

# **Job Satisfaction and Turnover Intentions in Faith-Based Hospitals in Uganda: The Mediation Role of Organizational Commitment**

**Joan Paula Mary Kwatampora**  
Makerere University

**Seperia Bwadene Wanyama**  
Makerere University

**Samuel Eyamu**  
Kyambogo University

*This paper examines job satisfaction, organizational commitment and turnover intentions among health workers in faith-based hospitals in Uganda. The study surveyed 125 nurses from three catholic faith-based hospitals. Hierarchical regression analysis confirmed that job satisfaction has a negative effect on turnover intentions, while affective and normative commitments partially mediate the relationship between job satisfaction and turnover intentions. Female gender, and organizational tenure— 3-9 years, each negatively contributes to turnover intentions, while Registered Comprehensive Nursing positively predicts turnover intentions. The importance of job satisfaction, emotional attachment, and a sense of obligation is emphasised, but the ambiguity and thus negative effect of Registered Comprehensive Nursing is noted.*

*Keywords: human resource management, job satisfaction, organizational commitment, turnover intentions, faith-based hospitals*

## **INTRODUCTION**

Health worker turnover is a real challenge facing hospitals worldwide (Chiao *et al.*, 2021; Fogel, 2007; Rawashdeh & Tamimi, 2019) and particularly in developing countries such as those of sub-Saharan Africa (Bonemberger *et al.*, 2014; Hagopian *et al.*, 2009; Shumba *et al.*, 2017). Uganda's health system in particular faces a considerable human resource shortage; reporting a ratio of 1.87 (Ministry of Health, 2019), which is less than the defined critical shortage level of 2.28 health workers per 1,000 people (WHO, 2006). Given such a low health staffing capacity, higher levels of turnover could only serve to worsen the situation. In fact, this problem has been cited as one of the main contributors to Uganda's slow progress towards the achievement of healthcare goals (Ministry of Health, 2011). Moreover, the situation is dire among nurses and midwives (Zuyderduin *et al.*, 2010). They are believed to account for over 50% of the health workforce in many countries, but their number is expected to decline from 9 million to 7.3 million by 2030 worldwide,

and likely to worsen in African countries (WHO, 2016). Amidst these challenges, there have been reported concerns about nurses' job satisfaction, lack of commitment, and turnover intentions (Bonenberger *et al.*, 2014; Ministry of Health, 2015; Momanyi & Kaimenyi, 2015). These streams of research are indicative of a fundamental tension in health worker literature, as exemplified by the question: What is the relationship among job satisfaction, organizational commitment and turnover intentions?

While some studies have examined the relationships among turnover intentions, job satisfaction, and organizational commitment (Hayes, *et al.*, 2012; Meyer *et al.*, 2002; Blau, 2009), they have predominantly originated from the developed world. Limited effort has been undertaken to examine these concepts and their relationships in Sub-Saharan Africa, particularly Uganda (Tumwesigye, 2010). Accordingly, more contextualized research is needed to empirically demonstrate the relationship among job satisfaction, organizational commitment and turnover intentions (Hagopian *et al.*, 2009; Nabirye *et al.*, 2011). This study adds to a growing body of literature which examines the relationships among job satisfaction, organizational commitment and turnover intentions, but importantly, among nurses in faith-based hospitals in Uganda. Moreover, nurses are a critical healthcare workforce, required in almost every department to complement specialized medical staff. However, while faith-based hospitals uniquely espouse their strong underlying values (Chiao *et al.*, 2021), they have been reported to experience higher turnover rates in comparison to government and other privately-owned hospitals (Momanyi & Kaimenyi, 2015). Indeed, although they can be categorized and considered as private (Coudounaris *et al.*, 2020), understanding the unique nature of faith-based hospitals and nurses' job satisfaction, organizational commitment and turnover intentions is crucial for effective health service delivery, especially considering that they are among the greatest contributors to health service delivery.

The paper further examines the mediation effect of organizational commitment (affective and normative) in the relationship between job satisfaction and turnover intentions. It examines the Two-Factor theory (Herzberg *et al.*, 1959; Herzberg, 1965), the Interlinkages model (Mobley, 1977; Mobley *et al.*, 1979), and the three-component model (Allen & Meyer, 1990, 1996; Meyer & Allen, 1991), to synthesize, link and explain the considered main study variables. This way, the paper contributes to knowledge and theory of job satisfaction, organizational commitment, and turnover intentions. It provides affective and normative commitment as mechanisms through which job satisfaction reduces turnover intentions. There has remained contradiction over the independence and influence of affective and normative commitment (Kartika & Purba, 2018; Samad & Yusuf, 2012; Wells *et al.*, 2016, Lu *et al.*, 2002; Meyer & Parfyonova, 2010) notwithstanding the predictive capability of continuance commitment (Jaros, 1997; Jaros & Culpepper, 2014) although all the three components have generally been posted as strong predictors of turnover intentions (Meyer *et al.*, 2002; Blau, 2009). This paper's specific consideration of affective and normative commitment contributes to this debate.

## **THEORETICAL REVIEW**

Perceptual and attitudinal factors such as job satisfaction and organizational commitment have been linked to turnover intentions, but each has been examined theoretically differently. Therefore, our theoretical approach draws from Herzberg's Two-Factor theory and integrates it with Mobley's Intermediate linkages model and Meyer & Allen's three-component model of organizational commitment, to develop an integrated model. We maintain that theoretical triangulation is relevant for a logically coherent explanation of possible relationships among such key variables examined in this study.

### **Herzberg's Two-Factor Theory**

The two-factor theory (Herzberg *et al.*, 1959) provides job satisfiers and hygiene factors as two distinct phenomena. Whereas job satisfaction is said to be internally generated from work (internal to the job, otherwise called intrinsic factors or motivators); job dissatisfaction is a result of the absence of external factors to the job (otherwise called extrinsic or hygiene factors). The extent to which a job is intrinsically

satisfying through achievement, recognition, work itself, advancement, and responsibility becomes crucial. However, hygiene factors involving the context of the job: company policies, administration, supervision, salary, interpersonal relations, and working conditions (Herzberg, 1965), ought to be provided to avoid dissatisfaction, but not to achieve job satisfaction (Mete & Sokmen, 2017). Some studies employing the two-factor theory have questioned the core assumptions and methodology that led to the theory's development (Stello, 2011). Others have argued that job satisfaction can be affected by both intrinsic and extrinsic factors (Kacel *et al.*, 2005). Generally, the two-factor theory suggests that when employees possess higher levels of job satisfaction, they are likely to reciprocate with positive work-related outcomes. Similarly, we argue that job satisfaction has a significant effect on organisational commitment and turnover intentions.

### **Mobley's Intermediate Linkages Model**

Mobley's (1977) Intermediate Linkages Model is one of the first turnover process models, viewing turnover intentions as the final cognitive event before actual turnover. The theory establishes a path from job dissatisfaction to turnover intentions, arguing that dissatisfied employees are likely to develop quit thoughts, conduct job searches, and desire to leave organizations, while employees with higher levels of job satisfaction are likely to portray lower turnover intentions. However, employees are likely to weigh such options based on the vitality of their current jobs, in the process of developing turnover intentions and subsequently turnover (Singh & Sharma, 2015). Whereas the expanded model (Mobley *et al.*, 1979) included individual values, job and labour market perceptions of current jobs and possible alternatives; job satisfaction and organizational commitment in view of turnover (Maertz & Campion, 1998), individual factors such as age, tenure, and education are crucial in these relationships (Porter & Steers, 1973). It is imperative to measure the nature of the relationship between job satisfaction, organizational commitment and turnover intentions, especially among nurses of the private sector, and particularly, faith-based hospitals, because of their unique foundational values including transparency, accountability, teamwork, shared decision-making and productivity (Mash *et al.*, 2015).

### **Allen & Meyer's Three-Component Model**

The three-component model by Allen & Meyer (1990) is the most widely used theoretical explanation for organizational commitment (Allen & Meyer, 1990; Meyer & Allen, 1991; 1993). They explain organizational commitment as a psychological state or mindset that attaches an employee to an organization; comprised of affective, normative, and continuance commitment (Allen & Meyer, 1990). First, *affective commitment* conveys an employee's emotional attachment to an organization. Employees with high affective commitment remain with an organization because they feel they want to do so (Meyer & Allen, 1991). Second, continuance commitment refers to an employee's perceived need to remain with an organization because of the limited alternatives or the costs associated with leaving. Therefore, individuals with *continuance commitment* stay because they have to do so (Meyer & Allen, 1991). Third, *normative commitment* is the moral obligation to stay with the organization because it is the right thing to do – they ought to do so (Allen & Meyer, 1996). This is mainly a result of induction and socialisation processes employees undergo when they first join an organization. They later feel indebted to the organization for the resources invested in them, and hence the need to not only put effort into their work, but to also stay with the organization (Nagar, 2012). However, debates continue on the independence of the three constructs and the strength of each in predicting turnover intentions (Jaros, 1997; Jaros *et al.*, 1993). Whereas affective commitment has been consistent in its findings and hence considered the real meaning of organizational commitment, some researchers (e.g., Ko *et al.*, 1997) did not find discriminant validity for it and normative commitment, questioning their independence (Meyer & Herscovitch, 2001; Jaros, 1997). Moreover, the dimensionality and predictive ability of continuance commitment has been challenged (Guntur *et al.*, 2012; Jaros, 1997; Kashifa & Marzuki, 2015; Lee *et al.*, 2001; Luz *et al.*, 2018; Meyer *et al.*,

2002). Accordingly, recommendations exist to examine the model in different contexts (Meyer *et al.*, 2002; Ko *et al.*, 1997), particularly in developing economies.

Therefore, the three models coherently contribute to understanding job satisfaction and organizational commitment, and their link to turnover intentions. Whereas each of the reviewed models can mainly explain specific factors, e.g., job satisfaction, organizational commitment, and turnover intentions, their integrated explanation provides a better fit for the current study.

## **EMPIRICAL LITERATURE REVIEW**

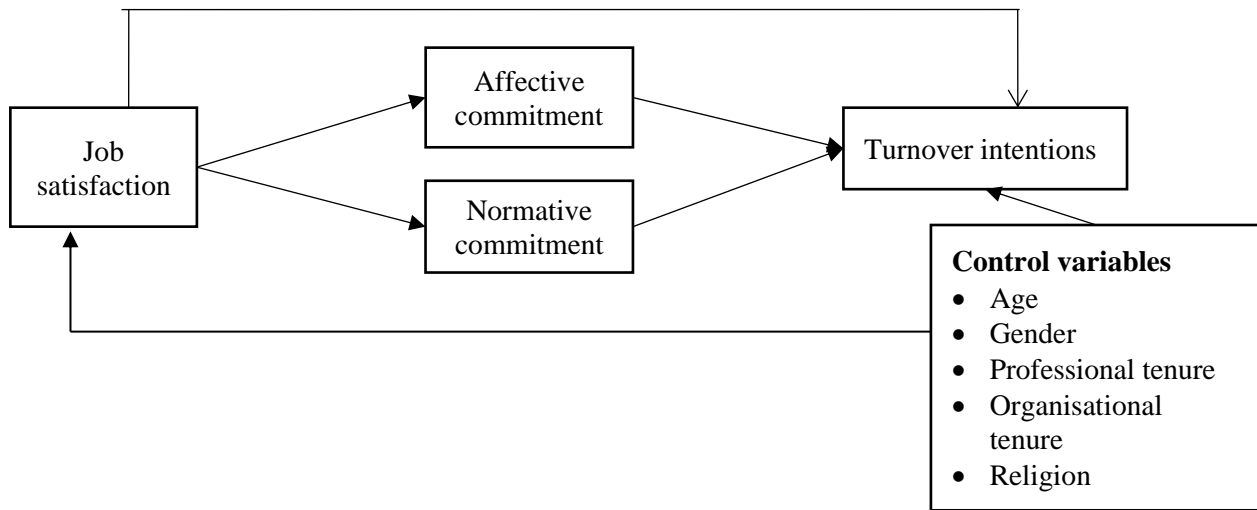
### **Turnover Intentions and Turnover**

The phenomenon of employee turnover remains of particular interest in management research and practice (Bonenberger *et al.*, 2014; Chiao *et al.*, 2021; Coudounaris *et al.*, 2020; Momanyi & Kaimenyi, 2015; Brunetto *et al.*, 2012). However, turnover intentions have been broadly conceptualized and examined as the most immediate predictor of turnover in different contexts, sectors and organizations, but with different findings (Blau, 2009; Griffeth *et al.*, 2000; Gager, 2013). Therefore, context-specific studies considering national, sector, organizational, and individual differences are relevant.

Turnover can be defined as the actual leaving of an organization by an employee to seek or join other employment elsewhere. Turnover generally revolves around employees leaving an organization, although this should not be mixed with ordinary leaving for reasons such as retirement, end or termination of contract. Turnover occurs when one decides to leave an organization, but for continued employment or search for a job elsewhere. Moreover, there are generally two types of turnover – voluntary and involuntary (Iverson, 1999). Involuntary turnover is when a person is made to leave his or her job by an employer, e.g., for disciplinary reasons, while voluntary turnover is when an employee makes the decision to leave an organization on his or her own will (Lambert & Hogan, 2009) to seek employment elsewhere. Voluntary turnover is a major concern to organizations as it results in loss of disciplined and valuable employees.

However, turnover intentions, which is the cognitive process of thinking of leaving, planning to leave, and the desire to leave an organization (Addae *et al.* 2008; Lambert & Hogan, 2009) usually precedes turnover. In other words, turnover intentions are the harboured desire to leave an organization, anchored in individuals' feelings as a result of evaluations they make about their job and organization (Mobley *et al.*, 1979). If turnover intentions are not effectively acted upon, they are likely to result into actual turnover. This way, it is important to understand and address turnover intentions because they are a precursor to actual turnover while depending on perceptual and attitudinal outcomes such as job satisfaction and organizational commitment as conceptualized in figure 1.

**FIGURE 1  
HYPOTHESISED MODEL**



Whereas job satisfaction has been found to be a predictor of turnover intentions in health workers (Hagopian *et al.*, 2009), and organizational commitment has been negatively associated with turnover intentions in Uganda (Tumwesigye, 2010), the current study adds the dimension of nurses and faith-based hospitals. Furthermore, while demographic variables have been emphasized in the study of turnover/turnover intentions (De Gieter *et al.*, 2011), they only moderately predicted turnover, with organizational tenure being the strongest predictor, followed by age, and then training and education (Griffeth *et al.*, 2000). Hayes *et al.* (2012) reported similar findings where job satisfaction and organizational commitment were key predictors of turnover and turnover intentions.

### **Job Satisfaction and Turnover Intentions**

Job Satisfaction is a positive feeling about one’s job and its characteristics (Robbins & Judge, 2013). Basically, it is an employee’s overall positive as opposed to negative (job dissatisfaction) evaluation of a job. People with positive attitudes about their jobs largely express high levels of job satisfaction, while those with negative attitudes in this regard always have lower job satisfaction (Robbins & Judge, 2013). This suggests that employees who are satisfied with their jobs are most likely to express negative turnover intentions and hence, more willing to stay longer with an organization.

Job satisfaction can either take a global or a multi-faceted approach (Spector, 1997). The global approach is used when the interest is in the overall attitude towards the job, while the multi-faceted approach is useful in determining which particular aspects of the job contribute to satisfaction, which may help identify different areas for improvement. Facets of job satisfaction are most frequently assessed based on Herzberg’s two factors including intrinsic and hygiene issues (Herzberg *et al.* 1959; Bonenberger *et al.*, 2014; Coomber & Barriball, 2007). However, intrinsic factors or satisfiers including recognition, achievement, advancement and the nature of work are more important because of their positive outcomes such as motivation.

Although some studies (e.g., Asegid *et al.*, 2014; Lavoie-Tremblay *et al.*, 2010; Tourangeau *et al.*, 2010) link supervision, work environment, and continuous education and training, to job satisfaction, our study considers job satisfiers to explain job satisfaction. Our position is consistent with Herzberg’s arguments that hygiene factors such as policies, salary, and company car do not necessarily result into job satisfaction, but are only required to avoid dissatisfaction (Herzberg *et al.* 1959). Previous studies (e.g.,

Dado *et al.*, 2019; Asegid *et al.*, 2014; Coomber & Barriball, 2007; Delobelle, *et al.*, 2010) also show that there is a negative relationship between job satisfaction and turnover intentions. Thus, we hypothesise:

**Hypothesis 1:** *There is a negative relationship between job satisfaction and turnover intentions.*

### **Organizational Commitment and Turnover Intentions**

Organizational commitment is generally an individual's attachment to an organization, the desire, need, and/or obligation to remain working for an organization (Meyer & Allen, 1991). According to Meyer & Allen (1991, p.67), organizational commitment is "a psychological state that characterizes the employee's relationship with the organization and has implications for the decision to continue or discontinue membership in the organization." It is hence perceived to be highly associated with low turnover intentions (Meyer *et al.*, 2002; Allen *et al.*, 2003). This is because organizational commitment provides a bond between an employee and the organization, whereby employees become loyal to the organization, share its values, and identify with its goals; making them less likely to voluntarily leave (Lambert & Hogan, 2009). Whereas empirical studies have largely shown organizational commitment as being negatively related to turnover intentions (Ingersoll *et al.*, 2002; Lambert & Hogan, 2009; Lu *et al.*, 2012; Samad & Yusuf, 2012; Tourangeau & Cranley, 2006), it is conceptualized to have different facets whose contributions differ (Allen & Meyer, 1990; 1996; Meyer *et al.*, 2002).

The three-component conceptualization including affective, continuance and normative commitment (Allen & Meyer, 1990; Meyer & Allen, 1991) is the most broadly considered and examined explanation of organizational commitment (Ko *et al.*, 1997; Blau, 2009; Jaros, 1997; Meyer *et al.*, 2002). However, of the three components, affective commitment has been more consistently found to have the strongest negative relationship with turnover intentions, followed by normative commitment. Continuance commitment has showed a considerably weaker influence (Larkin *et al.*, 2016; Meyer *et al.*, 2002; Jaros, 1997). Owing to lack of consensus with regard to continuance commitment scale, its relationship with turnover intentions, and previous findings indicating that it is the least effective at predicting turnover intentions (Ko *et al.*, 1997; Meyer *et al.*, 2002), this particular construct was not considered for this research.

Affective and normative commitments have been reported as better predictors of turnover intentions (Allen & Meyer, 1996), although the distinctiveness of these two has been questioned (Meyer & Herscovitch, 2001; Ko *et al.* 1997). They have been established to be highly correlated, with both reflecting emotional attachment to organizations; hence considered to measure the same thing (Jaros, 1997). While some scholars argue that it is counterproductive to include both affective and normative commitment (Jaros, 1997; Solinger *et al.*, 2008), a counter argument exists for their retention independently because they demonstrate significantly different relationships with outcomes of commitment including turnover intentions; thus, implying they have independent contribution (Meyer *et al.* 2002). Consequently, affective and normative commitment, compared to continuance commitment, have been found to strongly explain variability in turnover intentions, and more effectively measure organizational commitment (Meyer & Parfyonova, 2010). Whereas affective commitment has consistently been found to be a strong predictor of attitudes, intentions and behaviours (Meyer *et al.*, 1993; Meyer *et al.*, 2002), normative commitment has yielded varying results, pointing to a need for further studies, especially in different settings and cultures. Therefore, this study hypothesises the following:

**Hypothesis 2[a]:** *There is a negative relationship between affective commitment and turnover intentions.*

**Hypothesis 2[b]:** *There is a negative relationship between normative commitment and turnover intentions.*

### **The Mediation Effect of Organizational Commitment**

Employee perceptions and attitudes play a key role in shaping turnover intentions, with job satisfaction (Asegid *et al.*, 2014; Edoho *et al.*, 2015) and organizational commitment being important predictors (Meyer

*et al.*, 1993; 2002; Larkin *et al.*, 2016; Luz *et al.*, 2018). Whereas the foregoing analysis postulates job satisfaction and organizational commitment as each influencing turnover intentions, the latter has been reported to have stronger influence. Consequently, it has been examined as the most proximal predictor of turnover intentions (Blau, 2009; Brunetto *et al.*, 2012). In this regard, there remains debate about the ordering relationship of job satisfaction and organizational commitment with turnover intentions (Yalabik *et al.*, 2013). Whereas some research findings support organizational commitment as a mediator to the job satisfaction–turnover intentions relationship (Kartika & Purba, 2018; Samad & Yusuf, 2012; Wells *et al.*, 2016), others have found varying influence or no evidence for mediation effect of organizational commitment (Kanwar *et al.*, 2012; Lambert & Hogan, 2009; Lu, *et al.*, 2002). Such contrasting findings and ensuing arguments contribute to the ongoing and growing debate on organizational commitment generally, and specifically, its role in job satisfaction–turnover intentions relationship. In spite of the differing findings and arguments (Jaros, 1997; Solinger *et al.*, 2008), there is evidence of literature emphasizing the importance of organizational commitment, especially affective and normative commitments (Meyer *et al.*, 2002; Meyer & Parfyonova, 2010), beyond other attitudinal and perceptual factors (Blau, 2009) particularly in relation to turnover intentions. Therefore, this paper posits affective and normative commitment as not only antecedents of turnover intentions, but also, as mediators in the job satisfaction–turnover intentions relationship. Accordingly, we hypothesise:

**Hypothesis 3[a]:** *Affective commitment mediates the relationship between job satisfaction and turnover intentions.*

**Hypothesis 3[b]:** *Normative commitment mediates the relationship between job satisfaction and turnover intentions.*

### **Individual Background Factors**

Individual factors of age, gender, education, organizational and professional tenure, have been recognized as predictors of turnover intentions, as far back as the review and conceptual analysis of the turnover process in the intermediary linkages model by Mobley *et al.* (1979). The three-component model of organizational commitment also emphasizes the importance of individual differences (Meyer & Allen, 1991; Allen & Meyer, 1990). However, value attachment and empirical findings in this regard vary with context (Griffeth *et al.*, 2000; Hayes, *et al.*, 2012; De Gieter *et al.*, 2011), making them unique. Accordingly, this study treats age, gender, religion, professional cadre and organizational tenure as control variables given their influence on perceptions, attitudes and behaviours.

## **METHODS**

### **Study Design, Sampling, and Data Collection**

This study employed associational cross-sectional research designs so as to analyse data collected at one point in time (Creswell, 2014) and determine relationships and associations among the study variables. It surveyed a representative sample of 163 out of 284 nurses of different cadres in three catholic-founded hospitals under the Uganda Catholic Medical Bureau (UCMB) umbrella network in Kampala, including Uganda Martyrs Lubaga Hospital, Benedict Medical Centre, and Our Lady of Consolata Hospital Kisubi (Wakiso). Saint Francis Hospital Nsambya, is not included because of the difficulty with obtaining timely clearance from the hospital research office committee. The sample was proportionately distributed across the three hospitals, and the nurses were randomly selected on Wards. Out of the 163 questionnaires that were distributed physically, 131 were returned. However, 125 were usable while 6 were not adequately filled. This resulted in a total useable response of  $n = 125$ , constituting a response rate of 76.7%. The high response rate was achieved through regular physical follow-up by the first author. The survey questionnaire adopted existing scale items for the main study variables: job satisfaction, affective and normative

commitment, and turnover intentions. The responses were rated on a 5-point Likert-type scale, ranging from strongly disagree to strongly agree. Categorical variables for individual background factors were dummy coded with one category used as a reference.

## Measures

**Job satisfaction** was measured using a 4-items scale used by Bennett *et al.* (2000), addressing job satisfaction aspects of recognition, work achievement, nature of work, and advancement. A sample item included “*I am satisfied with the recognition I get for the work that I do*”. The Cronbach’s reliability alpha for this study was .75.

**Organizational commitment** was measured using affective and normative commitment scales (Meyer *et al.*, 1993) while continuance commitment was not considered in this study. Affective commitment included five items, with a sample item, “*I would be very happy to spend the rest of my career with this organization*”. Normative commitment included six items e.g., “*I owe a lot to this organization*” (Meyer *et al.*, 1993). The Cronbach alpha for affective commitment was .61 while that for normative commitment scale was .71. Although the Cronbach’s alpha for affective commitment scale was slightly lower compared to previous studies, and below the generally recommended threshold of .70, others (e.g., Taber, 2018; Gliem & Gliem, 2003) have recommended an average score of .50.

**Turnover intentions** were measured using a scale by Sager *et al.* (1998). It consisted of five items that were summed up as a single construct to form the turnover intentions index. A sample item included “*I desire to leave my current job*”. The Cronbach alpha was .75, consistent with previous studies (Lambert & Hogan, 2009).

**Individual characteristics** included age, gender, education, professional cadre, organizational tenure, and professional tenure; all measured as categorical variables. Each variable had one category as a reference. For example, *Gender* (male=0, Female=1). The results were interpreted in comparison to the reference category.

## Data Analysis

Data were analysed for descriptive, correlational and regression results, using Statistical Package for Social Scientists (SPSS) version 24. The descriptive results provided the distribution of responses according to percentages, means and standard deviations. Pearson product moment correlation ascertained correlations among variables. Correlations revealed preliminary relationships with medium effect sizes as evidenced by correlation coefficients ( $r$ ) of the predictors and the outcome variable being between .30 and .50 (Pallant, 2005). The coefficients of determination ( $R^2$ ) were also computed (as percentages of  $r$ ) to ascertain possible shared variances between the predictors and the outcome variable (Field, 2013). The relationships between the independent and the dependent variables were investigated using Ordinary Least Squares (OLS) Hierarchical Multiple Regression. This was supported by the nature of the hypothesised relationships at different levels with organizational commitment assumed to be more proximal while individual factors are distal (Blau, 2004) in the job satisfaction-turnover intentions relationship.

Data quality was assured by checking for outliers, normality, linearity, heteroscedasticity and multicollinearity prior to Pearson product moment correlation and regression analyses. First, the correlation coefficients of the study variables ruled out multicollinearity, with no coefficient being above +/- .90 (Field, 2013). Second, other collinearity diagnostics such as Variance Inflation Factor (VIF) and tolerance statistic (1/VIF) were also inspected to ascertain if the predictors had strong linear relationships. All these were within the recommended thresholds, for example, all VIF values were below 10 (Field, 2013; Pallant, 2005). Third, no case had a standardized residual value above +/- 3, ruling out any concerns about outliers. This confirmed normal distribution of residual errors, hence meeting the requirement of normality for regression analysis. Fourth, Cook’s distances had all values below 1, hence ruling out any possibility of influential cases on the model as a whole. Fifth, Durbin-Watson statistic confirmed that residual terms were uncorrelated or independent. While noting that values less than 1 or greater than 3 are a concern, Field



(2013) advised that the closer the value is to 2, the better. The value for this study was 2.05, which is very close to 2, hence meeting the assumption.

## RESULTS

### Descriptive and Correlation Results

The descriptive statistics reported in table 1 provide the distribution of the respondents according to different parameters of the sample. Female nurses constituted 91.2% while males were only 8.8% of the survey respondents. Over half of the respondents (54%) were under the age of 30; 37.1% were between 30 and 50 years; while those over 50 years accounted for 8.9% of the sample. This finding showing majority of the respondents being below 30 years is in line with that on professional tenure, where the majority of the nurses (45.5%) had worked for 4 years or less.

**TABLE 1**  
**INDIVIDUAL BACKGROUND VARIABLES**

	<b>Variable</b>	<b>Valid Percentage</b>
<b>Gender</b>	Male	8.8
	Female	91.2
<b>Age categories in years</b>	18-29	54.0
	30-49	37.1
	50-69	8.9
<b>Education Level</b>	Certificate	53.7
	Diploma	40.6
	Undergraduate	5.7
<b>Professional Cadre</b>	Enrolled Comprehensive Nurse	17.1
	Enrolled Nurse/Midwife	39.0
	Registered Comprehensive Nurse	4.1
	Registered Nurse	33.3
	Others	6.5
<b>Professional Tenure</b>	0-4	45.5
	5-9	23.6
	10-15	22.0
	16 and above	8.9
<b>Organizational Tenure</b>	<3 years	32.5
	3-9 years	48.8
	10 and above years	18.7
<b>Religion</b>	Moslem	4.1
	Catholic	65.9
	Other Christians	30.0

With regard to *education*; more than half of the respondents (53.7%), had a certificate in nursing, while 40.6% had a diploma. Only 7 respondents (5.7%) had an undergraduate degree while none of the respondents had a postgraduate qualification. Distribution by *Professional cadre* reveals an interesting finding. Enrolled and Registered Comprehensive Nurse cadres were fewer in numbers (17.1% and 4.1% respectively) compared to Enrolled and Registered Nurse cadres (39% and 33.3% respectively). *Organizational tenure* revealed a fairly stable workforce; with 48.8% having been at the same hospital for 3 to 9 years, while 18.7% had been there for more than ten years. 32.5% had worked at the hospitals for 3

years or less, which is reflective of the sample— where majority were younger nurses (see age categories, for example, 18-29 years =54%, and 30-49 years =37.1%. Only 8.9% were of 50 years and above). Considering *religion*, most respondents were Catholics (65.9%), with other Christian denominations constituting 30%, while Muslims were only 4.1% of the sample. This can be explained partly by first, the catholic faith constitutes the biggest population in the country, and second, the study hospitals are catholic-founded, which means that faith plays a crucial role in employment.

The means, standard deviations and Pearson product-moment correlation coefficients for the main study variables are reported in table 2. The results reveal significant negative correlations between job satisfaction ( $r = -.40, p < .05$ ), affective commitment ( $r = -.45, p < .05$ ), and normative commitment ( $r = -.40, p < .05$ ), with turnover intentions.

**TABLE 2**  
**CORRELATION MATRIX FOR THE MAIN VARIABLES**

Variables	Mean	Standard Deviation	1	2	3	4
1. Turnover Intentions	2.413	0.954	-			
2. Job Satisfaction	3.541	0.832	-.3995*	-		
3. Affective Commitment	3.458	0.592	-.4544*	.4055*	-	
4. Normative Commitment	3.496	0.692	-.3988*	.5595*	.4855*	-

**Note:**

a) 1= Turnover Intentions; 2=Job Satisfaction; 3=Affective Commitment; 4=Normative Commitment;

b) \* $P < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$  level of Significance

The results mean that higher levels of job satisfaction, affective commitment and, normative commitment, are correlated with lower levels of turnover intentions. The medium effect size, considering that the correlation coefficients are between -.30 and -.50, suggests strong relationships between the predictors and the dependent variable (Pallant, 2005). Whereas correlation does not infer causality, the coefficients of determination ( $R^2$ ) reveal strong shared variances between the predictors and the outcome variable. Job satisfaction ( $R^2 = .16$ ), affective commitment ( $R^2 = .20$ ), and normative commitment ( $R^2 = .16$ ); meaning that each of the respective three factors shares 16.0%, 20.3% and 16.0% of the variability in turnover intentions. This is strong preliminary evidence for testing the hypotheses.

**Regression Analysis and Hypotheses Testing**

The hypothesised relationships among the variables were estimated using hierarchical regression model. The approach was supported by the structured hierarchical nature of relationships, whereby some factors are distal with limited influence while others are more proximal and with stronger influence, and hence entered in such order (Blau, 2009). Therefore, the first block or model 1 included demographic variables: age, gender, professional cadre, organizational tenure and religion. The second model included adding organizational commitment (affective and normative commitment) as strong and most proximal predictors of turnover intentions (Currivan, 1999; Meyer & Allen, 1991; Meyer *et al.*, 2002). The third model added job satisfaction as the main variable of interest, whose contribution was to be ascertained after controlling for the effect of other variables considered by the model. The hierarchical regression results are reported in table 3.

Model 1 assessing the contribution of individual factors: age, gender, profession, organizational tenure, and religion as control variables made a significant contribution of 22.4% ( $R^2 = 0.224, F = 2.863, p < .002$ ) in explaining the variation in turnover intentions, considering only included factors. Female gender ( $b = -0.739, p = .02$ ), and organizational tenure between 3-9 years ( $b = -0.518, p = .04$ ), each negatively contributed to turnover intentions, while Registered Comprehensive Nursing as a profession ( $b = 1.064, p = .05$ ) positively predicted turnover intentions. The results indicate that each unit increase in the number of

females as compared to males, and employees who have worked with a hospital for 3-9 years as compared to those who worked for 10 years and above, is associated with a decrease in turnover intentions by 0.739 and 0.518 units respectively, holding other factors constant. However, one unit increase in the number of Registered Comprehensive Nurses in comparison to theatre nurses, is associated with an increase in turnover intentions by 1.064 units; holding other factors constant.

Model 2, adding affective and normative commitment to the overall model, made a significant contribution of 21.4% to the total variance in turnover intentions ( $R^2 = 0.439$ ,  $\Delta R^2 = 0.214$ ,  $F = 6.430$ ,  $p = .000$ ). Both affective commitment ( $b = -0.508$ ,  $p = .00$ ) and normative commitment ( $b = -0.329$ ,  $p = .01$ ) had statistically significant negative relationships with turnover intentions. This means that an increase in either affective or normative commitment by one unit, is each associated with a decrease in turnover intentions by 0.508 and 0.329 units respectively, holding other factors constant. Therefore, hypotheses H2[a] and H2[b] are fully supported; affective commitment and normative commitment are each negatively related to turnover intentions.

Model 3 added job satisfaction to the overall model to assess its effect on turnover intentions. This model made a significant contribution of 3.2% to the total variance in turnover intentions ( $R^2 = 0.471$ ,  $\Delta R^2 = 0.032$ ,  $F = 6.740$ ,  $p = 0.01$ ). Job satisfaction registered a statistically significant relationship with turnover intentions ( $b = -0.264$ ,  $p = 0.01$ ), implying that one unit increase in job satisfaction is associated with a decrease in turnover intentions by 0.264 units, when all other factors are held constant. Thus, hypothesis H1 is supported; job satisfaction is negatively related to turnover intentions.

**TABLE 3**  
**HIERARCHICAL REGRESSION MODEL OF STUDY VARIABLES**

VARIABLES	Model (1)				Model (2)				Model (3)			
	<i>b</i>	<i>SE B</i>	$\beta$	<i>P</i>	<i>b</i>	<i>SE B</i>	$\beta$	<i>P</i>	<i>b</i>	<i>SE B</i>	$\beta$	<i>P</i>
Constant	2.946***	0.576		.000	5.971***	0.684		.000	6.155***	0.671		.000
Age (1=18-29)	0.553	0.326	0.286*	.098	0.414	0.281	0.214	.151	0.447	0.274	0.232	.113
Age (2=30-49)	0.471	0.305	0.236	.134	0.395	0.262	0.198	.144	0.415	0.255	0.208	.116
Gender (1=Female)	-0.739**	0.299	-0.217**	.018	-0.738***	0.2560	0.217***	.006	-0.807***	0.250	-0.237***	.002
Profession (2= Enrolled Comprehensive)	-0.082	0.378	-0.032	.833	0.124	0.326	0.049	.709	0.130	0.317	0.051	.690
Profession (3= Enrolled Nurse)	-0.429	0.345	-0.217	.225	-0.220	0.298	-0.111	.470	-0.198	0.290	-0.101	.504
Profession (4= Registered Comprehensive)	1.064**	0.518	0.218**	.046	1.056**	0.445	0.217**	.022	1.026**	0.432	0.211**	.022
Profession (5=Registered Nurse)	-0.427	0.361	-0.209	.245	-0.227	0.311	-0.111	.473	-0.175	0.303	-0.086	.572
Organization Tenure (1=<3 years)	-0.223	0.267	-0.108	.415	-0.180	0.230	-0.088	.444	-0.096	0.226	-0.047	.678
Organization Tenure (2= 3-9 years)	-0.518**	0.242	-0.269**	.038	-0.533**	0.208	-0.277**	.013	-0.512**	0.202	-0.266**	.015
Religion (2=Catholics)	0.581	0.429	0.213	.231	0.416	0.370	0.153	.319	0.437	0.360	0.161	.283
Religion (3=Other Christians)	0.251	0.477	0.102	.568	0.030	0.410	0.012	.936	0.018	0.399	0.007	.961
Affective Commitment					-0.508***	0.136	-0.312***	.000	-0.440***	0.135	-0.270***	.002
Normative Commitment					-0.329***	0.118	-0.235***	.007	-0.185	0.129	-0.132	.158
Job Satisfaction									-0.264**	0.103	-0.228**	.012
$R^2$		0.224				0.439				0.471		
$\Delta R^2$		0.224				0.214				.032		
F-Statistic												
Total $\Delta R^2 = .471, p = .000$ , Durbin-Watson = 2.049.												
<b>Note:</b>												
a) *** $p < .001$ , ** $p < .01$ , * $p < .05$												
b) <i>SE B</i> = Standard Error of Beta												
c) Dependent Variable: Turnover Intentions												
d) Model 1= Individual Factors (Age, Gender, Profession, Organizational Tenure, Religion); Model 2= Affective Commitment and Normative Commitment entered; Model 3= Job Satisfaction.												
e) Reference for categorical data: Age= 50 and above; Gender=Male; Profession=Other cadres Organizational Tenure=10years and above; Religion=Muslim												

### **Mediation Effect of Affective and Normative Commitment**

To test for mediation in table 4, we used Baron & Kenny's (1986) approach that established four conditions that must be met in order to determine mediation. These are, significant relationships between: the independent and the dependent variables (path C), independent variable and the mediator (path a), the mediator and the dependent variable (path b), and; the relationship between the independent and dependent variables decreases in strength when the mediator is in the equation (path C'), either to zero in total/full mediation or to a non-zero value in partial mediation.

**TABLE 4**  
**MEDIATION ROLE OF AFFECTIVE AND NORMATIVE COMMITMENT**

Mediators	Paths from job satisfaction to affective and normative commitment, and to turnover intentions			
	JS→TOI Path C	JS→AC/NC Path a	AC/NC→TOI Path b	JS→AC/NC→TOI Path C'
AC (JS→ AC→ TOI)	-0.405, $p < 0.01$	0.246, $p < 0.01$	-0.690, $p < 0.01$	-0.289, $p < 0.01$
NC (JS→ NC→ TOI)	-0.405, $p < 0.01$	0.354, $p < 0.01$	-0.538, $p < 0.01$	-0.300, $p < 0.01$

*JS = Job satisfaction; AC = Affective Commitment; NC = Normative Commitment; TOI = Turnover Intentions. The reported regression coefficients are b-values.*

### *Mediation Effect of Affective Commitment*

The results in table 4 support Baron & Kenny's (1986) conditions for mediation. In the first model, there is a significant regression coefficient for the path from job satisfaction to turnover intentions (path C;  $b = -0.405, p < 0.01$ ), showing further support for hypothesis 1.

In the consequent models, the results reveal statistically significant coefficients for the paths from job satisfaction to affective commitment (path a;  $b = 0.246, p < 0.01$ ), and from affective commitment to turnover intentions (path b;  $b = -0.69, p < 0.01$ ). These three conditions with statistically significant coefficients are sufficient for testing mediation effects (Baron & Kenny, 1986). When affective commitment was included in the mediation model, the path between job satisfaction and turnover intentions (C') still remained significant ( $b = -0.289, p < 0.01$ ), but its magnitude reduced, showing support for partial mediation. This means that job satisfaction affects turnover intentions directly as well as indirectly, through affective commitment.

### *Mediation Effect of Normative Commitment*

Consistent with previous analyses as reported in table 4 above, relationships between job satisfaction and turnover intentions, job satisfaction and normative commitment, normative commitment and turnover intentions, and the relationship between job satisfaction and turnover intentions through normative commitment, were performed. First, there is a significant relationship between job satisfaction and turnover intentions (path C;  $b = -0.405, p < 0.01$ ). Second, there is a statistically significant coefficient for the paths from job satisfaction to normative commitment (path a;  $b = 0.354, p < 0.01$ ), and third, from normative commitment to turnover intentions (path b;  $b = -0.538, p < 0.01$ ). Fourth, the inclusion of normative commitment in the mediation model reveals that the path between job satisfaction and turnover intentions (C' path) still remained significant ( $b = -0.30, p < 0.01$ ), but its magnitude reduced, confirming partial mediation.

Therefore, all four of the conditions were met for each of the mediation relationships, and the results from the mediation tests reveal partial mediation. Consequently, H3[a] and H3[b] are supported; affective and normative commitment, each mediates the relationship between job satisfaction and turnover intentions. Overall, table 5 summarises the decisions on the set hypotheses for the study.

**TABLE 5**  
**SUMMARY OF DECISIONS ON HYPOTHESES TESTING**

Hypothesis 1	<i>There is a negative relationship between job satisfaction and turnover intentions.</i>	Confirmed
<i>Hypothesis 2[a]:</i>	<i>There is a negative relationship between affective commitment and turnover intentions.</i>	Confirmed
<i>Hypothesis 2[b]:</i>	<i>There is a negative relationship between normative commitment and turnover intentions.</i>	Confirmed
<i>Hypothesis 3[a]:</i>	<i>Affective commitment mediates the relationship between job satisfaction and turnover intentions.</i>	Confirmed - Partial mediation
<i>Hypothesis 3[b]:</i>	<i>Normative commitment mediates the relationship between job satisfaction and turnover intentions.</i>	Confirmed - Partial mediation

The results reveal that hypotheses 1, 2a and 2b are confirmed, that job satisfaction, affective commitment and normative committed are negatively related to turnover intentions. Hypotheses 3a and 3b show partial mediation of job satisfaction-turnover intentions relationship by affective and normative commitments.

## DISCUSSION

The study revealed interesting findings on both demographic and the main study variables in relation to turnover intentions. First, with regard to demographic variables, female nurses are associated with lower turnover intentions. This is contrary to some previous studies that established no difference by gender in turnover intentions for skilled workers generally (Griffeth *et al.*, 2000), and nurses in Jordan (Raddaha *et al.*, 2012). The finding also differs from those by Heinen *et al.* (2013) who found higher turnover intentions in male nurses, and high turnover intentions in female health workers (Bruyneel *et al.*, 2017). The low turnover intentions among females as compared to males underscores two reasons; first, nursing has generally been gendered as a female profession especially in Uganda, and second, it is still currently dominated by females. This suggests the need to encourage more males to join nursing as efforts also continue towards supporting the already stable females in the profession. However, while low turnover intentions of nurses are appreciated, this can be linked to their narrow specialization and limited employment opportunities.

Registered comprehensive nurses were the only cadre that was positively associated with turnover intentions. This can be attributed to lack of clear roles and responsibilities for this highly trained nursing group generally referred to as 'multipurpose' nurses, with skills in general nursing, midwifery, paediatrics, psychiatry, public health, and nursing management (Amandu *et al.*, 2013). The lack of clear roles can blur one's career path and advancement. Whereas it has been argued that nurses need clearly defined roles to avoid role ambiguity, role conflict, and role discrepancies (Hayes *et al.*, 2012), these are precursors to turnover intentions.

Nurses with organizational tenure of 3 to 9 years were associated with lower turnover intentions compared to those of 10 years or longer. In support of this finding, it is evident that the longer one works for an organization up to five years as an average, the more they understand the organization and available opportunities (Coomber & Barriball, 2007; Ma *et al.*, 2009). However, nurses under three years of organizational tenure, experience discrepancies in their career as compared to job expectations they develop while in training (Lavoie-Tremblay *et al.*, 2010). On the other hand, those of 10 years and above develop complacency, career frustration, and job dissatisfaction when they fail to advance (Ministry of Health, 2007; Nabirye *et al.*, 2011). Whereas nurses of 3-9 years of organizational tenure harbour lower turnover intentions, the profession should provide better terms and career opportunities so as to retain new entrants and those who serve beyond 10 years.

Second, among the main study variables, nurses satisfied with their jobs are less likely to intend to leave their hospitals. While empirical evidence (Labrague *et al.*, 2018; Lu *et al.*, 2019; Sojane *et al.*, 2016; Hagopian *et al.*, 2009) has confirmed a negative relationship between job satisfaction and turnover intentions, this study contributes to this debate by specifically considering the dimension of nurses and more so, in a developing country, Uganda. The study further distinctively examined job satisfiers/ intrinsic factors as the main source of job satisfaction, including recognition, advancement, achievement, and work itself. The importance of job satisfaction as exemplified by intrinsic factors responds to concerns about non-stimulating work, overwhelming workload, unclear or conflicting roles depicted by poor job description, which have been associated with turnover intentions (Coomber & Barriball, 2007; Hagopian *et al.*, 2009; Lu *et al.*, 2019). This concern is more evident with the registered comprehensive nursing, and hence, it requires clarity.

Organizational commitment as represented by affective and normative commitment in this study, each uniquely demonstrated its importance in explaining turnover intentions. As for affective commitment, it implies that nurses feel emotionally attached to their employing hospitals and hence, are less likely to intend to leave. Whereas this finding is supported by a number of previous studies (Abou, 2017; Ehksan, 2019; Labrague *et al.*, 2018; Lu *et al.*, 2012), this particular study contributes to knowledge from a different country context and culture as earlier recommended (Ko *et al.*, 1997; Meyer *et al.*, 2002). We argue that because of the nature of their work, nurses do not only develop emotional attachment to their patients, but also to the organization that provides them the platform to save lives. Faith-based hospital employees have for example been reported to be happier knowing that their work at the organization directly contributes to



helping others in need (Ministry of Health, 2007). However, to further improve their attachment and reduce turnover intentions across the board, considerable attention should be paid to improving terms of service for those below three, and above ten years of organizational tenure, clarifying roles for registered comprehensive nurses, and encouraging more males to join the profession.

The study further provides support for inclusion of normative alongside affective commitment, unlike where it has been suggested that when the two forms of commitment are studied together, normative commitment's contribution may be overshadowed by its similarity to affective commitment (Meyer *et al.*, 2002; Jaros, 1997). For this study, normative commitment makes its own distinctive contribution to reducing turnover intentions. This implies that nurses have a moral obligation to their hospitals, thereby developing a sense of loyalty that results in lower turnover intentions. Faith-based organizations are founded on religious moral principles, which create a sense of employee obligation towards the organization. The finding aligns well with some previous studies on normative commitment and turnover intentions (Abou, 2017; Ehksan, 2019; Labrague, *et al.*, 2018; Lu *et al.*, 2012), although not in a related context and sector. Although similar findings were established among post-graduate students (Tumwesigye, 2010), health sector and nursing profession make unique contributions in a unique health sector and profession.

Third, affective and normative commitment partially mediate the relationship between job satisfaction and turnover intentions. Whereas some studies mostly from the developed world support the mediation role of organizational commitment (Kartika & Purba, 2018; Samad & Yusuf, 2012; Wells *et al.*, 2016), the findings here emphasize the importance of nurses' emotional attachment and sense of obligation to their faith-based hospitals in the relationship between job satisfaction and turnover intentions. This is supported by the intermediary linkages model (Mobley *et al.*, 1979), which specifies the importance of links among variables. Moreover, the partial mediation effect by both affective and normative commitment in addition to their individual direct relationship with turnover intentions emphasizes their unique importance. Affective and normative commitments are therefore strong mechanisms for reducing turnover intentions, and also, for enhancing the effect of job satisfaction, at least, in the context of this study.

## CONCLUSIONS

This paper has been able to establish relationships between job satisfaction, affective and normative commitments and, turnover intentions. Informed by Mobley's intermediate linkages model (Mobley *et al.*, 1979), Herzberg's two-factor theory – with particular focus on job satisfiers (Herzberg *et al.*, 1959; Herzberg, 1965) and the three-component model of organizational commitment (Meyer & Allen, 1991, Allen & Meyer, 1990); all the study variables linked well and negatively associated with turnover intentions. A path was established from job satisfaction directly to turnover intentions, but also through organizational commitment (affective and normative commitments). Herzberg's job satisfiers importantly foster employee positive inner feelings about their jobs and hospitals, leading to organizational commitment within the lens of the three-component model, and subsequently lower turnover intentions.

Affective and normative commitment are evidently important not only in directly reducing turnover intentions, but also as mechanisms through which turnover intentions can be minimised. The two facets have been proved to be importantly different, making independent contributions to turnover intentions although some previous studies have criticised them for being the same (Jaros, 1997; Solinger *et al.*, 2008). Affective commitment creates emotional attachment whereby employees generally and nurses in this case, feel it in themselves wanting to stay with their employer. Normative commitment on its part creates a sense of obligation for employees to stay because they feel it is the right thing to do. This is entrenched in the medical professional code of conduct, and values espoused by the faith-based institutions such as catholic-founded hospitals.

The study underscores the importance of encouraging more males to join nursing, and for improved terms of service so as to maintain lower turnover intentions of female nurses. Moreover, there is need to redefine and clarify the roles and career paths of different nursing cadres. Whereas Registered Comprehensive Nurses are broadly trained and considered "multipurpose", they do not have specifically

defined roles, job descriptions and terms of service so unique to other cadres. Such ambiguity that remains with the nursing cadres is the reason the most revered cadre (Registered Comprehensive Nursing) harboured turnover intentions, a situation that can be averted through a review of cadres, their required qualifications and terms of service. Such a review can help address nursing expectations and hence provide employment stability for new entrants and employees with ten years and above in service.

However, caution is given while interpreting the findings of this study. First, the findings could be constrained by context – national, health sector, nursing, and catholic faith-based hospitals. It is important that similar studies are conducted in different contexts. Second, the study relied on self-reported survey, which is likely to bear common-method bias although care was taken in the design and analysis stages. Furthermore, we used hierarchical regression analysis and Baron & Kenny's (1986) steps for testing mediation. Although these have been criticised, they remain relevant and widely applied. However, different analytical tests such as PROCESS (Hayes, 2009; 2012) can be used to compare results. Considering other factors such as employee engagement can also make additional contribution.

## REFERENCES

- Abou, H.E. (2017). Relationship between ethical work climate and nurses' perception of organizational support, commitment, job satisfaction and turnover intent. *Nurse Ethics*, pp. 151–166.
- Addae, H.M., Parboteeah, K.P., & Velinor, N. (2008). Role stressors and organizational commitment: public sector employment in St Lucia. *International Journal of Manpower*, 29, 567–582.
- Allen, D.G., Shore, L.M., & Griffeth, R.W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management*, 29(1), 99–118.
- Allen, N.J., & Meyer, J.P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18.
- Allen, N.J., & Meyer, J.P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, 49(3), 252–276.
- Amandu, G.M., Uys, L.R., Mwizerwa, J., Erejod, A., Cheruto, I.A., & Chota, M. (2013). Introducing a new cadre into Uganda's health care system: Lessons learnt from the implementation process. *Procedia - Social and Behavioral Sciences*, pp. 670–676.
- Asegid, A., Belachew, T., & Yimam, E. (2014). Factors Influencing Job Satisfaction and Anticipated Turnover among Nurses in Sidama Zone Public Health Facilities, South Ethiopia. *Nursing Research and Practice*.
- Baron, R.M., & Kenny, D.A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, pp. 1173–1182.
- Bennett, S., Franco, L.M., Kanfer, R., & Stubblebine, P. (2000). *The Development of Tools to Measure the Determinants and Consequences of Health Worker Motivation in Developing Countries*. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc.
- Blau, G. (2009). Can a four-dimensional model of occupational commitment help to explain intent to leave one's occupation? *Career Development International*, 14(2), 116–132.
- Bonenberger, M., Aikins, M., Akweongo, P., & Wyss, K. (2014). The effects of health worker motivation and job satisfaction on turnover intention in Ghana: A cross-sectional study. *Human Resources for Health*, 12(1), 1–12.
- Brunetto, Y., Shacklock, K., Bartram, T., Leggat, S.G., Farr-Wharton, R., Stanton, P., & Casimir, G. (2012). Comparing the impact of leader–member exchange, psychological empowerment and affective commitment upon Australian public and private sector nurses: Implications for retention. *International Journal of Human Resource Management*, 23(11), 2238–2255.
- Bruyneel, L., Thoelen, T., Adriaenssens, J., & Sermeus, W. (2017). Emergency room nurses' pathway to turnover intention: A moderated serial mediated analysis. *Journal of Advanced Nursing*, pp. 930–942.

- Chiao, L.H., Wu, C.F., Tzeng, I.S., Teng, A.N., Liao, R.W., Yu, L.Y., . . . Su, T.T. (2021). Exploring factors influencing the retention of nurses in a religious hospital in Taiwan: A cross-sectional quantitative study. *BMC Nursing*, 20(1), 1–8.
- Coomber, B., & Barriball, K.L. (2007). Impact of job satisfaction components on intent to leave and turnover for hospital-based nurses: A review of the research literature. *International Journal of Nursing Studies*, pp. 297–314. doi:10.1016/j.ijnurstu.2006.02.004
- Coudounaris, D.N., Akuffo, I.N., & Nkulenu, A.O. (2020). Human resource management for Ghanaian nurses: Job satisfaction versus turnover intentions. *Sustainability*, 12(17), 7117.
- Currivan, D.B. (1999). The Causal Order of Job Satisfaction and Organizational Commitment in Models of Employee Turnover. *Human Resource Management Review*, pp. 495–524.
- Dado, W., Mekonnen, W., Aragw, M., Desta, B., & Desal, A. (2019). Turnover Intention of Health Workers in Public-Private Mix Partnership Health Facilities: A Case of Addis Ababa, Ethiopia. *Epidemiology (Sunnyvale)*, 9, 374.
- De Gieter, S., Hofmans, J., & Pepermans, R. (2011). Revisiting the impact of job satisfaction and organizational commitment on nurse turnover intention: An individual differences analysis. *International Journal of Nursing Studies*, pp. 1562–1569. doi:10.1016/j.ijnurstu.2011.06.007
- Delobelle, P., Rawlinson, J.L., Ntuli, S., Malatsi, I., Decock, R., & Depoorter, A.M. (2010). Job satisfaction and turnover intent of primary healthcare nurses in rural South Africa: A questionnaire survey. *Journal of Advanced Nursing*, pp. 371–383.
- Edoho, S.-A.P., Bamidele, E.O., Neji, O.I., & Frank, A.E. (2015). Job Satisfaction among Nurses in Public Hospitals in Calabar, Cross River State Nigeria. *American Journal of Nursing Science*, pp. 231–237.
- Ehksan, M. (2019). The Influence of Job Satisfaction and Organizational Commitment on Employees Turnover Intention. *Journal of Business, Management and Accounting*, pp. 48–55.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. London: Sage.
- Fogel, K.M. (2007). *The relationships of moral distress, ethical climate, and intent to turnover among critical care nurses*. Loyola University Chicago.
- Gauger, J.W. (2013). *Integrating Content and Process Models to Study Turnover*. Ottawa: Unpublished Thesis.
- Gliem, J.A., & Gliem, R.R. (2003). Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. *Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education*. Columbus, OH: The Ohio State University.
- Griffeth, R.W., Hom, P.W., & Gaertner, S. (2000). A Meta-Analysis of Antecedents and Correlates of Employee Turnover: Update, Moderator Tests, and Research Implications for the Next Millennium. *Journal of Management*, pp. 463–488.
- Guntur, R.M., Haerani, S., & Hasan, M. (2012). The influence of affective, continuance and normative commitments on the turnover intentions of nurses at Makassar's private hospitals in Indonesia. *African Journal of Business Management*, pp. 10303–10311.
- Hagopian, A., Zuyderduin, A., Kyobutungi, N., & Yumkella, F. (2009). Job Satisfaction and Morale in the Ugandan Health Workforce. *Health Affairs*, pp. w863–w875.
- Hayes, A.F. (2009) Beyond Baron & Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408–420.
- Hayes, A.F. (2012). *PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling* [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Hayes, L.J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., . . . North, N. (2012). Nurse turnover: A literature review – An update. *International Journal of Nursing Studies*, pp. 887–905. doi:10.1016/j.ijnurstu.2011.10.001
- Heinen, M., Achterberg, T.V., Schwendimann, R., Zander, B., Matthews, A., & Ko'zsk, M. (2013). Nurses' intention to leave their profession: A cross sectional observational study in 10 European countries. *International Journal of Nursing Studies*, pp. 174–184.

- Herzberg, F. (1965). The Motivation to Work Among Finnish Supervisors. *Personnel Psychology*, pp. 393–402.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to Work*. New York: Wiley.
- Ingersoll, G., Olsan, T., Drew-Gates, J., DeVinney, B., & Davies, J. (2002). Nurses' job satisfaction, organisational commitment, and career intent. *The Journal of Nursing Administration*, pp. 250–262.
- Iverson, R.D. (1999). An event history analysis of employee turnover: The case of hospital employees in Australia. *Human Resource Management Review*, 9(4), 397–418.
- Jaros, S., & Culpepper, R.A. (2014). An analysis of Meyer & Allen's continuance commitment construct. *Journal of Management and Organization*, 20(1), 79–99.
- Jaros, S.J. (1997). An assessment of Meyer & Allen's (1991) three-component model of organizational commitment and turnover intentions. *Journal of Vocational Behavior*, 51(3), 319–337.
- Jaros, S.J., Jermier, J.M., Koehler, J.W., & Sincich, T. (1993). Effects of Continuance, Affective, and Moral Commitment on the Withdrawal Process: An Evaluation of Eight Structural Equation Models. *Academy of Management Journal*, 36(5), 951–995.
- Kacel, B., Millar, M., & Norris, D. (2005). Measurement of Nurse Practitioner Job Satisfaction in a Mid-Western State. *Journal of the American Academy of Nurse Practitioners*, pp. 27–32.
- Kanwar, Y., Singh, A., & Kodwani, A.D. (2012). A Study of Job Satisfaction, Organizational Commitment and Turnover Intent among the IT and ITES Sector Employees. *Vision*, pp. 27–35. doi:10.1177/097226291201600103
- Kartika, G., & Purba, D.E. (2018). Job satisfaction and turnover intention: The mediating effect of affective commitment. *Psychological Research on Urban Society*, pp. 100–106.
- Kashifa, Y., & Marzuki, N.A. (2015). Impact of Organizational Commitment on Intention to Quit Among Psychiatric Nurses: Evidence from Pakistan. *International Journal of Learning and Development*, pp. 89–102.
- Ko, J.W., Price, J.L., & Mueller, C.W. (1997). Assessment of Meyer & Allen's three-component model of organizational commitment in South Korea. *Journal of Applied Psychology*, 82(6), 961–973.
- Labrague, L.J., Gloe, D., McEnroe, D.M., Konstantinos, K., & Colet, P. (2018). Factors Influencing Turnover Intention among Registered Nurses in Samar Philippines. *Applied Nursing Research*, pp. 200–206.
- Labrague, L.J., McEnroe-Petite, D.M., Tsaras, K., Cruz, J.P., Colet, P.C., & Gloe, D.S. (2018). Organizational Commitment and Turnover Intention among Rural Nurses in the Philippines; Implications for Nursing Management. *International Journal of Nursing Sciences*, pp. 403–408.
- Lambert, E., & Hogan, N. (2009). The Importance of Job Satisfaction and Organizational Commitment in Shaping Turnover Intent. *Critical Justice Review*, pp. 96–118.
- Larkin, I.M., Brantley-Dias, L., & Lokey-Vega, A. (2016, September). Job Satisfaction, Organizational Commitment, and Turnover Intention of Online Teachers in the K-12 Setting. *Online Learning*, 20(3), 26–51.
- Lavoie-Tremblay, M., Leclerc, E., Marchionni, C., & Drevniok, U. (2010). The Needs and Expectations of Generation Y Nurses in the Workplace. *Journal for Nurses in Staff Development*, pp. 2–8.
- Lee, K., Allen, N.J., Meyer, J.P., & Rhee, K-Y. (2001). The Three Component Model of Organizational Commitment: An Application to South Korea. *Applied Psychology: An International Review*, 50(4), 596–614.
- Lu, H., Barriball, K.L., Zhang, X., & While, A.E. (2012). Job satisfaction among hospital nurses revisited: A systematic review. *International Journal of Nursing Studies*, pp. 1017–1038. doi:10.1016/j.ijnurstu.2011.11.009
- Lu, H., Zhao, Y., & While, A. (2019). Job satisfaction among hospital nurses: A literature review. *International Journal of Nursing Studies*, pp. 21–31.
- Lu, K.-Y., Lin, P.-L., Wu, C.-M., Hsieh, Y.-L., & Chang, Y.-Y. (2002). The Relationships Among Turnover Intentions, Professional Commitment, and Job Satisfaction of Hospital Nurses. *Journal of Professional Nursing*, pp. 214–219.

- Luz, C.M., Luiz de Paula, S., & Barbosa de Oliviera, L.M. (2018). Organizational Commitment, Job Satisfaction, and their Possible Influences on Intent to Turnover. *Revista de Gestão*, 25(1), 84–101. doi:10.1108/REGE-12-2017-008
- Ma, J.-C., Lee, P.-H., Yang, Y.-C., & Chang, W.-Y. (2009). Predicting Factors related to Nurses' Intention to Leave, Job Satisfaction, and Perception of Quality of Care in Acute Care Hospitals. *Nursing Economics*, pp. 178–184.
- Maertz, C.P., & Campion, M.A. (1998). 25 Years of Voluntary Turnover Research: A Review and Critique. *International Review of Industrial and Organizational Psychology*, pp. 49–81.
- Mash, R., Phaladze, N., & Nkomazana, O. (2015). Understanding the organisational culture of district health services: Mahalapye and Ngamiland health districts of Botswana. *African Journal of Primary Health Care and Family Medicine*, 7(1), 1–9.
- Mete, E.S., & Sokmen, A. (2017). Exploring the Relationship between Job Satisfaction and Turnover Intention among Employees in Hospitality Industry: The Moderating Role of Gender. *International Review of Management and Business Research*, pp. 1287–1298.
- Meyer, J.P., & Allen, N.J. (1991) A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89.
- Meyer, J.P., & Herscovitch, L. (2001) Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11(3), 299–326.
- Meyer, J.P., & Parfyonova, N.M. (2010) Normative commitment in the workplace: A theoretical analysis and re-conceptualization. *Human Resource Management Review*, 20(4), 283–294.
- Meyer, J.P., Allen, N.J., & Smith, C.A. (1993) Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538–551.
- Meyer, J.P., Stanley, D.J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1), 20–52.
- Ministry of Health Uganda. (2011). *HRH 5 Year Roll Out Plan*. Kampala: Ministry of Health Uganda.
- Ministry of Health. (2007). *Uganda Health Workforce Study: Satisfaction and Intent to Stay Among Current Health Workers*. Kampala: The Republic of Uganda.
- Ministry of Health. (2015). *Human Resources for Health Bi-Annual Report*. Kampala: Uganda Ministry of Health.
- Ministry of Health. (2019). *Annual Health Sector Performance Report*. Kampala: Uganda Ministry of Health.
- Mobley, W., Griffeth, R., Hand, H., & Meglino, B. (1979). Review and Conceptual Analysis of the Employee Turnover Process. *Psychological Bulletin*, pp. 493–522.
- Mobley, W.H. (1977). Intermediate Linkages in the Relationship between Job Satisfaction and Employee Turnover Process. *Journal of Applied Psychology*, pp. 237–240.
- Momanyi, N.B., & Kaimenyi, C.K. (2015). An investigation into factors causing high nurse turnover in mission hospitals in Kenya: A case for Pcea Chogoria hospital. *International Journal of Academic Research in Business and Social Sciences*, 5(3), 55.
- Nabirye, R.C., Brown, K.C., Pryor, E.R., & Maples, E.H. (2011). Occupational stress, job satisfaction and job performance among hospital nurses in Kampala, Uganda. *Journal of Nursing Management*, pp. 760–768.
- Nagar, K. (2012). Organisational commitment and job satisfaction among teachers during times of burnout. *Research Journal*, 37(2), 43–60.
- Pallant, J. (2005). *SPSS Survival Manual*. Crows Nest: Allen and Unwin.
- Porter, L.W., & Steers, R.M. (1973). Organisational, Work and Personal Factors in Employee Turnover and Absenteeism. *Psychological Bulletin*, pp. 151–176.
- Raddaha, A.H., Alasad, J., Albikawi, Z.F., Batarseh, K.S., Realat, E.A., Saleh, A.A., & Froelicher, E.S. (2012). Jordanian nurses' job satisfaction and intention to quit. *Leadership in Health Services*, pp. 216–231.

- Rawashdeh, A.M., & Tamimi, S.A. (2019). The impact of employee perceptions of training on organizational commitment and turnover intention: An empirical study of nurses in Jordanian hospitals. *European Journal of Training and Development*.
- Robbins, S.P., & Judge, T.A. (2013). *Organizational Behavior*. New Jersey: Prentice Hall.
- Sager, J., Griffeth, R., & Hom, P. (1998). A Comparison of Structural Models Representing Turnover Cognitions. *Journal of Vocational Behavior*, pp. 254–273.
- Samad, S., & Yusuf, S.Y. (2012). The role of organizational commitment in mediating the relationship between job satisfaction and turnover intention. *European Journal of Social Sciences*, pp. 125–135.
- Shumba, C.S., Kielman, K., & Witte, S. (2017). Health workers' Perceptions of Private-not-for-Profit Health Facilities' Organizational Culture And its Influence on Retention in Uganda. *BMC Health Services Research*.
- Singh, N., & Sharma, L. (2015). Process Models of Employee Turnover during 1975 to 1995: A Review . *European Academic Research*, pp. 2494–2518.
- Sojane, J., Klopper, H., & Coetzee, S. (2016). Leadership, job satisfaction and intention to leave among registered nurses in the North West and Free State provinces of South Africa. *Curationis*, pp. e1–e10.
- Solinger, O.N., Van Olffen, W., & Roe, R.A. (2008). Beyond the three-component model of organizational commitment. *Journal of Applied Psychology*, 93(1), 70–83.
- Spector, P. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences*. London: Sage Publications.
- Stello, C.M. (2011). Herzberg's Two-Factor Theory of Job Satisfaction: An Integrative Literature Review. *Journal of Education and Human Development*.
- Taber, K.S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Res Sci Educ*, pp. 1273–1296.
- Tourangeau, A.E., Cummings, G., Cranley, L.A., Ferron, E.M., & Harvey, S. (2010). Determinants of hospital nurse intention to remain employed: broadening our understanding. *Journal of Advanced Nursing*, pp. 22–32.
- Tumwesigye, G. (2010). The relationship between perceived organisational support and turnover intentions in a developing country: The mediating role of organisational commitment. *African Journal of Business Management*, pp. 942–952.
- Wells, J.B., Minor, K.I., Lambert, E.G., & Tilley, J.L. (2016). A Model of Turnover Intent and Turnover Behavior Among Staff In Juvenile Corrections. *Criminal Justice and Behavior*.
- WHO. (2006). *The World Health Report 2006 - Working Together for Health*. WHO.
- WHO. (2016). *Global Strategic Directions for Strengthening Nursing and Midwifery 2016-2020*. Geneva.
- Yalabik, Z.Y., Popaitoon, P., Chowne, J.A., & Rayton, B.A. (2013). Work engagement as a mediator between employee attitudes and outcomes. *The International Journal of Human Resource Management*. DOI:10.1080/09585192.2013.763844
- Zuyderduin, A., Obuni, J.D. & McQuide, P.A. (2010). Strengthening the Uganda nurses' and midwives' association for a motivated workforce. *International Nursing Review*, 57(4), 419–425.