

Building Success: The Hidden Power of Staffing and Job Satisfaction in Construction

P. Karthikeyan¹, P.M. Murali^{2*}, C.R. Aarthi Ramanigopal³

1. Research Scholar, Vinayaka Mission's Kirupanandavariyar Engineering College, Vinayaka Mission's Research Foundation (Deemed to be University), Salem-636308, Tamilnadu.
2. Associate Professor, Vinayaka Mission's Kirupanandavariyar Engineering College, Vinayaka Mission's Research Foundation (Deemed to be University), Salem-636308, Tamilnadu.
3. Research Scholar, FDDI – Footwear Design Development Institute, Kanchipuram, Tamilnadu, Chennai

* For Correspondence

Dr. P. M. Murali

Associate Professor,

Vinayaka Mission's Kirupanandavariyar Engineering College,
Vinayaka Mission's Research Foundation (Deemed to be University),
Salem-636308, Tamilnadu.

E.mail: srimoorthymurali@gmail.com

Abstract:

The construction industry is very important for the progress, development, and economic growth of a country. The construction industry depends on Human resources to a large extent. The task of analysing the current problems and challenges are very important aspect in the present scenario for the successful completion of projects in the construction industry. A Survey Questionnaire related to the objectives of the study was framed. The 186 filled-up questionnaires were received for the research analysis. From the results obtained, it was noted that 60% of the respondents were aged above 60 indicating that the construction company was functioning with senior citizens mostly who obviously should be well experienced in any decision-making process. Problems identified among workers are that they feel no job security, and no job satisfaction and mostly find themselves in a life riskier job sector, lacking talents or multi-skills with limited opportunities for personal and career growth offered by employers. Being an unorganized sector, there are no fixed working hours, a fixed set of needed skills among workers, fixed eligibility criteria to be checked while recruitment or staff outsourcing by the company, etc. Recruitments are biased by recommendations or by low-wage quotes of applicants overlooking the real talents and skills. Selecting unskilled laborers affects the growth of the company and product values. All these pose a great challenge for the construction company. The study indicates that though workers at some companies were given flexible stress-free working environments, the monetary

rewards they receive play a highly influencing factor in deciding about quitting or retaining that job. With varied reasons influencing job quitting, the experience, multi-tasking skill and job-specific talent-gaining process by the worker suffers. Worker absenteeism and job quitting become major reasons for construction project failures. The study tried to identify the benefits of the transformation of the construction industry from an unorganized to an organized sector.

Keywords: Staffing, job-quitting, unorganized sector, multi-tasking skill, job-specific talent, construction industry transformation

Introduction:

The construction industry is very important for the progress, development, and economic growth of a country. The construction industry depends on Human resources to a large extent (Husseini, 1992; Hossein *et al.*, 2018). HR will be fruitful to Construction Companies as they can provide a Competitive Edge (Ford *et al.*, 1983). The task of analysing the current problems and challenges are very important aspect in the present scenario for the successful completion of projects in the construction industry. The prominent literature on assessment in the construction industry has been studied to take a look at the different aspects and requirements of construction projects. As a way of looking ahead and expecting good things, the study tried to identify the benefits of the transformation of the construction industry from an unorganized to an organized sector (Jill Wells, 1984). Hence in-depth knowledge about the existing and expected trends in the construction industry becomes mandatory. Such knowledge gathering will help to fill the existing gaps and needs while framing policies and regulations for the betterment of the construction industry that includes suggestions for successful transformations of the company (Masoud Norouzi *et al.*, 2021; Müge Tetik *et al.*, 2019). The domains for procuring existing literature knowledge in the construction industry have been fixed by the researcher as below since they are considered highly influential factors in deciding the nature of construction companies.

Exploring the present prospects and problems of human resource management in the construction sector

Using the secondary data in literature it is identified that - Human resources are a must for the construction industry, Construction projects are in continuous increase thus creating job opportunities, Opportunities for employment and enrolment is very wide for applicants, Low skilled workers also get benefits at their capacity and there exists good opportunities for many reasonable demands for skilled human workforce (Alaloul *et al.*, 2021). At the same time the

Problems identified among workers are that they feel no job security, No job satisfaction, mostly find themselves in life riskier job sector, lack talents or multi-skills with limited opportunities for personal and career growth

The present challenges faced by the construction sector are:

- To prove itself to be an important GDP decider as ever
- An unorganized sector
- Defective staffing process
- No strict recruitment process
- Lack of skilled and multi-skilled laborers
- The project process involves an unpredictable course
- Lack of quality assurance
- Frequent project failures
- Frequent and mass job quitting by workers

There are many risks of different nature in multiple levels associated with various sectors of the construction industry, which the human resources are posed to. Because of the lack of highly specific or multi-skilled talents as per the need of the construction environment, the companies neither prefer to hire less skilled laborers nor are they ready to make their position permanent with reasonably good wages. Hence, the workers feel insecure and unsatisfied with their jobs. In many cases, the reluctance of employers to pay a good package or rewards even after performing life-riskier work that demands only limited skills, makes the workers lose interest in sticking to their jobs, thus creating high staff turnover rates in construction companies (Knight, 2013). The researcher aims to study the changing patterns of HR in the construction sector, to analyze and suggest solutions to sort the labor issues, and to suggest the future prospects of human workers in the construction sector.

METHODOLOGY

Survey Questionnaire related to the objectives of the study, Determination of Sample size, and Data collection technique

A questionnaire is set to cover the objectives to be employed for a survey study from reliable subjects. From the responses collected, explanations will be made after statistically

analyzing the response results and the results will be interpreted. Conclusions will be drawn and suggestions and recommendations will be put forth.

Questionnaire preparation and pre-testing

The pilot study of the research instrument is carried out to determine the relevance, order, wording, strengths, weaknesses, and reliability of the questionnaire in question format. To assess the reliability and to ensure that the research instrument measured the variables that it was intended to measure, the data collected from the respondents during the pilot study were evaluated. The questionnaire consisted of two sections. Section 1 comprised general questions related to the age, designation, and experience of the respondents. Section 2 covered the study objective based on specific questions. The questions were directed to receive opinions about the prospects and importance of HR in the construction sector, worker's job satisfaction, worker benefits, recruitment process, training needs, project failures and reasons, and health and safety levels. Under each lead, many sub-questions were put to achieve optimized and nearly accurate responses.

Data source & collection

Primary data and secondary data were utilized in this study for the purpose of data collection. The survey research method was used to collect the necessary primary data from the participants through the distribution of copies of questionnaires in this study. The secondary data were collected from reports, websites, published articles, journals, and other published information from IDA and DCI.

Determination of sample size for primary data

The study's aim was achieved through administering a questionnaire to construction workers in Tamilnadu in South India. Random sampling was adopted administering the questionnaire and a total of 186 was retrieved from the members of construction HRs belonging to CDC and used for the analysis. The data extracted from the questionnaire was analyzed using SPSS V 24, adopting, mean score, frequencies, chi-square test, and correlations.

The hypothesis framed for the study tests are:

1. Realizing the HR importance, there is good scope for HR in the construction industry,
2. There is a high demand for multi-skilled and multitasking workers in the construction sector

3. The staffing process influences the construction industry's growth and workers' job satisfaction level with career growth assistance.
4. The existing staffing process is efficient.
5. There is a need for frequent training in the construction industry.

Results and Discussion:

The 186 filled-up questionnaires received within the stipulated time were exactly sufficient for the reliable research analysis. From the results obtained, it was noted that 60% of the respondents were aged above 60. Only 10% of the respondents were found below the age group of 40 indicating that the construction company was functioning with senior citizens mostly who obviously should be well experienced in any decision-making process.

PART II – OBJECTIVE RELATED QUESTIONS

Table 1: Importance of Human Resource in Construction Company at present

S.No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	Human resources are important for a construction company.			6%	7%	87%
2.	The construction sector is mostly machinated and relies only to a small extent on human resources	32%	8%			60%
3.	The construction industry requires equal operation of human resources and machines.		14%	28%	20%	30%
4.	The construction industry can function without human laborers, fully automated	100%				
5.	The construction industry does not require any machines	100%				
6.	Human Intervention is a must. Though machinated, humans are needed to operate it and maintain it.				12%	88%

HUMAN RESOURCE AND INTERVENTION ARE IMPORTANT FOR CONSTRUCTION SECTOR

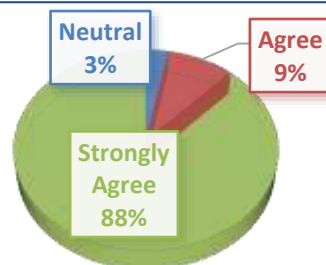


Fig-1

From the results obtained and analyzed (Table 1), it can be inferred that Human Intervention is a must in a construction company. Though machinated, humans are needed to operate it and maintain it. Construction Companies cannot be fully automated without any human involvement. It is completely disagreed that both full automation and nil automation are not at all possible. It is also agreed that in construction companies machines are involved which explains their importance. The responses to items 4 and 5 make clear that machine and human needs, both are must for Construction Companies, ie., accepted to the extent of 100% and 88% (Fig 1) of the respondents agreed to the statement that Human Intervention is a must, though machinated since humans are needed to operate it and maintain it. However analyzing the responses for item number 2, 60% of respondents opined that Human reliance is affected by machination involvement.

Table 2- Scope for human resources in the construction industry in your view?

S.No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	Demand for new construction remains robust.				5%	95%
2.	The size of the human resources is enormous.			9%	15%	76%
3.	Demand for new construction projects is decreasing	90%	9%	1%		

4.	The size of the multi-skilled human resource is in demand.			5%	15%	80%
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The construction industries of a country always retain high scopes, as the development of a nation greatly depends on the construction sector (Kokkaew, 2022; Qarnain *et al.*, 2021). Since they influence the economic growth of a country, it is obvious that the construction industry will be sustained with continuous demands for new construction projects always and the same opinion has been reflected in the outcomes of this study also. Nearly 95% of the respondents supported the view that there is a robust demand for new construction projects (Table 2).

Similarly, they also agree that there are many human resources available irrespective of the increasing number of new construction projects. We can understand that as the number of projects are increasing so is the number of people involved in the construction process. With growing projects, the workforce number too is increasing simultaneously. However, 80 % of the respondents opined that the size of the multi-skilled human resource is still in demand. This indicates that among the enormously available human resources, there is still a demand for multi-skilled workers. Multi-skills of a worker will fetch him much fortune by being engaged continuously by HR managers throughout a project process. Unlike limited skilled workers who engage only in small work packages, multi-skilled laborers have more scope in the industry in the near future. Companies will start looking for multi-skilled laborers for their projects and recruit them by offering good rewards. Multi-skilled laborers can be beneficial both for self and organizational growth. The outcome of this study has made clear this concept.

3. The % of multi-skilled to manage the absenteeism of other workers

Table 3: Availability of multi-skilled laborers

	Less than 25%	26% to less than 50%	Between 51-75%	More than 76%
Response in percentage	85%	15%	-	-

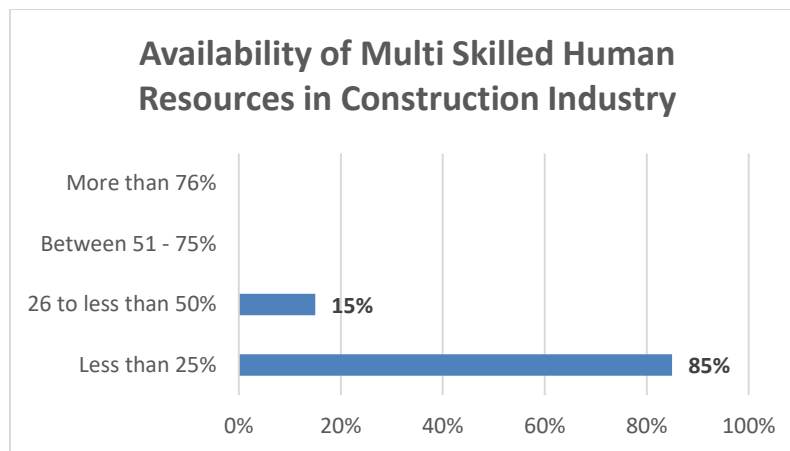


Fig 2: Availability of multi-skilled human resources in the construction industry

From the results, the conclusion can be derived that most construction companies have only a minimum number of multi-skilled potential workers who are able to tackle mass absenteeism in the construction workforce. Worker absenteeism could be one of the main causes of the delay of any project and the reputation of the company. Hence managing worker absenteeism in the way it affects the construction process is something that needs consideration and demands attention and the companies should be efficient enough to recruit or replace multi-skilled workers to alleviate absenteeism problems in the construction process. From the response data, it is clear that only a few companies (15 %) have only or nearly a quarter of their worker population as multi-skilled. Hence there is a need for HR managers should understand the importance of recruiting potential candidates. The selection process must include tests to judge and analyze the candidates' additional skills related to the construction process, including decision-making skills too (www.thomas.co/resources).

Table 4- Opinion about the staffing process followed in your organization

S.No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	Do you hire sub-consultants and subcontractors with skills needed for particular projects temporarily?	-	-	-	10%	90%
2.	Do you create permanent internal positions for skilled laborers?	90%	9%	-	-	1%
3.	Do you select them based on their	8%	15%	10%	23%	34%

	certification course as a testimony of their skills?					
4.	Do you select them based on the recommendations or references?	25%	30%	5%	13%	27%
5.	Do you select them based on their years of experience they claim to possess?	-	-	5%	15%	80%
6.	Do you select them based on the skills they claim to possess?	-	-	-	1%	99%
7.	Based on the ability to perform multitask they claim to possess?	-	-	-	2%	98%
8.	Do you select them based on the quoting of low wages?	-	-	-	14%	86%

The practice of employing temporary recruitments as and when needed is the present existing practice in the Construction sector. This practice will minimize unnecessary payments and cut short finance for salary or wages. This is reflected in the present study response, where 90% of the HR respondents have agreed to the fact that employment to the posts was made temporarily rather than permanent basis as given in items number 1 & 2. This also conveys that the company is not interested in holding back employees when there is no human resource requirement or no project on board (Human Rights at Work 2008). Their lack of interest in retaining the workers explicitly exposes the fact that there is always an availability of human force with the higher volume of the supply chain. The other reason, that employers are not interested in providing permanent positions for them simply correlates well with the fact that most construction sector human forces are not efficient enough, skilled, multi-faceted, or multi-talented. Present responses strongly supporting the recruitment of temporary posts also indicate that the majority of the workforce is not reliable enough to be dependable upon for meeting emergency problems or filling the lacunae of construction intelligence needed for the successful completion of projects in time without delay and also for the sustenance of their industry.

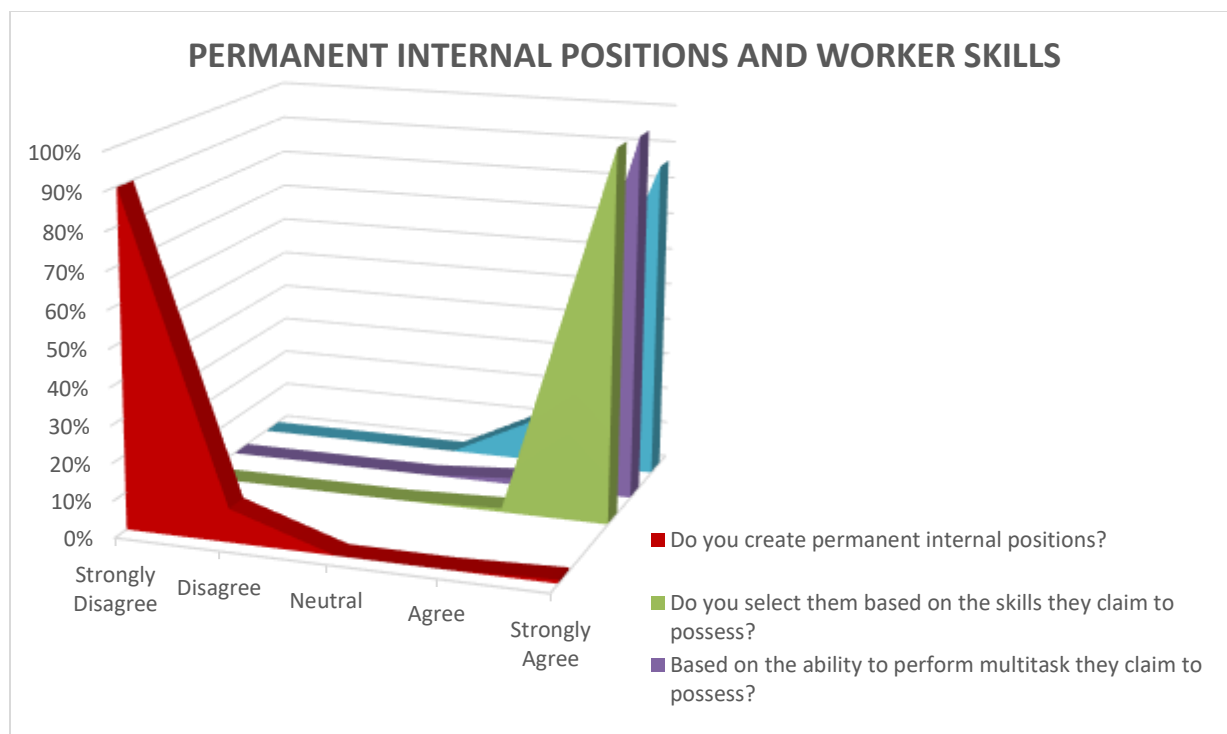


Fig-3: A high positive correlation is found between the worker skills and their chances for permanent positioning in the organization

A correlation test was run between the items in the lead for the staffing procedure. It was noted that item 2 with most others did give a weak negative correlation. This shows the fact that organizations are not showing interest in creating permanent jobs. However, there is no discretely significant data related to the response strength when analyzing the nature of the recruiting process based on the candidate's certification or merits. The responses were found distributed across the different scales provided, without bringing out any significance. This forces the researcher to the conclusion that the certification of the candidate is not given importance as to the wages quoted by the candidate as given in item number 8.

The strongly agreed responses of 80%, 99% & 98%, as given in item numbers – 5,6 & 7 respectively, as to the selection of candidates based on their experience, talents, and multi-skills, shows that companies are quite interested in acquiring such candidates possessing them. However, the wages quoted by such candidates influence their chances of getting recruited (Musarat, 2020).

Table 5: A correlation test was run between the items in the lead for the staffing procedure

	<i>Temporary hiring for the job</i>	<i>Creating permanent posts</i>	<i>Certification course completion</i>	<i>Recommendations or references</i>	<i>Years of experience</i>	<i>Selection based on their skills</i>	<i>Ability to perform multitask</i>	<i>Quoting of low wages</i>
Temporary hiring for the job	1							
Creating permanent posts	-0.308	1						
Certification course completion	0.888	-0.543	1					
Recommendations or references	0.336	0.328	0.259	1				
Years of experience	0.996	-0.358	0.905	0.263	1			
Selection based on their skills	0.994	-0.273	0.844	0.366	0.985	1		
Ability to perform multitask	0.995	-0.277	0.849	0.363	0.986	0.999	1	
Quoting of low wages	0.998	-0.325	0.907	0.318	0.998	0.988	0.989	1

It can be concluded that though the human workforce for the construction industry is surplus, there is still a demand for multi-skilled workers which is really the need for the industry.

In the pair-wise correlation study made, it was noted that the sub-item “ Permanent job creation did not match with any applied criteria indicating that the construction companies are not satisfied with job excelling skills of workers and hence are not willing to create permanent posts for them. At the same time, there is a high correlation between the sub-item ‘Temporary post creations’ with almost all the required worker eligibilities during the recruitment process. The lack of skilled workers does not motivate construction companies to create permanent employment, but at the same time, the organizations are ready to offer temporary posts to those who have few minimum qualifications like certificate courses. Such staffing processes practiced as a result of the low prevailing job skills of candidates are a hindrance for the industry to transform into an organized sector.

Tab-6: Worker job satisfaction analysis

S.No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	Your organization's employees are satisfied with the job pay	45%	25%	15%	13%	02%
2.	They stick on to a job until it is over	40%	20%	20%	10%	10%
3.	Changing jobs in sequential projects	4%	6%	10%	10%	70%
4.	Facing Noncooperative issues with fellow Human resources	18%	20%	10%	12%	40%
5.	Having Managerial issues	10%	10%	2%	18%	60%
6.	Burden of Overload	4%	2%	4%	15%	75%
7.	Flexible working hours	35%	33%	20%	2%	10%
8.	Acquired ergonomic problems due to the nature of work	2%	3%	10%	13%	72%
9.	Acquired health-related problems due to work environment Pollution	2%	5%	08%	15%	70%

A chi-square analysis made on the response scales obtained for item numbers 7 and 8 revealed a high level of similarity, both revealing the fact that their work influences their health. 85% of the respondents agree the fact that workers acquire ergonomic and other health-related

problems due to the work nature or work environment they are put into. Only 5 to 6 % of the HR managers are responding positively that their workers are not overloaded or put under stress. And only 12% of HRs have accepted that flexible working hours are provided for workers. This shows that less % of HRs say that their workers are enjoying flexible hours with not much workload. Similarly, only a small % of HRs express that their workers do not suffer much health risk. However, when a correlation study was done for the above-obtained responses with their job satisfaction and job switch-over percentages as denoted by their specific HRs, a high level of negative correlation was obtained. This indicates that though the workers were given a flexible stress-free working environment, the monetary rewards they received were the highly influencing factor in deciding about quitting or retaining that job.

A pairwise correlation study between items helped to deduce some existing facts. People who have multi-skilled talents only can enjoy all the privileges in the organization, because organizations have the habit of recognizing or supporting, only those laborers who have multi-skilled skills. They may get the opportunity to access the decision makers and gets opportunity to get sanctioned their obligations both for personal or organizational needs.

Some organizations can provide a comfortable and flexible work environment where the chances of acquiring health issues are nil for the employees (Hoboubi, 2017). However, even such employees used to switch over jobs due to their non-satisfaction purely based on the salary insufficiency feeling and quit their present job for attraction of a better salary elsewhere.

Table 7: Existing job incentives and worker benefits for human resources

S.No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	Performance-based incentive		80%		20%	
2.	Insurance Coverage		80%		20%	
3.	Holiday incentives		90%		5%	5%
4.	Opportunity for Career Growth	90%			10%	
5.	Family welfare		90%		5%	5%
6.	Regular technical update			90%	10%	
7.	Logistics and Academic support to dependents			90%	5%	5%

8.	Regular health check-up		90%		5%	5%
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From the results obtained it was found that 80-90% of the respondents disagreed with the mentioned worker benefits in the questionnaire provided. The tested items were undoubtedly the indicators that influence the job satisfaction of the human resources in an organization. This questionnaire launched to test the type of worker benefits extended by construction companies to their human resources is significantly reporting the lack of such availability in most construction organizations. Only 10% of the responses agree to the provision of such worker benefits like Family welfare, Regular health check-up, regular technical update, holiday incentives, logistics, and academics support to dependents and opportunities for career growth. And only 20% of the respondents agree with the existence of Performance-based incentives and Insurance Coverage. With the absence of motivations, rewards, and incentives from management it is hard to retain the workers in an institution and there is frequent absenteeism or job quits as a consequence (Mary Jones, 2019). On the contrary with the provision of family welfare and opportunities for career growth, the workers' reliance on their company increases with parallel building up of positive attitude. From the received data it is clear that most companies in the construction sector are not serious about creating a job satisfaction atmosphere among their human resources which is the most needed feeling required to utilize the maximum inherent abilities and skills of the workers for the positive successful growth of the organization.

9. Training needs:

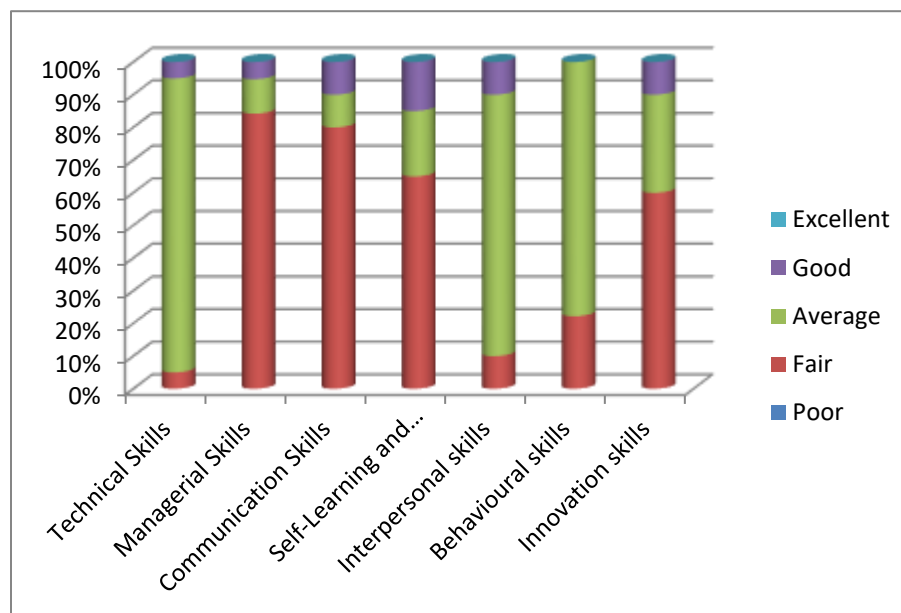


Fig 4 Employee skill competencies

The responses fall mostly in the range of fair and average indicating that the skills possessed are not up to the mark as per experienced peoples' opinion. These strings are required for proficiency development, career growth, managing the work environment challenges, and also for becoming aware of the safety measures to be adopted both for the organizations 'and self's growth as well as health benefits.

The above responses reveal that there exists a skill gap widely. It was found that human resources involved in the construction sector have to enhance their skills as their life skills in all aspects. The sector being unorganized is the major cause of this prevailing issue. If this sector becomes organized, then these skills will have been acquired and pre-packed, and the human resources will become skilled, talented, and eligible resources to serve for quality (Komm *et al.*, 2021).

Conclusion

Prospects of human resources in the construction sector are high.

The results of the questionnaire study supported the hypothesis framed as per the secondary data existing in literature, that 'Human Intervention is a must in a construction company'. Without human resources, construction companies cannot exist. Even though the construction process is being modernized, computers and machines require human intervention to

function appropriately. The responses to the first couple of questions support the fact that the human resource availability and the scope for their enrolment is enormous in the present scenario. The recognized problem is that, in the absence of multi-skilled laborers, the option or chance for low-skilled persons to get enrolled in construction projects remains high (Vance, 2006).

There is a high demand for talented and multi-skilled workers

The responses for question number 6, support the fact that there is a lack of talented and multi-skilled workers in the present scenario in the construction industry.

Lack of Job satisfaction and career growth

Based on the results obtained for Section II - question 4 to test worker's job satisfaction in construction organizations a conclusion was derived that only for a few exceptions most of the workers are not satisfied with their work, either experiencing a sort of bully from superiors or disliking the environment and nature. There is frequent job quitting by workers in such cases.

Based on the results obtained for question 5 regarding the worker benefits, incentives, and motives received by the employees, the fact that was understood is that the majority of workers are denied and don't enjoy any reasonable job incentives or family welfare schemes raised from their companies. Also, there is a lack of career growth opportunities. With long tiresome working hours and burdens without any attractive rewards, there is always much chance of developing misunderstandings with superiors and co-workers (Bryan Lufkin, 2021). A state of indifference builds up. They can cause internal strikes, material damage, or job quitting. This eventually affects the company's growth and reputation. Being an unorganized sector, there are no fixed working hours, a fixed set of needed skills among workers, fixed eligibility criteria to be checked while recruitment or staff outsourcing by the company, etc. All these pose a great challenge for the construction company.

The existing Staffing process is not efficient.

Being an unorganized sector, there are no separate certification courses available at present, and thus candidate selection based on their certificates is not given priority. Mostly their selection during recruitment is based on the ability of the candidates to show cast their experience, talents skills, etc., orally by themselves or through any recommendations or references. Above all any candidate has more chances of being recruited by quoting comparatively low wages than his opponents during the recruitment process. Thus undergoing a certification process or pre-testing of skills that the candidate claims to possess is given only

second-level importance when compared to his ability to accept low-wage packages. Hence based on the above findings it can be rightly stated that the existing staffing process is not efficient in recruiting worthy candidates based on skill set and talents. **So the statement about efficient staffing is rejected.**

Need for an organized staffing process.

An organized staffing process is essential for the success of construction projects (Myrna Gusdorf, 2008). From the analysis of the results for question number 7 on staffing, the following conclusions can be derived.

Since the industry is mainly unorganized with no decided platforms to follow for recruitment, the quality and standard could not be maintained in construction industries due to the lack of needed skills and efficiency prevailing with most employees. Hence this poses a challenge in delivering quality finished construction projects. Without the ability to supply quality products, a sector cannot prove itself to be one of the main sources for the financial and social development of a nation. Unlike in the past, the construction sector may fail to remain the major GDP decider of our country in the future, if the quality is not upheld. So there is a need for a change in staffing pattern followed by frequent training.

Analyzing the changing patterns

The study hypothesis accepts that there is good scope and demand for HR in the construction industry. However, there is a high demand for multi-skilled, multi-talented, multi-tasking workers. The claimed skill levels by applicants should be test-proven, and a pre-requisite during the pre-recruitment period. Internal assessments are important for imparting need-based training. The pattern of the staffing process has a high influence on the organization's growth and on workers' job satisfaction. At present staffing processes are based on recommendations and low-wage quoting. Hence skilled workers are expected to be less in the working environment. With fewer skilled laborers, production suffers, and wages and other rewards by employers become minimized. With worker benefits being minimal, job satisfaction among laborers is down causing increased staff quitting. Skills and talents and Multi-tasking develop with experience in specific job types. While years of experience in a company build up, the multi-tasking skills and talents of the person also get improved. However, at present, the proportion of experienced workers in a construction company is notably less due to the high rate of job quitting annually. With job quitting, the gaining of experience and skill levels by workers suffer. Job quitting may

be due to several other reasons apart from unattractive wages like lack of career growth opportunities, job insecurity, health and safety risks, etc.

60% of responses for item number 1.2 of Section II support the fact that machinery involvement is much higher than human requirement comparatively. Obviously, with modernization, the automation trend in the construction sector will reduce the need for human resources (Haitao Wu, 2022; Lopes, 2008). This is much reflected in the observed results of the study regarding the changing trends in the construction industry. There is always a chance that at specific levels of the construction process, the human resource requirement for companies may go down in the future due to automation. This again will create a demand only for highly skilled, trained, and talented experienced candidates who can tackle unprecedented problems efficiently and contribute to product quality and organization growth.

Post-recruitment is the real period when the company can realize the true actual ability of the recruited human force, since most of the time recruitment process is mostly taken up in contractual mode where less attention is given to pre-testing the abilities required from the candidates. One of the reasons for not creating permanent posts is also because the efficiency level of the human force is not up to the expectation of the company and hence the employment posts are mostly of floating nature presently.

Suggestions

Obviously, companies never opt for creating permanent posts for less skilled laborers. The transformation of an unorganized construction sector to an organized sector very much needs the creation of permanent employment posts which demands quite meritorious qualifications from candidates. Simultaneously, the recruitment process must be highly organized or channelized too. Hence certification courses and the generation of reliable experience certificates that stand out as a testimony of efficiency for a construction industry candidate must come into existence.

Hence certification courses supported with high-level apprenticeship should be mandatorily created to produce a skilled human workforce to meet the demands and expectations of the construction industry. A high wage package proportionate to various levels with additional rewards will be a possibility only in an organized sector. It is suggested that companies should modify their recruitment process in line with the above needs.

The staffing process should follow an organized pattern.

- Candidates with specific skills should be preferred

- Talented and multi-tasking applicants should be offered a permanent position
- Skill testing is conducted as part of the recruitment process
- Certificate course completion made mandatory
- Experience should be taken into account
- Staffing should not be biased by recommendations
- Candidates with minimum skills can be recruited as per workplace demand and trained.
- As there are more migrants from other parts of the country to take the job offer, the risk due to communication gap in causing life loss accidents may occur. Hence recruitments of good language translators also should be considered.

To correct the prevailing situations in the construction industry, training can help a lot. Frequent motivational and skill development training to improve job talents and multi-tasking abilities should be provided. Training can help build the attitude development process.

Apart from the careful staffing process by the companies of the construction sector, modernization and automation should be brought in (Delgado, 2019; www.robotics247.com), to assist workers in making their jobs easy and interesting. Rewards should be offered to win workers' positive attitude.

References:

1. Alaloul, W.S.; Musarat, M.A.; Liew, M.; Qureshi, A.H.; Maqsoom, A. 2021, Investigating the impact of inflation on labour wages in Construction Industry of Malaysia. Ain Shams Eng. J.
2. Asmus Komm, Florian Pollner, Bill Schaninger, and Surbhi Sikka (2021). The new possible: How HR can help build the organization of the future. People and Organizational performance. Mc Kinsey and Company. <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/the-new-possible-how-hr-can-help-build-the-organization-of-the-future>
3. Bryan Lufkin, (2021). Why do we buy into the 'cult' of overwork? Work Life. <https://www.bbc.com/worklife/article/20210507-why-we-glorify-the-cult-of-burnout-and-overwork>
4. Danica K. Knight, Jennifer E. Becan, and Patrick M. Flynn (2013). The Impact of Staff Turnover on Workplace Demands and Coworker Relationships. Counselor (Deerfield Beach). 2013 May-Jun; 14(3): 20–23.

5. Haitao Wu, Heng Li, Xin Fang, Xiaochun Luo, 2022, A survey on teaching workplace skills to construction robots, Expert Systems with Applications, Volume 205, 1 November 2022,[for multi tasking skills]
6. Hossein K., Dadi G. B., Goodrum P., Srinivasan C. (2018). Impact of skilled labor availability on construction project cost performance. *Journal of Construction Engineering and Management*, 144(7), 1–10.
7. https://www.robotics247.com/article/how_ai_artificial_intelligence_drones_can_improve_construction_site_safety).
8. <https://www.thomas.co/resources/type/hr-blog/candidate-selection-criteria-process-and-examples>
9. Human Rights at Work 2008 - Meeting the accommodation needs of employees on the job. Ontario Human rights Commission, Third Edition.
10. Husseini A. A. (1992). The importance of Manpower training and management to the construction industry. In Olateju B. (ed.), *Proceedings of the National Seminar on Effective Contract Management in the Construction Industry* (pp. 119–130).
11. J Ford, M Jepson, A Bryman, T Keil, M Bresnen, A Beardsworth, 1983, Management of recruitment in the construction industry, International Journal of Project Management, Volume 1, Issue 2, May 1983, Pages 76-82
12. Jill Wells, 1984, The construction industry in the context of development: A new perspective, Habitat International, Volume 8, Issues 3–4, 1984, Pages 9-28
13. Juan Manuel Davila Delgado, Lukumon Oyedele, Anuoluwapo Ajayi, Lukman Akanbi, Olugbenga Akinade, Muhammad Bilal, Hakeem Owolabi (2019). Robotics and automated systems in construction: Understanding industry-specific challenges for adoption, Journal of Building Engineering, Volume 26, <https://doi.org/10.1016/j.jobbe.2019.100868>.
14. Lopes, J. 2008, Investment in construction and economic growth. In Economics for the Modern Built Environment; Taylor & Francis: Oxford, UK, 2008; pp. 94–112
15. Mary Jones (2019). Why is Employee Reward and Recognition Important?Pentarium HR Blog (2022 Updated). <https://petaurumsolutions.co.uk/blog/why-are-employee-rewards-and-recognition-so-important/>

16. Masoud Norouzi , Marta Chàfer , LuisaF. Cabeza , Laureano Jiménez , Dieter Boer, 2021, “Circular economy in the building and construction sector: A scientific evolution analysis”, Journal of Building Engineering, Volume 44, December 2021
17. Müge Tetik ^a, Antti Peltokorpi ^a, Olli Seppänen ^a, Jan Holmström, 2019, Direct digital construction: Technology-based operations management practice for continuous improvement of construction industry performance, Automation in Construction, Volume 107
18. Musarat, M.A.; Alaloul, W.S.; Liew, M. 2020, Impact of inflation rate on construction projects budget: A review. Ain Shams Eng. J. 2020, 12, 407–414
19. Myrna Gusdorf (2008). Recruitment and Selection: Hiring the Right Person. Staffing Management instructor’s Manual. Society for Human Resource Management. SHRM Academic Initiatives, USA. Pgs 15.
20. Nakhon Kokkaew, Noppadon Jokkaw, Vachara Peansupap, Warit Wipulanusat, 2022, Impacts of human resource management and knowledge management on non-financial organizational performance: Evidence of Thai infrastructure construction firms, Ain Shams Engineering Journal, Volume 13, Issue 6, November 2022
21. Naser Hoboubi, Alireza Choobineh, Fatemeh Kamari, Ghanavati, Sareh Keshavarzi, Ali Akbar Hosseini (2017). The Impact of Job Stress and Job Satisfaction on Workforce Productivity in an Iranian Petrochemical Industry, Safety and Health at Work, Volume 8, Issue 1, 67-71
22. Qarnain et al. 2021, The construction sector plays an imperative role in economic growth and helps reduce the unemployment gap.
23. Robert J. Vance (2006). Employee Engagement and Commitment A guide to understanding, measuring and increasing engagement in your organization, Society for Human Resource Management (SHRM) U.S.A.