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THE ROLE OF INTELLIGENCE AND ACHIEVEMENT IN ENHANCING JOB PERFORMANCE OUTCOME AMONG CIVIL SERVANTS IN ENUGU URBAN

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ABSTRACT

The objective of this study is to explore job performance among workers alongside the influence of intelligence and achievement motivation in Enugu metropolis. Two hundred and six (206) civil servants' were purposively enrolled by administering validated instruments: 29-item Achievement Motivation Scale, the 18-item Individual Work Performance Questionnaire (IWPQ) and the 40-item Eysenck's General Intelligence Test. Two hypotheses were stated and tested using a 2-way ANOVA factorial design. Results confirmed that intelligence level of participants significantly influenced their job performance, while achievement motivation showed significant influence on civil servants' work performance. Based on the study, findings, conclusions and policy implications were discussed and it was recommended that employment and recognition of workers by way of promotions should be done mainly on merit in order to serve as an institutionalized motivation strategy for civil servants in particular and the work force in general; while at the same time, keeping them 'on their toes' to work harder for optimal productivity and performance.

Keywords: Achievement motivation, civil servants, contributors, intelligence, job performance.

INTRODUCTION

Job performance has been of central concern to scholar and researchers for several years and is adjudged as one of

the most critical factor in the domain of education and social sciences due to its complexity and mastery of the activities in the work environment. Job

performance, also called work performance, has to do with the extent to which an individual performs his or her work; it assesses whether a person performs a job well or not. There are several factors that affect job performance such as achievement motivation and general intelligence, which form the basis for this study. Akinboye *et al.* (2002) rightly noted that several organisations are undergoing rapid changes in order to meet up the needs of a fast growing and dynamic work environment in the 21st century. Hence, the justification to include motivation as an independent variable due to the possibility of mitigating the challenges that come with a typical demanding or stressful work environment. Simply put, motivation is a construct that describes what compels learners to invest time and effort. According to Guay *et al.* (2010) motivation is, “the reasons underlying behaviour”. These reasons therefore, involve a conglomerate of related beliefs that are interconnected, as well as perceptions, actions etc., – which are based on emotional and achievement-related goals. Some people are highly motivated to succeed and spend considerable efforts striving to excel. Conversely, others are not encouraged in any way to succeed and they do not over work themselves to achieve, necessitating the variation in these two different personalities and their different drives for success. In McClelland’s (1985) motivation theory, he believed that every individual inherently possesses

three propelling motivators: nurturing need for achievement, the needs for affiliation, and the need for power. He further asserted that these motivators are not inborn but learnt and acquired through the process of our upbringing and exposure to life’s vicissitudes.

Meanwhile, achievement motivation is a consistent striving force for an individual to succeed up to a certain standard of excellence. Achieving motivation and job performance has been found to be related and, despite these positive links between specific aspects of the duo, some studies revealed weak correlations (e.g., Hattie *et al.*, 2020; Valentine *et al.*, 2004), even though exceptions exist that revealed strong relationships (Huang, 2011; Koenka, 2020; Korpershoek *et al.*, 2019; Trigueros *et al.*, 2020; Vu *et al.*, 2021). In recent times, achievement motivation is a much researched aspect of social and industrial psychology and so many scholars have affirmed the involvement of achievement motivation on job performance (Ogunleye & Osekita, 2016; Yi & Park, 2015).

Furthermore, intelligence, an important construct in this study, is often referred to as Intelligence Quotient (IQ). The IQ, being utilised as a cognitive functioning measure span over a century, and plays an important role in the development of clinical diagnosis. More so, intelligence is also known as g-factor that has to do with a broad mental capacity, impacting on performance along cognitive levels - thereby making those who excel in



certain areas of life tend also to do well in other areas. Based on this, the researcher intends to explore the impact of intelligence and achievement motivation on job performance among civil servants in Enugu metropolis, Nigeria.

In an organisational settings or environment, a lot of factors lead to the success or failure of the organisation', the way and manner people respond and commit to their designated jobs is of great importance. Some workers exhibited some form of low intelligence in their official duties, which in some cases affect their performance on the job. Again, some civil servants remain in one position for a prolonged period of time, while others are not motivated to achieve their careers. In view of these, the study sets out to investigate how intelligence and achievement motivation affects or enables job performance of civil servants. This is owing to the assumption that people who are motivated to actualise their goals or recognised in a given organisation will always perform well in any given task and come out successful. Therefore, cumulative purpose of this study revolves the need to determine the role of intelligence and achievement motivation on job performance among civil servants in Enugu metropolis, Nigeria. Other specific objectives are, to:

1. Determine the influence of intelligence on job performance of civil servants in Enugu metropolis;
2. Examine influence of achievement motivation on job performance of

civil servants in Enugu metropolis; and

3. Ascertain the interplay between intelligence and achievement motivation on job performance of civil servants in Enugu metropolis.

Literature Review

Understanding job performance, intelligence constructs, and achievement motivation requires dissecting of relevant theories. First, is the socio-analytic theory propounded by Hogan and Blicke (2013), which holds the view that individuals who are extravert are naturally endowed to work towards acquiring status and being recognized in their profession. On the other hand, activation trait theory holds the opinion that situations trigger one's personality into action (Tett & Burnett, 2003). The drive to strive for status and acceptance are backed up by needs and expectations. It is at this point that the needs or content theory surfaces, whose premise is based on the fact that motivational content is made up of needs (Armstrong, 2010). When a need is unsatisfied, it directly creates panic and anxiety including states of disequilibrium. In order to activate balance, a goal that will meet the need of such individual is identified and at the same time, behavior pathways leading to the goal directed achievements (Armstrong, 2010).

Furthermore, in order to create state of equilibrium, intelligence is required. At this point, review of mutualism model propounded by van der Vegt *et al.* (1998) becomes necessary. The theory believes

that an efficient process births other processes, and at the end, such processes converge to correlate with one another. Other related studies were also reviewed to give clearer perspective to variables of interest and for research direction. For instance, Erentaite *et al.* (2022) recruiting 1439 participants found patterns of relationship between dimensions of achievement motivation and performance. Guo *et al.* (2021) in their investigations on the impact of personality traits on job performance among 1,523 physicians found that achievement motivation influenced job performance and organisational commitment. Razali *et al.* (2022) also in their investigation recruited 118 operators in a manufacturing company and the results showed significant relationship of emotional intelligence and job performance. Liu *et al.* (2012) conducted a study on the relationship between motivation and individual career planning by recruiting 37 high-tech industry employees and found that achievement motivation was consistent while career planning was also consistent and reliable, showing a correlation between the duo.

Cote and Miners (2006) found that general intelligence has a strong relationship with job performance and other solid tasks. Researchers have reviewed the correlation between general cognitive ability and job performances among different positions in the workplace, as seen in the work of Deary (2001), with findings revealing that

intelligence contributed to job performance more than personality. The importance of these constructs on predicting job performance were examined and empirical evidence showed that cognitive functions were part of the variable in job performance. Because only a handful of studies have been conducted on this area in Nigeria, the present research is important for several reasons: it will help address the issues of civil servants' work performance, show how intelligence and achievement motivation are implicated in doing well on a task, and whether there is any interplay between intelligence and achievement motivation on the criterion variable (i.e., job performance). Finally, conducting this study will serve as a contribution to knowledge and source of literature on the area of industrial/organisational psychology, sociology, and administration, as well as a guide for employee relations and management in the workplace.

Hypotheses

1. Participants with above average intelligence will perform their work better than participants with below average intelligence.
2. Participant with high achievement motivation will perform their work better than participants with low achievement motivation.



Methodology

Research Design

The present study utilized a cross-sectional design to examine influence of intelligence and achievement motivation on job performance among civil servants in Enugu metropolis, Nigeria.

Study Area

This study was carried out at Enugu Civil Service Secretariat, Enugu, Enugu State, Nigeria.

Study Population

Population of the study consists of public civil servants who are duly employed by the Enugu state government in Nigeria.

Sample and Sampling Techniques

In sampling participants, the study was carried out in two (2) phases. The first phase covered the pilot study in order to revalidate the instrument, while the second phase was the main study. Purposive sampling technique was adopted in recruiting the participants. For data gathering, the researcher went to some civil service departments at the Enugu state secretariat; and after seeking and obtaining requisite approval, the researcher approached civil servants individually and in groups of 2 and 3, soliciting for their cooperation by assuring them of utmost confidentiality. Two hundred and fifty (250) copies of the questionnaires were administered after creating proper rapport. Once adequate rapport was established, the researcher with the help of two research assistant distributed the instruments, and thereafter retrieved completed

questionnaires, thanking each participant. At the end of the exercise, 236 copies of the questionnaires were retrieved and 206 were finally used for data analysis, as 30 were discarded due to poor response, representing 82.4% return rate. Hence, a total of two hundred and six (206) civil servants with a mean age of 31.83 and standard deviation of 8.02 were recruited and participated in this study. Out of the 206 workers, 124 were male and 81 were females; also, the marital status of the workers revealed that 71 were married, 124 were single, 6 were separated, 2 were widowed, and 1 was divorced.

Instruments for Data Collection

Three validated measures was utilized: Eysenck's General Intelligence Test (EGIT – 4), Nigerian Adaptation of Herman's Questionnaire Measure of Achievement Motivation (NAHQMAM), and Individual Work Performance Questionnaire (IWPQ).

Intelligence Test Scale

To measure intelligence in the current study, Eysenck's 40-item General Intelligence Test (EGIT-4) was used; EGIT-4 was developed by Eysenck (1981) to measure general intelligence and was modified for use in Nigeria by Ihekuna (1991). The EGIT-4 is a test measuring general intelligence. The EGIT assesses verbal and qualitative aptitude as well as problem-solving abilities. EGIT-4 is scored 1 point for each correct response, yielding scores 0 to 40. The EGIT-4 assesses models of intelligence such as verbal, quantitative

aptitude as well as making inferences and problem solving. The measure is administered individually or in group and is a reliable and valid instrument to measure intelligence. A pilot study was conducted and the result revealed a Cronbach Alpha reliability of .89 indicating a very high internal consistency and very good to be employed in the main study.

Achievement Motivation Scale

The 29-item Achievement Motivation Scale was designed by Herman (1970) and later adapted to be used in Nigerian by Eyo (1986). Some of the items were positively scored while others were inversely scored. Scores higher than the norm (i.e., 30) indicate low achievement motivation and vice versa. However, in order to revalidate the instrument, a pilot study using 35 participants who were not part of the main study was carried out and the result revealed a Cronbach Alpha reliability of .50; which means average internal consistency and suitable to be used for the main study.

Job Performance

In order to assess job performance, the 18-item Individual Work Performance Questionnaire (IWPQ) designed by Koopmans *et al.* (2014) was utilised. The IWPQ is a reliable and valid in measuring job performance among workers from different occupational sectors, with and without health problems. The IWPQ

consists of 3 factors: task performance, contextual performance and counterproductive work behavior. Within each scale, items were presented to participants in randomized order, to avoid order effects. All items had a five-point rating scale (“seldom” to “always” for task and contextual performance, “never” to “often” for counterproductive work behavior). Also, a pilot study was conducted and the result revealed a Cronbach Alpha reliability of .75 indicating a high internal consistency and ideal to be used for the main study.

Method of Data Analysis

Data was collected, collated, coded and data analysis was conducted through the 2-way analysis of variance (ANOVA) for unequal sample sizes. The 2 x 2 statistical analysis involves a joint study of two independent variables (intelligence and achievement motivation) with two levels each (intelligence: above average and below average; achievement motivation: high and low - both on the dependent variable (job performance)).

Ethical Considerations

Ethical approval was obtained from the Ethical Board of Enugu State College of Education (Technical); while informed consent of the participants were also sought and obtained before embarking on the study.

Results

Table 1: Summary of univariate analysis showing the mean scores of achievement motivation and general intelligence on job performance.

		Achievement		
		High(A1)	Low (A2)	SUM
EGI	Above(B1) Average Intelligence	N= 64 X= 59.98 SD= 5.59	N= 52 X= 60.48 SD= 7.93	60.23
	Below(B2) Average Intelligence	N= 47 X= 59.55 SD= 7.43	N= 43 X= 60.49 SD= 8.21	60.02
	SUM	119.53	120.97	120.25

Results presented on Table 1 shows that workers with above average intelligence and workers with high achievement motivation (59.98) reported lower mean score on job performance than workers with above average intelligence and low achievement motivation (60.48). Again,

the result indicates a slight mean difference in the mean scores between workers with below average intelligence and high achievement motivation (59.55) compared to workers with below average intelligence and low achievement motivation (60.49).

Table 2: Summary of 2-way ANOVA showing the influence of intelligence and achievement motivation on job performance.

SOV	SS	df	MS	F	P	Decision
Achievement Motivation (A)	32.40	1	32.40	.520	<0.05	Accepted
Intelligence (B)	.592	1	.592	.701	<0.05	Accepted
A X B	.511	1	.511	.010	<0.05	Interaction
Error	10557.21	202	52.25			
Total	753273.00	205				

The 2-way ANOVA result reveal that workers with high intelligence differed

significantly from workers with low intelligence on job performance [F

(1,205) = .701, $P < 0.05$]. Therefore, the first hypothesis which stated that participants with above average intelligence will perform their work better than participants with below average intelligence was confirmed. Accordingly, further results indicates that workers with high achievement motivation performed their work better than participants with low achievement motivation, [$F(1,205) = .520, P < 0.05$]. Therefore, the second hypothesis was sustained. Furthermore, the two result indicated that intelligence and achievement motivation jointly influenced job performance, hence the interaction effect $F(1, 205) = .010, P < 0.05$.

Discussion

This present study was conducted to investigate the influence of intelligence and achievement motivation on job performance among workers in Enugu metropolis. The first result indicated that intelligence exerted a significant influence on job performance. Therefore, the first hypothesis which stated that workers with above average intelligence will perform their work better than participants with below average intelligence was confirmed. This means that general intelligence is one of the factors that influence civil servant's job performance. This finding is consistent with the findings of Razali *et al.* (2022) whose results revealed significant outcome of emotional intelligence on work performance. This finding is also resonates the work of Cote and Mines

(2006) who found that general intelligence has a strong relationship with job performance and other solid tasks. An explanation for this finding is common place in the sense that when people are intelligent and know what they are supposed to do, they instinctively deploy such natural intelligence which enables them perform better at their job and will do more with the right financial incentives.

Achievement motivation exerted a significant influence on job performance; hence, the second hypothesis was confirmed. This means that achievement motivation plays a major role when it comes to job performance in the industrial setting. This finding resonate the findings of Liu *et al.* (2012) who found that achievement motivation influenced job performance. The findings were also in consonance with Guo *et al.* (2021) who found that achievement motivation influenced job performance and organisational commitment. A possible explanation for this finding is that man is naturally drawn to being acknowledged, being rewarded and eulogized than being rebuked, queried or punished. Therefore, any opportunity that will make them to be motivated by achieving any significant feat in their organization will be met with corresponding input that will be evident in their job performance. Another possible explanation for this finding is that workers' achievement motivation is hinged on attaining success and one's aspiration in life. Seeing that



achievement motivation behavior in performance varies based on how an employee pursues challenging goals, civil servants in some Nigeria establishments are not rewarded based on their efforts, but on some 'high based connections' or 'nepotistic considerations'. Therefore, a worker who has high levels of achievement motivation needs to set higher goals if he or she may ever attain enviable heights in their career in the typical Nigeria setting. This goal is hardly rewarding; hence the worker should be motivated to aspire for more.

Policy Implications of the Study

From all indications, current study findings have practical implications. First it shows or rather has exposed that general intelligence plays a significant role in the job performance of workers. It also brings to light that achievement motivation is not a significant factor influencing job performance. The present study may also be regarded as a ground breaking one. This is because, with the findings of this study, workers and organizations have learnt that to expect better work performance, it is of utmost importance to encourage and train their workers on the need to develop their general intelligence capacity as well as their need for achievement and proper motivation.

Recommendations

Since this study has found that intelligence and achievement motivation positively impact job performance, recruitment, placement and promotion of workers should be solely based on merit

so as to motivate employees, and at the same time, 'putting them on their toes' and making them to work more for better accolades in due time.

Industries and organizations should also be on watch for job seekers having high intelligence quotient during the recruitment processes; which will directly and indirectly make every member of the organization to invest worthwhile efforts towards the attainment of organizational goals.

Limitations and Suggestions for Further Studies

The use of cross-sectional survey was the first limitation of the study which basically does not allow for causal relationships. A further limitation has to do with the lack of outcome's measures that could support the importance of the relationships between the variables of the study in job performance. Based on the limitations, the researchers stated that further research should be carried out to replicate these preliminary findings and longitudinal investigation would provide better validation of study relationships between intelligence and achievement motivation on job performance. Also, alternative data collection techniques such as observational interviews or even direct observation of job performance should be adopted in future studies.

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