

# Construction Professionals Job Performance and Characteristics: A Comparison of Indigenous and Expatriate Construction Companies in Nigeria

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#### **Abstract**

Job performance is considered one of the most important constructs in human resources management because it helps to explain the value and utility that each employee adds to the organisation. This study examined the relationship between job characteristics and task performance for overall as well as facets of job characteristics. In carrying out this investigation, construction professionals (Architects, Builders, Civil Engineers, Quantity Surveyors and Services Engineers) were asked to respond to job characteristics questionnaire (JCQ) and their immediate supervisors were asked to respond to task performance questionnaire (TPQ). Data collected were analysed using Pearson correlation, correlation matrix and independent sample t- test where appropriate. Results indicate that there is positive significant relationship between overall job characteristics and overall task performance. However, when the facets of job characteristics were considered, different relationship emerged. There were stronger positive and significant relationships between facets of job characteristics and subjective task performance than objective task performance. There were significant differences in the figure of task performance score between construction professionals in indigenous and expatriate construction companies. Results indicated the importance of considering different facets with the job characteristics and task performance relationship.

**Keyword**: Construction companies, Construction professionals, Job characteristics, Job performance, Nigeria

#### Introduction

Job performance is an extremely important criterion that relates to organizational outcomes and success. Therefore, organizations design jobs to simplify employee activities at works, manage social-interpersonal daily work, and help to achieve the goal of work efficiently. Hence, the success of work design hinges on positively influencing employees behaviour and attitudes such as job performance. Task performance refers to behaviours that are role prescribed. distinguish one job from another, and contribute to the technical core of the organization (Borman & Motowidlo, 1993; Campbell, McCloy, Oppler, & Sager, 1993). Task performance involves patterns of behaviours that are directly involved in producing goods or services. The relationship between job performance and job characteristics has fascinated researchers for decades and several theoretical explanations have been posited to explain this relationship (Watt & Greguras, 2004). Despite the intuitive and theoretical appeal of the hypothesized relationship between job characteristics and job performance, the empirical support for this relationship has been mixed. Meta-analyses of the relationship between job characteristics and job performance have reported a wide range of results between overall job characteristics and overall job performance. Previous empirical studies found that job characteristics has an effect on job performance (Morgeson et al, 2006, 2008; Humphrey, 2007; Hollman, 2009; Indartono et al, 2010).

However, the empirical findings on the relationship between job characteristics and job performance are varying. For example, Fried and Ferris (1987) indicated that dimensions of job characteristics have weak relationships to job performance while Humphrey et al, (2007) found that job characteristics are related to high job performance achievement. Moreover, Humprev et al (2007) suggest the need to clarify previous findings and to investigate actively how the work change influences the relationship between job characteristics and job performance. The divergent results of these meta-analyses of ostensibly the same content domain have been attributed to several factors such as differences in judgment calls and decision rules related to study inclusion criteria, coding of studies, inaccurate corrections for unreliability, and combining multiple, distinct facets of job performance to define overall job performance (Judge et al., 2001). Another plausible explanation for the variability in reported relationships between job characteristics and job performance is the effect of different conceptualisations and operationalisations of both job characteristics and job performance. For example, it has been suggested that the relationship between job characteristics and job performance varies depending on whether performance is defined in terms of task or contextual performance (Organ, 1988). However, direct comparisons of the relationships between job characteristics and objective job performance and job characteristics and subjective job performance have been limited (Judge et al., 2001).

Because of these issues, we considered an empirical examination of the job characteristics and job performance relationship to be a meaningful contribution to the extant literature. Ajzen (2005) have suggested that the strongest attitude and behaviour relationships are obtained when the constructs are matched by level of specificity. The strongest attitude-behaviour connections are likely to result from matching specific facet-level job characteristics to specific facets of job performance, thereby enhancing compatibility. Thus, it is important to study the job characteristics-job performance relationship at the facet level because it is plausible that due to the multidimensional nature of job characteristics and job performance, there are differential relationships between facets of job characteristics and dimensions of performance. In summary, to better understand the nature of the job characteristics and job performance relationship, our objectives were to (a) conduct a direct, empirical comparison of the magnitude of the relationships between overall job characteristics (skill variety, task identity, task significance, autonomy and feedback) and task performance (objective and subjective), (b) examine the job characteristics and task performance relationship at the facet level of job characteristics and task performance, (c) to compare the figure of job performance rate of construction professionals in indigenous construction companies with those in expatriate construction companies and (d) to compare the figure of job characteristics rate of construction professionals in indigenous construction companies with those in expatriate construction companies.

#### **Job Characteristics and Job Performance**

The essence of work design is to produce work quality effects on employee well-being and job performance (Hollman, 2009). A job is defined as a collection of related positions that are similar in terms of the work performed or goals served by the organization (Brannick, Levine, & Morgeson, 2007). Work design thus refers to the content and structure of jobs that is performed by employees (Oldham, 1996). The focus of work design research tends to be on the tasks and activities that job incumbents perform on a day-to-day basis. Job characteristics are primarily attributable to the traditional focus on job design of the work itself. Recent research demonstrated the importance of job characteristics (Humphrey *et al.*, 2007; Morgeson & Humphrey, 2006). Conceptually, Morgeson and Humphrey (2008) developed job characteristics into five dimensions that make jobs more satisfying for workers. It included autonomy, skill variety, task identity, task significance, and feedback from the job. Autonomy is defined as the

freedom an individual should have in carrying out work. Whereas, skill variety is reflected as the extent to which various skills are needed for job performance. Task identity is shown as the extent to which an individual completes an entire piece of work. Task significance reflects the degree to which a job influences the lives of others, both inside and outside the organization. The last characteristic dimension of task is feedback from the job. It is the extent to which a job imparts information about an individual's performance. Empirically Fried and Ferris (1987) indicated that dimensions of job characteristics are strongly related to job satisfaction, growth satisfaction, and internal work motivation, with weaker relationships to job performance and absenteeism. Recently, the study by Humphrey et al (2007) found that all five motivational characteristics are positively related to job satisfaction, growth satisfaction, and internal work motivation. Autonomy is related to objective performance. In contrast, autonomy, task identity, task significance, and feedback from the job had non-zero correlations with subjective performance.

In order to support performance, Humphrey et al, (2007) indicated that all dimensions of job characteristics are related to high performance achievement. Recent empirical test of Morgeson et al, (2008) concluded that overall, the five job characteristics have effect on performance.

## Job Characteristics and Job Performance Relationship at Facet Level

Researchers interested in diagnosing the psychological impact of work have also identified autonomy (at the individual level) as a primary contributor to job performance. For example, self-determination theory identifies the provision of opportunities for self-regulation as one of the environmental supports necessary for the realisation of innate intrinsic motivation tendencies in human beings (Ryan & Deci, 2000). Within the job characteristics tradition of work design, employee autonomy in respect of job-related decisions has long been seen as causative in intrinsic work motivation and subsequent job performance (Morgeson & Humphrey, 2008) more recently, autonomy has been cast as a central contributor to feelings of psychological empowerment, a collective motivational state linked to job performance (Kirkman & Rosen, 1999, 2000). Beyond perceived significance, job autonomy may also enhance effort and job performance. Autonomy is intrinsically motivating, tapping an employee's desire for a sense of control, responsibility, and constructive change (Fuller, Marler, & Hester, 2006), resulting in greater effort and persistence (Morgeson & Campion, 2003). Further, job autonomy allows employees to broaden the scope of responsibility and expand the view of their own work roles (i.e., role breadth), leading to extra effort, stronger identity with the job, and better performance (Morgeson, Delaney-Klinger, & Hemingway, 2005; Wrzesniewski et al., 2003). Despite the persistence of these various theoretical traditions linking autonomy to job performance empirical evidence in support of such assertions is surprisingly inconclusive. Reviewers of research in this area have, over a number of decades, typically reported only modest and inconsistent relationships between autonomy and job performance (Guzzo & Dickson, 1996).

Conceptually, supervisory feedback seeking and relationship development should affect employees' task effectiveness because the resulting information helps them do their jobs better. Specifically, these proactive behaviours help employees understand their organizations' needs and their supervisors' expectations, prioritize their tasks appropriately, and improve organizational performance through their job contributions. In support of this logic, Morrison (1993) demonstrated a positive linkage between feedback seeking and task mastery and role clarity, while Ashford and Black (1996) found that feedback supervisory relationship development positively influenced task performance. Feedback interventions are actions taken by an external agent to provide information regarding some aspect of an individual's task performance (Kluger & DeNisi, 1996). The acceptance of feedback has been noted as a core

psychological process underlying feedback in organizations (Ilgen, Fisher, & Taylor, 1979). Ilgen et al. (1979) defined feedback acceptance as the recipient's belief that the feedback is an accurate portrayal of his or her performance. Researchers agree that before feedback can be used it must be accepted and internalized (Ashford, 1986), and as result of its theoretical importance, feedback acceptance has received extensive empirical attention (e.g., Brett & Atwater, 2001; Ryan, Brutus, Greguras, & Hakel, 2000). Researchers has suggested that feedback environment may have important effects on employees' task performance and organizational citizenship behaviour (OCB) (e.g., Kluger & Denisi, 1996; Norris-Watts & Levy, 2004; Rosen, Levy, &Hall, 2006; Steelman et al., 2004; Whitaker, Dahling, & Levy, 2007).

The task significance and autonomy aspects of the job characteristics model account for meaningful variance in job satisfaction, motivation, and both objective and subjective measures of performance (e.g., Humphrey et al., 2007). When employees know that their job assignments have a positive and meaningful impact on the lives of other people, these employees are more likely to exert effort for the successful and timely completion of job assignments (Morgeson & Humphrey, 2006). As Grant (2008) proposed, "the experience of meaningfulness [increases] job performance by motivating employees to invest additional time and energy in completing their assigned tasks"

These previous findings indicated that job characteristics have the effects of increasing task performance. Therefore, based on the previous discussion, the following hypotheses are proposed:

H<sub>oa</sub>: Overall job characteristics are not positively related to overall task performance

H<sub>1a</sub>: Overall job characteristics are positively related to overall task performance

Hob: Job characteristics (Autonomy, Skill variety, Task identity, Task significance, and

Feedback from the job) are not positively related to task performance (objective and subjective)

H<sub>1b</sub>: Job characteristics (Autonomy, Skill Variety, Task identity, Task significance, and

Feedback from the job) are positively related to task performance (objective and subjective)

H<sub>oc</sub>: There is no significant difference in the figure of task performance rate of construction professionals in indigenous and expatriate construction companies.

H<sub>1c</sub>: There is significant difference in the figure of task performance rate of construction professionals in indigenous and expatriate construction companies.

H<sub>od</sub>: There is no significant difference in job characteristics design of construction professionals in indigenous and expatriate construction companies.

 $H_{1d}$ : There is significant difference in job characteristics design of construction professionals in indigenous and expatriate construction companies.

#### **Research Method**

The research area comprised ten Nigerian states and Federal capital territory: Kano, Lagos, Oyo, Ogun, Kwara, Anambra, Kaduna, Delta, Rivers, Sokoto states and Abuja. These states were selected because Construction companies selected through the federation of construction industry directory were domiciled in these states. The target population for this study comprised core building industry professionals involved in the procurement of building projects. These

include Architects, Builders/Construction Managers, Structural Engineers, Quantity Surveyors, and Services Engineers (Electrical and Mechanical). Other built -environment professionals such as estate surveyors and town planners were excluded because of the insignificant role they play in the procurement process of building projects. The population sample was drawn from professionals in 49 indigenous construction companies and 32 expatriate construction companies, making 81 construction companies (see table 1 for details) A simple random sampling technique was adopted for construction companies. The construction firms were sampled from the list of contracting firms accredited and registered with the federation of construction industry. The population was stratified according to their operational base within the research areas and a simple random sampling of the population within each state in the research area was carried out using tables of random numbers.

# **Job Performance Measures**

When researchers study dimensions of job performance, they often measure job performance using subjective supervisor ratings. Given that individual job performance is a multifaceted and complex construct that may not be captured with subjective assessments, we included objective indicators of performance for the following reasons: First, compensation research highlights the effectiveness of an organizations objective performance measures in guiding employee behaviour as the role expectations are clearly defined (Spreitzer, 1995). Second, objective job performance measures limit both intentional and unintentional biases that occur in performance evaluation processes. In this study, modified Mustapha and Naoum (1998) and Igbaria (1991) Performance Evaluation Questionnaire (PEQ), which contains 24 attitude statements was used by supervisors to measure the performance of professionals who work directly under them. Job performance is a multifaceted term. It is not able to measure job performance by a single criterion. A set of criteria has to be employed. The study employed a more practical approach that was to select key job performance criteria from prior empirical studies. After a review of the relevant literature, two studies that had tested different sets of job performance criteria were identified.

- 1. Mustapha & Naoum (1998) studied factors influencing the effectiveness of construction site managers. Thirty sites were used for their study. Part of the research was to ascertain the multi-item measure of job performance. Supervisors were required to rate each of their site managers' employees on 11 items on a ten-point scale.
- 2. Igbaria (1991) studied the antecedents and consequences of job performance of management information systems MIS professionals. One hundred four supervisors and 94 MIS employees participated in the research. Part of the research was to ascertain the multi-item measure of job performance. Supervisors were required to rate each of their MIS employees on 17 items on a seven-point scale.

The response format originally designed by Mustapha and Naoum (1998) and Igbaria (1991) was altered. In this study, instead of the 10-point Likert scale used in Mustapha and Naoum (1998) study, and 7- point Likert scale used by Igbaria(1991), a 5-point Likert scale was used for measurement in this study, with 5 indicating strongly agree" and 1 indicating strongly disagree. Cronbach's alpha is a measure of internal reliability. This is bounded by 0 and 1, with measures closer to 1 representing strong reliability for the items in the research instrument. The job performance instrument in this study recorded a Cronbach's alpha value of 0.80. This research measured job performance objectively by calculating the percentage increase or decrease on the estimated program in weeks (%+ or % - time) and percentage cost overrun

(%+ or % - cost). This was calculated after the + or – authorized value of variations by the client was taken into account.

Job performance score: The maximum score that can be given to the respondents by their respective supervisors is  $5 \times 24 = 120$ , this was computed and recorded for each of the respondents and the aggregate scores were divided by total number of the respondents to arrive at the subjective job performance score.

#### **Job Characteristics Measures**

We measured job characteristics using Hackman and Oldham's (1975) scale. There were 11 items representing the five dimensions of job characteristics: skill variety, task identity, task significance, autonomy, and feedback. Sample items include the following: "My job requires me to use a number of complex, high-level skills"; "From start to finish, my tasks are very complete and my contribution can be seen in the final results"; "The results of my work have a significant effect on other people's lives and well-being"; "My job gives me the chance to use my personal initiative or judgment in carrying out the work"; and "My supervisor frequently discusses matters related to my job performance." The response options ranged on a 5-point Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). The Cronbach's alpha for each of the five job characteristic dimensions was .72, .56, .68, .63, and .79, respectively.

#### **Results and Discussion**

From the biographical information of the respondents presented in Table 1, civil engineers constitute the largest majority of the respondents with 20.8% and 29.1% respectively in indigenous and expatriate construction companies. Others are: architects 19.4% and 12.1%, builders 18.5% and 18.2%, quantity surveyors 17.7% and 21.3%, electrical engineers 13% and 10.3%, mechanical engineers 10.6% and 9%. This results is in agreement with the employment structure of most construction companies in the area of study. As regards the working experience of the respondents in the construction industry, 45% and 47% of the study samples in indigenous and expatriate construction companies have less than 10 years working experience in the industry, 30% and 31% of the respondents were in the age range of 10-19 years, 19% and 15% were between 20 and 29 years, 4% and 4% were in the age range of 30-39 years, while 2% and 3% respectively have more than 40 years working experience in the construction industry. This means that most of the respondents have relevant experience to make contribution to this study.

In terms of the age distribution of the respondents, majority of the respondents in indigenous construction companies 34.7% are within the age range of (31-40) years while in expatriate construction companies, majority of the respondents are within the age range of (41-50) years. The results on age distribution of respondents indicates that expatriate construction companies had in their employment older construction professionals than indigenous construction companies, this difference may explain why the rate of turnover is more pronounced in indigenous construction companies than expatriate construction companies. As regards the academic qualification of respondents, the majority of respondents, 38.9% and 36.4% had masters degree in indigenous and expatriate construction companies. Others are: higher national diploma 28.7% and 30.3%, bachelors degree 25.5% and 27.9%, Doctor of Philosophy 4.1 % and 2.4%, ordinary national diploma 2.8% and 3% respectively. The result shows that most of the respondents are well educated and are competent to answer the questions in the research instrument. In terms of professional qualification of respondents, the majority of respondents are yet to be professionally qualified, this class of the respondents represents 66.2% and 53.4% in indigenous and expatriate construction companies. Others are:

Personal variables	I.C.C	;			E.C.C	;
1. Professional Group (%)	Freq	Per (%)	Cum. Per (%	6) Freq	Per (%)	Cum. Per
Architects	42	19.4	19.4	20	12.1	12.1
Builders	40	18.5	37.9	30	18.2	30.3
Civil Engineers	45	20.8	58.7	48	29.1	59.4
Mechanical Engineers	23	10.6	69.3	15	9.0	68.4
Electrical Engineers	28	13.0	82.3	17	10.3	78.7
Quantity Surveyors	38	17.7	100.0	35	21.3	100.0
TOTAL	216	100.0		165	100.0	
2. Industrial Experience						
Less than 10 years	98	45.4	45.4	78	47.3	47.3
10-19 years	65	30.0	75.4	51	30.9	78.2
20-29 years	40	18.5	93.9	24	14.5	92.7
30-39 years	9	4.2	98.1	7	4.2	96.9
40 years and above	4	1.9	100.0	5	3.1	100.0
TOTAL	216	100.0		165	100.0	
3. Age ( in years)						
Less than 20 years	17	7.9	7.9	23	13.9	13.9
21-30 years	54	25.0	32.9	34	20.6	34.5
31-40 years	75	34.7	67.6	38	23.0	57.5
41-50 years	56	25.9	93.5	53	24.5	82.0
Above 50 years	14	6.5	100.0	17	18.0	100.0
TOTAL	216	100.0		165	100.0	
4. Academic Qualification						
OND	6	2.8	2.8	5	3.0	3.0
HND	62	28.7	31.5	50	30.3	33.3
B.Sc	55	25.5	57.0	46	27.9	61.2
M.Sc	84	38.9	95.9	60	36.4	97.6
Ph.D	9	4.1	100.0	4	2.4	100.0
<b>T</b> OTAL	216	100.0		165	100.0	
5. Professional Qualification						
NSE/COREN	29	13.4	13.4	44	26.7	26.7
MNIQS/RQS/RICS	22	10.2	23.6	8	4.8	31.5
MNIA	10	4.6	28.2	14	8.5	40.0
MNIOB	12	5.6	33.8	11	6.6	46.6
Non qualified members	143	66.2	100.0	88	53.4	100.0
TOTAL	216	100.0		165	100.0	

**Table 1 Profile of study sample** 

Freg. =frequency, Per. =Percentage, I.C.C =Indigenous construction companies, E.C.C =Expatriate construction companies

NSE/COREN, 13.4% and 26.7%, MNIQS/RQS/RICS, 10.2% and 4.8%, MNIA, 4.6% and 8.5%, MNIOB, 5.6% and 6.6%. This results may be a reflection of low salaries and incentives prevalent with most construction companies in the area of study, in the sense that qualified professionals seek employment where the pay is good.

# **Association between overall Job Characteristics and Task Performance**

The results presented in Table 2 indicate that overall job characteristics are positively and significantly related to overall task performance. These results provide support for hypothesis  $H_{1a}$ : Overall job characteristics are positively related to overall task performance. This result is consistent with the work done by (Humphrey *et al*, 2007; Morgeson *et al* 2008). In order to support performance, Humphrey *et al*, (2007) indicated that all dimensions of job characteristics are related to high performance achievement. Recent empirical test of Morgeson *et al* (2008) concluded that overall, the five job characteristics have effect on performance.

	Pearson correlation				
M SD	Task performance	Job characteristics			
Task performance 60.71 13.35	1	0.205** (sig = 0.000)			
Job characteristics 36.40 3.77	0.205** (sig. = 0.000)	1			

Table 2 Association between overall Job characteristics and overall Task performance

Table 3 reveals descriptive statistics (means and standard deviations) and Pearson correlation coefficients of the variables. There are several interesting findings that should be noted. The correlation coefficient indicates that all the five facets of job characteristics are positively related with objective and subjective task performance. All the five facets of job characteristics are significantly correlated with subjective task performance. With the exception of autonomy and task significance, all the five facets of job characteristics are significantly related to objective task performance .Hypothesis H<sub>1b</sub>: Job characteristics (Autonomy, Skill Variety, Task identity, Task significance, and Feedback from the job) are positively related to task performance (objective and subjective) is strongly supported by this result.

# **Autonomy and Objective/Subjective Task Performance**

Subjective task performance was significantly and positively predicted by autonomy (r= 0.133, P<0.01). There were weak but positive correlation between Autonomy and Objective task performance (r=0.060, P<0.01). There were significant positive correlations between Autonomy and other studied variables. This finding is supportive of result of previous studies (Humphrey et al, 2007; Morgeson *et al.*, 2008). These studies established modest relationship between autonomy and subjective task performance as well as objective task performance.

#### Task Identity and Objective/Subjective Task Performance

Task Identity was significantly correlated with subjective task Performance (r= 0.176, P<0.01) and Objective task performance (r=0.252, P< 0.01). There were significant positive correlations between task identity and other studied variables. This finding supports result of previous studies (Humphrey et al., 2007; Morgeson *et al.*, 2008). These studies established modest

<sup>\*\*</sup> Correlation is significant at 0.01 level (2 - tailed), M = Mean, SD = Standard Deviation

relationship between autonomy and subjective task performance as well as objective task performance.

# **Skill Variety and Objective/Subjective Task Performance**

Skill variety was significantly correlated with subjective task performance (r=0.217, P< 0.01). Objective task performance was significantly and positively predicted by skill variety(r = 0.162, P< 0.01). There were significant positive correlations between skill variety and other studied variables. This finding is in agreement with the result of previous studies (Kirkman & Rosen, 1999, 2000; Morgeson *et al.*, 2008). These studies established modest relationships between skill variety and subjective task performance as well as objective task performance.

# **Task Significance and Objective/subjective Job Performance**

Task Significance significantly correlated with subjective task performance (r= 0.264, P< 0.01). There were weak but positive correlation between Task significance and Objective task performance (r= 0.138, P<0.01). There were significant positive correlations between task significance and other studied variables. This finding supports results from previous studies (Humphrey et al., 2007; Morgeson *et al.*, 2008). These studies established modest relationships between task significance and subjective task performance as well as objective task performance.

# Feedback and Objective/Subjective Job Performance

Feedback was significantly correlated with subjective task performance (r=0.219, P<0.01) and Objective task performance (r=0.119, P<0.01). There were significant positive correlations between feedback and other studied variables. This result is consistent with previous findings (Morrison, 1993; Rosen et al., 2006; Dahling&Levy,2007). These studies found that feedback supervisory relationship development positively influenced task performance.

Variables	1	2	3	4	5	6	7
1. Autonomy							
2. Task Identity	.261**						
3. Skill Variety	.250**	.220**					
4. Task Significance	.232**	.230**	.312**				
5. Feedback	.246**	.240**	.239**	.243**			
6. Objective Performance	.060	.252**	.162**	.138	.119*		
7. Subjective Performance	.133**	.176**	.217**	.264**	.219**	.379**	
M	3.62	3.70	3.80	4.14	4.10	12.63	47.89
SD	1.04	1.10	1.08	0.91	1.05	2.70	6.85

**Table 3 Means, standard deviations, and bivariate correlations among study variables** M = mean, SD = standard deviation

# Task Performance Rate in Indigenous and Expatriate Construction Companies

Table 4 shows at a glance the descriptive statistics of task performance of construction professionals in indigenous and expatriate construction companies. What can be inferred from Table 4 is that the average task performance score for construction professionals in indigenous construction companies is (53.16) which means that their performance is average while for

construction professionals in expatriate construction companies with task performance score of (70.60), their performance is good.

Variables	N	Mean	Std. Dev.	Std. Error
Task Performance				
Indigenous	216	53.16	8.84	0.60
Expatriate	165	70.60	11.71	0.91

Table 4 Descriptives of independent samples t-test of task performance of construction professionals in indigenous and expatriate construction companies

Std. Dev. = Standard Deviation

Std. Error = Standard Error

Table 5 indicates Independent Samples t-test of Job Performance of Construction Professionals in Indigenous and Expatriate Construction Companies.

The value of t (df =379) is 16.571, P < 0.05 with a two-tail P value, sig. (2 tailed) of 0.000, t is significant at the 5% level. This result supports the hypothesis H1c: That there is significant difference in the figure of task performance rate of construction professionals in indigenous and expatriate construction companies.

Variables	t	df	Sig. (2 tailed)	Mean Difference	Std. error	Decision
Task performance						
t-test for Equality of Means	16.571	379	0.000	17.44	0.80	Accept H <sub>1c</sub>

Table 5 Independent samples t-test of task performance of construction professionals in indigenous and expatriate construction companies

df = Degree of freedom

sig. = Significance

Std. error = Standard error

# Job Characteristics Design in Indigenous and Expatriate Construction Companies

Table 6 shows at a glance the descriptive statistics of job characteristics design of construction professionals in indigenous and expatriate construction companies. What can be inferred from Table 6 is that the design of core dimensions of job characteristics is poor in indigenous and expatriate construction companies and there is no significant difference in job characteristics design in indigenous and expatriate construction companies.

Variables	N	Mean	Std. Dev.	Std. Error
Job Characteristics				
Indigenous	216	36.40	3.78	0.26
Expatriate	165	36.40	3.77	0.29

Table 6 Descriptives of independent samples t-test of job characteristics of construction professionals in indigenous and expatriate construction companies

Std. Dev. = Standard Deviation

Std. Error = Standard Error

The value of t (df =379) is -0.005, P < 0.05 with a two-tail P value, sig. (2 tailed) of 0.996, t is not significant at the 5% level. This result supports hypothesis Hod: That there is no significant difference in job characteristics design of construction professionals in indigenous and expatriate construction companies.

Variables	t	df	Sig. (2 tailed)	Mean Difference	Std. error	Decision
Job Characteristics t-test for Equality of Means	-0.005	379	0.996	-0.002	0.39	Accept H <sub>od</sub>

Table 7 Independent samples t-test of job characteristics of construction professionals in indigenous and expatriate construction companies

df = Degree of freedom

sig. = Significance

Std. error = Standard error

#### Conclusion

The purpose of our study was to examine the relationship between overall job characteristics and task performance. We contribute to extant literature by (a) concluding a direct, empirical comparison of the magnitude of the relationship between overall job characteristics and task performance, and (b) examining the job characteristics and task performance relationship at the facet level of job characteristics and task performance. In support of hypothesis H<sub>1a</sub>, there was a significant, positive relationship between overall job characteristics and overall task performance. Our results were consistent with (Morgeson et al., 2006; Morgeson et al, 2008; Humphrey et al, 2007; Hollman, 2009 and indartono et al, 2010). These findings extend Humphrey (2007) study that five dimensions of task characteristic are related to performance directly and strengthen Morgeson et al (2008) finding that concluded that overall five task characteristics have effect on performance. In contrast to overall job characteristics, operationalizing job characteristics at the facet level showed differential relationships with objective and subjective task performance in the predicted direction for the five core dimensions of job characteristics. Three of the five facets of job characteristics were significantly related to objective task performance, but all the five facets were significantly related to subjective task performance. In addition, the figure of task performance score for construction professionals in expatriate construction companies is higher than their indigenous construction companies while there was no significant difference in their job design approach. A major contribution of the present study is that we examined the job characteristics and task performance relationship at the facet level of job characteristics and task performance. This is important for several reasons. First, both iob characteristics and performance are multifaceted (e.g. Kinicki, et al., 2002). So examinations of the relationship between overall job characteristics and overall task performance may confuse the true nature of this relationship. Thus, our results indicated that the relationship between job characteristics and task performance may best be assessed at the facet level and the failure to do so may explain the wide range of effect sizes reported in the literature (Hollman, 2009 and Indartono, et al., 2010). Second, there are compelling relationships between job characteristics and task performance at the facet level. As our data suggested, certain facets of job characteristics may be more related to task performance than others which may in turn depend on the specific dimension of task performance measured. Third, an examination of the job characteristics and task performance at the facet level provides a richer and more complete picture of this relationship. Finally, we improved upon designs of previous research and collected job characteristics data from employees and performance data from supervisors, thus eliminating the impact of common method variance which has plaque previous studies of the job characteristics – task performance relationship in which data were collected from the same source (Hollman, 2009; Indartono *et al.*, 2010).

### **Future Research Directions**

This study used role performance to represent the performance explored. Extra role performance such as organizational citizenship behaviour (OCB) may enrich further our understanding of total performance related to job characteristics of job design. We measured employees' task performance solely from the perspective of their supervisors. It would be useful for future research to complement supervisory judgment with perceptions of peers.

#### References

Ajzen, I. (2005) Attitudes, personality, and behaviour (2nd ed.), Chicago, IL: Dorsey Press

Ashford, S. J. (1986) 'The role of feedback seeking in individual adaptation: A resource perspective,' *Academy of Management Journal*, **29** (1), 465–487

Borman, W.C. and Motowidlo, S.J. (1993) 'Expanding the criterion domain to include elements of contextual performance,' In N. Schmitt, & W.C. Borman (Eds.), *Personnel selection in organizations*, San Francisco, CA: Jossey-Bass, 71-98

Brannick, M.T., Levine, E.L. and Morgeson, F.P. (2007) *Job and work analysis:Methods, research, and applications for human resource management.* Sage Publications, Inc

Brett, J. F. and Atwater, L. E. (2001) '360 degree feedback: Accuracy, reaction, and perceptions of usefulness', *Journal of Applied Psychology*, **86** (1), 930–942

Campbell, J. P., McCloy, R. A., Oppler, S. H. and Sager, C. E. (1993) 'A theory of performance,' In N. Schmitt & W. C. Borman (Eds.), *Personnel Selection in Organizations*, San Francisco: Jossey-Bass, 35-70

Fried, Y. and Ferris, G. R. (1987) 'The validity of the job characteristics model: A review and meta-analysis', *Personnel Psychology*, **40** (1), 287 322

Fuller, J. B., Marler, L. E. and Hester, K. (2006) 'Promoting felt responsibility for constructive change and proactive behaviour: Exploring aspects of an elaborated model of work design,' *Journal of Organizational Behaviour*, **27** (1), 1089–1120

Guzzo, R. A., and Dickson, M. W. (1996) 'Teams in organizations: Recent research on performance and effectiveness,' *Annual Review of Psychology*, **47** (1), 307–308

Hackman J. R. and Oldham, G. R. (1980) Work redesign, Reading, MA: Addison-Wesley

Holman, D., Frenkel, S., Sorensen, O. and Wood, S. (2009) 'Strategic choice and institutional explanation', *Industrial and Labour Relations Review*, **62** (4), 1-20

Humprey, S. E., Nahrgang, J. D. and Morgeson, F. P. (2007) 'Integrating motivational, social, and contextual work design features: A meta analytic summary and theoretical extension of the work design literature', *Journal of Applied Psychology*, **92** (5), 1332-1356

Ilgen, D. R., Fisher, C. D. and Taylor, M. S. (1979) 'Consequences of individual feedback on behaviour in organizations,' *Journal of Applied Psychology*, **64** (1), 349–371

Indartono, S., Chen, V. and Chun, H. (2010) 'Moderation of gender on the relationship between task characteristics and performance', *International Journal of Organizational Innovation*, **2** (2), 195-222

Judge, T.A., Thoresen, C.J., Bono, J.E. and Patton, G.K. (2001) 'The job satisfaction - job performance relationship: A qualitative and quantitative review,' *Psychological Bulletin*, **127**, 376–407

Kirkman, B. L. and Rosen, B. (1999) 'Beyond self-management: Antecedents and consequences of team empowerment,' *Academy of Management Journal*, **42**(1), 58–74

Kirkman, B. L. and Rosen, B. (2000) 'Powering up teams,' Organizational Dynamics, 28, 48–66

Kluger, A. N. and DeNisi, A. (1996) 'The effects of feedback interventions on performance: A historical review, meta-analysis, and a preliminary feedback intervention theory,' *Psychological Bulletin*, **119**, 254–284

Morgeson, F. P. and Stephen E. H. (2006) 'The Work Design Questionnaire WDQ): Developing and Validating a Comprehensive Measure for Assessing Job Design and the Nature of Work,' *Journal of Applied Psychology*, **91** (6), 1321–1339

Morgeson, F. P. and Stephen E. H. (2008) 'Job and team design: toward a more integrative conceptualization of work design,' research *in personel and human resource development*, **27**, 39-91

Morgeson F. P. and Campion, M. A. (2003) 'Work design,' In W. C. Borman, D. R. Ilgen and R. J.Klimoski Eds., Handbook of psychology: *Industrial and organizational psychology* Hoboken, NJ: Wiley, **12** (1) 423 -452

Morgeson, F. P., Delaney-Klinger, K. A. and Hemingway, M. A. (2005) 'The importance of job autonomy, cognitive ability, and job-related skill for predicting role breadth and job performance,' *Journal of Applied Psychology*, **90**, 399–406

Morrison, E. W. (1993) 'Longitudinal study of the effects of information seeking on newcomer socialization,' *Journal of Applied Psychology*, **78**, 173–183

Norris-Watts, C., and Levy, P. (2004) 'The mediating role of affective commitment in the relation of the feedback environment to work outcomes,' *Journal of Vocational Behaviour*, **65**, 351–365

Oldham, G.R. and Cummings, A. (1996) 'Employee creativity: Personal and contextual factors at work,' *Academy of Management Journal*, **39** (3), 607-635

Organ, D.W. (1988) Organizational citizenship behaviour: The Good Soldier Syndrome, Lexington, MA: Lexington Books

Rosen, C. C., Levy, P. E. and Hall, R. J. (2006) 'Placing perceptions of politics in the context of the feedback environment, employee attitudes, and job performance,' *Journal of Applied Psychology*, **91**, 211–220

Ryan, R. M. and Deci, E. L. (2000) 'Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being,' *American Psychologist*, **55**, 68–78

Ryan, A. M., Brutus, S., Greguras, G. J. and Hakel, M. D. (2000) 'Receptivity to assessment-based feedback for management development,' *Journal of Management Development*, **19**, 252–276

Steelman, L. A., Levy, P. E. and Snell, A. F. (2004) 'The feedback environment scales (FES): Construct definition, measurement and validation,' *Educational and Psychological Measurement*, **64**, 165–184

Whitaker, B. G., Dahling, J. J. and Levy, P. (2007) 'The development of a feedback environment and role clarity model of job performance,' *Journal of Management*, **33**, 570–591

Wrzesniewski, A. C., Dutton, J. E. and Debebe, G. (2003) 'Interpersonal sensemaking and the meaning of work,' *Research in Organizational Behaviour*, **25**, 93–135