees with opportunities to develop their skills and abilities may increase their performance because they can personally grow at work and can take on new challenging tasks. Feedback and Autonomy is positively and highly correlated with Occupational self-efficacy. Providing routine feedback to the employees regarding their performance can enhance employee's self-efficacy beliefs at work. Similarly employees place more value on Autonomy since for doing any kind of job, freedom is needed. Until and unless freedom is given, employees cannot try new processes, work practices and exhibit their competence at work. At the same time, Social support has positive and low correlation ($r=0.299$ $p<0.000$) with Occupational self-efficacy, indicating that feeling competent at work can slightly contribute to decreasing social support levels. Social support can be measured as the perception that one has assistance available or the degree to which a person is integrated in a social network. Support can come from many sources, such as family, friends, organizations, coworkers, etc. Social support has been linked to many benefits for both physical and mental health, but social support is not always beneficial. It could hence be inferred from the above discussions that job demands and job resources enhance Occupational self-efficacy among the employees.

Table 4.4: Correlation analysis- Job Demands, Job Resources, Occupational Self Efficacy and Job Performance

		Job Demands	Job Resources	Occupational self-efficacy	Job Performance
Job Demands	Peason Correlation	1			
Job Resources	Peason Correlation	.448**	1		
	Sig(2-tailed)	.000			
Occupational self-efficacy	Peason Correlation	.337**	.566**	1	
	Sig (2-tailed)	.000	.000		
Job Performance	Peason Correlation	.416**	.519**	.600**	1
	Sig (2-tailed)	.000	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.4 presents the correlation analysis results for Job Demands, Job Resouces, Occupational Self Efficacy and Job Performance. It could be inferred from table 4.4 that Occupational self-efficacy is positively and highly correlated with Job Performance ($r=0.600$ $p<0.000$).The next highest and positive correlation exists between Job Resouces and Occupational Self Efficacy ($r=0.566$ $p<0.000$) followed by Job Resouces and Job Performance ($r=0.519$ $p<0.000$), Job Demands and Job Resouces ($r=0.448$ $p<0.000$), Job Demands and Job Performance ($r=0.416$ $p<0.000$) and Job Demands and Occupational Self Efficacy ($r=0.337$ $p<0.000$). All the Correlations are significant.

Hence it could be inferred that Job Demands and Job Resources helps in enhancing the Occupational self-efficacy of employees. The highest and positive correlation between Occupational self-efficacy and Job Performance indicates that higher the job specific self-efficacy, higher will be the Job performance. The findings of present study are in line with the findings of the study carried by Bandura (1982), Cervone et al (1991) and Stajkovic and Luthans (1997, 1998). Mathieu and Button (1992) also observed significant impact of self-efficacy beliefs on performances over time. Also, Mitchell et al; (1994) found that self-efficacy was a better predictor of performance than expected goals. Similarly study by

Orpen (1995) revealed a significant positive correlation between self-efficacy beliefs and self-rating of performance. Although bulk of evidence shows positive relationship between self-efficacy and performance, some researchers observed negative relationship when the analysis was done across time (repeated measures) rather than across individuals (Vancouver et al, 2001; Hawkins, 1992).

Regression analysis

Multiple regression analysis helps in determining the combined and separate influences of two or more variables on a dependent variable (Kerlinger 1986), and it is used to establish the extent to which various differing variables add to predict another variable (Guyatt et al 1995).

The analysis starts with estimating the co-efficients and the constants. Among the several methods of analysis of Multiple Regression, the method used here is stepwise regression method. Initially, the equation starts with no predictor variables, then at first step the variable with maximum correlation with the dependent variable is selected first and included in the model. Also once the variable is included in the equation, then it is again considered for removal from the equation to avoid multi-collinearity (correlation between independent variables) problems.

Once the variable entered and remains in the equation, the next variable with highest positive/ negative partial correlation is selected and considered for entry and if satisfied then added to the equation. Now the variables so far entered into the equation are checked for removal. This process continues until all the variables satisfying entry and removal criteria are included in the equation. Finally either all the independent variables selected for the analysis would have been included in the model or the variables selected based on the selection criteria are alone included in the model.

Two regression analysis is carried out and step wise method is used

i) The items of Job Demands and Job Resources are taken as independent variables and Occupational self-efficacy as dependent variable. Job Demands comprises of sub-dimensions namely work pressure, cognitive demand, emotional demand, role conflict and hassles. Job Resources comprises of sub-dimensions namely autonomy, social support, feedback, opportunities for development and coaching.

ii) The items of Occupational self-efficacy as independent variable and Job Performance as dependent variable.

Table 4.5: Regression analysis– Job Demands and Job Resources as independent variables and Occupational self-efficacy as dependent variable – Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F value	P value	Durbin-Watson
1	.546[a]	.298	.297	.61428			
2	.627[b]	.393	.390	.57195			
3	.650[c]	.423	.419	.55851			
4	.675[d]	.455	.450	.54318			
5	.700[e]	.490	.484	.52636			
6	.715[f]	.512	.505	.51554			
7	.731[g]	.534	.526	.50411			
8	.740[h]	.548	.539	.49735			
9	.747[i]	.558	.548	.49221			
10	.752[j]	.565	.554	.48889			2.018
11	.758[k]	.574	.563	.48439			
12	.762[l]	.581	.568	.48123			
13	.766[m]	.587	.573	.47846			
14	.771[n]	.595	.581	.47426			
15	.770[o]	.593	.579	.47505			
16	.778[p]	.605	.591	.46831			
17	.781[q]	.611	.596	.46553			
18	.784[r]	.615	.599	.46372			
19	.788[s]	.620	.604	.46091	5.851	0.016	
t. Dependent Variable: OSE							

From the Table 4.5, it is inferred that the adjusted R^2 value is 0.604. This implies that 60.4% variability in the Dependent variable i.e. Occupational self-efficacy is being predicted by the independent variables i.e. items of Work Pressure, Cognitive Demands, Emotional Demand, Role Conflict, Opportunities for Development, Coaching and Social Support and the regression model is significant (F= 5.851, p<0.016).

Table 4.6: Regression analysis: Job Demands and Job Resources as independent variables and Occupational self-efficacy as dependent variable – Coefficients of Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
19	(Constant)	.388	.150		2.583	.010
	CG3	.205	.033	.263	6.228	.000
	AT3	.098	.026	.157	3.801	.000
	CG5	.184	.029	.248	6.290	.000
	RC1	.209	.028	.311	7.387	.000
	OD3	.191	.030	.257	6.435	.000
	HS2	-.151	.029	-.222	-5.197	.000
	ED1	.084	.025	.141	3.282	.001
	FB2	.066	.028	.094	2.348	.019
	SS2	-.098	.029	-.158	-3.412	.001
	HS1	.070	.019	.138	3.726	.000
	HS5	-.078	.027	-.127	-2.891	.004
	WP2	-.142	.027	-.232	-5.270	.000
	WP1	.120	.029	.168	4.149	.000
	AT2	.084	.027	.127	3.136	.002
	SS1	.071	.031	.108	2.262	.024
	FB1	-.074	.030	-.103	-2.463	.014
	CD3	.066	.027	.108	2.419	.016
a. Dependent Variable: OSE						

In Job Demand construct, under Work Pressure dimension 2 Items WP1-'Do you have to work at speed?' (β=0.168 positive, t=4.149 positive, p<0.000) and Item WP2-'Do you have too much work to do?' (β= - 232 negative, t= - 5.270 negative, p<0.000); in

Cognitive Demand ItemCD3- ‘Do you regard your work as mentally very straining?’ (β= 0.108 positive, t= 2.419 positive, p=0.016); in Emotional Demand ItemED1- ‘Is your work emotionally demanding?’ (β=0.141 positive, t= 3.282 positive, p<0.001); under Role Conflict Item RC1- ‘I receive conflicting requests from two or more people’ (β=0.311 positive, t=7.387 positive, p<0.000); and in Hassles Item HS1- ‘ have to deal with administrative hassles’ (β=0.138 positive, t= 3.726 positive, p<0.000), Item HS2 ‘I have many hassles to go through to get projects/assignments done’ (β= - 0.222 negative, t= -5.197 negative, p<0.000) and Item HS5 ‘I have many hassles to go through to get my work done’ (β= -0.127 negative, t= - 2.891 negative, p<0.004) have a significant influence on Occupational Self-efficacy.

In Job Resource construct, under Coaching 2 items CG3-‘I feel valued by my supervisor’ (β=0.263 positive, t=6.228 positive, p<0.000) and Item CG5-‘My supervisor is friendly and open to me’ (β=0.248 positive, t=6.290 positive, p<0.000); under Autonomy Item AT3- ‘Can you participate in decision-making regarding your work?’ (β=0.157 positive, t= 3.801 positive, p<0.000) and Item AT2- ‘Do you have control over how your work is carried out?’ (β=0.127 positive, t=3.136 positive, p<0.002); under Opportunities for Development Item OD3- ‘My work offers me the possibility to learn new things’ (β=0.257 positive, t=6.435 positive, p<0.000); under Social Support Item SS1- ‘If necessary, can you ask your colleagues for help?’ (β=0.108 positive, t=2.262 positive, p<0.024) and Item SS2- ‘Can you count on your colleagues to support you, if difficulties arise in your work?’ (β= - 0.158 negative, t= - 3.412 negative, p<0.001); under Feedback Item FB1-‘I receive sufficient information about my work objectives’ (β= -0.103 negative, t= -2.463 negative, p<0.014) and Item FB2-‘My job offers me opportunities to find out how well I do my work’ (β= 0.094 positive, t=2.348 positive, p<0.019) have a significant influence on Occupational Self-efficacy.

From the above regression analysis, it could be inferred that among the Job Demand sub-dimensions, item of Work Pressure WP1 has the highest influence on Occupational Self-efficacy followed by items CD3(Cognitive Demand), ED1(Emotional Demand), RC1(Role Conflict) and HS1(Hassles). The reason could be employees in engineering industry quickly adjust to new pressures and challenges resulting from rapidly evolving technologies, and also able to manage the work with tight schedules all these contributes

to enhance their occupational self-efficacy. Speed in work and working under time pressure are challenging demand for employees to increase their skills and abilities. At the same time if the employees possess excellent cognitive skillsets such as creative thinking, logical reasoning, etc. they would be able to show high self-efficacy and perform better in their job. Further high emotional task demands indicate that work is personally touching or disturbing and it leads to enhancing employee's self-efficacy at work. Similarly, conflict with colleagues' expectations increases their own competence and are able to attain their goals. Through conflict employees will deliberate more ideas which in turn enhance their skills and abilities.

Among the Job Resource sub- dimensions, items of Coaching (CG3 and CG5) has the highest influence on Occupational Self-efficacy followed by items OD3 (Opportunities for Development), AT3 and AT2 (Autonomy) and SS1(Social Support). Being open, helps build and maintain effective employee and supervisory relationships to gain necessary skills and to accept responsibility for improving. Further, providing opportunities for development to learn new skills is likely to bring out a very good result for the employees with regard to their self-efficacy beliefs. Similarly, support can come from colleagues, routine feedback can help employees to achieve good results and find opportunities in their job. Employees have freedom to participate in decision-making process regarding their work which will enhance their occupational self-efficacy. On the whole, the above regression analysis emphasizes that Employees who are utilizing the job resources and challenging job demands are highly self-efficacious; they believe that they are able to meet the demands in a broad array of contexts. Challenging job demands stimulate and motivate employees to use their skills and abilities, to reach difficult goals. The findings of the study are consistent with the results of the study by Xanthopoulou, Bakker, Demerouti, and Schaufeli (2007) who assessed several job resources and found a positive relationship between self-efficacy and availability of job resources. This indicates that highly self-efficacious employees recognize (or even create) more features from their environment to assist them in attaining their (demanding) goals than employees with low self-efficacy (Xanthopoulou et al., 2007). In a longitudinal study, Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) found that feelings of self-efficacy were over time positively related with job resources.

Table 4.7: Regression analysis- items of Occupational Self-efficacy as independent variable and Job Performance as dependent variable – Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Value	Sig.	Durbin-Watson
1	.515[a]	.265	.264	.59918			2.057
2	.575[b]	.331	.328	.57242			
3	.598[c]	.357	.352	.56186			
4	.613[d]	.376	.370	.55434	12.199	0.000	

From the Table 4.7, it is inferred that the adjusted R^2 value is 0.370. This implies that 37% variability in the Dependent variable i.e. Job Performance is being predicted by the items of the Independent variable i.e. Occupational Self-Efficacy and the regression model is significant ($F=12.199$; $p<0.000$).

Table 4.8: Regression analysis- Occupational Self-efficacy as independent variables and Job Performance as dependent variable – Coefficients of Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.250	.107		20.998	.000
	OSE6	.354	.029	.515	12.199	.000
2	(Constant)	1.836	.121		15.135	.000
	OSE6	.282	.030	.410	9.421	.000
	OSE2	.199	.031	.277	6.358	.000
3	(Constant)	1.663	.126		13.161	.000
	OSE6	.217	.033	.315	6.468	.000
	OSE2	.177	.031	.246	5.662	.000
	OSE5	.135	.033	.196	4.074	.000
4	(Constant)	1.558	.128		12.141	.000
	OSE6	.178	.035	.259	5.100	.000
	OSE2	.131	.034	.182	3.891	.000
	OSE5	.126	.033	.182	3.836	.000
	OSE3	.123	.035	.174	3.493	.001
a. Dependent Variable: PF						

In model 1, F-test is statistically significant (F=148.812, p<0.000), which indicates that the model is statistically significant. The adjusted R square value of 0.264 indicates that 26.4% of the variability in Job Performance is predicted by the Occupational self-efficacy Item 6- 'I feel prepared for most of the demands in my job' (β=0.515 positive, t=12.199 positive, p<0.000).

In model 2, F-test is statistically significant (F=40.421, p<0.000), which indicates that the model is statistically significant. The adjusted R square value of 0.328 indicates that 32.8% of the variability in Job Performance is predicted by the items OSE6 and OSE2. Model 2 reveals that Occupational self-efficacy Item 6- I feel prepared for most of the demands in my job (β=0.410 positive, t= 9.421 positive, p<0.000) has the highest influence on Job Performance followed by Occupational self-efficacy Item 2 -When I am confronted with a problem in my job, I can usually find several solutions (β=0.277 positive, t=6.358 positive, p<0.000) have significant influence on Job Performance.

In model 3, F-test is statistically significant (F=16.594, p<0.000), indicating that the model is statistically significant. The adjusted R square value of 0.357 indicates that 35.7% of the variability in Job Performance is predicted by the items OSE6, OSE2 and OSE5. Model 3 reveals that among the items of the independent variable Occupational self-efficacy Item 6- I feel prepared for most of the demands in my job (β=0.315 positive, t= 6.468 positive, p<0.000) followed by Occupational self-efficacy Item 2 -When I am confronted with a problem in my job, I can usually find several solutions (β=0.246 positive, t=5.662 positive, p<0.000) and Occupational self-efficacy Item 5 - I meet the goals that I set for myself in my job (β=0.196 positive, t=4.074 positive, p<0.000) has a significant influence on Job Performance.

In model 4, F-test is statistically significant (F=12.199 p<0.000), which indicates that the model is statistically significant. The adjusted R square value of 0.370 indicates that 37% of the variability in Job Performance is predicted by the independent items OSE6, OSE2, OSE5 and OSE3. Model 4 reveals that among the items of the independent variable Occupational self-efficacy Item 6- I feel prepared for most of the demands in my job (β=0.259 positive, t= 5.100 positive, p<0.000) followed by Occupational self-efficacy Item 2 -When I am confronted with a problem in my job, I can usually find several solutions

(β=0.182 positive, t= 3.891 positive, p<0.000), Occupational self-efficacy Item 5 - I meet the goals that I set for myself in my job (β=0.182 positive, t=3.836 positive, p<0.000) and Occupational self-efficacy Item 3 - Whatever comes my way in my job, I can usually handle it (β=0.174 positive, t=3.493 positive, p<0.001) have a significant influence on Job Performance.

Getting prepared for meeting the demands in the job has the highest influence of employees job performance followed by confronting problems and finding several solutions, ability to meet the goals themselves and handle the jobs individually led them to exhibit better performance. Efficacy beliefs influence how employees feel and motivate themselves to contribute significantly to employee's performance in organization. Employers should focus on improving employee's self-efficacy in order to improve both individual and organizational performance. Thus, it can be concluded that in determining the job performance level of employees, Occupational self-efficacy plays a significant role.

Structural Model Estimation - Partial Least Square Analysis

Confirmatory factor analysis is used to validate the model. Confirmatory factor analysis estimates the parameters and empirically validates the hypothesized model. Confirmatory factor analysis was analyzed using Partial Least Squares. The most popular SEM technique is the covariance techniques such as LISEL, AMOS, EQS, EZPath, SEPATH, CALIS, MX, and RAMONA (Chin, 1995). This technique generally follows five stages: model specification, identification, estimation, testing fit and respecification. PLS was chosen mainly because it allows latent constructs to be modeled as either formative or reflective indicators.

PLS method of structural equation modeling is widely used in IS research (Agarwal & Karahanna, 2000; Gefen and Straub, 1997; Igbaria, 1995; Karahanna et al., 1999; Thompson, 1991). PLS is sometimes called “component-based SEM,” in contrast to the covariance-based structural equation modeling (SEM). PLS is a statistical method that allows optimal empirical assessment of a structural and measurement model. The measurement model is also called the outer model and the structural model the inner model. The measurement model shows the link of each construct with a set of indicators (items) measuring that construct. The structural model shows the causal relationships between multiple constructs (Wold, 1982).

PLS method of SEM (specifically Warp PLS) was chosen because of its ability to handle multicollinearity among the independent variables, robustness in the face of data noise and missing data, and the ability to create independent latent variables directly on the basis of cross -products involving the response variables thus allowing for stronger predictions. Consequently, PLS method has some major advantages over covariance-based methods such as LISREL, EQS and AMOS. PLS requires a sample size consisting of 10 times the number of predictors, using either the indicators of the most complex formative construct or the largest number of antecedent constructs leading to an endogenous construct, whichever is greater (Marcoulides, 2006).

PLS has an advantage over LISREL in that it does not require a multivariate normal distribution or a large sample size (Fornell and Bookstein 1982). LISREL emphasizes overall model fit, while PLS is more prediction oriented and seeks to maximize the variance explained in the constructs (Barclay, 1995). PLS estimates the variance of dependent construct and their associated latent variables (Chin, and Newsted, 1999; Chin, Marcolin, and Newsted, 2003). PLS basically relies on principal component analysis whereas the covariance method relies on common factor analysis. Falk and Miller (1992) identify four conditions under which PLS-based SEM is better than covariance based SEM as follows: (1) theoretical conditions, (2) measurement conditions, (3) distributional conditions, and (4) practical conditions.

Theoretical conditions consider the purpose of the study and whether or not strong theory exists. PLS is best suited when: (i) hypotheses are derived from theory and the relevant variables are not known, (ii) the relationships between theoretical constructs and their manifestations are unclear, and (iii) the relationships between constructs are hypothetical (Falk, 1992).

Measurement conditions consider the characteristics of the latent and manifest variables. PLS is best suited when: (i) some or all of the manifest variables represent different levels of measurement, (ii) manifest variables have some degree of unreliability, and (iii) residuals on manifest and latent variables are correlated. Under the distribution condition PLS is better suited when data come from non-normal or unknown distributions. Under the practical conditions PLS is best suited when: (i) the following designs are used

- cross-sectional, survey, secondary data, or quasi-experimental research designs, (ii) a large number of manifest and latent variables are modeled, and (iii) too many or too few cases are available (Falk, 1992).

SEM Model and Path Analysis

Path analysis involves using an algorithm in which factor scores are estimated by averaging all the indicators associated with the latent variables. P values are calculated through the process of resampling. The first phase involved defining the outer model by selecting the indicators associated with different latent variables and guided by theory. In PLS there are two types of indicators – reflective and formative indicators. A reflective latent variable is one in which all the indicators are expected to be highly correlated with the latent variable score whereas, a formative latent variable is one in which indicators are expected to measure certain attributes of the latent variable, but the indicators are not expected to be correlated with each other (Kock, 2010). Reflective indictors are used in classical test theories and factor analysis models. They are used in an attempt to account for observed variances. Formative indicators, however, are used to minimize residuals in the structural relationship and are not designed to account for observed variances (Fornell, and Bookstein, 1982). Since the study expect the indicators to be highly correlated with each other, the measurement model was set to be reflective.

A bootstrap resampling method (500 resamples) was used in this study because bootstrapping tends to generate more stable resample path coefficients and hence more reliable p-values with larger samples. Since all the measurements are reflective, the item loadings to each block of indicators were examined and compared with the results of factor structure matrix of loadings and cross loading (Chapter 3). There was no difference in the way the items loaded and hence no items were dropped.

4.4 Parameters in Warp PLS Model Fit

In order to determine if the model has a good fit with the original data, assessing model fit is important. Three model fit indices are provided in PLS: Average Path Coeffient (APC), Average R- Squared (ARS), and the Average Variance Inflation (VIF). P-values are provided for both APC and ARS. These p-values are calculated through resampling estimations coupled with Bonferroni-like corrections. Conservatively, it is recommended

that the p-values for both APC and ARS be less than 0.05 (significant at 0.05 level), and AVIF (Average Block Variance Inflation Factor) be lower than 5 (Kock, 2010). AVIF index will increase if new latent variables are added to the model in such a way to add full collinearity (multicollinearity) to the model (kock and lynn, 2012). It is recommended that both the AVIF and AFVIF (Average Full Collinearity) be equal to or lower than 3.3 particularly in models where most of the variables are measured through one or more indicators. A more relaxed (acceptable) criterion is that both the AVIF and AFVIF be equal to or lower than 5. GoF index reffered to as "TennenhausGoF" is a measure of models explanatory power. Wetzels et al, (2009) proposed the following thresholds for the GoF; small if equal to or greater than 0.1, medium if equal to or greater than 0.25 and large if equal to or greater than 0.36. The SPR (Simpons Paradox Ratio) index is a measure of the extent to which the model is free from simpsons paradox instances. Ideally the SPR should be equal to 1. Acceptable values of SPR are equal to or greater than 0.7 meaning that at least 70% of the paths in the model are free from Simpson's paradox.

Structural Model Analysis

The research model and its related hypotheses were assessed with Warp PLS. The models in PLS are estimated by loadings or weights which describe how the observations relate to the unobservables. They are also estimated by the structural relations, whereby values of the unobservables influence values of other unobservables in the model. A bootstrapping procedure with two hundred resamples was used to generate the t-statistics for the structural paths. Kock (2010) suggests that two hundred resamples is reasonable to obtain adequate standard error estimates.

WarpPLS produces path coefficients with their respective p-values, and Rsquared coefficients. In PLS-based SEM analysis, path coefficients are referred to as beta (β) coefficients. The explanatory power of the structural model is evaluated by examining the squared multiple correlation (R^2) value in the final dependent constructs. The R^2 measures the percentage of variation that is explained by the model.

Model 1: Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy on Job Performance

This section of the study investigates the influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy on Job Performance.

Table 4.9: R-squared coefficients - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy on Job Performance

Construct	R-squared coefficients	Adjusted R-squared coefficients
Occupational Self-Efficacy	0.377	0.374
Job Performance	0.368	0.366

From the table 4.9, it is inferred that R^2 values for each of the dependent variables are as follows: Occupational Self-Efficacy (37.7%) and Job Performance (36.8%) and the adjusted R^2 is 0.374 and 0.366.

Table 4.10: Fit indices - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy on Job Performance

Indiβces	Average path coefficient (APC)	Average R-squared (ARS)	Average adjusted R-squared (AARS)	Average block VIF (AVIF)	Average full collinearity (AFVIF)	Tenenhaus GoF (GOF)	Sympson's paradox ratio (SPR)
	0.432	0.372	0.370	1.221	1.663	0.413	1.000

*Significant at 0.001

The table 4.10 shows the fit indices. The APC value of the above model is 0.432 and the ARS value is 0.372 for which the significant level is less than 0.05. The AVIF value is 1.221 and AFVIF value is 1.663. The GOF value is 0.413 therefore the value fits in large range. The SPR value is 1. From the above discussions it could be inferred that the model fit indices are within the standard values thus indicating that the model fits the data

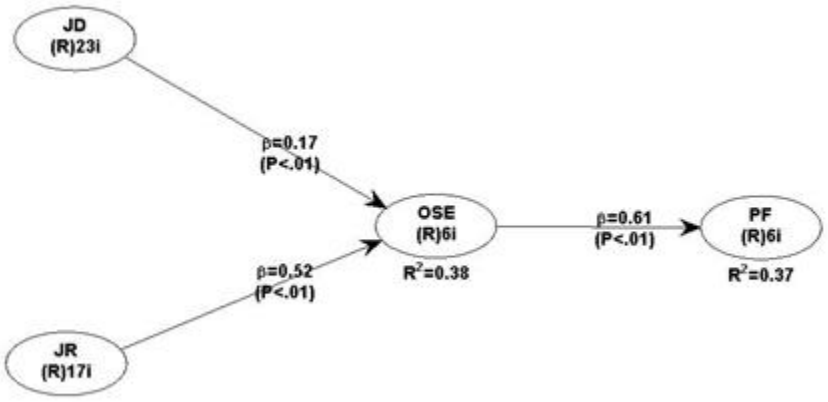

Figure 4.1: Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy on Job Performance

Table 4.11: Path Coefficients - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy on Job Performance

Path	Beta Coefficient	P value	Standard errors for path coefficients	Effect sizes for path coefficient
JD→OSE	0.167	<0.001	0.048	0.065
JR→OSE	0.524	<0.001	0.046	0.312
OSE→PF	0.606	<0.001	0.045	0.368

The path coefficients and the associated significance value, standard errors for path coefficients and effect sizes for path coefficients are presented in Table 4.11. The path coefficients are measured from -1 to +1. The path coefficient value that is moving towards +1 exhibits stronger positive association and the value moving nearer to -1 exhibits stronger negative association.

The path coefficient between Job demand and Occupational self-efficacy is found to be 0.167, which indicates a positive relationship ($\beta = 0.167$; $p<0.001$), which is significant thus proving Hypothesis 1 and therefore, it is inferred that Job demands has a positive and significant influence on Occupational self-efficacy

The path coefficient between Job Resources and Occupational self-efficacy is found to be 0.524, which indicates a positive relationship ($\beta = 0.524$; $p<0.001$), which is significant thus proving Hypothesis 2 and therefore, it is inferred that Job Resources has a positive and significant influence on Occupational self-efficacy.

The path coefficient between Occupational self-efficacy and Job Performance is found to be 0.606, which indicates a positive relationship ($\beta = 0.606$; $p<0.001$), which is significant.

From the above Table 4.11, it could be inferred that Job demand has a significant influence ($\beta=0.167$) on Occupational self-efficacy. Since Challenging job demand helps in positive development of an employee and improves strengths and capabilities which helps to foster self-efficacy among the employees.

From the above Table 4.11, it could be inferred that Job Resources has significant influence ($\beta=0.524$) on Occupational self-efficacy. since employees are given adequate resources to perform their tasks and duties which helps to enhance self-efficacy among the employees. The findings of the study are in line with Bakker (2011) suggested that different job resources, like social support from colleagues, performance feedback and supervisory coaching, lead to work engagement and subsequently better performance. Organization provides them with valued job resources that enhance learning, growth, and development (Houkes, Janssen, De Jonge, & Nijhuis, 2001).In addition, Salanova (2010), also showed that resourceful environments and self- efficacy beliefs contribute to a flourishing, engaged workforce, and vice versa.

It could also be inferred that Occupational self-efficacy has a significant influence ($\beta=0.606$) on Job Performance. Since highly self-efficacious leads to improve productivity and efficiency of an employee which in turn improves Job Performance. The findings of the study are in line with the findings of the study carried out by Noviawati and Witjaksono (2016) that self-efficacy will encourage someone to work more spirit to achieve optimal results in their performance. Moreover, these findings confirm the use of Albert Bandura's social cognitive theory (1977) provides the theoretical foundation for linking occupational self-efficacy with Job Performance by suggesting that efficacy beliefs are the basis of human agency, which influences one's motivation to engage in specific positive behaviors related to high performance.

Table 4.12: Indirect Effects for path with 2 segments - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy on Job Performance

Construct	Job Demand				Job Resource			
	Indirect Effects	P Value	Standard errors	Effect sizes	Indirect Effects	P Value	Standard errors	Effect sizes
Job Performance	0.101	0.002	0.034	0.039	0.318	<0.001	0.033	0.167

From the table 4.12, it is inferred that Indirect effect of the variables Job demand on Job Performance is 0.101 ($\beta = 0.101$; $p= 0.002$); and Job resources on Job Performance is 0.318 ($\beta = 0.318$; $p< 0.001$) and are significant at 5%.

Table 4.13: Total Effects - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy on Job Performance

Construct	Occupational Self-Efficacy				Job Demand				Job Resource			
	Total Effects	P Value	Standard errors	Effect sizes	Total Effects	P Value	Standard errors	Effect sizes	Total Effects	P Value	Standard errors	Effect sizes
Occupa-tional Self-Efficacy					0.167	<0.001	0.048	0.065	0.524	<0.001	0.046	0.312
Job Perfo-rmance	0.606	<0.001	0.045	0.368	0.101	0.002	0.034	0.039	0.318	<0.001	0.033	0.167

Source: Primary data

From the table 4.13, it is inferred that the total effects between Job demand on Job Performance is found to be 0.101 ($\beta = 0.101$; $p= 0.002$); and Job resources on Job Performance is found to be 0.318 ($\beta = 0.318$; $p< 0.001$), which indicates a significant positive relationship and therefore, it is inferred that Job demand and job resources has a significant indirect effect on Job Performance.

From the table 4.13, it is inferred that the total effects between Occupational self-efficacy and Job Performance is found to be 0.606 ($\beta = 0.606$; $p< 0.001$), which

indicates a significant positive relationship and therefore, it is inferred that Occupational self-efficacy has a significant direct effect on Job Performance.

Model 2 : Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy and Job Crafting on Job Performance

This section of the study investigates the Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy and Job Crafting on Job Performance

Table 4.14: R-squared coefficients - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy and Job Crafting on Job Performance

Construct	R-squared coefficients	Adjusted R-squared coefficients
Occupational Self-Efficacy	0.377	0.374
Job Performance	0.407	0.404

From the table 4.14it is inferred that R^2 values for each of the dependent variables are as follows: Occupational Self-Efficacy (37%) and Job Performance (40.7%) and the adjusted R^2 is 0.374 and 0.404.

Table 4.15: Fit indices - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy and Job Crafting on Job Performance

Indiβces	Average path coefficient (APC)	Average R-squared (ARS)	Average adjusted R-squared (AARS)	Average block VIF (AVIF)	Average full collinearity (AFVIF)	Tenenhaus GoF (GOF)	Sympson's paradox ratio (SPR)
	0.354	0.392	0.389	1.262	1.683	0.419	1.000

*Significant at 0.001

Table 4.15 shows the fit indices. The APC value of the above model is 0.354 and the ARS value is 0.392 for which the significant level is less than 0.05. The AVIF value is

1.262 and AFVIF value is 1.683. The GOF value is 0.419 therefore the value fits in large range. The SPR value is 1. From the above discussions it could be inferred that the model fit indices are within the standard values thus indicating that the model fits the data.

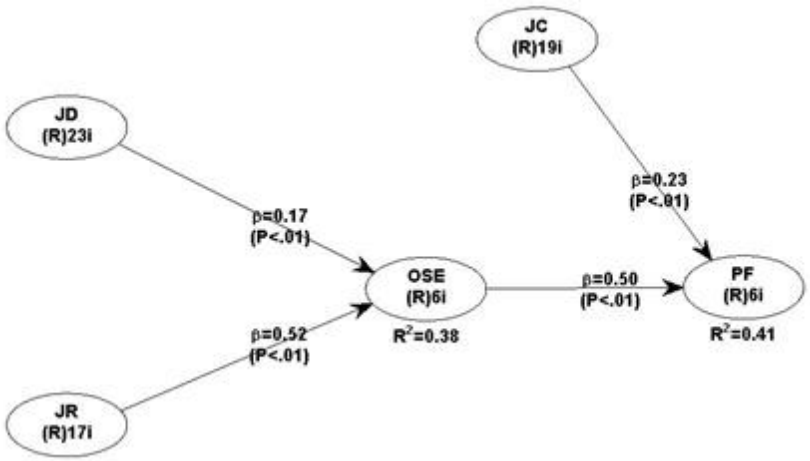

Figure 4.2: Structural Model - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy and Job Crafting on Job Performance

Table 4.16: Path Coefficients - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy and Job Crafting on Job Performance

Path	Beta Coefficient	P value	Standard errors for path coefficients	Effect sizes for path coefficient
JD→OSE	0.167	<0.001	0.068	0.065
JR→OSE	0.524	<0.001	0.044	0.312
OSE→PF	0.498	<0.001	0.046	0.302
JC→PF	0.225	<0.001	0.038	0.105

The path coefficient between Occupational self-efficacy and Job Performance is found to be 0.498, which indicates a positive relationship ($\beta = 0.498$; $p<0.001$), which is significant thus proving Hypothesis 3and therefore, it is inferred that Occupational

self-efficacy has a positive and significant influence on Job Performance. The path coefficient between Occupational self-efficacy and Job Performance was reduced from 0.606 in model 1, to 0.498 in model 2, which is also significant. It could be inferred that occupationally self-efficacious employees exhibit better job performance. Findings of the study are in line with the results of the study by Yakin and Erdil (2012) that beliefs regarding one's capabilities work related attitudes and motivation affects job performance and satisfaction.

The path coefficient between Job Crafting and Job Performance is found to be 0.225, which indicates a positive relationship ($\beta = 0.225$; $p<0.001$), which is significant. Hence, it could be inferred that crafting stimulate the employees to take on challenges and strengthen their resources to improve their performance. The findings are in line with the results of the study by Henson (1996) that employees who craft their job in terms of reducing demands might view their work just as a source of pay check and might be less engaged and therefore reduce the complexity and amount of tasks performed on the job.

Table 4.17: Indirect Effects for path with 2 segments - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy and Job Crafting on Job Performance

Construct	Job Demands				Job Resources			
	Indirect Effects	P Value	Standard errors	Effect sizes	Indirect Effects	P Value	Standard errors	Effect sizes
Job Performance	0.083	0.010	0.036	0.032	0.261	<0.001	0.035	0.137

From the table 4.17, it is inferred that the Indirect effect of the variables Job demand on Job Performance is 0.083 ($\beta = 0.083$; $p= 0.010$); and Job resources on Job Performance is 0.261 ($\beta = 0.261$; $p< 0.001$) and are significant at 5%.

Table 4.18: Total Effects - Influence of Job Demand, Job Resources on Occupational Self-Efficacy and Occupational Self-Efficacy and Job Crafting on Job Performance

Construct	Occupational self-efficacy				Job Demands				Job Resources				Job Crafting			
	Total Effects	**P Value**	**Standard errors**	**Effect sizes**	**Total Effects**	**P Value**	**Standard errors**	**Effect sizes**	**Total Effects**	**P Value**	**Standard errors**	**Effect sizes**	**Total Effects**	**P Value**	**Standard errors**	**Effect sizes**
Occupational self-efficacy					0.167	0.007	0.068	0.065	0.524	<0.001	0.044	0.312				
Job Performance	0.498	<0.001	0.046	0.302	0.083.	0.010	0.036	0.032	0.261	<0.001	0.035	0.137	0.225	<0.001	0.038	0.105

From the table 4.18, it is inferred that the total effects between Job demand on Job Performance is 0.083 (β = 0.083; p= 0.010); and Job resources on Job Performance is 0.261 (β = 0.261; p<0.001), which indicates a significant positive relationship and therefore, it is inferred that Job demand and job resources has a significant indirect effect on Job Performance.

From the table 4.18, it is inferred that the total effects between Occupational self-efficacy and Job Performance is found to be 0.498 (β = 0.498; p< 0.001), which indicates a significant positive relationship and therefore, it is inferred that Occupational self-efficacy has a significant direct effect on Job Performance.

From the table 4.18, it is inferred that the total effects between Job Crafting and Job Performance is found to be 0.225 (β = 0.225; p< 0.001), which indicates a significant positive relationship and therefore, it is inferred that Job Crafting has a significant direct effect on Job Performance.

The above analysis depicts the direct effects of the construct Job Demand, Job Resources on Occupational self-efficacy and the direct effects of Occupational self-efficacy on Job Performance and also the direct effects of Job Crafting on Job Performance. It also explains the indirect effect of the construct Job Demands, Job Resources on Job Performance.

The Mediating role of Job Crafting on Occupational Self-Efficacy and Job Performance

In order to establish mediation effect of Job Crafting between Occupational self-efficacy and Job Performance, the Baron and Kenny Mediation model (Baron and Kenny, 1986; Kenny, 1998) is adopted. This model describes the following four steps that should be followed in order to establish mediation. This section of the study investigates the mediating effect of Job Crafting between Occupational Self-efficacy and Job Performance.

1) Use regression equation to show that Occupational Self-efficacy (predictor variable) affects Job Performance (criterion variable) and then determine the direct effect or path coefficient between Occupational Self-efficacy and Job Performance.

2) Use regression equation to show that Occupational Self-efficacy affects Job Crafting (criterion variable) and then estimate path coefficient between Occupational Self-efficacy and Job Crafting.

3) Use regression equation to show that Job Crafting affects Job Performance and estimate path coefficient between Job Crafting and Job Performance while controlling for Occupational Self-efficacy.

4) Establish complete mediation if the effect of Occupational Self-efficacy on Job Performance is zero while controlling for Job Crafting.

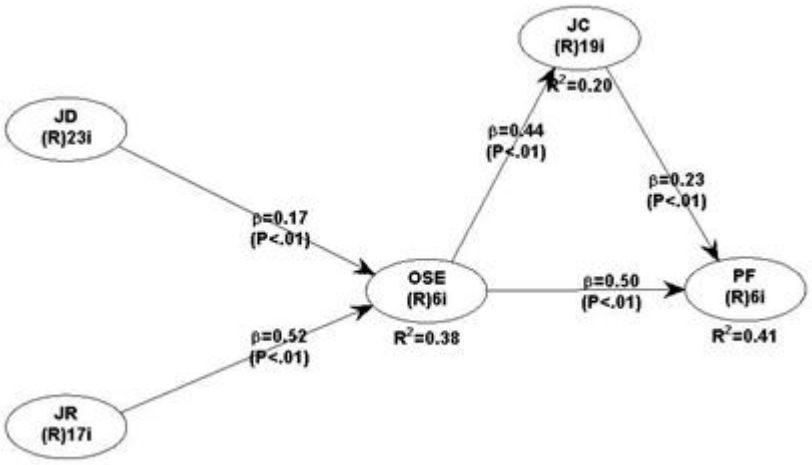

Figure 4.3: Structural Model -The Mediating role of Job Crafting on Occupational Self-Efficacy and Job Performance

Table 4.19: R-squared coefficients The Mediating role of Job Crafting on Occupational Self-Efficacy and Job Performance

Construct	R-squared coefficients	Adjusted R-squared coefficients
Occupational Self-Efficacy	0.377	0.374
Job Performance	0.407	0.404
Job Crafting	0.196	0.194

From the table 4.19, it is inferred that R^2 values for each of the dependent variables are as follows: Occupational Self-Efficacy (37.7%), Job Performance (40.7%) and Job Crafting (19.6%) and the adjusted R^2 is 0.374, 0.404 and 0.194.

Table 4.20: Fit indices - The Mediating role of Job Crafting on Occupational Self-Efficacy and Job Performance

Indiβces	Average path coefficient (APC)	Average R-squared (ARS)	Average adjusted R-squared (AARS)	Average block VIF (AVIF)	Average full collinearity (AFVIF)	Tenenhaus GoF (GOF)	Sympson's paradox ratio (SPR)
	0.371	0.327	0.324	1.262	1.683	0.382	1.000

*Significant at 0.001

The table 4.20 shows the fit indices. The APC value of the above model is 0.371 and the ARS value is 0.327 for which the significant level is less than 0.05. The AVIF value is 1.262 and AFVIF value is 1.683. The GOF value is 0.382 therefore the value fits in large range. The SPR value is 1. From the above discussions it could be inferred that the model fit indices are within the standard values thus indicating that the model fits the data.

Table 4.21: Path Coefficients - The Mediating role of Job Crafting on Occupational Self-Efficacy and Job Performance

Path	Beta Coefficient	P value	Standard errors for path coefficients	Effect sizes for path coefficient
JD→OSE	0.167	0.007	0.068	0.065
JR→OSE	0.524	<0.001	0.044	0.312
OSE→PF	0.498	<0.001	0.046	0.302
OSE→JC	0.443	<0.001	0.047	0.196
JC→PF	0.225	<0.001	0.038	0.105

It could be inferred from the mediation table that

- The path coefficient between Occupational Self-efficacy and Job Performance is 0.498 (β=0.498; p<0.001) and is significant at 5%. In a similar vein, meta-analysis by Judge and Bono (2001) opined that generalized self-efficacy showed the highest correlation to job performance as compared to self-esteem, internal locus of control and emotional stability.
- The path coefficient between Occupational Self-efficacy and Job Crafting is 0.443 (β=0.443; p<0.001) and is significant at 5%.Hence it could be inferred that individuals with a higher level of self-efficacy craft their jobs effectively. Findings are in line with Bakker, Tims and Derks (2014) which revealed that individuals who felt self-effective searched for more opportunities to learn new things and sought more variety in tasks. In addition, Van den Heuvel, Demerouti, and Peeters (2012) found that when employees learned to influence the demands and resources of their work through job crafting exercises, they experienced more positive and less negative emotions as well as higher levels of self-efficacy.
- The path coefficient between Job Crafting and Job Performance is 0.225 (β=0.225; p<0.001) and which is significant thus proving Hypothesis 5 and therefore, it is inferred that Job Crafting has a positive and significant influence on Job Performance. Since crafting help the employees to work with their preferences and needs will lead to obtain greater job performance. Thus, employees who craft their job may show higher levels of job performance. Findings of the study are in line with Berg, Dutton and Wrzesniewski (2010) suggested that when employees try to craft their job this will lead to higher levels of satisfaction with their working life, an increase in engagement, increase in personal resilience and the achievement of higher levels of performance. In a similar vein, the findings of the study are in line with the results of the study by Bakker, Demerouti and Verbeke (2014) and Tims, Bakker and Derks (2014) that the individual resourcefulness through job crafting also enables employees to perform more tasks or more complex tasks, thus improving their performance levels. In addition, Recent evidences also indicated that job crafting improves task performance through reducing exhaustion of employees (Demerouti et al., 2015; Petrou et al., 2015).

The results of mediation analysis shown in figure, shows that Job Crafting partially mediates the relationship between Occupational Self-efficacy and Job Performance. The mediation is partial because controlling Job Crafting does not make the mediation effect of Occupational Self-efficacy on Job Performance to be zero (β=0.498; p<0.001). Hence, it could be concluded that "Job Crafting partially mediates the positive relationship between Occupational Self-efficacy and Job Performance.

Table 4.22: Indirect Effects for paths with 2 segments - The Mediating role of Job Crafting on Occupational Self-Efficacy and Job Performance

Construct	Occupational self-efficacy				Job Demands				Job Resources			
	Indirect Effects	P Value	Standard errors	Effect sizes	Indirect Effects	P Value	Standard errors	Effect sizes	Indirect Effects	P Value	Standard errors	Effect sizes
Job Perfor-mance	0.100	<0.001	0.021	0.061	0.083	0.010	0.036	0.032	0.261	<0.001	0.035	0.137
Job Crafting					0.074	0.009	0.031	0.036	0.232	<0.001	0.032	0.098

From the table 4.22, it is inferred that the Indirect effect of the variables Occupational self-efficacy on Job performance is 0.100 (β = 0.100; p<0.001); and Job demand on Job Performance is 0.083 (β = 0.083; p= 0.010); and Job resources on Job Performance is 0.261 (β = 0.261; p< 0.001) and are significant at 5%.

From the table 4.22, it is inferred that the Indirect effect of the variables Job demand on Job Crafting is 0.074 (β = 0.074; p= 0.009); and Job resources on Job crafting is 0.232 (β = 0.232; p< 0.001) and are significant at 5%.

Table 4.23: Indirect Effects for paths with 3 segments - The Mediating role of Job Crafting on Occupational Self-Efficacy and Job Performance

Construct	Job Demands				Job Resources			
	Indirect Effects	P Value	Standard errors	Effect sizes	Indirect Effects	P Value	Standard errors	Effect sizes
Job Performance	0.017	0.013	0.007	0.007	0.052	<0.001	0.012	0.027

From the table 4.23, it is inferred that the Indirect effect of the variables Job demand on Job Performance is 0.017 (β = 0.017; p= 0.013); and Job resources on Job Performance is 0.052 (β = 0.052; p< 0.001) and are significant at 5%.

Table 4.24: Total Effects - The Mediating role of Job Crafting on Occupational Self-Efficacy and Job Performance

Construct	Occupational self-efficacy				Job Demands				Job Resources				Job Crafting			
	Total Effects	**P Value**	**Standard errors**	**Effect sizes**	**Total Effects**	**P Value**	**Standard errors**	**Effect sizes**	**Total Effects**	**P Value**	**Standard errors**	**Effect sizes**	**Total Effects**	**P Value**	**Standard errors**	**Effect sizes**
Occupational self-efficacy					0.167	0.007	0.068		0.524	<0.001	0.044	0.312				
Job Performance	0.597	<0.001	0.037	0.362	0.100	0.008	0.042		0.313	<0.001	0.035	0.164	0.225	<0.001	0.038	0.105
Job Crafting	0.443	<0.001	0.047	0.196	0.074	0.009	0.031		0.232	<0.001	0.032	0.098				

From the table 4.24, it is inferred that the total effects of the variables Job demand on Job Performance is 0.100 (β = 0.100; p= 0.008); and Job resources on Job Performance is 0.313 (β =0.313; p< 0.001), which indicates a significant positive relationship and therefore, it is inferred that Job demand and Job resources has a significant indirect effect on Job Performance.

From the table 4.24, it is inferred that the total effects between Occupational self-efficacy and Job Performance is found to be 0.597 (β = 0.597; p< 0.001), which indicates a significant positive relationship and therefore, it is inferred that Occupational self-efficacy has a significant direct effect on Job Performance.

From the table 4.24, it is inferred that the total effects between Job Crafting and Job Performance is found to be 0.225 (β = 0.225; p< 0.001), which indicates a significant positive relationship and therefore, it is inferred that Job Crafting has a significant direct effect on Job Performance.

The above analysis depicts the direct effects of the construct Job Demand, Job Resources on Occupational self-efficacy and the direct effects of Occupational self-efficacy on Job Performance and also the direct effects of Job Crafting on Job Performance. It also explains the indirect effect of the construct Job Demand, Job Resources on Job Performance.

Model 4: The Moderating role of Work Meaningfulness on Occupational Self-Efficacy and Job Crafting

Work Meaningfulness has a moderating effect on the relationship between Occupational self-efficacy and Job crafting. The Moderation effect is associated with an interaction effect. The sign and power of the path coefficient of a moderator relationship refers to the effect of the moderating variable (Work Meaningfulness) over the intensity of the direct relationships among the independent and dependent variable (Kock 2011).

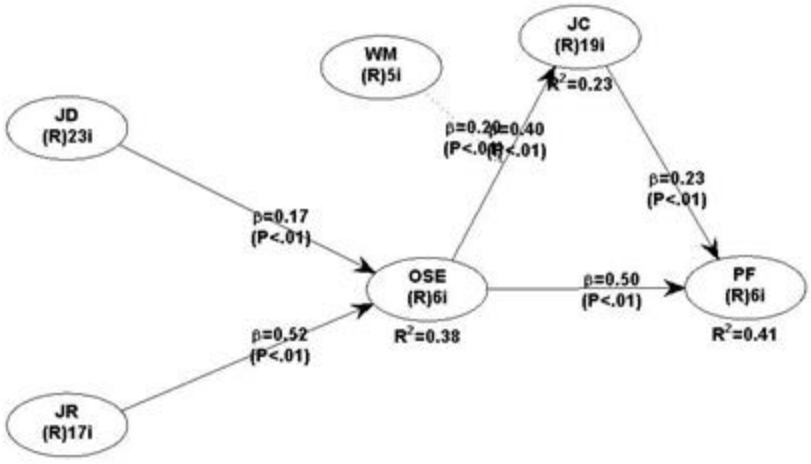

Figure 4.4: Structural Model - The Moderating role of Work Meaningfulness on Occupational Self-Efficacy and Job Crafting

Table 4.25: R-squared coefficients - The Moderating role of Work Meaningfulness on Occupational Self-Efficacy and Job Crafting

Construct	R-squared coefficients	Adjusted R-squared coefficients
Occupational self-efficacy	0.377	0.374
Job Performance	0.407	0.404
Job Crafting	0.235	0.231

From the table 4.25, it is inferred that the R^2 values for each of the dependent variables are as follows: Occupational Self-Efficacy (37.7%), Job Performance (40.7%) and Job crafting (23.5%) and the adjusted R^2 is 0.374, 0.404 and 0.231.

Table 4.26: Fit indices - The Moderating role of Work Meaningfulness on Occupational Self-Efficacy and Job Crafting

Indiβces	Average path coefficient (APC)	Average R-squared (ARS)	Average adjusted R-squared (AARS)	Average block VIF (AVIF)	Average full collinearity (AFVIF)	Tenenhaus GoF (GOF)	Sympson's paradox ratio (SPR)
	0.336	0.339	0.336	1.190	1.761	0.393	1.000

*Significant at 0.001

The table 4.26 shows the fit indices. The APC value of the above model is 0.336 and the ARS value is 0.339 for which the significant level is less than 0.05. The AVIF value is 1.190 and AFVIF value is 1.761. The GOF value is 0.393 therefore the value fits in large range. The SPR value is 1. From the above discussions it could be inferred that the model fit indices are within the standard values thus indicating that the model fits the data.

Table 4.27: Path Coefficients - The Moderating role of Work Meaningfulness on Occupational Self-Efficacy and Job Crafting

Path	Beta Coefficient	P value	Standard errors for path coefficients	Effect sizes for path coefficient	Result
JD→OSE	0.167	0.007	0.068	0.065	H1 Accepted
JR→OSE	0.524	<0.001	0.044	0.312	H2 Accepted
OSE→PF	0.498	<0.001	0.046	0.302	H3 Accepted
OSE→JC	0.401	<0.001	0.053	0.178	H4 Accepted
JC→PF	0.225	<0.001	0.038	0.105	H5 Accepted
WM*OSE	0.201	<0.001	0.056	0.057	H6 Accepted

- From the table 4.27, it is inferred that the path coefficient of the moderating effects has a value of 0.201 and the p value is <0.001 (β=0.201; p<0.001). Since it is a positive path coefficient of an effect that moderates a positive direct relationship, the relationship between Occupational self-efficacy and Job crafting will go up in value as Work Meaningfulness increases, the effect of Occupational self-efficacy on Job crafting will decrease with increase in Work Meaningfulness. Hence Hypothesis 6 is accepted and therefore, it is inferred that Work Meaningfulness has a positive and significant influence on Job Crafting.

Results showed that work meaningfulness moderate the relationship between occupational self-efficacy and Job crafting. More specifically, when work meaningfulness was high, the effect of occupational self-efficacy on Job crafting was significantly reduced. Job crafting facilitate employees to identify opportunities to craft their jobs to better suit their motives, strengths, and passions is likely to cultivate greater work meaningfulness. In essence, the employees can craft their jobs to cultivate meaningfulness by changing the nature of the relationship to be about a new and encouraging others to give valuable help and support in return. The findings of the study are in line with those of Tims, Bakker and Derks (2015) who suggested that by crafting their job, individuals can proactively optimize their person–job fit and experience their work as meaningful and also Michaela Schoberova (2015) in their study suggested that employees can proactively make their work more engaging and meaningful via job crafting and contributes to overall well-being and performance. In addition, Demerouti (2014) inferred that Job crafting can be considered as proactive behavior from employees to initiate changes in their job demands and job resources to make their jobs more meaningful, satisfying and engaging.

Table 4.28: Indirect Effects for paths with 2 segments - The Moderating role of Work Meaningfulness on Occupational Self-Efficacy and Job Crafting

Construct	Occupational Self-Efficacy				Job Demands				Job Resources				Work Meaningfulness* Occupational Self-Efficacy			
	Indirect Effects	P Value	Standard errors	Effect sizes	Indirect Effects	P Value	Standard errors	Effect sizes	Indirect Effects	P Value	Standard errors	Effect sizes	Indirect Effects	P Value	Standard errors	Effect sizes
Job Performance	0.090	<0.001	0.020	0.055	0.083	0.010	0.036	0.032	0.261	<0.001	0.035	0.137	0.045	<0.001	0.013	0.004
Job Crafting					0.067	0.011	0.029	0.033	0.210	<0.001	0.033	0.089				

From the table 4.28, it is inferred that the Indirect effect of the variables Job demand on Job Crafting is 0.067 (β = 0.067; p= 0.010); and Job resources on Job crafting is 0.210 (β = 0.210; p< 0.001) and are significant at 5%.

From the table 4.28, it is inferred that the Indirect effect of the variables Job demand on Job Performance is 0.083 (β = 0.083; p= 0.010); and Job resources on Job Performance is 0.0216 (β = 0.216; p< 0.001) and are significant at 5%.

Table 4.29: Indirect Effects for paths with 3 segments - The Moderating role of Work Meaningfulness on Occupational Self-Efficacy and Job Crafting

Construct	Job Demands				Job Resources			
	Indirect Effects	**P Value**	**Standard errors**	**Effect sizes**	**Indirect Effects**	**P Value**	**Standard errors**	**Effect sizes**
Job Performance	0.015	0.015	0.007	0.006	0.047	<0.001	0.011	0.025

From the table 4.29, it is inferred that the Indirect effect of the variables Job demand on Job Performance is 0.015 (β = 0.015; p= 0.007); and Job resources on Job Performance is 0.047 (β = 0.047; p< 0.001) and are significant at 5%.

Table 4.30: Total Effects - The Moderating role of Work Meaningfulness on Occupational Self-Efficacy and Job Crafting

Construct	Occupational Self-Efficacy				Job Demands				Job Resources				Job Crafting				Work Meaningfulness *Occupational Self-Efficacy			
	Total Effects	P Value	Standard errors	Effect sizes	Total Effects	P Value	Standard errors	Effect sizes	Total Effects	P Value	Standard errors	Effect sizes	Total Effects	P Value	Standard errors	Effect sizes	Total Effects	P Value	Standard errors	Effect sizes
Occupational Self-Efficacy					0.167	0.007	0.068	0.065	0.524	<0.001	0.044	0.312								
Job Performance	0.588	<0.001	0.038	0.356	0.098	0.009	0.041	0.038	0.308	<0.001	0.035	0.162	0.225	<0.001	0.038	0.105	0.045	<0.001	0.013	0.004
Job Crafting	0.401	<0.001	0.053	0.178	0.067	0.011	0.029	0.033	0.210	<0.001	0.033	0.089					0.201	<0.001	0.056	0.057

From the table 4.30, it is inferred that the total effects between Occupational self-efficacy on Job Performance is found to be 0.588 (β = 0.588; p< 0.001), which indicates a significant positive relationship and therefore, it is inferred that Occupational self-efficacy has a significant direct effect on Job Performance.

From the table 4.30, it is inferred that the total effects of the variables Job demand on Job Performance is 0.098 (β = 0.098; p= 0.009); and Job resources on Job Performance is 0.308 (β = 0.308; p< 0.001), which indicates a significant positive relationship and therefore, it is inferred that Job demand and job resources has a significant indirect effect on Job Performance.

From the table 4.30, it is inferred that the total effects between Job Crafting and Job Performance is found to be 0.225 (β = 0.225; p< 0.001), which indicates a significant positive relationship and therefore, it is inferred that Job Crafting has a significant direct effect on Job Performance.

From the table 4.30, it is inferred that the moderating effects has a value of 0.201 and the p value is <0.001 (β=0.201; p<0.001). since it is a positive path coefficient of an effect that moderates a positive direct relationship, the relationship between Occupational self-efficacy and Job crafting will go up in value as Work Meaningfulness increases, the effect of Occupational self-efficacy on Job crafting will decrease with increase in Work Meaningfulness. Hence Hypothesis 6 is accepted.

The above analysis depicts the direct effects of the construct Job Demand, Job Resources on Occupational self-efficacy and the direct effects of Occupational self-efficacy on Job Performance and also the direct effects of Job Crafting on Job Performance. It also explains the indirect effect of the construct Job Demand, Job Resources on Job Performance.

4.5 Discriminant Function Analysis

Discriminant or discriminant function analysis is a parametric technique to determine which weightings of quantitative variables or predictors best discriminate between 2 or more than 2 groups of cases and do so better than chance (Cramer, 2003).

Discriminant analysis finds a set of prediction equations based on independent variables that are used to classify individuals into groups. There are two possible objectives in a discriminant analysis: finding a predictive equation for classifying new individuals or interpreting the predictive equation to better understand the relationships that may exist among the variables. The analysis creates a discriminant function which is a linear combination of the weightings and scores on these variables. The maximum number of functions is either the number of predictors or the number of groups minus one, whichever of these two values is the smaller.

$Zjk = a + W1X1k + W2X2k + ... + WnXnk$

Where:

Zjk = Discriminant Z score of discriminant function *j* for object *k.*

a = Intercept.

Wi = Discriminant coefficient for the Independent variable *i.*

Xj = Independent variable *i* for object *k.*

Again, caution must be taken to be clear that sometimes the focus of the analysis is not to predict but to explain the relationship, as such, equations are not normally written when the measures used are not objective measurements.

Discriminant analysis is used to identify the items that discriminate employees with high job Performance from the employees with low job Performance. Based on the average responses given by the respondents for the variable job Performance, respondents scoring a mean value of 3.5 and above on the average of job Performance items are categorized as having high job Performance and low when the mean score for job Performance is less than 3.5. The 70 scale items comprising the items in the variables Job Demands, Job Resources, Occupational Self-Efficacy, Job Crafting and Work Meaningfulness are the independent variables and Job Performance is taken as the dependent variable and a discriminant function is arrived.

The objective of discriminant analysis is to identify the variables that help in discriminating a respondent exhibiting high job Performance from the one exhibiting low Work Performance. The Eigen value is a special set of scalars associated with a linear

system of equations that are also known as characteristics roots, characteristics values (Hoffman and Kunze, 1971), proper values or latent roots (Marcus and Mink, 1988).

Table 4.31: Discriminant Analysis- Eigen Values of Variables Influencing Job Performance

Function	Eigen value	% of Variance	Cumulative %	Canonical Correlation
1	1.744[a]	100	100	0.797
a. First 1 canonical discriminant functions were used in the analysis				

In the table 4.32, The Eigen value is 1.744 which indicates that the model explains 100% of variance in the grouping variable. The Canonical correlation is 0.797 which indicates that the functions discriminate well.

Wilks' Lambda is the ratio of within-groups sums of squares to the total sums of squares. This is the proportion of the total variance in the discriminant scores not explained by differences among groups. Wilks' Lambda indicates the significance of the discriminant function.

Table 4.32: Discriminant Analysis- Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	0.364	380.589	70	0.000

Source Primary data

In the table 4.32, the Lambda value of 0.364 indicates that group means appear to differ. The associated significance value indicates a highly significant function ($p<0.005$). Here, the Lambda of 0.364 has a significant value (Sig. <0.000), thus the group means appear to differ and provides the proportion of total variability of 42% not explained, i.e. it is the converse of the squared canonical correlation.

The discriminant weight or the discriminant coefficient relates to the discriminatory power of the independent items across the groups of the dependent items. Independent items with large discriminatory power have large weights, and those with little

discriminatory power usually have little weights. Based on the discriminant weights the items are grouped into high Job Performance or low Job Performance. Among the seventy independent items, eleven items are identified to be discriminating the two groups. Items that has a discriminant loading value higher than 0.3 depicts that these items discriminate the groups substantially. The items and their order of discriminating power are represented as rank.

In table 4.33 displays eleven items and it can be observed that these items as those that discriminate employees exhibiting high Job Performance from those exhibiting low Job Performance.

Table 4.33: Items that Discriminate employees with High and Low Job Performance

Item No	Item Description and Construct	W	L	Rank
OSE2	When I am confronted with a problem in my job, I can usually find several solutions	0.318	0.380	1
WM2	I have a meaningful job	-0.143	0.362	2
OSE4	My past experiences in my job have prepared me well for my occupational future	0.199	0.354	3
WM4	What I do at work makes a difference in the world	0.291	0.349	4
WM5	The work that I do is meaningful	0.282	0.344	5
OSE6	I feel prepared for most of the demands in my job	-0.008	0.342	6
WM3	The work that I do makes the world a better place	0.394	0.339	7
ED2	In your work, are you confronted with things that personally touch you?	0.071	0.317	8
ED3	Do you face emotionally charged situations in your work?	0.246	0.311	9
OSE5	I meet the goals that I set for myself in my job	0.032	0.303	10
TC6	Change the way you do your job to make it more enjoyable for yourself*	0.234	0.300	11
constant		-8.827		

Source: Primary data

Statistically significant discriminant loading

W – Discriminant weight or discriminant coefficient

L – Discriminant loadings

Rank – Discriminating power of the identified variable

A discriminant function is derived based on their unstandardized discrimination coefficients or the discriminant weights. Discriminant function**,** Z = -8.827 + 0.318 (OSE2) + (-0.143) (WM2) + 0.199 (OSE4) + 0.291 (WM4) + 0.282 (WM5) +(- 0.008) (OSE6) + 0.394 (WM3) + 0.071 (ED2) + 0.246 (ED3) + 0.032 (OSE5) + 0.234 (TC6).

From the table 4.33, it could be inferred that Out of 6 items in Occupational Self-Efficacy of which 4 items namely OSE2, OSE4, OSE5 and OSE6; Out of 6 items in Work Meaningfulness of which 4 items namely WM2, WM3, WM4 and WM5; in Job Demand dimension, Out of 6 items in Emotional demand sub- dimension 2 items namely ED2 and ED3; and in Job Crafting dimension, Out of 7 items in Task Crafting sub- dimension 1 item TC 6 discriminates employees with high Job Performance from those with low Job Performance.

Further interpretation of discriminant analysis results in describing each in terms of its profile, using the group means of the predictor variables. These group means are called centroids. These are displayed in the Group Centroids table 4.35. In this study, low Job Performance has a mean of -.906 while high Job Performance has a mean of 1.915. Cases with scores near to a centroid are predicted as belonging to that group.

Table 4.34: Discriminant Analysis-Functions at Group Centroids

High low Job Performance	**Function**
	1
.00	-.906
1.00	1.915
Unstandardized canonical discriminant functions evaluated at group means	

Source: Primary data

Table 4.35: Discriminant Analysis-Classification results

		High Low Job Performance	Predicted Group Membership		Total
			.00	1.00	
Original	**Count**	.00	257	24	281
		1.00	10	123	133
	%	.00	91.5	8.5	100.0
		1.00	7.5	92.5	100.0
Cross-validated[a]	**Count**	.00	242	39	281
		1.00	21	112	133
	%	.00	86.1	13.9	100.0
		1.00	15.8	84.2	100.0
a. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.					
b. 91.8% of original grouped cases correctly classified.					
c. 85.5% of cross-validated grouped cases correctly classified.					

Source: Primary data

The hit ratio reveals that the discrimination function has correctly classified 91.8% of the original group cases and 85.5% of the cross-validated group cases. Therefore the variables that have discriminated the groups have obtained a valid ratio for the original grouped cases and the cross validated grouped cases.

The variable **Occupational self-efficacy** has 6 items of which 4 items discriminate employees with high Job Performance from those with low Job Performance. (OSE2) “When I am confronted with a problem in my job, I can usually find several solutions”, (OSE4) “My past experiences in my job have prepared me well for my occupational future”, (OSE6) “I feel prepared for most of the demands in my job” and (OSE5) “I meet

the goals that I set for myself in my job". Hence it could be inferred that employees who have a strong belief in their capabilities increase their effort to master the challenges. It indicates that self-efficacy is the most influencing factor for their performance and also for their own growth and development. The employees' think that upgrading of skill and knowledge is very important in the changing technological world. Organizations can benefit at the recruiting stage by identifying individuals with high self-efficacy (an individual difference variable) because such employees are more likely to perform better in their job. Hence occupational self-efficacy is found to play a significant role. It helps in distinguishing the group of high performance employees from their low performance counterparts, designing interventions to increase occupational self-efficacy is likely to enhance the level of performance. The flexible nature of occupational self-efficacy makes it possible to increase the performance level of the existing workforce by designing self-efficacy-based interventions. Bandura (2001) stated that the most effective way of developing a strong sense of efficacy is through mastery experiences. Employees with strong sense of self-efficacy require experience in overcoming obstacles through effort and perseverance. Thus, training programmes in organisations could focus on enhancing the sources of self-efficacy would help to increase the performance level.

The variable Work Meaningfulness has 6 items of which 4 items discriminate employees with high Job Performance from those with low Job Performance.(WM2) "I have a meaningful job", (WM4) "What I do at work makes a difference in the world", (WM5) "The work that I do is meaningful" and (WM3) "The work that I do makes the world a better place". This implies that employees understand the significance of job and respond to their work contributes to making the world a better place and also allows them to interact with people to create important innovations in the organizations.

Among the Job demand dimension, emotional demand sub-dimension has 6 items of which 2 items discriminate employees with high Job Performance from those with low Job Performance.(ED2) "In your work, are you confronted with things that personally touch you?" and (ED3) "Do you face emotionally charged situations in your work? Hence it could be inferred that employees discover the critical solutions and also communicate with confidence even in emotionally charged situations.

Among the Job crafting dimension, task crafting sub-dimension has 7 items of which 1 item discriminate employees with high Job Performance from those with low Job Performance.(TC6) “Change the way you do your job to make it more enjoyable for yourself*”. This implies that employees can ask for more responsibilities to expand the scope of their jobs which in turn enhance work enjoyment and job performance. In a similar vein, Berg, Bakker and Demerouti (2008, 2014) stated that Job crafting by seeking challenges (e.g., undertaking new assignments) and seeking resources (e.g., asking for feedback) help employees to expand the scope of their jobs, can enhance well-being and performance.

The implications that can be drawn from this study creating high self-efficacy among employees will result in a stronger job performance. As such, the organizations should strive to create a favorable environment by building more opportunities for employees to work in small teams and project based assignments rather than individual assignments. By creating this kind of opportunities, self-efficacy, Work Meaningfulness and task crafting can be enhanced which will eventually lead to better performance.

4.6 Anova and T-test

Analysis of variance (ANOVA) is a collection of statistical models used to analyze the differences between group means and their associated procedures (such as "variation" among and between groups), developed by R.A. Fisher. Analysis of variance procedures are powerful parametric methods for testing the significance of differences between sample means where more than two conditions are used, or even when several independent variables are involved. ANOVA makes it feasible to appraise the separate or combined influences of several independent variables on the experimental criterion (Mouton & Marais 1990). ANOVA test was therefore used to identify whether there is a statistical significant difference between the demographical variables and study variables. In the ANOVA setting, the observed variance in a particular variable is partitioned into components attributable to different sources of variation. In its simplest form, ANOVA provides a statistical test of whether or not the means of several groups are equal, and therefore generalizes the t-test to more than two groups.

Table 4.36: Age group and study variables

Variables	Below 25			26-35			36-45			46-55			Above 55			F-value	Sig
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D		
Work Pressure	88	3.2017	.99846	230	3.3978	.81965	63	2.9524	.99074	23	3.7174	.84040	10	2.9500	.38730	5.103	**.001**
Cognitive Demands	88	3.3977	.99108	230	3.2620	.74662	63	3.0357	1.08589	23	3.6957	.87242	10	3.1000	.37639	3.141	**.015**
Emotional Demands	88	3.1420	.87484	230	2.4957	.85948	63	2.8519	.96679	23	2.9203	.83162	10	2.9667	1.03280	9.591	**.000**
Role Conflict	88	2.9460	.97117	230	2.3848	.83345	63	2.6349	1.12058	23	2.8804	.77924	10	2.6000	.70907	6.925	**.000**
Hassles	88	2.8886	.96125	230	2.5696	.84188	63	2.5587	1.20277	23	2.9217	.56162	10	2.4400	.74117	2.721	**.029**
Autonomy	88	3.2727	.82202	230	3.1768	.96902	63	3.4815	.94618	23	3.3478	.55485	10	3.4000	.66295	1.524	.194
Social support	88	3.2992	.98655	230	3.0768	.92062	63	3.1376	.99755	23	3.3043	.72414	10	3.0667	.68132	1.094	.359
Feed back	88	3.2121	.76844	230	3.2087	.83641	63	3.7090	.92456	23	3.3623	.59385	10	2.9667	.29187	5.346	**.000**
Opportunities For Development	88	3.5341	.92853	230	3.3348	.91751	63	3.7196	.85552	23	3.7826	.57392	10	3.6333	.24595	3.505	**.008**
Coaching	88	3.4864	.72002	230	3.4522	.67525	63	3.7524	1.02341	23	3.5304	1.00292	10	3.0000	.67987	3.005	**.018**
Occupational Self-efficacy	88	3.4432	.68177	230	3.4022	.71798	63	3.9101	.80591	23	3.5145	.50979	10	3.1333	.54885	7.091	**.000**
Task Crafting	88	3.6818	.82528	230	3.1764	.69917	63	3.4036	.49854	23	3.9441	.79626	10	2.7571	.50418	14.383	**.000**
Cognitive Crafting	88	3.4773	.80025	230	3.0817	.87703	63	3.3556	1.02387	23	3.7304	.86468	10	3.1600	.38644	5.570	**.000**
Relational Crafting	88	3.3084	.70947	230	2.9534	.74504	63	3.1610	.85541	23	3.5714	.86683	10	3.1571	.36546	6.180	**.000**
Work Meaningfulness	88	3.2523	.81790	230	3.3609	.74672	63	3.8952	.87167	23	3.7304	.60486	10	3.3800	.40497	8.253	**.000**
Job Performance	88	3.4356	.79487	230	3.4312	.66080	63	3.7222	.69561	23	3.7826	.59339	10	3.8833	.29450	4.150	**.003**

Source: Primary data

Interpretation

Testing at 5% level of significance it could be inferred from table 4.36 that significant difference exists in the perception of respondents of varied age groups among the job demand dimensions namely Work Pressure (F=5.103; P=0.001); Cognitive Demands (F=3.141; P=0.015); Emotional demands (F=9.591, P<0.000), Role Conflict (F=6.925; P<0.000) and Hassles (F=2.721; P=0.029) and in Job Resources namely feedback (F=5.346; P<0.000); Opportunities for Development (F=3.505; P=0.008); and Coaching (F=3.005; P=0.018).

Among the Job Crafting dimensions, Task Crafting (F= 14.383; P<0.000); Cognitive Crafting (F=5.570; p=0.000); and Relational Crafting (F=6.180; P<0.000) have a significant difference in the perception of respondents of varied age groups.

It is also inferred from the table 4.36 that significant difference exists in the perception of respondents of varied age groups for the variables namely Occupational Self-efficacy (F=7.091; P<0.000); Work Meaningfulness (F=8.253;P<0.000); and Job Performance (F= 4.150; P=0.003).

There is no significant difference in the perception of respondents among the job resource dimensions namely Autonomy (F=1.524; P=0.194); and Social support (F=1.094; P<0.359).Hence to find out which group of respondents differ from the others Post hoc LSD analysis is performed.

Post-Hoc Method

Tukey's post-hoc test is a method that is used to determine which groups among the sample have significant differences. This method calculates the difference between the means of all the groups. Tukey's HSD test values are number which acts as a distance between the groups. It works by defining a value known as Honest Significant Difference.

Table 4.37. Posthoc LSD analysis- Age and Study Variables

Variable	Age of the respondents	Age of the respondents	Mean diff	Std. Error	Sig.
Work pressure	46-55	Below 25	.5156*	.20660	.013
		26-35	.3195	.19293	.098
		36-45	.7650*	.21493	.000
		Above 55	.7673*	.33417	.022
Cognitive demand	46-55	Below 25	.2979	.20198	.141
		26-35	.4337*	.18861	.022
		36-45	.6599*	.21012	.002
		Above 55	.5956	.32669	.069
Emotional demand	Below 25	26-35	.6463*	.11061	.000
		36-45	.2901*	.14564	.047
		46-55	.2217	.20666	.284
		Above 55	.1753	.29449	.552
Role conflict	Below 25	26-35	.5612*	.11376	.000
		36-45	.3111*	.14978	.038
		46-55	.0655	.21253	.758
		Above 55	.3460	.30286	.254
Hassles	46-55	Below 25	.0331	.21485	.878
		26-35	.3521	.20064	.080
		36-45	.3630	.22351	.105
		Above 55	.4817	.34752	.166
Feedback	36-45	Below 25	.4968	.13486	.000
		26-35	.5003*	.11620	.000
		46-55	.3466	.19907	.082
		Above 55	.7423*	.27816	.008
Opportunities for development	46-55	Below 25	.2485	.20745	.232
		26-35	.4478*	.19373	.021
		36-45	.0630	.21581	.770
		Above 55	.1492	.33555	.657

Variable	Age of the respondents	Age of the respondents	Mean diff	Std. Error	Sig.
Coaching	36-45	Below 25	.2660*	.12662	.036
		26-35	.3002*	.10910	.006
		46-55	.2219	.18691	.236
		Above 55	.7523*	.26116	.004
Task crafting	46-55	Below 25	.2622	.16492	.113
		26-35	.7677*	.15401	.000
		36-45	.5404*	.17157	.002
		Above 55	1.1869*	.26676	.000
Cognitive crafting	46-55	Below 25	.2531	.20540	.218
		26-35	.6487*	.19181	.001
		36-45	.3748	.21368	.080
		Above 55	.5704	.33223	.087
Relational crafting	46-55	Below 25	.2629	.17714	.138
		26-35	.6180*	.16542	.000
		36-45	.4104*	.18427	.026
		Above 55	.4142	.28651	.149
Occupational self-efficacy	36-45	Below 25	.4668*	.11746	.000
		26-35	.5078*	.10121	.000
		46-55	.3955*	.17339	.023
		Above 55	.7767*	.24227	.001
Work meaningfulness	36-45	Below 25	.6429*	.12708	.000
		26-35	.5343*	.10950	.000
		46-55	.1648	.18760	.380
		Above 55	.5152	.26212	.050
Job Performance	Above 55	Below 25	.4477	.22953	.052
		26-35	.4521*	.22218	.042
		36-45	.1611	.23413	.492
		46-55	.1007	.26053	.699

Source: Primary data

Work pressure: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 46-55 years and below 25 years (Mean difference= 0.5156, p=0.013), 46-55 years and 36-45 years (Mean difference= 0.7650, p<0.000) and 46-55 years and Above 55 years (Mean difference= 0.7673, p=0.022). Respondents with age group of 46-55 years have a high mean value (M= 3.7174) compared to respondents of age group of 26-35 years (M=3.3978), below 25 years (M=3.2017) , 36-45 years (M= 2.9524) and Above 55 years (M= 2.9500). Work pressure is higher for the age group of 46-55 years (M= 3.7174).

Cognitive demand: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 46-55 years and 26-35 years (Mean difference= 0.4337, p=0.022) and 46-55 years and 36-45 years (Mean difference= 0.6599, p=0.002). Respondents with age group of 46-55 years have a high mean value (M= 3.6957) compared to respondents with age group of 26-35 years (M=3.2620), below 25 years (M=3.3977), 36-45 years (M= 3.0357) and Above 55 years (M= 3.1000). Cognitive demand is higher for the age group of 46-55 years (M= 3.6957).

Emotional demand: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of below 25 years and 26-35 years (Mean difference= 0.6463, p<0.000) and below 25 years and 36-45 years (Mean difference= 0.2901, p=0.047). Respondents with age group of below 25 years have a high mean value (M= 3.1420) compared to respondents with age group of 26-35 years (M=2.4957), 36-45 years (M= 2.8519), 46-55 years (M=2.9203), and Above 55 years (M= 2.9667).Emotional demand is higher for the age group of below 25 years (M= 3.1420).

Role conflict: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of below 25 years and 26-35 years (Mean difference= 0.5612, p<0.000) and below 25 years and 36-45 years (Mean difference= 0.3111, p=0.038). Respondents with age group of below 25 years have a high mean value (M= 2.9460) compared to respondents with age group of 26-35 years (M=2.3848), 36-45 years (M= 2.6349), 46-55 years (M=2.8804), and Above 55 years (M= 2.6000).Role conflict is higher for the age group of below 25 years (M= 2.9460).

Feed back: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 36-45 years and below 25 years (Mean difference= 0.4968, p<0.000); 36-45 years and 26-35 years (Mean difference= 0.5003, p<0.000) and 36-45 years and Above 55 years (Mean difference= 0.7423, p<0.008). Respondents with age group of 36-45 years have a high mean value (M= 3.7090) compared to respondents with age group of 26-35 years (M=3.2087), below 25 years (M=3.2121), 46-55 years (M= 3.3623) and Above 55 years (M= 2.9667). Feedback is higher for the age group of 36-45 years (M= 3.7090).

Opportunities for development: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 46-55 years and 26-35 years (Mean difference= 0.4478, p=0.021). Respondents with age group of 46-55 years have a high mean value (M= 3.7826) compared to respondents with age group of 26-35 years (M=3.3348), below 25 years (M=3.5341), 36-45 years (M= 3.7196) and Above 55 years (M= 3.6333). Opportunities for development is higher for the age group of 46-55years (M= 3.7826).

Coaching: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 36-45 years and below 25 years (Mean difference= 0.2660, p=0.036), 36-45 years and 26-35 years (Mean difference= 0.3002, p=0.006) and 36-45 years and Above 55 years (Mean difference= 0.7523, p=0.004). Respondents with age group of 36-45 years have a high mean value (M= 3.7524) compared to respondents with age group of 26-35 years (M=3.4522), below 25 years (M=3.4864), 46-55 years (M=3.5304) and Above 55 years (M=3.0000).Coaching is higher for the age group of 36-45 years (M= 3.7524).

Task crafting: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 46-55 years and 26-35 years (Mean difference= 0.7677, p<0.000), 46-55 years and 36-45 years (Mean difference= 0.5404, p=0.002) and 46-55 years and Above 55years(Mean difference= 1.1869, p<0. 000). Respondents with age group of 46-55 years have a high mean value (M= 3.9441) compared to respondents with age group of 26-35 years (M=3.1764), below 25 years (M=3.6818), 36-45years (M= 3.4036) and Above 55 years (M= 2.7571). Task crafting is higher for the age group of 46-55years (M= 3.9441).

Cognitive crafting: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 46-55 and 26-35 years (Mean difference= 0.6487, p=0.001). Respondents with age group of 46-55 years have a high mean value (M= 3.7304) compared to respondents with age group of 26-35years (M=3.0817), below 25 years (M=3.4773), 36-45 years (M= 3.3556) and Above 55 years (M= 3.1600). Cognitive crafting is higher for the age group of 46-55 years (M= 3.7304).

Relational crafting: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 46-55 years and 26-35 years (Mean difference= 0.6180, p<0.000), 46-55 years and 36-45 years (Mean difference= 0.4104, p=0.026). Respondents with age group of 46-55 years have a high mean value (M= 3.5714) compared to respondents with age group of 26-35 years (M=2.9534), below 25 years (M=3.3084), 36-45 years (M= 3.1610) and Above 55 years (M= 3.1571). Relational crafting is higher for the age group of 46-55 years (M= 3.5714).

Occupational self-efficacy: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 36-45 years and below 25 years (Mean difference= 0.4668, p<0.000), 36-45 years and 26-35 years (Mean difference= 0.5078, p<0.000), 36-45 years and 46-55 years (Mean difference= 0..3955, p=0.023) and 36-45 years and Above 55 years (Mean difference= 0.7767, p=0.001). Respondents with age group of 36-45 years have a high mean value (M= 3.9101) compared to respondents with age group of 26-35 years (M=3.4022), below 25 years (M=3.4432), 46-55 years (M=3.5145) and Above 55 years (M=3.1333). Occupational self-efficacy is higher for the age group of 36-45 years (M= 3.9101).

Work meaningfulness: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of 36-45 years and below 25 years (Mean difference= 0.6429, p<0.000), 36-45 years and 26-35 years (Mean difference= 0.5343, p<0.000) and 36-45 years and Above 55 years (Mean difference= 0.5152, p=0.050). Respondents with age group of 36-45 years have a high mean value (M= 3.8952) compared to respondents with age group of 26-35 years (M=3.3609), below 25 years (M=3.2523), 46-55years (M=3.7304) and Above 55years (M=3.3800). Work meaningfulness is higher for the age group of 36-45 years (M= 3.8952).

Job Performance: From the table 4.37, it is inferred that significant difference exist in the perception of the respondents having age group of Above 55 years and below 25 years (Mean difference= 0.4477, p=0.052) and above 55 years and 26-35 years (Mean difference= 0.4521, p=0.042). Respondents with age group of above 55 years have a high mean value (M= 3.8833) compared to respondents with age group of below 25 years (M=3.4356), 26-35 years (M=3.4312), 36-45years (M=3.7222) and 46-55 years (M=3.7826). Job Performance is higher for the age group of above 55 years (M= 3.8833).

Table 4.38: Educational qualification and study variables

Variables	ITI/Diploma			Engineering			Arts and Science			F-value	Sig
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D		
Work Pressure	133	3.2105	.90183	214	3.4077	.93696	67	3.1045	.71529	3.820	**.023**
Cognitive Demands	133	3.1955	.82706	214	3.3224	.95774	67	3.2910	.63454	.881	.415
Emotional Demands	133	2.6629	.88417	214	2.7002	.94228	67	2.9104	.89721	1.752	.175
Role Conflict	133	2.5996	.83538	214	2.5864	.99742	67	2.4888	.91332	.347	.707
Hassles	133	2.6722	.77941	214	2.6411	.96346	67	2.6478	1.06918	.047	.954
Autonomy	133	3.2155	.78838	214	3.3193	1.02260	67	3.1493	.76384	1.099	.334
Social support	133	2.8822	.88401	214	3.3022	.93841	67	3.1692	.91079	8.632	**.000**
Feed back	133	3.2306	.69894	214	3.3692	.90858	67	3.1443	.81489	2.337	.098
Opportunities For Development	133	3.3133	.89964	214	3.5561	.96129	67	3.4925	.59560	3.069	**.048**
Coaching	133	3.3368	.73623	214	3.5131	.80171	67	3.7731	.68304	7.365	**.001**
Occupational Self-efficacy	133	3.3885	.73332	214	3.4486	.74129	67	3.8109	.61402	8.337	**.000**
Task Crafting	133	3.3738	.74412	214	3.2777	.77330	67	3.5394	.64217	3.248	**.040**
Cognitive Crafting	133	3.3008	.77874	214	3.1533	.93450	67	3.4299	.96311	2.828	.060
Relational Crafting	133	3.0870	.69070	214	2.9613	.81663	67	3.5672	.60760	16.809	**.000**
Work Meaningfulness	133	3.3444	.66074	214	3.3654	.84948	67	3.8687	.73900	12.226	**.000**
Job Performance	133	3.2393	.69278	214	3.5592	.66891	67	3.8706	.59940	21.377	**.000**

Source: Primary data

Interpretation

Testing at 5% level of significance it could be inferred from table 4.38 that significant difference exists in the perception of respondents of varied educational qualifications among the job demand dimension namely Work Pressure (F=3.820; P=0.023) and in job resource dimensions namely Social support (F=8.632; P<0.000); Opportunities for Development (F=3.069; P=0.048); and Coaching (F=7.365 P=0.001).

Among the Job Crafting dimensions, Task Crafting (F= 3.248; P=0.040); and Relational Crafting (F=16.809; P<0.000) have a significant difference in the perception of respondents of varied educational qualifications.

It is also inferred from the table 4.38 that significant difference exists in the perception of respondents of varied educational qualifications for the variables namely Occupational Self-efficacy (F=8.337; P<0.000); Work Meaningfulness (F=12.226; P<0.000); and Job Performance (F= 21.377; P<0.000).

There is no significant difference in the perception of respondents among the job demand dimensions namely Cognitive Demands (F=0.881; P=0.415), Emotional demands (F=1.752, P=0.175), Role Conflict (F=0.347; P=0.707) and Hassles (F=0.047; P=0.954) and in job resources namely Autonomy (F=1.099; P=0.334) and feedback (F=2.337; P=0.098) and in job crafting dimension, Cognitive Crafting (F=2.828; p=0.060). Hence to find out which group of respondents differ from the others Post hoc LSD analysis is performed.

Table 4.39: Posthoc LSD analysis- Educational qualification and variables

Variable	educational qualification of the respondents	educational qualification of the respondents	Mean diff	Std. Error	Sig.
Work pressure	Engineering	ITI/Diploma	.19718*	.09866	.046
		Arts and Science	.30323*	.12508	.016
Social support	Engineering	ITI/Diploma	.41998*	.10123	.000
		Arts and Science	.13303	.12835	.301
Opportunities for development	Engineering	ITI/Diploma	.24279*	.09850	.014
		Arts and Science	.06354	.12489	.611
Coaching	Arts and Science	ITI/Diploma	.43629*	.11430	.000
		Engineering	.26005*	.10681	.015
Task crafting	Arts and Science	ITI/Diploma	.16565	.11151	.138
		Engineering	.26174*	.10420	.012
Relational crafting	Arts and Science	ITI/Diploma	.48016*	.11192	.000
		Engineering	.60588*	.10459	.000
Occupational self-efficacy	Arts and Science	ITI/Diploma	.42247*	.10783	.000
		Engineering	.36235*	.10076	.000
Work meaningfulness	Arts and Science	ITI/Diploma	.52430*	.11623	.000
		Engineering	.50324*	.10861	.000
Job performance	Arts and Science	ITI/Diploma	.63130*	.09980	.000
		Engineering	.31146*	.09325	.001

Source: Primary data

Work pressure: From the table 4.39, it is inferred that significant difference exist in the perception of the respondents having educational qualification of Engineering and ITI/Diploma (Mean difference= 0.19718, p=0.046) and Engineering and Arts and Science (Mean difference= 0.30323, p=0.016). Respondents with educational qualification of Engineering have a high mean value (M= 3.4077) compared to respondents with educational qualification level of ITI/Diploma (M=3.2105) and Arts and Science (M=3.1045).

Social support: From the table 4.39, it is inferred that significant difference exist in the perception of the respondents having educational qualification of Engineering and ITI/Diploma (Mean difference= 0.41998, p<0.000). Respondents with educational qualification of Engineering have a high mean value (M= 3.3022) compared to respondents with educational qualification level of ITI/Diploma (M=2.8822) and Arts and Science (M=3.1692).

Opportunities for development: From the table 4.39, it is inferred that significant difference exist in the perception of the respondents having educational qualification of Engineering and ITI/Diploma (Mean difference= 0.24279, p=0.014). Respondents with educational qualification of Engineering have a high mean value (M= 3.5561) compared to respondents with educational qualification level of Arts and Science (M=3.4925) and ITI/Diploma (M=3.3133).

Coaching: From the table 4.39, it is inferred that significant difference exist in the perception of the respondents having educational qualification of Arts and Science and ITI/Diploma (Mean difference= 0.43629, p<0.000) and Arts and Science and Engineering (Mean difference= 0.26005, p=0.015). Respondents with educational qualification of Arts and Science (M=3.7731) have a high mean value compared to respondents with educational qualification level of Engineering (M= 3.5131) and ITI/Diploma (M=3.3368).

Task crafting: From the table 4.39, it is inferred that significant difference exist in the perception of the respondents having educational qualification of Arts and Science and Engineering (Mean difference= 0.26174, p=0.012). Respondents with educational qualification of Arts and Science have a high mean value (M= 3.5394) compared to respondents with educational qualification level of ITI/Diploma (M=3.3738) and Engineering (M=3.2777).

Relational crafting: From the table 4.39, it is inferred that significant difference exist in the perception of the respondents having educational qualification of Arts and Science and ITI/Diploma (Mean difference= 0.48016, p<0.000) and Arts and Science and Engineering (Mean difference= 0.60588, p<0.000). Respondents with educational qualification of Arts and Science have a high mean value (M= 3.5672) compared to respondents with educational qualification level of ITI/Diploma (M=3.0870) and Engineering (M=2.9613). A turkey post – hoc test reveals that Relational crafting is significantly higher for Arts and Science respondents (M= 3.5672).

Work meaningfulness: From the table 4.39, it is inferred that significant difference exist in the perception of the respondents having educational qualification of Arts and Science and ITI/Diploma (Mean difference= 0. .52430, p<0.000) and Arts and Science and Engineering (Mean difference= 0. 50324, p<0.000). Respondents with educational qualification of Arts and Science have a high mean value (M= 3.8687) compared to respondents with educational qualification level of Engineering (M=3.3654) and ITI/Diploma (M=3.3444). A turkey post – hoc test reveals that Work meaningfulness is higher when their educational qualification of the respondents is Arts and Science (M= 3.8687).

Occupational self-efficacy: From the table 4.39, it is inferred that significant difference exist in the perception of the respondents having educational qualification of Arts and Science and ITI/Diploma (Mean difference= 0.42247, p<0.000) and Arts and Science and Engineering (Mean difference= 0.36235, p<0.000). Respondents with educational qualification of Arts and Science have a high mean value (M= 3.8109) compared to respondents with educational qualification level of Engineering (M=3.4486) and ITI/Diploma (M=3.3885).A turkey post – hoc test reveals that Occupational self-efficacy is higher for Arts and Science respondents (M= 3.8109). This implies that Arts and Science respondents possess high Competence (i.e. Occupationally self-efficacious) and also having confident and place more effort to succeed at challenging tasks. Findings of the study are in line with (Riley, Furth, and Zellmer, 2000) stated that Industry level success, is based on a set of competencies that include problem solving and communication skills, teamwork, technical competence, and personal attributes such as ethics and professionalism, flexibility, lifelong learning, innovativeness and appreciation of diversity and pluralism.

Job performance: From the table 4.39, it is inferred that significant difference exist in the perception of the respondents having educational qualification of Arts and Science and ITI/Diploma (Mean difference= 0.63130, p<0.000) and Arts and Science and Engineering (Mean difference= 0.31146, p=0.001). Respondents with educational qualification of Arts and Science have a high mean value (M= 3.8706) compared to respondents with educational qualification level of Engineering (M=3.5592) and ITI/Diploma (M=3.2393).A turkey post – hoc test reveals that Job performance (M= 3.8706) is higher for Arts and Science respondents. This implies that Arts and Science respondents can be highly

motivational, leading to improved performance, commitment, and satisfaction and also utilize the specific set of knowledge given by the organization to achieve high performance.

Overall findings revealed that educational background of ITI/Diploma and engineering respondents are better suit for engineering industries. Curriculum design and development in the engineering disciplines better suits transition between engineering education and engineering practice. Even cannot fully accept about the curriculum design of engineering disciplines that also need to be updated. For the variables namely coaching, task crafting, relational crafting, Occupational self-efficacy, Work meaningfulness and Job performance educational qualification of Arts and Science respondents perceive more different than ITI/Diploma and engineering respondents. Hence, it could be inferred that organization should provide training to the ITI/Diploma and engineering respondents since they are fully engaged in more technical oriented work hence employees need to concentrate on other side also, so that they can work more flexible and exhibit better job performance.

Independent samples t test

The independent samples t test allows researcher to evaluate the mean difference between two populations using the data from two samples. This test is used in situations where a researcher has no prior knowledge about either of the two populations being compared. The general purpose of the independent samples t test is to determine whether the sample mean difference obtained is a real difference between the two populations or simply the result of sampling error.t-test is done for nature of job, marital status and gender and study variables.

Testing at 5% level of significance, when the p- value under Levene's Test for Equal variances yields a value of <0.05 with respect to study variables, it indicates that there is significant difference in the perception of respondents and the group variances are not equal, hence in the column Levene's Test for Equality of variances the values in the second row (Equal variances not assumed - EVNA) is to be considered. On the other hand when the p- value under Levene's Test for Equal variances yields a value of >0.05, it indicates that there is no significant difference exists in the perception of respondents and the group variances are equal, hence in the column Levene's Test for Equality of variances the values in the first row (Equal variances assumed-EVA) is to be considered.

Table 4.40: **T-test: Nature of Job and Study Variables**

								Levene's Test for Equality of Variances		t-test for Equality of Means		
	Variables	**Nature of Job**	**N**	**Mean**	**Std.Deviation**	**Std.Error Mean**		**F**	**Sig.**	**T**	**df**	**Sig.(2 tailed)**
Job Demands	Work Pressure	Technical	332	3.3140	.87548	.04805	EVA	.869	.352	.852	412	.395
		Managerial	82	3.2195	.99333	.10970	EVNA			.789	114.035	.432
	Cognitive Demand	Technical	332	3.2462	.83256	.04569	EVA	7.509	**.006**	-1.427	412	.154
		Managerial	82	3.3994	1.00987	.11152	EVNA			-1.271	109.721	.206
	Emotional Demand	Technical	332	2.6687	.92019	.05050	EVA	.793	.374	-2.401	412	.017
		Managerial	82	2.9390	.88406	.09763	EVNA			-2.460	127.909	.015
	Role Conflict	Technical	332	2.5407	.98547	.05408	EVA	17.101	**.000**	-1.503	412	.133
		Managerial	82	2.7134	.66912	.07389	EVNA			-1.887	178.502	.061
	Hassles	Technical	332	2.6530	.95776	.05256	EVA	7.710	**.006**	.037	412	.970
		Managerial	82	2.6488	.78414	.08659	EVNA			.042	146.812	.967
Job Resources	Autonomy	Technical	332	3.2681	.93607	.05137	EVA	1.684	.195	.430	412	.667
		Managerial	82	3.2195	.82355	.09095	EVNA			.465	137.513	.643
	Social Support	Technical	332	3.1576	.93795	.05148	EVA	.052	.820	.521	412	.602
		Managerial	82	3.0976	.91996	.10159	EVNA			.527	125.900	.599
	Feedback	Technical	332	3.3373	.85857	.04712	EVA	4.176	**.042**	2.424	412	.016
		Managerial	82	3.0894	.69694	.07696	EVNA			2.747	148.014	.007

								Levene's Test for Equality of Variances		t-test for Equality of Means		
	Variables	**Nature of Job**	**N**	**Mean**	**Std.Deviation**	**Std.Error Mean**		**F**	**Sig.**	**T**	**df**	**Sig.(2 tailed)**
	Opportunities for development	Technical	332	3.4639	.91298	.05011	EVA	1.990	.159	-.180	412	.858
		Managerial	82	3.4837	.83173	.09185	EVNA			-.190	133.492	.850
	Coaching	Technical	332	3.5325	.79258	.04350	EVA	4.994	**.026**	1.801	412	.072
		Managerial	82	3.3610	.68453	.07559	EVNA			1.967	139.771	.051
Job Crafting	Task Crafting	Technical	332	3.3804	.72573	.03983	EVA	1.607	.206	1.614	412	.107
		Managerial	82	3.2317	.82773	.09141	EVNA			1.491	113.676	.139
	Cognitive Crafting	Technical	332	3.2199	.90769	.04982	EVA	.004	.947	-1.167	412	.244
		Managerial	82	3.3488	.84609	.09343	EVNA			-1.217	131.005	.226
	Relational Crafting	Technical	332	3.1003	.77356	.04245	EVA	.010	.919	.028	412	.978
		Managerial	82	3.0976	.78628	.08683	EVNA			.028	122.643	.978
Occupational Self-Efficacy		Technical	332	3.5301	.73190	.04017	EVA	.162	.688	2.372	412	.018
		Managerial	82	3.3171	.71368	.07881	EVNA			2.408	126.459	.017
Work Meaningfulness		Technical	332	3.5163	.79476	.04362	EVA	1.418	.234	3.984	412	.000
		Managerial	82	3.1317	.73112	.08074	EVNA			4.191	132.420	.000
Job Performance		Technical	332	3.5713	.67026	.03679	EVA	4.220	**.041**	3.841	412	.000
		Managerial	82	3.2459	.75096	.08293	EVNA			3.586	114.922	.000
EVA: Equal Variances Assumes; EVNA: Equal Variances not Assumed												

Source: Primary data

Table 4.40 reveals that significant difference exists in the perception of technical and managerial respondents among the job demand dimension namely Cognitive demand (p=0.006), Role conflict (p<0.000) and Hassles (p<0.000) and in job resource dimensions namely Feedback (p=0.042) and Coaching (p=0.026). It is also inferred from the table 4.40 that significant difference exists in the perception of technical and managerial respondents for the variable namely Job Performance (P=0.041).

There is no significant difference in the perception of technical and managerial respondents among the job demand dimensions namely Work pressure and Emotional demand and in job resource dimensions namely Autonomy, Social Support and Opportunities for development .Among the Job Crafting dimensions, Task Crafting, Cognitive Crafting and Relational Crafting does not have a significant difference in the perception of technical and managerial respondents. It is also inferred from the table 4.40 that there is no significant difference in the perception of technical and managerial respondents for the variables namely Occupational Self-efficacy and Work Meaningfulness.

Among the job demand dimensions namely cognitive demand (M= 3.3994), emotional demand (M= 2.9390) and role conflict (M= 2.7134) and in job resource dimension namely opportunities for development (M= 3.4837) and in Job Crafting dimensions, Cognitive Crafting (M= 3.3488) the managerial employees have scored high mean value when compared to technical employees.

Among the job demand dimensions namely work pressure (M= 3.3140) and hassles (M= 2.6530) and in job resource dimension namely autonomy (M= 3.2681), social support (M= 3.1576), feedback (M= 3.3373) and coaching (M= 3.5325) sub-dimensions the technical employees have scored high mean value when compared to managerial employees. Among the Job Crafting dimensions, Task Crafting (M= 3.3804) and Relational Crafting (M= 3.1003) sub-dimension the technical employees have scored high mean value when compared to managerial employees.

Correspondingly, technical employees value more on some factors namely Occupational Self-efficacy (M= 3.5301), Work Meaningfulness (M= 3.5163) and Job Performance M= 3.5713). The reason could be that technical employees by nature have excellent technical knowledge of mechanical and electrical systems and good problem-solving skills, understand the purpose of the organization to find their work meaningful, and are more task oriented and have skill variety to exhibit better job performance.

Table 4.41: t-test marital status and study variables

								Levene's Test for Equality of Variances		t-test for Equality of Means		
	Variables	**Marital Status**	**N**	**Mean**	**Std.Deviation**	**Std.Error Mean**		**F**	**Sig.**	**T**	**df**	**Sig.(2 tailed)**
Job Demands	Work Pressure	Married	234	3.4060	.84611	.05531	EVA	4.663	.031	2.880	412	.004
		Unmarried	180	3.1514	.94784	.07065	EVNA			2.838	361.387	.005
	Cognitive Demand	Married	234	3.3675	.84411	.05518	EVA	.865	.353	2.436	412	.015
		Unmarried	180	3.1583	.89415	.06665	EVNA			2.418	373.644	.016
	Emotional Demand	Married	234	2.6902	.86928	.05683	EVA	8.565	.004	-.809	412	.419
		Unmarried	180	2.7639	.97960	.07301	EVNA			-.797	360.041	.426
	Role Conflict	Married	234	2.4861	.87408	.05714	EVA	4.838	.028	-2.217	412	.027
		Unmarried	180	2.6903	.99558	.07421	EVNA			-2.180	357.615	.030
	Hassles	Married	234	2.6000	.89289	.05837	EVA	.191	.663	-1.310	412	.191
		Unmarried	180	2.7200	.96361	.07182	EVNA			-1.297	369.653	.196
Job Resources	Autonomy	Married	234	3.3319	.93085	.06085	EVA	.007	.934	1.870	412	.062
		Unmarried	180	3.1630	.88542	.06600	EVNA			1.882	393.976	.061
	Social Support	Married	234	3.0043	.91846	.06004	EVA	1.429	.233	-3.565	412	.000
		Unmarried	180	3.3296	.92351	.06883	EVNA			-3.562	384.158	.000
	Feedback	Married	234	3.3048	.89621	.05859	EVA	3.810	.052	.461	412	.645
		Unmarried	180	3.2667	.74777	.05574	EVNA			.472	409.254	.637

								Levene's Test for Equality of Variances		t-test for Equality of Means		
	Variables	**Marital Status**	**N**	**Mean**	**Std.Deviation**	**Std.Error Mean**		**F**	**Sig.**	**T**	**df**	**Sig.(2 tailed)**
	Opportunities for development	Married	234	3.5954	.89382	.05843	EVA	.115	.735	3.344	412	.001
		Unmarried	180	3.3019	.87499	.06522	EVNA			3.353	389.097	.001
	Coaching	Married	234	3.6120	.79474	.05195	EVA	1.185	.277	3.441	412	.001
		Unmarried	180	3.3511	.72362	.05394	EVNA			3.483	400.434	.001
Job Crafting	Task Crafting	Married	234	3.3687	.75552	.04939	EVA	.000	.988	.552	412	.581
		Unmarried	180	3.3278	.74034	.05518	EVNA			.553	388.921	.580
	Cognitive Crafting	Married	234	3.3991	.88990	.05817	EVA	.719	.397	4.053	412	.000
		Unmarried	180	3.0456	.86698	.06462	EVNA			4.067	389.945	.000
	Relational Crafting	Married	234	3.1978	.74150	.04847	EVA	.937	.334	2.963	412	.003
		Unmarried	180	2.9722	.80105	.05971	EVNA			2.933	369.430	.004
Occupational Self-Efficacy		Married	234	3.6695	.71281	.04660	EVA	2.472	.117	5.990	412	.000
		Unmarried	180	3.2519	.69079	.05149	EVNA			6.014	390.864	.000
Work Meaningfulness		Married	234	3.6462	.74437	.04866	EVA	1.074	.301	6.273	412	.000
		Unmarried	180	3.1722	.78442	.05847	EVNA			6.230	374.736	.000
Job Performance		Married	234	3.6403	.62257	.04070	EVA	8.111	.005	4.539	412	.000
		Unmarried	180	3.3333	.75281	.05611	EVNA			4.429	343.784	.000
EVA: Equal Variances Assumes; EVNA: Equal Variances not Assumed												

Source: Primary data

Testing at 5% level of significance the table 4.41 Reveals that significant difference exists in the perception of married and unmarried employees among the 5 job demand dimensions namely work pressure (p= 0.031), emotional demand (p= 0.004) and role conflict (p= 0.028) and in job resource dimension namely feedback (p= 0.052). Further, there is also a significant difference exists in the perception of the variable namely job performance (p=0.005).

There is no significant difference in the perception of married and unmarried employees for the variables namely in job demand dimension – cognitive demand and hassles. In job resource dimension namely autonomy, social support, opportunities for development and coaching. Further, there is no significant difference in the perception of the variables namely occupational self-efficacy and Work meaningfulness.

Among the Job Demand dimensions namely Work Pressure (M= 3.4060) and Cognitive demand (M= 3.3675) and in Job Resource dimension namely autonomy (M= 3.3319), feedback (M= 3.3048), coaching (M= 3.6120) and Opportunities for development (M= 3.5954) and in Job Crafting dimensions, Task Crafting (M= 3.3687), Relational Crafting (M= 3.3991) and Cognitive Crafting (M= 3.1978) sub-dimensions the married employees have scored high mean value when compared to unmarried employees.

It is also inferred from the table 4.41 that variables namely Occupational Self-efficacy (M= 3.6695), Work Meaningfulness (M= 3.6462) and Job Performance (M= 3.6403) the married employees have scored high mean value when compared to unmarried employees.

Correspondingly, unmarried employees value more on some factors, among the job demand dimensions namely emotional demand (M= 2.7639), role conflict (M= 2.6903) and Hassles (M= 2.7200) and in job resource dimension namely social support (M= 3.3296) the unmarried employees have scored high mean value when compared to married employees.

Table 4.42: T-Test: Gender and Study Variables

								Levene's Test for Equality of Variances		t-test for Equality of Means		
	Variables	**Gender**	**N**	**Mean**	**Std.Deviation**	**Std.Error Mean**		**F**	**Sig.**	**T**	**df**	**Sig.(2 tailed)**
Job Demands	Work Pressure	Male	333	3.3018	.90978	.04986	EVA	1.715	.191	.298	412	.766
		Female	81	3.2685	.86130	.09570	EVNA			.308	127.060	.758
	Cognitive Demand	Male	333	3.2342	.87936	.04819	EVA	.668	.414	-2.012	412	.045
		Female	81	3.4506	.82008	.09112	EVNA			-2.099	128.584	.038
	Emotional Demand	Male	333	2.6612	.89840	.04923	EVA	2.955	.086	-2.765	412	.006
		Female	81	2.9733	.96229	.10692	EVNA			-2.651	116.259	.009
	Role Conflict	Male	333	2.5465	.86281	.04728	EVA	19.079	.000	-1.253	412	.211
		Female	81	2.6914	1.17876	.13097	EVNA			-1.040	101.793	.301
	Hassles	Male	333	2.5910	.87868	.04815	EVA	.407	.524	-2.750	412	.006
		Female	81	2.9037	1.06495	.11833	EVNA			-2.448	107.976	.016
Job Resources	Autonomy	Male	333	3.1772	.91157	.04995	EVA	.092	.762	-3.725	412	.000
		Female	81	3.5926	.85147	.09461	EVNA			-3.883	128.420	.000
	Social Support	Male	333	3.0891	.93769	.05138	EVA	.438	.508	-2.519	412	.012
		Female	81	3.3786	.88467	.09830	EVNA			-2.610	127.404	.010
	Feedback	Male	333	3.2553	.83789	.04592	EVA	.312	.577	-1.635	412	.103
		Female	81	3.4239	.80969	.08997	EVNA			-1.669	125.060	.098

								Levene's Test for Equality of Variances		t-test for Equality of Means		
	Variables	**Gender**	**N**	**Mean**	**Std.Deviation**	**Std.Error Mean**		**F**	**Sig.**	**T**	**df**	**Sig.(2 tailed)**
	Opportunities for development	Male	333	3.4795	.90588	.04964	EVA	1.097	.296	.537	412	.591
		Female	81	3.4198	.86084	.09565	EVNA			.554	126.687	.580
	Coaching	Male	333	3.4775	.78041	.04277	EVA	1.919	.167	-1.123	412	.262
		Female	81	3.5852	.74885	.08321	EVNA			-1.151	125.737	.252
Job Crafting	Task Crafting	Male	333	3.3664	.75836	.04156	EVA	1.153	.284	.851	412	.395
		Female	81	3.2875	.70656	.07851	EVNA			.888	128.681	.376
	Cognitive Crafting	Male	333	3.2318	.90504	.04960	EVA	1.452	.229	-.625	412	.533
		Female	81	3.3012	.86263	.09585	EVNA			-.643	126.392	.521
	Relational Crafting	Male	333	3.0639	.76604	.04198	EVA	.397	.529	-1.912	412	.057
		Female	81	3.2469	.79956	.08884	EVNA			-1.862	118.292	.065
Occupational Self-Efficacy		Male	333	3.4670	.72017	.03947	EVA	.036	.849	-1.181	412	.238
		Female	81	3.5741	.77951	.08661	EVNA			-1.125	115.468	.263
Work Meaningfulness		Male	333	3.3976	.76552	.04195	EVA	2.253	.134	-2.211	412	.028
		Female	81	3.6148	.89765	.09974	EVNA			-2.008	109.979	.047
Job Performance		Male	333	3.4815	.68821	.03771	EVA	.009	.925	-1.501	412	.134
		Female	81	3.6111	.73314	.08146	EVNA			-1.444	116.678	.151
EVA: Equal Variances Assumes; EVNA: Equal Variances not Assumed												

Source: Primary data

Table 4.42 reveals that significant difference exists in the perception of male and female respondents among the job demand dimension namely Role conflict ($p<0.000$).

There is no significant difference in the perception of male and female respondents among the job demand dimensions namely Work pressure , Cognitive demand , Emotional demand and Hassles and in job resource dimensions namely Autonomy, Social Support, Feedback, Opportunities for development and Coaching. Among the Job Crafting dimensions, Task Crafting, Cognitive Crafting and Relational Crafting does not have a significant difference exists in the perception of respondents of varied gender. It is also inferred from the table 4.42 that there is no significant difference in the perception of male and female respondents for the variables namely Occupational Self-efficacy, Work Meaningfulness and Job Performance.

Among the Job Demand Dimension, Cognitive demand (M= 3.4506), Emotional demand (M= 2.9733), hassles (M= 2.9037) and role conflict (M= 2.6914) and in job resource dimension namely Autonomy (M= 3.5926) , social support (M= 3.3786), feedback (M= 3.4239) and coaching (M= 3.5852) and in Job Crafting dimensions, Relational Crafting (M= 3.2469) and Cognitive Crafting (M= 3.3012) sub-dimensions the female employees have scored high mean value when compared to male employees.

It is also inferred from the table 4.42 that variables namely Occupational Self-efficacy (M= 3.5741), Work Meaningfulness (M= 3.6148) and Job Performance (M= 3.6111) the female employees have scored high mean value when compared to male employees.

Correspondingly, male employees value more on some factors, among the job demand dimensions namely work pressure (M= 3.3018), and in job resource opportunities for development (M= 3.4795) and task crafting (M= 3.3664) have scored high mean value when compared to female employees. Compared to other industries in engineering industries there is a notable difference in the number of male and female employed. The present study also reflects the male supremacy in numbers in engineering industries. Hence it is inferred that, male respondents having too much work to do in the time available, mobilizing developmental opportunities lead to increase their abilities or competence and also through crafting the tasks to introduce new approaches that better suit their skills or interests.

4.7 Concluding Remarks

This chapter presents the results of various data analysis. To accomplish the objectives of the study appropriate statistical tools and analysis used. Hypotheses framed are also tested and results discussed in detail. Initially, this chapter presents a demographic profile of the respondents. To meet the first objective Descriptive statistics is performed. To fulfill the second objective Correlation and Regression analysis are performed. Likewise, for the third and fourth objectives, PLS-SEM is performed. For accomplishing the fifth objective Discriminant analysis is performed. ANOVA and t-test are performed to meet the sixth objective of this study. The analysis results and findings are discussed in detail.