

Labor Satisfaction at Work Sites – Considerations for Construction Industry Management

Danish Ahmed Khan
COMSATS Institute of Information Technology

Shahid Iqbal
COMSATS Institute of Information Technology

Abid Saeed
COMSATS Institute of Information Technology

Muhammad Zahid Iqbal
COMSATS Institute of Information Technology

The lot of poor laborer requires improvement in the developing world. He toils from morning till the day end in unwholesome conditions. In Pakistan the situation is made worse by the too hot weather and very meager pays. Most of the unskilled labor is illiterate and cannot fend for its rights. This paper is about how we can improve the worker's conditions, what kind of problems the labor in reality faces and the factors that can help in the mitigation of labor related problems and issues at work-sites. During the initial phases of the research process, field study interviews were conducted at sites which helped in the development of a detailed structured questionnaire in the local lingua franca "Urdu". The major problems identified were: Insufficiency of pay to meet daily requirements, the negative supervisory attitude, excessive work load, lack of training about the job, impermanent job, unavailability of unionized labor to voice concerns to authorities and lack of management concerns for the safety at the work sites. The data gathered supported the hypotheses relating these factors with the labor satisfaction.

INTRODUCTION AND LITERATURE REVIEW

Labor is the lifeblood of any construction organization. They help transform the resources into powerful structures and buildings, but it is also true that they are the most neglected part of the industry, especially in the developing world. Due to their availability in abundance, they are exploited to the fullest (Bartlett and Ghoshal, 1998). As in this research paper, labor satisfaction and labor issues are investigated at work sites, by dictionary definition issue means a vital unsettled matter or a dispute needing resolution. Labor issues connote the surfacing of a labor related problem at the work site and this may or may not be settled as yet. Why such issues surface and do they result in general negative perceptions and dissatisfaction about the place laborers work constitute the dependent and independent variables of this study. Previous research work confirms that the employee dissatisfaction is measured in a number of

ways (Jewell and Siegal, 1990), (Vecchio, 1980), (Oskamp, 1984) but in this research as we strived to find the dissatisfaction with present working conditions for the laborers at their present construction sites, our dependent variable implies laborer perception that it is hard to work at the present site, his quitting intention, the awareness of routine surfacing of the problems at the site and awareness that other laborers are also dissatisfied. Labor dissatisfaction in these spheres can be linked with the labor performance and surfacing of wider socio-economic concerns later on (Youngblood et al. 1984; Böckerman and Ilmakunnas, 2008; Jiang et al. 2009).

As to why these perceptions form, it is due to what a worker experiences at the micro level, i.e. at the construction site, but the root causes again may be present at the wider macro level, i.e. in poverty, violence, hazardous working conditions, joblessness, social injustices and suppression of human rights etc. These factors can directly relate with the independent variables of study. As the sphere of this paper is only to gaze at the micro level, we find that even the basic amenities are not taken care of at the places of work. International Development Exchange Corporation (2009) in its report explains the exploitation of workers in Rajasthan, India as “Faced with extremely harsh working conditions, neglectful mining companies fail to provide (laborers) with water, shade, first aid, or safety equipment”.

Apart from equipment and safety the other factor contributing to the dissatisfaction of the worker at the place of work is the wages he receives for his work. The reports referenced here confirm the exploitation of labor by the hand of construction companies in the form of low wages in the developing world. One such report issued by the International Labor Office, Geneva (Msita, 2005) examines the situation in West Africa, where workers were getting minimum wages as per law but these wages are exclusive of hours worked on Saturdays, Sundays and overtime payments. Human Rights Watch another international organization of repute (2006) confirms in its report that within a gulf state, the executive has been unwilling to put in place a minimum wage for the migrant worker, despite a mandate in the law dating from 1980 and thus labor tensions do arise from time to time. Doing their groundwork in Europe, Alberto Castro and José M. Varejão (2007) in their book “Operating Hours, Working Times and Employment in Portugal” present the new world scenario where the employers are under pressure to increase the length of working hours thus putting undue pressure on their workforce to fulfill the demand and responsibilities.

The most prominent issues of labor health, loss of job and poor performance are linked directly to the harsh attitude of the employers. Stress and stress related symptoms, repetitive work, health anxiety, (Haahr, 2007) all stem from the lack of leadership quality at the work place. Poor leadership also produces the mental strain and this manifests itself in the form of mental fatigue, psychosomatic disturbances and illnesses (Andriessen and Vartiainen, 2006). Babin et al. (2005) relates trust, responsibility, ethicalness of peer’s behavior and the perceived consequences of violating ethical norms to role stress, job satisfaction and organizational commitment. They are of the view that these ethical constructs followed at a workplace provide advice for operational practices.

Training does affect the labor performance especially of the novices. The well-trained workforce is more comfortable about their work and hence more productive and satisfied (Jun et al. 2006; Koys, 2001). In the construction industry as well where you employ labor for manual and machine chores, some training in the field is a must. This reduces stress and better adjustments at the workplace. Literature does also points and compares the job commitment, satisfaction and performance of temporary versus permanent employees (Ellingson et al. 1998), (Booth et al. 2002). It has been stated that due to this difference in the nature of jobs, the long term and short term goals of these employee types are different. If these types of employees are poorly managed, it would translate into low commitment, satisfaction, and performance (Von Hippel et al. 1997).

The management literature does also complain about the lack of real policies for the labor class even at the international stage of WTO Patrick F. J. Macrory et al. (2005) writes that “the WTO is virtually silent on labor issues. The single exception is article XX (e) of the GATT. This article permits but does not require countries to exclude goods made by prison labor. Should this silence be broken?” Leafy (2001) expostulates against the exclusion of organized labor/management issues from the principal arenas for business ethics study and voice some remedies for improvement including labor officials as guest

speakers and members of business school committees. From Indonesia we get the philosophy of Pancasila meaning principles of harmony emphasizing the state cannot function ignoring the labor issues and the government, labor, and management are expected to work cooperatively to achieve overall national development goals, including the establishment of social justice and an equitable apportionment of the fruits of economic progress (Levine, 1997).

In Pakistan, the construction worker faces a multitude of problems. The situation is exacerbated by illiteracy and poverty. According to the latest statistics the literacy rate in Pakistan is just around 50% with the definition of literacy as a person of age 15 and over, who can read and write. The total labor force is 50.58 million with official unemployed being 7.4% and the population below the poverty line is 24% (CIA Factbook).

In light of the above information and the unstructured interviews undertaken by the research team at the construction work sites, the similar set of variables were isolated. From this exercise the following research hypotheses were formulated

HA1: The satisfaction level with working conditions of construction workers is related with the provision of safe work environment at the worksites.

HA2: The satisfaction level with working conditions of construction workers is related with the attitude of their immediate supervisor.

HA3: The satisfaction level with working conditions of construction workers is related with the contentment with the salary they are receiving for their work.

HA4: The satisfaction level with working conditions of construction workers is related with the perception of the bearable work load at the worksites.

HA5: The satisfaction level with working conditions of construction workers is associated with the lack of training they receive for his/her job.

HA6: The satisfaction level with working conditions of construction workers is associated with the unavailability of labor union to voice labor concerns at the worksites.

HA7: The satisfaction level with working conditions of construction workers is associated with him being permanent or temporary at the worksites.

METHODOLOGY

Sampling

Data was collected from seven work sites on random days of a month. The systematic sampling technique was applied for the respondent selection. On a particular day of the field visit, a list of all workers at the site was procured from the supervisory engineer; every third worker was selected for filling out the questionnaire. As the labor force had little to no comprehension of English and some workers were illiterate, the questionnaire was first translated in Urdu – the local language. The research team member took the questionnaire to the valid individual and helped him fill it.

The work sites were operated by six leading construction companies in Islamabad, Pakistan. A different cadre of labor jobs was included as Figure 1 and table 1 explains the distribution of respondents at the work sites along with their jobs and average monthly income. The result of the activity was 134 filled questionnaires. As can be discerned from the table the masons and skilled masons form the largest group with around seventy percent representation – the most dominant group in work force. Then out of the total of 134 there were also 14 carpenters – only present at the advanced phase sites and welders, electricians, plumbers and painters, etc. The average monthly salary was highest of the skilled mason

group amounted to around US\$132/month. According to the foreign exchange conversion rate of time it summed up to approximately 12,000 Pakistani Rupees local. The minimum wage was that of guards, painter helpers and such cadre of jobs and amounted to just 7000 Pakistani Rupees/month at the time.

FIGURE 1
THE PERCENTAGE OF WORKERS FROM EACH CONSTRUCTION SITE

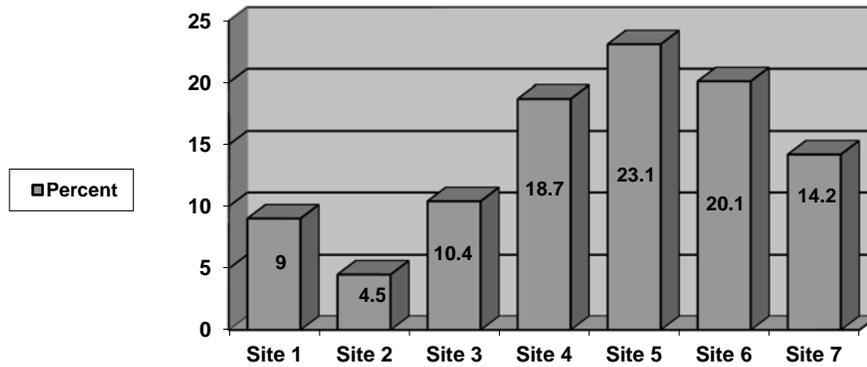


TABLE 1
RESPONDENT'S JOB TYPE AND AVERAGE PAY FROM THE SEVEN CONSTRUCTION SITES

Job Nature	Frequency	Percent	Average Monthly
			Salary - \$US
Carpenter	14	10.4	122.22
Electrician	3	2.2	122.22
Foreman	2	1.5	122.22
Guard	1	.7	77.77
Mason	40	29.9	101.16
Mechanic	1	.7	122.22
Operator	1	.7	77.77
Painter	3	2.2	111.11
Painter Helper	4	3	77.77
Plumber	3	2.2	122.22
Skilled Mason	60	44.77	131.68
Welder	2	1.5	122.22
Total	134	100.0	109.22

Measures

The elements of Worker's Satisfaction at Work Site as mentioned in the introductory section are (i). Labor's perception that it is hard to work at the present site, (ii). His quitting intention, (iii). Awareness that other laborers are also dissatisfied and (iv). The awareness of routine surfacing of the problems at the worksite. To measure the first independent variable, Safety Discerned at Worksites, two questions concerning the company's provision of safe working conditions at site and safety rules being followed at the work site were enquired. The perception about the attitude of the worker's immediate supervisor was measured by asking whether the supervisor being (i). Friendly, (ii). Helpful and (iii). Respectful.

The perception of satisfaction with the salary was measured by four items i.e. (i). Wages I receive are in accord with the standards set by the government. (ii). I am happy with the amount of money I receive as my pay. (iii). I cannot meet my end needs with pay. (iv). The money given out here to workers is equitable with their work. The variable "The bearable work load" was measured using a single item "I am satisfied with the work load i.e. hours/week". A five point likert scale was used against all of these items. The reliability of the measures was assessed by checking for the Cronbach's alpha coefficient. The four itemed dependent variable – Worker's Satisfaction with Working Conditions showed the value of coefficient .81. The four itemed Satisfaction with Pay resulted in the value of .806 and three itemed and two itemed Supervisory Attitude and Safety Discerned at Work Site scored .818 and .754 respectively. The factor analysis output showed a single component for all variables except the dependent variable. The two items showing adverse values were removed (Not shown in the items section) before the analysis. The other variables, Permanency of Work, Training Received for Job and Availability of the Labor Union to Voice Concerns were captured using dichotomous scale as the answers required were in either yes or no.

Regression and correlation was applied to check the relationship in the first four hypotheses. For hypotheses five to seven non parametric chi square test and an independent sample t-tests were applied for the calculation of significant mean difference among the values of dependent variable of two groups of labor: Permanent and temporary, trained and untrained and part of or otherwise of labor union.

It is imperative to state here that most of the items were positively worded in the questionnaire, therefore reverse coding was applied to negatively worded items of the dependent variable, and one item of dissatisfaction with pay as this was negatively worded in the questionnaire.

RESULTS

The purpose of this research was to find out the significant relationships of various independent variables with positive perceptions of workers about their worksite, the correlation analysis showed needed significant relationships. The correlation values between the dependent and independent variables are: Satisfaction with Pay (.595**), Supervisor's Attitude (.548**), Bearable Work Load (.509**), Safety Discerned at Work Sites (.476**). The values are shown in descending order in the table 2 below. Thus the first four hypotheses of this research were substantiated.

Multiple linear regression was also run on the data and the R Squared value of .465 indicates that this much fraction of variance is explained by the model with the F value of 28.03 significant at .001 level. Satisfaction with Pay influences most variance in the Worker's Satisfaction with Working Conditions with the beta value of .375 significant at .001 level. The beta values of other variables are also significant with most importantly Supervisor's Attitude showing the beta value of .242 significant at .01 level as shown in the table 4.

TABLE 2
CORRELATIONS BETWEEN VARIABLES UNDER STUDY

	WSWS	SP	SA	BWL	SDWS
Worker's Satisfaction at Work Site (WSWS)	1				
Satisfaction with Pay (SP)	.595**	1			
Supervisor's Attitude (SA)	.548**	.551**	1		
Bearable Work Load (BWL)	.509**	.495**	.535**	1	
Safety Discerned at Work Site (SDWS)	.476**	.489**	.482**	.401**	1

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

For the other variables, two recommended tests – chi square and independent sample t-test were applied to check the difference in satisfaction level of Permanent versus Temporary, Trained versus Untrained and part of Union and otherwise of groups of the laborer. There is a marked difference in the mean satisfaction level – the dependent variable of all these groups and results are statistically significant as well as shown in figure 2 and table 3: Columns 4, 5 and 6. Table 3 provides t-values of laborer groups with their significance level and these are 2.58, 3.4 and 3.12. The chi square values between the dependent variable and Permanent versus Temporary Workers (57.31), Trained versus Untrained (42) and Unionized versus Non-unionized (57.45) with fifteen degrees of freedom are all significant at .001. Hence the remaining hypotheses testing associations were also proved.

FIGURE 2
MEAN DIFFERENCE IN WORKPLACE SATISFACTION BETWEEN PERMANENT AND TEMPORARY (PER VS TMP), TRAINED AND UNTRAINED (TRD VS UNT) AND UNIONIZED AND NONUNIONIZED (UNI VS NON) WORKERS

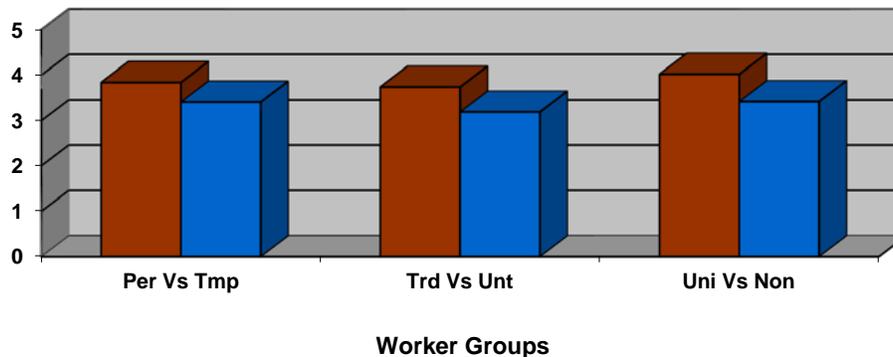


TABLE 3
EMPLOYEE GROUPS WITH X² VALUES WITH DEPENDENT VARIABLE, MEAN DIFFERENCES AND t-VALUES

Employee Groups	Chi Square Value with Dependent Variable	N	Mean Values of Dependent Variable for Each Group	t-values	Sig. (2-tailed)
Permanent Vs Temporary	57.31 Significant at .001 level with 15 degrees of freedom	43 91	3.84 3.41	2.58	.011
Trained Vs Untrained	42.00 Significant at .001 level with 15 degrees of freedom	87 47	3.74 3.19	3.4	.001
Unionized Vs Nonunionized	57.45 Significant at .001 level with 15 degrees of freedom	28 106	4.01 3.42	3.12	.002

TABLE 4
STUDY'S STANDARDIZED AND UN-STANDARDIZED COEFFICIENTS RESULTING FROM REGRESSION ANALYSIS

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.788	.272		2.900	.004
Satisfaction with Pay	.375	.098	.320	3.834	.001
Supervisor's Attitude	.242	.102	.203	2.378	.019
Safety Discerned at Worksite	.122	.064	.148	1.906	.059
Bearable Work Load	.183	.080	.183	2.285	.024

a. Dependent Variable: Worker's Satisfaction at Work Sites

CONSIDERATIONS FOR MANAGEMENT

In every organization, the productive worker is the one who is fully satisfied with the working conditions at the site. The company negligence in this sphere can lead to worker stress, burnout, turnover and employee commitment issues. The worker satisfaction due to an excellent work environment provided can have an opposite effect. Though by western standards the worker's pays are meager (See table 1) in Pakistan but whom so ever was satisfied with his salary had less negative perceptions about the company and the working conditions (A significant correlation of .595 exhibits). It is important to note that in the personal information section, the researchers do enquired about the monthly income of the individual. This showed no relationship with the dependent variable. The inference is that the workers who are satisfied with their pay regard the working environment more favorable. This view is also reinforced by the regression analysis establishing the fact that satisfaction from pay is the most important variable contributing significantly to the general positive perception about the work environment as a whole.

After satisfaction with pay the most important factor is the supervisory attitude. In our case, the more favorable it was (Supervisor exhibiting friendliness, helpfulness and respect) the general perceptions about the working conditions and satisfaction were more favorable (The correlation value of .548 significant at .001 level). In light of these results, some supervisory training is essential when someone is given charge of a work force. The good behavior training can be imparted in a very brief time frame where essential of how to deal with the laborer, understanding their queries and some basics about work can be taught over. A learned and skilled resource person would be a good investment for the company's future.

Understandably, the satisfaction with safety also affected the desirability of the work environment. The company should provide right gear, equipment and clothing to its workforce. The safety rules at worksite should be followed and a special training in this regard is essential, including first aid training, what to do in emergency and safety drills and how to handle equipment – the importance of which is being highlighted more so ever after the Tianjin explosions at an industrial warehouse on 12th August, 2015 in northern China (Bolton, 2015). The excessive work load also affected the dependent variable. The right scheduling and the right distribution of work is a must for workplace harmony. Those employees who were satisfied with their workload had a more positive perception about their workplace.

The last three variables, the impermanency of work, lack of training received for the job and unavailability of labor union also do contribute for a worker's positive or negative perception about his workplace. At labor sites such cells are required where the worker's complaints are received and are transferred to the higher authorities, and then the higher authorities are also supposed to take some visible action to look into such worker needs and complaints. Those workers who have little to no work experience do require supportive training and both on the work and off work training should be arranged. Last, but not the least, the workers who show promising output should be considered for promotion and kept on the permanent basis with the company as such workforce is indeed more satisfied as established from the research results.

LIMITATIONS

This research was an exercise to find out the problems faced by the construction workers at various worksites in and around the twin cities of Rawalpindi and Islamabad in Pakistan. This research looked into the problems faced by laborers in Pakistan from their perspective and the exploration done in the beginning of research highlighted such worker related issues. By no means the research addresses the question that why do these problems arise like is it mere negligence at the part of construction company owners that they fail to fathom the inflation in the country or an instance of an oversupply of the work force that determines the pay the labor force receives. This research gives some idea of what do labors expect at the work site and how the management can fill this gap between expectations versus reality (Both from literature review and interviewing). This research does not expound the model of labor satisfaction as such but rather explains the associated problems forming a hurdle in its achievement. Again, as the researchers did not visit the remote worksites away from the capital these problems are not all inclusive from the region and may vary from place to place even inside Pakistan as security can be a major source of workplace satisfaction where such threats occur or the problems of water sanitation at remote work sites etc. The measures were neither adopted nor adapted but were developed firsthand as workplace satisfaction and its related problems were studied primarily in Pakistan facing the construction industry; never the less, reliability and validity tests were applied and scores from these tests were within the acceptable range.

FUTURE DIRECTIONS

This research gives us an idea of what a construction worker demands and looks for at a work site. More research is needed to draw a generalizable picture from various corners of the country. This study is a start of work from where a model of construction worker satisfaction can be evolved and tested. We

also need to look at why in the very beginning these problems surface and can we have a responsible, caring and more ethically cautious senior management focusing on these issues for the benefit of their businesses and work force.

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