

# Organizational Commitment and Turnover Intentions of Clinical Laboratory Scientists in Ghana

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## Abstract

High employee turnover rate coupled with frequent strike actions embarked on by clinical laboratory scientists in Ghana over the years has become a major issue that needs to be addressed. This study examined the different dimensions of organizational commitment (affective, continuance and normative commitment) as predictors of turnover intentions of medical laboratory scientists in selected health facilities in Ghana. The study consisted of 141 medical laboratory scientists drawn from various public health institutions. Two standardized instruments were used to measure organisational commitment and turnover intentions. Results of the study revealed that turnover intentions correlated insignificantly with affective commitment, but correlated significantly with continuance commitment and negatively with normative commitment. Further analysis revealed a linear positive relationship between the predictor variables combined (affective commitment, continuance commitment, normative commitment) and criterion variable (turnover intentions) among clinical laboratory scientists. Based on the findings, retention strategies of clinical laboratory scientists were proposed.

**Key words:** Organisational Commitment, Turnover Intentions, Clinical Laboratory Scientists.

## 1. Introduction

Recruitment and retention of graduates from medical laboratory science programs remain a common challenge for clinical laboratory managers (Lundh, 1999; Blau et al., 2005; Stuart & Utz, 2007). Managers of laboratories often experience loss of highly skilled, competent and experienced employees as these workers pursue alternative 'attractive' areas of employment (Bernice & Teixeira, 2002). Since turnover is the ultimate decision preceded by thoughts of leaving the organization (turnover intentions), further research is needed to address factors predicting turnover intentions within the healthcare system (Hayes et al., 2006). This is against the background of a number of strike actions embarked on by biomedical scientists in various teaching hospitals in Ghana over the past few years.

A study by Bentum, K. (2009) for instance, revealed that the series of strike actions embarked on by biomedical scientist was the result of salary disparities, poor human resource development culture and the lack of improved facilities. In November 2011, for instance, the Ghana Association of Biomedical Laboratory Scientists (GABMLS) embarked on a strike that brought laboratory services in most teaching hospitals in Ghana to a halt. These actions were to protest against the discrepancies and anomalies that characterized the implementation of the Single Spine Salary Scheme (Domfeh, 2011). Increasingly, however, organizations are interested to develop committed workforce to reduce employee turnover and absenteeism, while improving the employees' performance and job-related attitudes (Mathieu & Zajaz, 1990; Meyer & Allen, 1997; Podsakoff & Mackenzie, 1997; Kwon & Banks, 2004). Given the above realities, it is essential to understand the extent to which the conditions under which the biomedical scientists work in affect their levels of commitment to their organisations as well as how their sense of commitment affect their intentions to leave their respective organisations. Having understood these connections, it is expected that management of medical facilities will best fashion out ways to engender the needed levels of commitment among biomedical scientists in their respective facilities.

## 1.1 Conceptual Framework

### 1.1.1 Turnover Intentions

Turnover intention may be defined as the intention of employees to quit their organization. According to Bigliardi, Petroni & Ivo-Dormio (2005) intention to leave refers to individuals' perceived likelihood that they will be staying or leaving the employer organization. Employees with high withdrawal intentions from the organisation subjectively assess that they will be leaving the organisation in the near future (Mowday, et al., 1982). Intention to depart from an occupation is a much more difficult decision than to leave the job (Blau, 2000). Meanwhile Sousa-Poza, (2007) defined 'intent to leave' as the reflection of the (subjective) probability

that an individual will change his or job within a certain time period and is an immediate precursor to actual turnover.

Johnsrud & Rosser (1999) and several studies found that researchers always used intention as a proxy for actual turnover because of difficulties to study it (Bluedorn, 1982; Lee & Mowday, 1987; Steers & Mowday, 1981). The validity of studying intentions in the workplace can also be drawn from Sager's (1991) longitudinal study of sales people in which intention to quit was found to discriminate effectively between leavers and stayers. Researchers such as Ajzen & Fishbein (1990); Igbaria & Greenhouse (1999) cited from Firth, Mellor, Moore & Loquet (2004); believed that intentions are the most immediate determinants of actual behaviour. The study revealed that, the more an individual implemented behaviour to quit, the more likely he or she will leave the organization. Gregory et al., (2007) supported the idea that behavioural intention to quit has been found to be a strong predictor of personal turnover across industries and theoretically is believed to be an important antecedent to turnover.

Tett & Meyer (1993) defined turnover intentions as conscious willfulness to seek for other alternatives in other organization. Park & Kim (2009) added that a worker's intentions to leave an organization include mere thoughts of quitting the organization (thinking and quitting), and statements by the worker that he or she actually wants to leave the organization (intent to leave). Nevertheless, behavioural intention to quit was found to be a strong predictor of personnel turnover across industries and is theoretically believed to be an important antecedent to turnover (Gregory et al. 2007). The correlation between turnover tendency and ultimate turnover has been found to be very high in several studies (Futrell & Parasuraman, 1984; Hom & Griffeth, 1987; Price & Mueller, 1981; Steel & Ovalle, 1984; Tyagi & Wotruba, 1993). Research attempting to link work-attitudes directly with employee turnover has had little success (Naumann, 1993). However, the presence of the employee turnover tendency as an intermediate linkage between work-attitudes and turnover has been strongly supported (Bluedorn, 1982; Hom & Griffeth, 1987; Naumann, 1993). Turnover intentions, or intentions to quit a job, have been found to be one of the best predictors of actual quitting (Griffeth *et al.*, 2000).

### **1.1.2 Organizational Commitment**

Organizational commitment has emerged as an important construct in organizational research owing to its relationship with work-related constructs such as absenteeism, turnover, job satisfaction, job-involvement and leader-subordinate relations (Arnolds & Boshoff, 2004; Bagraim, 2003; Eby, et al., 1999; Mathieu & Zajac, 1990; Tett & Meyer, 1993). Organizational commitment can be defined as the strength of an individual's identification with, and involvement in the organization (Levy, 2003). The concept has become one of the most accepted work attitudes studied by practitioners and researchers (Meyer, Allen & Smith, 1993; Mowday, Porter, & Steers, 1982). Mowday, Porter & Steers (1982) and Meyer et al (1989) have found that committed employees are more likely to remain with the organization and strive towards the organization's mission, goals and objectives.

Meyer & Allen (1997) conceptualized commitment in terms of three distinct psychological states which influence whether the employees remain or leave the organization affective commitment, continuance commitment, and normative commitment. Affective commitment refers to an employee's emotional attachment to and identification with the organization. For the employees, the positives include enhanced feelings of devotion, belongingness, and stability (Meyer, Allen & Smith, 1993). According to Hartman (2000), affective commitment has been related to personal characteristics, organizational structures, and work experiences.

Continuance (economic/calculative) commitment refers to what the employee will have to give up if they have to leave the organization. Employees whose primary link to the organization is based on continuance commitment remain with the organization because they feel they need to do so for material benefits (Meyer, Allen & Smith, 1993). Therefore, if the employees believe that fewer viable alternatives are available their continuance commitment will be stronger to their current employer. Becker (1960) suggested that continuance commitment should be related to anything that increases perceived costs, including direct or indirect investments in the organization.

Normative commitment or moral commitment (Jaros, Koehler & Sincich, 1993) reflects a feeling of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organization (Bentein, Vandenberghe & Stinglhamber, 2005). According to Wiener (1982) and Scholl (1981), normative commitment develops as a result of socialization experiences that emphasize the appropriateness of remaining loyal to one's employer or through the receipt of benefits (e.g. tuition payments and skill training) that create within the employee a sense of obligation to reciprocate.

In effect, employees with strong affective commitment remain in organization because they feel they want to, those with strong continuance commitment because they feel they need to and those with strong normative commitment because they feel they ought to (Adeyemo, 1999; Meyer et al., 1993; Yavuz, 2010). Given that individuals have differences in motives, it is expected that the types of commitment identified have different outcomes (Adenguga, Adenuga & Ayodele, 2013). Therefore, it has become increasingly imperative to understand the types of commitment and the factors that affect these three types of commitment (Abdulkadir & Orkun, 2009) especially among clinical laboratory scientists.

### **1.1.3 Organisational Commitment & Turnover Intentions**

A careful examination of the turnover intention literature points to studies on the effects of various predictors on turnover intentions, including employee attitudes, demographic factors and human resource (HR) practices. For instance, it has been suggested that organizational commitment, which is an attitudinal variable is related to specific employee behavior. If employees are committed to the organization it is expected that turnover and absenteeism rates will become lower (Igbaria & Greenhaus, 1992; Salami, 2008), while job and extra-role performance increase. Studies have also shown that managers wishing to improve organizational efficiency and effectiveness should ensure that employee commitment is optimal (Adams, 2007; Meyer & Allen, 1998).

In their study of organisational commitment and turnover intentions, Adenguga, Adenuga and Ayodele (2013) found a significant relationship in the dimensions of organizational commitment on turnover intention among private universities employees. More specifically, the study observed that the three dimensions of organizational commitment determined the turnover intentions of employees in private Universities. Affective commitment was, however, more important in determining employees' turnover intention. Related studies by Allen and Meyer (1997) Bergmann, T.J., Lester, S.W., De Meuse, K.P. and Grahn, J.L. (2000), James, B. Madupalli, R. Brian, R. and John, A.W. (2007), Abdulkadir & Orkun (2009), Yovuz (2010), Mosadeghrad, Ferlie and Rosenberg (2014) yielded similar results. These studies have consistently supported that increased organizational commitment has been positively associated with individual actions such as decreased intention to search for new jobs and reduced turnover.

Several studies have identified that the three dimensions of organizational commitment predict the turnover intentions of employees (Blau et al, 2006; Abdulkadir & Orkun, 2009; Yovuz, 2010; Adenguga, Adenuga, & Ayodele, 2013). However, *Saporna and Claveria (2013) found no* relationship between organizational commitment and turnover intentions.

## **1.2 Research Questions**

The following research questions were raised for the study:

1. What is the combined contribution of affective commitment, normative commitment and continuance commitment to the prediction of turnover intentions of clinical laboratory scientists?
2. What is the relative contribution of affective commitment, normative commitment and continuance commitment to the prediction of turnover intentions of clinical laboratory scientists?

## **1.3 Research Hypotheses**

Given the literature reviewed as well as the research questions, it was hypothesized that:

1. Organisational commitment as a combined variable will significantly predict turnover intentions
2. Affective commitment will be more important in predicting employees' turnover intentions than normative and continuance commitment.

## **2. Research Methodology**

### **2.1 Population**

The study population consisted of clinical laboratory scientists in public health facilities within Accra-Tema metropolis. The Accra-Tema metropolis has the highest number of health facilities in Ghana.

## 2.2 *Sample & Sampling Technique*

A sample of one-hundred and forty one (141) clinical laboratory scientists located in public health facilities in the Accra-Tema metropolis took part in the study. Participants were selected voluntarily to participate in the study using convenience sampling technique. Consequently, laboratory professionals who were available and expressed the desire to participate in the study were selected so as to fulfil the purpose of the study. Participants included 68% males and 32% females. Of these, 36.9% were single whilst 34% were married with 11.3% divorced. Most of the respondents (86.5%) were within the 25-45 years age range whilst 13.5% were 46 years and above.

## 2.3 *Materials*

A three-sectioned questionnaire with a total of 52 items was used as follows:

### *Demographic Data*

Section “A” gathered demographic information of respondents which included age, gender and marital status of respondents.

### *Three-Component Organisational Commitment Scale*

Section “B” of the questionnaire consisted of an 18 item three-component model of organizational commitment standardized scale developed by Allen and Meyer (1990). The questionnaire had three subscales measuring affective, continuance and normative commitment with each component having six-items. The affective commitment subscale had a total of 6 items of which 3 were negatively worded (an example of the items in the affective commitment scale is “I would be very happy to spend the rest of my career with this organization”). The continuance commitment subscale had 6 negatively worded items (e.g. “It would be very hard for me to leave my organization right now, even if I wanted to”). The normative commitment scale also had 6 items in all out of which 5 were negatively worded (e.g. I would not leave my organization right now because I have a sense of obligation to the people in it). The reliability scores for the organisational commitment instrument have been reported as follows:

- between .74 to .89 for the affective commitment subscale measure (ACS);
- between .69 and .84 for the continuance commitment subscale (CCS)
- between .71 to .86 for normative commitment sub-scale (NCS).

The scale was scored on a five-point scale as follows: “strongly agree (1), agree (2), neither agree nor disagree (3), disagree (4), and strongly disagree (5)”.

### *Turnover Intentions Scale*

Section “C” was an 8 item Turnover Intention Scale adopted from Shore and Martin (1989), and Simmon, Cochrah and Blount (1997) with a reliability coefficient of .92. The eight items were presented to the respondents as a series of statements to which they were to indicate the extent to which they agree or disagree on a scale of 1 to 5, with 1 being “strongly disagree” and 5 as “strongly agree”. In this present study, the 8 item Turnover Intention scale had a high alpha reliability coefficient (.90).

## 2.5 *Procedure*

Following institutional approval to conduct the study in the respective health facilities, participants were conveniently sampled and briefed on how to complete the questionnaires. The questionnaires were personally administered to the participants by research assistants trained for the purpose. This was to help clarify any ambiguity or issue to be raised by participants. To ensure high response rate, participants were required to agree on a convenient time for the exercise and at the agreed time, the questionnaires were completed and collected. In all, out of the one-hundred and fifty (150) questionnaires distributed, one-hundred and forty one (141) were successfully returned for analysis, giving a response rate of 94 %.

## 3. Results

Data analyses was done using Pearson’s Product Moment Correlation and Multiple Regression analyses in order to establish the relationship between the independent variables (facets of organisational commitment) and the dependent variable (turnover intentions).

Table 1 contains the descriptive statistics and inter-correlations among turnover intentions (dependent variable) and the facets or types of organisational commitment (independent variables). As shown in the table below,

turnover intentions correlated insignificantly with affective commitment ( $r = 0.154$ ;  $P=ns$ ), but correlated significantly with continuance commitment ( $r = 0.174$ ,  $P < 0.05$ ) and negatively with normative commitment ( $r = -0.293$ ,  $P < 0.01$ ).

**Table 1:** Descriptive Statistics and Correlations among the Variables

Variables	Mean	SD	N	TI	AC	CC	NC
Turnover Intentions (TI)	20.05	6.82	141	1			
Affective Commitment (AC)	16.68	2.46	141	.154	1		
Continuance Commitment (CC)	16.17	4.70	141	.174*	.276**	1	
Normative Commitment (NC)	18.18	4.15	141	-.293**	.124	.346**	1

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

\* . Correlation is significant at the 0.05 level (2-tailed).

Evaluating the combined contributions of the facets of organisational commitment (affective, continuance and normative) to the prediction of turnover intentions of clinical laboratory scientists. Results presented in table 2 refer.

**Table 2:** Multiple Regression Analysis on Independent & Dependent Variables

R = .432

R-Square = .186

Adjusted R-square = .169

Standard Error = 6.22

Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Regression	1215.558	3	405.186	10.460	.000
Residual	5307.094	137	38.738		
Total	6522.652	140			

*Significant @ 0.05*

Table 2 shows that there is linear positive relationship between the predictor variables (affective commitment, continuance commitment, normative commitment) and criterion variable (turnover intentions) among clinical laboratory scientists. The results show that affective commitment, continuance commitment, and normative commitment made 18.6% prediction of turnover intentions. The standard error of 6.22 indicates that on the average, clinical laboratory scientists deviated from true value by 6.22 limits of that measure. The analysis of variance for the multiple regression data yielded an F-ratio of 10.46 which was significant at  $P < 0.5$ . The implication of this result is that the combination of the three predictor variables (affective commitment, continuance commitment, and normative commitment) significantly predicted turnover intentions of clinical laboratory scientists.

Evaluating the relative contribution of the various facets of organisational commitment to the prediction of turnover intentions.

**Table 3:** The Relative Contributions of affective commitment, continuance commitment, and normative commitment to the prediction of Turnover Intentions

Predictor Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta ( $\beta$ )		
Constant	19.726	4.066		4.851	.000
Affective Commitment	.353	.222	.128	1.590	.114
Continuance Commitment	.404	.123	.278	3.279	.001
Normative Commitment	-.666	.135	-.405	-4.925	.000

Table 3 above shows that continuance commitment and normative commitment had significant contributions to the prediction of turnover intentions. Normative commitment had the greatest effect ( $\beta = -0.405$ ;  $t = -4.925$ ;  $P < 0.05$ ). Continuance commitment also had a significant effect ( $\beta = 0.278$ ;  $t = 3.279$ ;  $P < 0.05$ ). Affective commitment did not significantly predict turnover intentions ( $\beta = 0.128$ ;  $t = 1.590$ .  $P = ns$ ).

#### 4. Discussion

The study sought to examine the different dimensions or facets of organizational commitment (affective, continuance and normative commitment) as predictors of turnover intentions of medical laboratory scientists in selected health facilities in Ghana. Two hypotheses were stated to identify both the combined and relative contribution of affective commitment, normative commitment and continuance commitment respectively to the prediction of turnover intentions of clinical laboratory scientists.

Hypothesis one stated that Organisational commitment as a combined variable will significantly predict turnover intentions. Results of the study revealed that generally, organisational commitment significantly predicted turnover intentions of clinical laboratory scientists. Hence the first hypothesis was supported and is consistent with the studies by Blau et al, (2006), Abdulkadir and Orkun, (2009). Results of the study, however, contradicted the findings of *Saporna and Claveria (2013) who found no relationship between organizational commitment and turnover intentions.*

The second hypothesis which stated that affective commitment will be more important in predicting employees' turnover intentions than normative and continuance commitment was rejected. Results from the study revealed affective commitment did not significantly predict turnover intentions. Thus the stated hypothesis was not supported. This sharply contradicts the studies by Adenguga, Adenuga and Ayodele (2013), Bergmann, T.J., Lester, S.W., De Meuse, K.P. and Grahn, J.L. (2000) and Mosadeghrad, A. M., Ferlie, E. and Rosenberg, D. (2014) who concluded that affective commitment was, more important in determining employees' turnover intention. The present study, however, observed that continuance commitment and normative commitment had significant contributions to the prediction of turnover intentions. Further analyses revealed that normative commitment had the greatest effect on the prediction of turnover intentions among clinical laboratory scientists in Ghana. A cursory look at the figures presented in the Multiple Regression Analysis above showed a significant negative relationship between normative commitment and turnover intentions implying that high normative commitment leads to less turnover intentions. This means, most of the clinical laboratory scientists feel they are obliged to stay in the organization leading to reduced turnover intentions. This is perhaps the result of the fact that currently in Ghana, there are limited job opportunities opened to clinical laboratory scientists who might desire to quit, hence, quitting means economic challenges which has social consequences as well.

Results of this study further imply that although medical laboratory professionals place premium on feelings of obligation to stay in the organization (normative commitment) medical laboratory professionals place less value on emotional attachment and identification with and involvement in their organization (affective commitment). This could suggest that pay, supervision, role clarity and skill variety cited by Hartmann (2000), as examples of

organizational dynamics strengthening affective commitment are not necessarily having a positive bearing on the medical laboratory professional's decision to remain on the job.

#### 4.1. Challenges

The sample for this study was based on a small sample size of medical laboratory professionals in public hospitals. Given the large number of laboratory professionals in both the public and private sectors, the small sample size of this study may limit the ability to generalize this research to represent the whole population. However, this sample size did not make it impossible to obtain statistically significant results. Thus, the results of this study could measure the predictive power of the facets of organizational commitment on turnover intentions of medical laboratory professionals. Another limitation of this study was the fact that organizational commitment made 18.6% prediction of turnover intentions indicating that there are other variables that determine medical laboratory professionals' turnover intentions. The scope of this study appear limited and that the study could not examine the other potential variables that can predict turnover intentions. Given these limitations, it is recommended that researchers in replicating this study should use much larger, randomized sample including respondents from private medical institutions to improve the likelihood of achieving results that could be generalized to a larger, more diverse population. It is also suggested that the structural Equation modeling be used to examine the direct and indirect relationship among the latent and observed constructs.

#### 4.2 Conclusion

This present study sought to examine the types or facets of organizational commitment as predictors of turnover intentions among medical laboratory scientists. Findings revealed that turnover intentions of clinical laboratory scientists is significantly influenced by their overall level of commitment to their organisations. It was also revealed that continuance commitment as well as normative commitment contributed significantly in the prediction of medical laboratory professionals' turnover intentions. Affective commitment, however, did not make a significant contribution in predicting turnover intentions. These findings suggest that given that staff turnover is an important issue in managing human resources (Adenguga, Adenuga, & Ayodele, 2013), it is important that organisations pay critical attention to understanding employees' needs, devise proactive strategies for meeting these needs with the view to enhancing commitment whilst at the same time, reducing turnover intentions. Management of public laboratories must as well spend more time in dealing with the issues affecting employees' loyalty to their organizations as highly committed employees should not be contemplating quitting their jobs as revealed in this study. In view of the rapidly changing organizational environment, health facilities must devote greater effort to enhance their capabilities bearing in mind that the success and competing power of organizations depend on committed, highly motivated and innovative human resources.

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