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DETERMINANTS OF CAPACITY UNDERUTILIZATION OF PUBLIC CONSTRUCTION WORKERS IN KWARA STATE, NIGERIA

AINA, Omotayo O

Department of Building

Obafemi Awolowo University

Ile-Ife. Nigeria.

OLATUNJI, Goodness I.

Department of Building

Obafemi Awolowo University

Ile-Ife. Nigeria.

ABSTRACT

Construction industry accounts for a sizeable proportion of most countries' National Income and capital formation but is constantly challenged with low productivity which culminates in high costs, reduced profit margins, and added risk and waste across project life cycles.The aim of this study is to determine the factors responsible for capacity under utilization.The population for this study consisted of construction craftsmen and professionals working with Kwara State Government and Federal Ministry of Power, Works and Housing in Kwara State numbering 365 of which 191 sample was selected. Data was collected through questionnaire using the 5-point Likert scale.The data was analyzed using Factor Analysis and Mean Item Score to describe variability among the factors for parsimony. Results of Kaiser-Meyer-Olkin (KMO) measure of sample adequacy (0.841> min. 0.6) and Bartlett's test of sphericity (p value >min. 0.00001)showed the suitability of factor analysis for factor extraction. Multicollinearity and overlapping of variables was overcome by suppression of variables with coefficients < 0.5 reducing the total number of factors from 32 to 22. The remaining items were grouped under nine identified components: workplace related factors; policy related factors; emergence/task flexibility related factors; management related factors; procurement related factor; job related factors; training/facilities related factors; employment related factors; task related factor .Twelve principal factors were identified by Mean item score ranking. It was concluded that the principal component factors were

management related. It was recommended that bureaucratic principles often applied by managements should be flexible to promote innovation.

INTRODUCTION

The construction industry in any nation plays a pivotal role in its economic growth and overall development. It does not only produce the nation's physical infrastructure and other productive assets which boost national productivity, quality of life and make the attainment of economic goals possible (Waziri and Bala, 2014), it is also a major employer of labour and generates one of the highest multiplier effects for investments through its extensive backward and forward linkages with other sectors of the economy (Park, 1989). The construction industry accounts for a sizeable proportion of most countries' National Income and capital formation (Hillebrandt, 2000; Dlamini, 2012).

A constant challenge in the construction industry has been the problem of low productivity which raises costs, reduces profit margins, and adds risk and waste across project life cycles (The Economic Intelligence Unit [EIU], 2015). It undermines the industry's performance goals which Aina and Wahab (2011) defined as the ability to construct a facility of the highest quality at a minimum cost and time. This problem of low productivity in the construction industry is always a cause of great concern owing to the important contribution of the industry to the national economy (Park, Thomas and Tucker, 2005).

According to Devi and Kiran (2013), construction workers are very important in national economies as they produce the infrastructure necessary for socio-economic growth and national transformation. These workers are the construction industry's most valuable asset and a key determinant of the efficiency with which construction resources are utilized (Sharmila and Nirmalkumar, 2015). Public construction workers even play more crucial role in society as they are saddled with the responsibility of planning, design, construction and maintenanceof government projects. They are expected to carry out all necessary duties to ensure that government receives the best value-for-money on all its procurement (http://www.nasarawastate.gov.ng/works.php). However ,the productivity of these people, like their counterparts in other sectors of public service, have been a source of concern as

public perception, as well as some research reports, describe them as lazy, venal and of low productivity (El-Rufai, 2012; Lawal, 2008).

Models for public sector development and economic modernization often emphasize the role of competence among public servants and capable bureaucracies as the prime mover of development. In line with this model, capacity development of the public (construction) workforce through education (tertiary and vocational) and training (on-the-job training, seminars, and professional development) have been a major policy goal of successive governments (Al-Yahya, 2005; Aniekwu and Ozochi, 2010; Dantong, Lekjep and Dassah, 2011). The underlying assumption of this approach is that once the workforce is empowered with the right knowledge and skills, the various entities in the public sector will be endowed with the ability to undertake the developmental tasks that government requires, to use resources efficiently, to solve fresh problems as they arise, and to sustain increasingly complex and sophisticated activities over time (Esman, 1991).

Scottish Government (2008) and Skills Australia (2010) observed that developing workers' skills is important but not sufficient as those skills need to be used in such a manner as to meet the organization's needs. Al-Yahya (2005) further observed that investment in human capacity expansion of the public workforce has not been proportional to economic output and organization level performance. Capacity underutilization is defined as an employee's lack of opportunity to fully use acquired capacity which constitutes knowledge, skills, abilities and other characteristics (Al-Yahya, 2007; Pisica, Caragea, Vasile, 2015).

Thus, capacity underutilization impacts the productivity and performance of not only the individual employee, but also the organization and the economy at large. Hence the need to study the determinants of capacity underutilization of public construction workers. The aim of this study is to determine the factors responsible for capacity underutilization. The objectives are to: identify factors that could influence capacity underutilization; analyse significant factors responsible for capacity underutilization; evaluate the relative significance of identified factors on capacity underutilization.

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LITERATURE REVIEW

Investment in human capital development emerged as a major component of modern organizations' drive towards greater efficiency and productivity. Human capital now occupies centre stage in public policy as many governments pursuing economic and institutional development around the world have adopted a human resource-based model of economic development (Al-Yahya, 2007, 2010; Lowe, 2002). Many of the predominant theoretical approaches such as human capital, labor economics in economics, occupational psychology, human resource development in management, and capacity development in development administration all allude to the importance of skills and abilities in attaining economic development. For example, neoclassical development economists have often argued that improvement in human capital and technological resources are necessary requirements for the growth and prosperity of societies. While organizations and management researchers are also consistent in maintaining that organizational performance or productivity and efficiency is determined by the accumulation of skills and adoption of technological innovations (Kuruvilla, 1996; Dess and Shaw, 2001;Al-Yahya, 2007, 2010).

However, it has since been realized that enabling citizens to acquire knowledge, skills and education is a necessary but no longer sufficient condition for economic success. Equally important, then, is ensuring that past investments have the intended social and economic payoffs. The next generation of policy must strive to create the enabling conditions for the use and further development of human capital at the point where it can be most fully realized —within workplaces (Lowe, 2002). Al-Yahya (2010) observed that the preoccupation of nations over the last few decades with the accumulation of human capital resources and technical capacity even led some researchers in the U.S. and some European nations to be concerned about the potential problem of "over qualification", or "over education"; that is, when some workers acquire a qualification (skill and competence) then gain jobs that do not require that qualification for recruitment.

Human capital resource underutilization has generally been examined by two groups of researchers. The economists generally focus on the *"objective underemployment"* in domestic work situations. They define underutilization in term of returns to schooling and whether skilled and knowledgeable individuals are fully absorbed by employment markets and situations when workers work in jobs where they have education or skills which exceed normal job requirements. The Sociologists and organizational behavior researchers, on the other hand, commonly focus on "*subjective or perceived underemployment"* and use self-report data to examine situations where individuals feel that their abilities are not fully utilized in their work roles. This group of researchers also draws attention to underemployment's negative impact on job attitudes and work-related outcomes such as job satisfaction, motivation, organizational commitment, and citizenship behavior (O'Brien, 1980; Feldman and Turnley, 1995; Bolino and Feldman, 2000; Lee, 2005).

Al-Yahya (2007) also noted that underutilization can occur either as a result of mismatch between job content and area of expertise or due to incompatibility between qualification level of the worker and that which the work requires. Underutilization represents not only a waste of individuals' talent but also potentially a missed opportunity for employers to increase performance and productivity, improve job satisfaction and employee well-being, and stimulate investment, enterprise and innovation (Vivian, Winterbotham, Shury, James, Hewitt, Tweddle, Downing, Thornton, Sutton, Stanfield and Leach, 2016). The greater the level of underutilization, the lower the return from investment in human capital and the lower the benefits accruing to the organization's stakeholders, including the public, which ultimately pays for such investments and benefits immensely from the nurturing of a knowledgeable and engaged workforce. In addition, motivational energy is likely transformed into adverse reaction—stress, passivity, frustration(Al-Yahya, 2007).

Wright and Sissons (2012) identified drivers of workforce capacity underutilization as poor conception of work, corporate strategies (business models competing on cost rather than quality), Poor management and understanding of skills needs, High turnover of staff, Employee demand for flexible working/ work-life balance and forms of work organisation and management techniques based on Taylorist forms of job design which give workers

little task autonomy, discretion or flexibility. They identified other barrier factors to better utilization of workers capacities as: employers unawareness of the practical benefits of better skills utilization (to themselves, their employees and the wider economy), they may see skills utilization as irrelevant to them, and/or see job design as a cost (in terms of training or higher wages); skills utilization is interdependent on the wider economic development policy being pursued by a nation; the lack of intermediate level economic development and business support agencies; and, lack of representation of employees in skills policy formulation.

Bolino and Feldman (2000) identified the following as factors inhibiting the effective utilization of expatriate skills on oversea assignments: inadequate computing technology; poor career planning; cultural distance; poor teamwork in cross functional groups; corporate restructuring; lack of logistical support; suspicion and distrust; language barriers; lack of authority and responsibility; unclear or unspecific goals; lack of technical /functional training and mentoring; firefighting mentality. In Sung, Loke, Ramos, and Ng (2011)research on skill utilization in Singapore, they found that the job environment greatly impacts the extent to which employees are able to use their skills at work. Three factors were identified as either facilitating/inhibiting the effective utilization of skills in Singapore, they are: task discretion (organizations that are high bound by rules and demarcation of job descriptions tend to hinder the opportunities to utilize a higher level of skills through discretionary effort); Workplace involvement (extent of consultation and participation that the job allows in decision making); Worker commitment (worker commitment to workplace).

Vivian *et al.,* (2016) found the commonest reasons for underutilization in UK as follows: lack of interest in taking on higher level role; working hours suit them better; lack of jobs in desired higher level role; to gain experience / current role is lower level in same industry as desired higher level role; They own the business / are a partner in the business; temporary role / stop gap; attractive conditions of employment; competition for higher level roles / struggling to get higher level job; actively seek staff with qualification / skills beyond needs; family-run business; qualifications / skills not relevant to job role; they have more than one job; no particular reason / it just happened .Pisica, Caragea, Vasile (2015) also noted that

some feature of the employer or workplace can influence underutilization of the workers such as inadequate equipment, insufficient training, or poorly organized working arrangements.

The investigation of Al-Yahya (2005) identified the following as factors inhibiting effective utilization of the capacities of public sector workers. They are: unchallenging nature of work; too many organizational regulations and hierarchal levels; lack of recognition and utilization of employee skills and capacities; Limited opportunity to choose a work team with which to work (self-managing teams); lack of facilities (office space, modern office equipment) to do my job; limited authority to organize and manage my own work inthe way I think best; Promotion was highly linked with seniority; limited opportunity for extra schooling and/or training to gain more knowledge and skill; limited influence and participation in the decision making and policymaking; limited interaction and cooperation with others; lesser trust is bestowed on me; job content does not match with my area of expertise; limited decision power and autonomy; Communications and information sharing are less open and flexible; more accurate and fair standards for performance assessment; negative customs and practices (e.g., nepotism and favoritism) are prevalent; limited acceptance for different opinions and more freedom of choice and expression.

METHODOLOGY

The population of the study consisted of construction craftsmen and professionals working with the Kwara State Ministry of Housing and Urban Development, Kwara State Ministry of Works and Transport as well as the Federal Ministry of Power, Works and Housing (Works and Housing sectors) in Kwara State. These craftsmen, technicians and professionals were drawn from five departments of the ministries namely: Building; Civil/Highway Engineering; Electrical Engineering; Mechanical Engineering; Urban and Regional Planning. The craftsmen considered for this study were Bricklayers, Carpenters, Electricians, Painters, Plant operators and drivers, Plumbers, Steel fixers and Tilers while the construction professionals were Architects, Builders, Engineers, Quantity Surveyors and Urban and Regional Planners. The study population is as shown in the Table 1 below:

Table1: Study Population

S/N	Study Group	Cadre	Kwara State Ministry of Housing and Urban Development (Building Services and Urban and Regional Planning Department)	Kwara State Ministry of Works and Transport (Civil, Mechanical Department)	Federal Ministry of Power, Works and Housing (Works and Housing Sectors)	Total
1	Construction Craftsmen& Technician	04-07	20	52	36	**108**
2	Construction Professionals	08-12	82	148	27	**257**
					Total	**365**

In order to ensure an unbiased representation of the craftsmen, construction professionals and directors in the study, astratified random sampling technique was adopted for the study. The sample size will be determined using Taro Yamane formula for finite populations (Odesola and Idoro, 2014) shown in equation 3.1.

$$n = \frac{N}{1+N(e)^2}$$ ---------- Equation 3.1

where n is the sample size, *N* is the finite population, *e* is the level of significance (0.05) and 1 is unity.

$$\text{Sample size for this study (n)} = \frac{365}{1+365(0.05)^2} = 191$$

Thus, the sample size for the study is 191 and distributed as shown in Table 2 below:

Table 2: Sample frame and size

S/N	Study Group	Cadre	Kwara State Ministry of Housing and Urban Development (Building Services and Urban Regional Planning Department)		Kwara State Ministry of Works and Transport (Civil and Mechanical Department)		Federal Ministry of Power, Works and Housing (Civil and Mechanical Department)		Total Sample Size
			Sample Frame	Sample Size	Sample Frame	Sample Size	Sample Frame	Sample Size	
1	Construction Craftsmen &Technician	04-07	20	**11**	52	**27**	36	**19**	**57**
2	Construction Professionals	08-12	82	**43**	148	**77**	27	**14**	**134**
	Total								**191**

The factors affecting the capacity underutilizationof public construction workers in the study areawere determined using the ratings indicated by respondents on a 5-point Likert scale. On the Likert scale, the value of 5,4,3,2 and 1 represented most significant, highly significant, significant, fairly significant and least significant. The data was analyzed using Factor Analysis and Mean Item Score methods of analysis. It was used to describe variability among the factors in order to group the factors with similar patterns of responses together.

RESULTS AND DISCUSSION

The factors influencing the capacity underutilization of public construction workers were rated by respondents using a five-point Likert scale as follows: 'Least significant,' 'Fairly

significant,' 'Significant,' 'Highly significant,' and 'Most significant' with weight values of 1,2,3,4 and 5 respectively. The responses were examined using factor analysis, with Principal Component Analysis (PCA) as the method of extraction and Varimax with Kaiser Normalization as the method of rotation. This was used to determine which group or theorized constructs identified in the research instrument are responsible in influencing capacity underutilization of public construction workers and to also determine which factors are to be removed so as to reduce the number of factors to only significant ones.

The suitability of factor analysis for the factor extraction was determined by calculating the Kaiser-Meyer-Olkin (KMO) that measures the sampling accuracy and anti-image correlation that determines the strength of relationship among the variables based on partial correlation coefficients. The Kaiser-Meyer-Olkin (KMO) measure of sample adequacy was 0.841 which exceeded the minimum of 0.6. The Bartlett's test of sphericity also yielded a p value of 0.000 which is greater than the recommended minimum value of 0.00001. Thus, both result indicated that factor analysis was appropriate for the factor extraction (see Table 3).

Table 3 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.841
Bartlett's Test of Sphericity	Approx. Chi-Square	1873.823
	Df	496
	Sig.	.000

The Eigen values of each component explained the amount of variance of the component in the original variables. By Kaiser's criterion (Field, 2005) seven factors with eigenvalues greater than 1, were extracted. The factor loadings of the items are presented in (Table 4.38). Initially, there was no consistency in the observed pattern due mainly to multi collinearity and overlapping of variables. This was however corrected by eliminating the variables that were highly correlated with each other and variables with coefficients less than 0.5 were suppressed in order to optimize the factor loadings and correct for the overlap.

Factors eliminated include: lack of representation of employees in skills policy formulation; insufficient demand for organization's services; qualification/skills not relevant to job role; limited interaction and cooperation with others; prevalence of negative customs and practices (e.g., nepotism and favoritism); limited acceptance for different opinions and freedom of choice and expression; job content does not match with my area of expertise, unclear or unspecific goals; non-availability of fund for implementing planned annual production. This reduced the total number of factors from 32 to 22. The remaining items were grouped under the nine identified components as shown in Table5.

From Table 4, it is observed that the first group which is represented by the first component had an eigenvalue of 10.506 and accounted for 32.831% of the observed variance. The second group had an eigenvalue of 1.872 and accounted for 5.848% of the observed variance; while the eigenvalues and percentage of observed variance of group 3, 4, 5, 6, 7, 8 and 9 are as shown in Table 4. For this study, the group of factors with an eigenvalue of 5.0 and above was taken as the principal factor, however only the first group met this requirement and was hence considered principal factor.

Table 4: Total Variances Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.506	32.831	32.831	10.506	32.831	32.831	3.387	10.584	10.584
2	1.872	5.848	38.680	1.872	5.848	38.680	3.207	10.022	20.605
3	1.628	5.086	43.766	1.628	5.086	43.766	3.006	9.394	29.999
4	1.422	4.443	48.209	1.422	4.443	48.209	2.641	8.253	38.252
5	1.369	4.278	52.487	1.369	4.278	52.487	2.139	6.683	44.936
6	1.288	4.024	56.511	1.288	4.024	56.511	2.000	6.250	51.186
7	1.169	3.652	60.163	1.169	3.652	60.163	1.924	6.013	57.199
8	1.125	3.515	63.678	1.125	3.515	63.678	1.738	5.432	62.631
9	1.098	3.431	67.109	1.098	3.431	67.109	1.433	4.478	67.109

It can therefore be observed that the five factors in component (group) one are significant factors influencing capacity underutilization of public construction workers in Kwara Stateas each of the factors on its own explains more variance than a single variable. The five principal factors that can influence the capacity underutilization of public construction workers after extraction is as shown in Table 4 are as follows: inadequate computing technology; too many organizational regulations and hierarchal levels; lack of recognition and proper utilization of employee skills and capacities; inadequate tools and equipment for assigned task; suspicion and distrust.

The nine components extracted were named as follows: workplace related factors; policy related factors; emergence/task flexibility related factors; management related factors; procurement related factor; job related factors; training/facilities related factors; employment related factors; task related factor. The contents of these components / group are as shown in Table 5.

Table5: Grouping of Factors Influencing the Capacity Underutilization of Public Construction Workers in Kwara State

S/N	Group/ Component	Factors	Extraction	% of variance explained
1	**Workplace related factors**	Inadequate computing technology	.730	32.831
		Too many organizational regulations and hierarchical levels	.681	
		Lack of recognition and proper utilization of employee skills and capacities	.565	
		Inadequate tools and equipment for assigned task	.521	
		Suspicion and distrust	.512	
2	**Policy related factors**	Employee demand for flexible working/work-life balance	.756	5.848

		Poor management and understanding of skill needs	.753	
		Poor implementation of existing policies	.551	
3	**Emergency/Task Flexibility related factors**	Fire fighting mentality	.775	
		Employees' not interested in taking on higher level role	.564	5.086
		Strict demarcation of job description	.556	
4	**Management related factors**	Top management style non-supportive of innovation	.784	
		Slow decision making due to long process and excessive paper work	.687	4.443
		Rigidity in the system hinders creativity	.648	
5	**Procurement related factor**	Works are usually outsourced to contractors	.755	4.278
6	**Job related factors**	Current role is temporary/stop gap	.789	4.024
		Lack of jobs in desired higher level role	.728	
7	**Training/Facilities related factors**	Poor facilities (office space, modern office equipments) to do my job	.758	3.652
		Lack of technical/functional training and mentoring	.682	
8	**Employment related factors**	Organisation actively seeks staffs with qualification/skills beyond needs	.740	3.515
		Attractive conditions of employment (e.g Job security)	.686	
9	**Task related factor**	Nature of work is not challenging	.861	3.431

The workplace related factors emerged as the principal factors influencing the capacity underutilization of public construction work ersas shown in Table 4.39, the factors were

inadequate computing technology; too many organizational regulations and hierarchal levels; lack of recognition and proper utilization of employee skills and capacities; inadequate tools and equipment for assigned task and suspicion and distrust.

The inclusion of inadequate computing technology indicates that the workers recognize the importance of information and communication technologies in facilitating their ability to carry out their duties. Tukur (2016) identified the use of ICT in construction as follows: general administration; tender preparation and bidding; design/drawing; bill of quantities; economic and risk analysis; data records and management; specification writing; quality plan and management. This supports the findings of Bolino and Feldman (2000) that inadequate computing technology is a leading inhibitor to the full utilization of workers' skills.

Another principal factor identified as influencing the capacity underutilization of public construction workers is too many organizational regulations and hierarchical levels. This is one of the features of bureaucratic organizations which results in slow decision-making, communication problems and inflexibility and rigidity thus increasing organizational costs, impeding performance and may result in organizational failure. This result agrees with the work of Al-Yahya (2005) which identified too many organizational regulations and hierarchical level as major cause of capacity underutilization among public workers in Saudi Arabia and Oman.

In addition, Al-Yahya (2005) also found that another crucial factor identified by public workers in Saudi Arabia and Oman is thelack of recognition and proper utilization of employee skills and capacities at the workplace. He noted that this singular factor heightens their job dissatisfaction and has lead to a high level of employee turnover in both countries. It is a situation whereby employees have acquired skills and competencies but do not get the opportunity to utilize the acquired capacity. This was also observed to be a problem among public construction workers in Kwara State although unlike Saudi Arabia and Oman, it rarely resulted in employee turnover.

Inadequate tools and equipment for assigned task is another major cause of capacity underutilization of public construction workers. It undermines an employee's ability to fully

utilize his/her skills and abilities. While suspicion and distrust was identified by Bolino and Feldman (2000) as one of the leading causes of skill underutilization of expatriate workers. It limits collaborative efforts and teamwork as each employee is suspicious of the actions of the other, it will also limit organizational learning, knowledge transfer and knowledge management since everyone will keep what he/she knows to themselves.

Appendix shows the mean item score ranking of the factors influencing the capacity underutilization of public construction workers in Kwara State. From the Table, the top twelve factors responsible for their capacity underutilization are as follows: works are usually outsourced to contractors (mean=3.34); nature of work is not challenging (mean=3.31); attractive conditions of employment (e.g job security) (mean=3.30) ; inadequate tools and equipment for assigned task (mean=3.18); lack of technical/functional training and mentoring (mean= 3.12); poor management and understanding of skill needs (mean= 3.11); poor facilities (office space, modern office equipment) to do my job (mean= 3.10); organization actively seeks staffs with qualification/skills beyond needs (mean = 3.09); rigidity in the system hinders creativity (mean=3.08); strict demarcation of job description (mean=3.08); slow decision making due to long process and excessive paper work (mean=3.06); top management style non-supportive of innovation (mean=3.05).

CONCLUSION

The most significant factors affecting the capacity underutilization of public construction workers are management related factors such as non-challenging nature of work, unattractive conditions of employment (e.g. job insecurity), inadequate tools and equipment for assigned task, lack of technical/functional training and mentoring, poor management and understanding of skill, etc. Many of the factors listed above are also part of the natural limitation of bureaucracy system of government. The study concluded that bureaucracy and other workplace related factors contribute significantly to the capacity underutilization of public construction workers in Kwara State.

RECOMMENDATIONS

It was recommended that bureaucratic principles often applied by managements should be flexible to promote innovation. Workplace and workers' welfare consideration must be of serious consideration. Hiring procedures must reflect needs of the organisations and not

nepotism or other corrupt considerations. The provision of appropriate tools and equipment for the accomplishment of tasks is *sine qua non.*

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Appendix

Mean Score of Factors Influencing the Capacity Underutilization of Public Construction Workers in Kwara State

S/N	Factors Influencing Capacity Underutilization	Percentage (%)					Mean	Rank
		LS	FS	S	HS	MS		
1	Works are usually outsourced to contractors	9.60	11.20	34.40	24.80	20.00	3.34	1
2	Nature of work is not challenging	15.32	18.55	30.65	23.39	12.10	3.31	2
3	Attractive conditions of employment (e.g Job security)	6.40	15.20	32.00	35.20	11.20	3.30	3
4	Inadequate tools and equipment for assigned task	8.00	20.80	33.60	20.80	16.80	3.18	4
5	Lack of technical/functional training and mentoring	6.40	20.00	36.80	28.80	8.00	3.12	5
6	Poor management and understanding of skill needs	8.80	15.20	42.40	23.20	10.40	3.11	6
7	Poor facilities (office space, modern office equipment) to do my job	8.80	18.40	39.20	20.80	12.80	3.10	7
8	Organisation actively seeks staffs with	12.80	11.20	39.20	28.00	8.80	3.09	

	qualification/skills beyond needs							8
9	Rigidity in the system hinders creativity	12.00	20.00	28.80	26.40	12.80	3.08	9
10	Strict demarcation of job description	10.40	15.20	40.80	23.20	10.40	3.08	9
11	Slow decision making due to long process and excessive paper work	13.60	16.80	30.40	28.80	10.40	3.06	11
12	Top management style non-supportive of innovation	8.80	23.20	33.60	23.20	11.20	3.05	12
13	Poor implementation of existing policies	11.20	16.80	40.00	21.60	10.40	3.03	13
14	Suspicion and distrust	11.20	21.60	34.40	21.60	11.20	3.00	14
15	Too many organizational regulations and hierarchal levels	13.60	20.80	31.20	21.60	12.80	2.99	15
16	Inadequate computing technology	10.40	20.80	36.80	24.00	8.00	2.98	16
17	Employee demand for flexible working/work-life balance	8.00	21.60	50.40	16.80	3.20	2.86	17
18	Fire fighting mentality	12.80	22.40	39.20	19.20	6.40	2.84	18
19	Lack of recognition and proper utilization of employee skills and capacities	16.80	20.80	33.60	20.00	8.80	2.83	19
20	Current role is temporary/stop gap	12.80	28.00	31.20	20.80	7.20	2.82	20
21	Lack of jobs in desired higher level role	13.60	24.00	37.60	19.20	5.60	2.79	21
22	Employees' not interested in taking on higher level role	13.60	24.00	37.60	22.40	2.40	2.76	22

LS=Less Significant, FS=Fairly Significant, S=Significant, HS= Highly Significant, MS=Most Significant