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ANALYSIS OF EMPLOYEE TURNOVER IN CONSTRUCTION INDUSTRY IN KERALA

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Abstract - Employee turnover refers to the employees leaving an organization due to various reasons which can be voluntary or involuntary. The study focuses on voluntary turnover. Turnover intent acts as a precedent to turnover and hence the survey measures turnover intention as a precedent for turnover. The study has been conducted to understand the factors relevant to the career decisions of the professionals working in the industry and how well the factors are being fulfilled in the current scenario. The data was collected by a *questionnaire survey and the data was analysed to determine* the relevant factors and their satisfaction levels. The importance of factors was assessed using Relative Importance index and correlation between importance and satisfaction was done using Spearman's Rank Correlation. The factors and satisfaction were correlated to determine areas where improvement was needed to improve satisfaction and hence mitigate turnover intentions.

Key Words: Employee turnover

1. INTRODUCTION

The last two decades have seen the Indian economy grow significantly. India's GDP has crossed the US\$ 2 trillion mark in 2014. It is estimated that about 10% of India's GDP is based on construction activity. The construction sector employs approximately 35 million people. Large investments are being made in housing, commercial, industrial and infrastructure sectors. However, the construction projects in India are facing key challenges such as time and cost overruns, low-productivity and lack of skilled labour. Among the numerous factors that influence the outcome of a construction project, productivity is one of the major factors. Since many of the construction activities are labor-intensive, construction productivity is influenced by effective and efficient use of human resources. Hence, contractors require a workforce that is both stable and productive

Employee attrition significantly affects constructions firms due to increased cost of hiring, work disruptions, etc. Hence there is a need to study the turnover in the construction industry. Psychological research has shown that there is a positive correlation between turnover intentions and actual turnover. Hence, gauging the employees' turnover intent can help in determining turnover propensity. It has been found that job satisfaction is negatively related to turnover and turnover intention is positively related. Hence job satisfaction acts as an antecedent to turnover. Employees go through three stages before deciding to leave an organization, they think of leaving, they intend to look for another job and then follow intent to quit. Hence, understanding the causes of turnover can help us to take decisions to better manage the workforce to avoid the loss of valued human resources. It can enable us to devise strategies to arrest turnover

Cordelia H.S. Hee et al (2011) [1] conducted a study of the quantity surveyors in Singapore to determine the turnover intentions and to devise the strategies to reduce turnover. They investigated job and jobholder characteristics that affected satisfaction; provide significantly and recommendations to reduce QS' turnover intentions. It was found that certain characteristics of QS and their jobs give rise to job satisfaction, and therefore designing quantity surveying jobs that take in these characteristics may decrease turnover intention. The relevant characteristics that should be included in the design of QS' jobs to increase retention rates are task significance, autonomy and feedback

Jonathan Lian et al, (2018) [3] studied the influence of personal characteristics on quantity surveyors' job satisfaction. QSs feel that they have significantly high passion for the job, are significantly satisfied with task variety and are treated fairly. However, they are significantly dissatisfied with their workload, hours worked, and lack of work-life balance. QSs in upper management have significantly higher job passion. Those in mid-management are more dissatisfied with their income. QSs who are married/attached, older, and more experienced are significantly more dissatisfied with their workload and hours worked than singles, younger, and less experienced QSs

Florence Yean et al, (2015) [2] conducted a study to evaluate the relation between performance and personal traits of project managers and their job outcomes identify job and personal characteristics that significantly affect construction project managers' satisfaction with their jobs and work outcomes. Data were collected from 32 construction project managers using a structured questionnaire, and data were analyzed using Spearman's correlation. It showed that significant job satisfaction was achieved, and projects achieved significantly good outcomes, and clients were satisfied. The finding revealed several job characteristics that give construction project managers the job satisfaction, the most important are salary, work autonomy, and task significance. Personal characteristics that lead to job satisfaction for construction project managers were job fit between the manager and the firms and the presence of promotion and self-development opportunities.

2. RESEARCH METHODOLOGY

A questionnaire survey was carried out with construction industry professionals in Kerala to find out the significant factors relevant to the career decisions. 24 factors were identified from extensive literature review of various journals related to PPP.

The questionnaire consisted of three parts. First part collected demographic information of respondents. In second part the respondents were asked to rate the career decisions factors based on their importance and in third part, they were asked to evaluate the satisfaction levels of the aforementioned 24 factors on a Five Point Likert

Data obtained was then analyzed using Statistical package for social sciences software (SPSS) for reliability, relative importance and importance-satisfaction correlation.

3. RESULTS AND DISCUSSIONS

3.1 Reliability Analysis

 Table -1: Output of Reliability Analysis of Importance on

 SPSS

Case	Processing	Summary
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		Ν	%
Cases	Valid	39	100.0
	Excluded ^a	0	0.0
	Total	39	100.0

Reliability Statistics

Cronbach's	Ν	of
Alpha	Items	
0.875	24	

The Cronbach's alpha value is the measure of reliability. For the data to be reliable the Cronbach's alpha value should be greater than 0.7, sometimes lowered to 0.6 in exploratory researches. Cronbach's alpha for risk factor ratings based on probability is greater than 0.7. Hence we can conclude than data is reliable.

Similarly the Cronbach's alpha for factor rating based on importance is also greater than 0.7, thus making it reliable.

 Table -2: Output of Reliability Analysis of Satisfaction on

 SPSS

Case Processing Summary

		Ν	%
Cases	Valid	39	100.0
	Excluded ^a	0	0.0
	Total	39	100.0

Reliability Statistics

Cronbach's	N of
Alpha	Items
0.902	24

3.2 Relative Importance Index (RII)

Descriptive statistical analysis of risk factors were conducted to rank them based on perceived importance. For this purpose relative importance index was calculated. It is common method to identify the relative importance of various factors.

Relative importance index is calculated using the formula

$$RII = \frac{\sum W}{A * N}$$



Factor	RII	Rank
Monetary Benefits (Salary, Bonus, etc.)	0.8	2
Non - Monetary Benefits (Leaves, Holidays, etc.)	0.620512821	23
Working Hours	0.656410256	22
Job Security	0.81025641	1
Ethics and Integrity of Company	0.784615385	3
Sense of Accomplishment	0.748717949	6
Challenging Work Task	0.671794872	20
Feedback and Evaluation	0.697435897	16
Job Stress	0.671794872	21
Commute/ Travel Distance	0.6	24
Technical Knowledge to perform Work	0.733333333	8
Amount of Workload	0.682051282	18
Fit between personal skills and job needs	0.692307692	17
Chances for Promotion	0.728205128	11
Chances to learn new things	0.764102564	5
Autonomy in Decision making	0.712820513	15
Physical Work Environment	0.682051282	19
Effectiveness of superior	0.728205128	12
Approach-ability of Superior	0.733333333	9
Relationship with co-workers	0.743589744	7
Company work Culture	0.723076923	13
Working in Teams	0.774358974	4
Sense of Belonging to Company	0.717948718	14
Recognition for Success and Appreciation	0.733333333	10

Table -3: Output of Relative Importance Index Analysis of Factors

3.3 Spearman's Rank Correlation

Spearman's Rho is a non-parametric test used to measure the strength of association between two variables, where the value r = 1 means a perfect positive correlation and the value r = -1 means a perfect negative correlation. Here, we conduct this test to evaluate the relationship between overall job satisfaction and satisfaction with the relevant factors

The Spearman's rank correlation shows a significant correlation between the overall satisfaction and the following factors : Monetary Benefits, Job Security, Ethics and Integrity, Sense of Accomplishment , Technical Knowledge to Perform Work, Chances to learn new things, Relationship with co-workers, Working in Teams



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Factor	Spearman's Rho	Sig. (2-tailed)	Ν
Monetary Benefits (Salary, Bonus, etc.)	.510**	0.001	39
Non - Monetary Benefits (Leaves, Holidays, etc.)	0.17	0.101	39
Working Hours	0.153	0.151	39
Job Security	.426**	0.007	39
Ethics and Integrity of Company	.485**	0.002	39
Sense of Accomplishment	.569**	0.000	39
Challenging Work Task	0.188	0.076	39
Feedback and Evaluation	0.066	0.521	39
Job Stress	0.251	0.150	39
Commute/ Travel Distance	0.112	0.143	39
Technical Knowledge to perform Work	.289*	0.050	39
Amount of Workload	0.186	0.073	39
Fit between personal skills and job needs	0.092	0.204	39
Chances for Promotion	0.138	0.152	39
Chances to learn new things	.357*	0.026	39
Autonomy in Decision making	0.231	0.045	39
Physical Work Environment	0.204	0.211	39
Effectiveness of superior	0.141	0.175	39
Approach-ability of Superior	-0.01	0.727	39
Relationship with co-workers	0.488**	0.002	39
Company work Culture	0.186	0.126	39
Working in Teams	.598**	0.000	39
Sense of Belonging to Company	0.135	0.195	39
Recognition for Success and Appreciation	0.062	0.543	39
Overall Job Satisfaction	1.000		39

Table - 4: Output of Spearman's Rank Correlation on SPSS

4. CONCLUSION

The study provided an insight into the perceptions of the professionals working in the construction industry in Kerala. The perceived importance of factors was determined by using a relative importance analysis. The results of the spearman's rank correlation study show that there is significant correlation between the overall job satisfaction factors such as monetary benefits, job security, ethics and integrity, sense of accomplishment, technical knowledge to perform work, chances to learn new things, relationship with co-workers, working in teams.

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