

# Demographic Factors Predicting Turnover Intentions in Tamale Technical University

Yakubu Hawawu  
Tamale Technical University (TaTU), PR Unit

## Abstract

The study sought to understand demographic factors predicting turnover intentions in Tamale Technical University. Literature was reviewed in areas of turnover and the following demographic factors: age, gender, education, tenure, marital status and income. Correlation design and quantitative strategy were used in this study.

**Keywords:** Demographic Factors, Turnover, Technical Universities, Tamale Technical University (TaTU)

## Introduction

Tamale Technical University (TaTU) is faced with unabated employee turnover. TaTU has loss 73 staff representing 13% from 2012 to 2017 (TaTU Human Resource Unit, 2017). Contrary to this decline, Government of Ghana has placed ban on employment in the almost all sectors of the economy. This has posed a significant challenge which is affecting TaTU negatively in recent times. The quality of performance of any firm is contingent on the staff (Akovaa, Cetin, & Cifci, 2015). Put differently, turnover is regarded as one of the key factors that define business success, because the lesser the turnover, the superior the company in competitive set (Baum, 2007; Mohsin, Lengler & Bhupesh, 2013), and its continuous existence (Baum, 2006). Extensive literature has acknowledged the trend of teacher turnover globally, but far less research has been conducted in the area of demographic factors predictors of turnover in higher institutions like Technical Universities. This has generated a knowledge cavity on staff turnover, therefore, the current study targets to fill the omitted gap by determining the demographic factors that influence turnover intention in Technical Universities with specific to TaTU. This research contributes to the understanding of Lecturers' turnover by modeling the link between turnover and the following factors: age, gender, education, tenure, marital status and income.

## LITERATURE REVIEW

### Turnover Intentions

According to Brough and Frame (2004), turnover intention is a person's anticipated probability to leave his/her presents institution in the near future. Turnover intention is the intention of employees to lay off their organization (Shaw, 2013). Turnover intention is the likelihood that an employee will change a job within a certain point culminating into real turnover (Kauret et al., 2013). Research has shown that employees normally take conscious decisions before actually exiting the organization (Ali et al., 2016). David (2008) proffered that turnover intention is a strong turnover determinant compared with other factors such job environment among others. To determine the probability employee leaving the firm, turnover has to be measured so that, opportunities can be identified to reduce the effect of the turnover (Kaur et al., 2013). The negative consequences of turnover in an organization are in respect of assets and labour (Shaw, 2013).

### Turnover Intention in Education

Turnover is connected with gargantuan institutional cost as a result of employee leaving his/her job because of human resource processes such recruiting, hiring, and training among others (Magbool & Murtaza, 2012). Educational institutions have taken keen interest in turnover rate of staff since turnover leads to disruptions (Murphy, 2009) such as teaching and learning in the Universities. According to Dessler (2009), employee turnover in higher education is caused by host of factors such as employee attendance, low wages, job performance, and company benefits amongst others. Previous researchers have shown the problems of turnover in firms but had not provided practical solutions that will increase employee retention and company efficiency (Ali, 2010; Dessler, 2009; Duncan, 2008; Edward, 2010; Fredrick, 2010; Maxwell, 2010; Miller, 2006; Paul, 2009; Philip, 2009).

### Research Model

#### Demographic factors affecting Turnover

According Meral, Irge, Seval and Luftihak (2012), workers leave their present institutions for range of reasons which have been investigated earlier via research. The demographic factors influencing employee turnover include: age, gender, education, tenure, marital status and income.

#### Gender and Turnover Intention

Malaysian Department of Statistics (2012), proffered that of late, Malaysian women are ever willing to part take

in organizational management, and that trend is likely to continue into the future. Also, in Akovaa et al. (2015), women's role in the families makes them pay less attention to business matters. Women are the most affected by the gender variable due to the role of child birth, and child up bringing (Darcy, McCathy, Hill, & Grady, 2012). Meral et al. (2012) stated that, better commitment to the firm comes from the male employees, because they occupy better ranks than their female counterpart. Staff's external responsibilities as parents was a reason that was important to a mother with children at their infant stages, hence, psychological contract significantly affect turnover intention (Botsford-Morgan & King, 2012). The sexual characteristics of a supervisor and leadership approach are critical factors for turnover plans (Grisson et al., 2012). Individual employee's turnover intentions increase when he/she perceives a treatment as unfair justice, and employees with opposite sex characteristics. In Botsford-Morgan and King (2012), the ability of the supervisor to moderate the undesirable effects was a key reason for retaining female staff. Byrd et al. (2000) found no difference between male and female intentions towards turnover. "The departure rates of men and women appointed to the tenure track for medical faculty members were the same" (Speck et al., 2012, p.78). Males with high levels of self-efficacy were associated with higher intentions to turnover than females (Troutman et al., 2011).

Due to these inconsistencies, I formulate the hypothesis that:

There is a significant relationship difference in gender of the employee towards turnover intentions amongst staff of the University.

### **Age and Turnover Intention**

The age of the staff has varying impact on decisions of turnover (Teclaw, Osafuke, Fishman, Moore Dyrenforth, 2014). Toosi (2012) found that, in 2020, United States will lose 3.6 million labour force due to retirement and old age. Knowledge transfer management has become very imperative for firm leaders so as to prepare the young ones to succeed the experienced workforce who will be exiting (Toosi, 2012). In the education sector there exists a positive association between age and turnover intentions (Tepeci & Barlett, 2002). Other researchers have found a negative relationship age and turnover (Byrid et al., 2000; Griffeth et al., 2000; Henneberger & Souza-Poza, 2007; Iverson & Currivan, 2003; Mor-Byrid et al., 2001; Mitchell et al., 2000; Piriyaikul & Khantanaphad, 2012). A study conducted by Simon, Muller and Hasselborn (2010) showed that younger staff have high intention to exit compared to the older counterpart. Supporting this assertion, were Bjelland et al. (2011), Couch (2011) and Lopina, Rogelberg, and Howell (2012), who after comparing older and younger workforce, found that, a vast dissimilarity exists in workforce mobility and intentions to leave between them. Also in a Malaysian study, Okpara (2004) found that older people have a propensity to be more content with their jobs than the young workers. On the contrary, Akovaa et al. (2015) investigated age variable and turnover, declared that, younger employees are highly committed to the firm as a result of their fewer experiences they have, which limits their ability to change jobs. In many cases, because of the non-availability of jobs out there, employees prefer to stay with the current organization (Wren, Berkowitz, & Grant, 2014). The age of employee can influence his/her perception of job commitment and satisfaction (Wren et al., 2014; Lambert et al., 2012). Buttressing this assertion, matured workforces have rare intentions to quit than the younger workforce (Bjelland et al., 2011; Lambert et al., 2012; Monk, 2012; Wren et al., 2014). Difference also exists between different countries' workforce. This is because in Couch (2011), Germany workers have longer medium employment length than United States workers. We therefore propose the second hypothesis that:

There is significant difference between different age groups amongst staff of the University.

### **Marital status and Turnover Intention**

Marital status is yet another antecedent which influences turnover intention. Salami (2008) opined that marriage has an adverse effect on turnover intention of staff whereby it will be expensive for employees' family to rearrange for new jobs. Single individuals have high turnover compared to marriage workforce (Akintayo, 2010). This is because, married respondents perform family roles particularly, and men employees who are married have a great sense of family responsibility (Chughtai & Zafar, 2006). There exists no positive relationship between marital status and turnover intention in the educational industry (Chughtai & Zafar, 2006). Therefore the third hypothesis was formulated as follows:

There is significant association between marital status and turnover intention of the University.

### **Educational qualification and Turnover Intention**

The recognition of a higher degree of education enhanced the marketability of employee (Stanley, Vandenberghe, Vandenberg & Bentein, 2013). In Mitchell et al. (2000), employees' educational level was positively related with staff intention to leave in the hospitality industry (Khatri et al., 2001), health sector (Yin & Yang, 2002), retail sector (Stanley et al., 2013), higher education (Salami, 2008). Employees who obtain higher certificates tend to seek employment in new organizations (Wren et al., 2014). Also, employees with higher qualifications usually have higher expectations from his/her employers (Igbarr, 2010). Therefore employees with higher degrees were more

likely to quit the present employment compare with those who do not have college degrees (Islam et al., 2013). According to Salami (2008), individuals with higher education and take up senior positions will have higher task towards the firm. In Pakistan, academic staff in the universities were investigated, comparing their level of education, turnover intentions and institutional commitment. It was found that negative relationship exists between educational qualification and intention to leave (Chughtai & Zafar, 2006), even in social service workers (Curry et al., 2005). Higher educational qualification has higher level of job satisfaction (Toker, 2007). A positive link existed between individual's educational qualification and turnover intention and supervisor's status (Islam et al., 2013). According to Jayasingam and Yong (2013), individuals with higher degree were of high quality, knowledge workers and high performing teams reduced the possibility of turnover in institutions. Finally, Islam et al. (2013) found very much educated employees sought job opportunities via knowledge intensive organizations. Based on this argument the research formulated the hypothesis that:  
There is significant difference amongst level of education and turnover intention of the University.

### **Income and Turnover Intention**

In some organizations it is difficult to understand a fair compensation. Income is the amount of money an employee gets. Rost and Weibel (2013) said good leaders sometimes use the labour market rate to determine equitable compensation. Taylor and Finley (2010) disclosed that, employee turnover is high in industries where employees' entry jobs receives poor earnings and are easily replaceable. Payment methods are associated with workforce level and degree of commitment to the university (Kaplan, Wiley & Msertz, 2011; Ryan, Healy & Sullivan, 2012). An affirmative link between monetary compensation and the effectiveness of multiplicity inventiveness existed (Kaplan et al., 2011). In Llorens and Stazyk (2010), it was postulated that, the remuneration level of an employee, significantly affects his/her decision to quit or stay in the institution. Also, a positive connection exist between public and private sector pay equity and employees intention to leave (Llorens & Stazyk, 2010). According to Monk (2012), leaders in private Universities are able to hire and retain capable and talented administrators because of higher salaries paid to them. In Messersmith, Guthrie, Ji and Lee (2011), it was found that, top level management especially the CEO's remuneration was a leading predictor in voluntary turnover and firm's profitability. Also, pay satisfaction and organization commitment were important determinants of workforce intention to quit or stay (Messersmith et al., 2011). O'Neil, Stanley and O'Reilly (2010) found a positive effect between financial reward, salary expectations and high performance. A positive effect between financial reward employee retention existed in the hospitality industry (O'Neil et al., 2010). However, Lin, Hsien-Chang and Lie-Huey (2013) found unpaid CEOs were linked to significant increases in institutions profitability, as against their counterparts who receive an equitable remuneration. Employee with high monetary reward but has stumpy performance are likely to leave the organization (Carnahan et al., 2012). It is hypothesized that:

There is a significant difference amongst different income group towards turnover intentions of the staff of the University.

### **Tenure of Office and Turnover Intention**

Tenure of office is the time-span that a worker spends at employment they presently find themselves (Ng & Feldman, 2013; Burler, Brennan-Ing, Wardamasky & Ashley, 2014). Ng and Feldman (2013) coupled increased duration of tenure with staff's worth in the labour market. The absence of good pay amongst the younger employees is a catalyzing factor for quitting even if the job is consistent with employee requirements and needs (Butler et al., 2014). Long served staff are not as dependent on exchange relationship after all the staff is aware of the expectations of the leaders of the firm (Ali, 2015; Bal et al., 2013). Again, long served staff more likely to have adequate person-organization fit (Bal et al., 2013). A link therefore exists between long service and staff obligation and contribution (Bal et al., 2013). According to Dinger, Thatcher, Stepina and Craig (2012) posited that, human resource theorists believed that, affective commitment is linked to decision to stay in the institution. Also, due to accumulated experience and organizational investment long served staff are unwilling to quit present jobs (Maden, 2014). Long-tenured workforce demonstrates more professionalism compare to the short-tenured counterparts (Ali, 2015; Dinger et al., 2012).

It is hypothesized that:

Tenure has a significant effect on turnover intention amongst staff of the University.

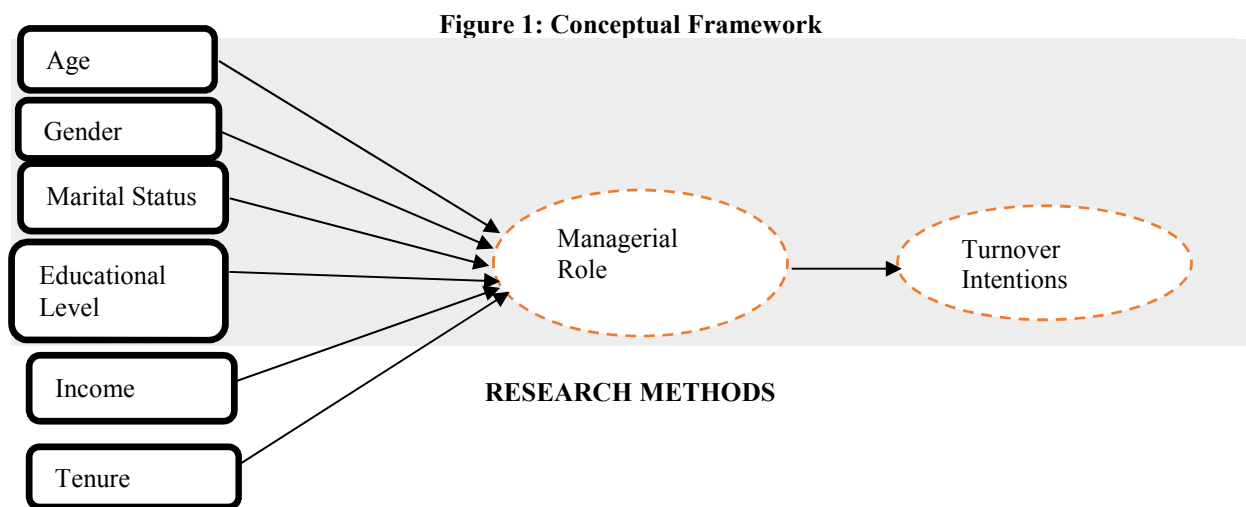
### **Managerial Role, demographic variables and turnover**

Managers make strategies for institutions (Scoles and Johnson, 2005). Managers therefore paly a critical role in shaping staff opinions and perception (Campbell, Perry, Maertz, Allen, & Griffeth, 2013). Separation of employees can result in turnover (Chang & Lyon, 2012). Output and morale mostly diminishes when workforce think that their managers are not willing to listen and respond to workers needs (Chang & Lyon, 2012). Employee perception about the employer's recognition can diminish the effort of the employee resulting in

intention to leave (Shuck et al., 2011). Firms need to create programs that address the human capital requirement in the firm; by considering employee age, marital status, educational qualification, tenure of office and income (Mullins, 2016; Campbell et al., 2013; Sgourey, 2011). Management needs to design good compensation packages to retain competent and experience employee (McClellan et al., 2013). Chang, Wang and Haung (2013) suggested that management should provide training programs to create job satisfaction and lower intentions to quit. Management should identify and replace employees who are low performing in organization (Kwon & Rupp, 2013).

### Conceptual Framework

Based on the discussions in the literature, the conceptual framework is encapsulated in figure 1. Conceptual framework is constructed on tenants of chief goal of the paper, which is to assess the contribution of demographic characteristics to turnover intention in Tamale Technical University.



### Research Design and Strategy

The researcher employs correlation design which involves the gathering of information from a particular population (Cohen, Cohen, West & Aiken, 2013). Correlation design is used to assess the association between a predictor variables, and criterion variable (Cokley & Awal, 2013). Correlation is appropriate for this study because of the need to assess the association between turnover (criterion variable) and education, gender, age, income and tenure of employees (Predictor variables).

The researcher used quantitative strategy for this study. Therefore, deductive research method was used, since quantitative uses deductive methods to analyse phenomenon (Venkatesh, Brown & Bala, 2013). The rationale for the use of quantitative was to test the hypotheses of the study. It also uses intensity, frequencies and numbers to get broad concepts into particular conclusion and describe difference amongst clusters (Cokley & Awal, 2013).

### Population and Sampling

Mostly, in quantitative research, the researcher uses sampling strategies on large populations to draw conclusions (Uprichard, 2013). The population of the University is 513 with 199 teaching and 314 non-teaching staff (TaTU, HR Unit, 2017). Non-probability sampling method (convenient sampling technique) was employed to spread knowledge of the population sample (Uprichard, 2013). Convenient sampling technique was used because it is less costly, and simplifies recruitment of available and willing respondents (Bornstein, Jager & Putnick, 2013). Yamane (1967) sample size formula was used as follows:

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

Where n=sample size

N=population

e=Margin of error

1=is constant

n=?

N=513

e=5% (0.05)

$$n = \frac{513}{1+513(0.05)^2} \quad n = \frac{513}{1+513(0.0025)} \quad n = \frac{513}{1+1.2825}$$

$$n = \frac{513}{2.2825} \quad n = \frac{513}{2.2825} \quad n=224.75356, \text{ Hence, the sample size is } \underline{225}$$

**Data Collection Instrument**

Questionnaire was used for the collection of data from the respondents. The questions were closed ended since the research strategy is quantitative. The researcher measured participants' responses using a rating scale called 5-point Likert scale as follows: strongly disagree=1, disagree=2, neutral=3, agree=4, and strongly agree=5. According to Meyers, Gamst and Guarino (2013), point rating scale may not signify equal interval, but ranking scale data are nearer to interval than ordinal scale data, hence, rating are broadly used as interval data in quantitative analysis.

**Reliability**

The researcher developed the reliability and validity of a 5-item turnover intention questionnaire instrument. The first three items are adapted from Buttigieg and West (2013) and Yucel (2012), whilst the other two are the researcher's own constructs. Tayakol and Dennick (2011) said, Cronbach's alpha is the universally used measure for testing reliability in inter item phenomenon. Cronbach's alpha is ideal when it is 0.9 or above (Tayakol & Dennick, 2011). Other researchers have recommended 0.70-0.95 for questionnaire on turnover intentions of staff (Buttigieg & West, 2013; Yucel, 2012).

**Data Analysis**

The researcher used multiple regression analysis to run analysis for the relationship between dependent variable (turnover) and independent variables (age, income, gender, turner of office, and educational level). Green and Salkind (2011) proffered that, the arithmetical conventions of multiple regression analysis are: linear relationship; normal data distribution; homoscedasticity; and measurement accuracy. Multiple regression analysis describes the effect of variance of the independent variable to the entire variance of the dependent variable, as well as the magnitude, direction and nature of associations between variables (Chen et al., 2013).

**Details of Analysis of Results**

**Measuring the internal consistency of the data**

Cronbach's alpha is the most common measure of internal consistency ("reliability"). It is used since the questions in a survey/questionnaire forms a scale and it is wished that we want to determine if the scale is reliable. The Reliability Statistics is shown in Table 1 below.

SPSS Statistics produces many different tables. The first important table is the Reliability Statistics table that provides the actual value for Cronbach's alpha, as shown in Table 1 below:

**Table1: Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.901	.902	5

From Table 1 above, the Cronbach's alpha is 0.901, which indicates a high level of internal consistency for our scale with this data.

The Item-Total Statistics table presents the "Cronbach's Alpha if Item Deleted" in the final column, as shown in Table 2 below:

**Table 2: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
It is possible that I will look for a new job any moment from now	11.04	17.758	.830	.892	.882
If given the opportunity, I would not work for the University	10.67	17.507	.844	.930	.879
I often thought of leaving the University	10.68	20.558	.720	.652	.804
I will only leave when I retire	10.96	18.767	.934	.895	.862
I will create my own firm and leave	11.23	22.256	.587	.564	.900

This column presents the value that Cronbach's alpha would be if that particular item was deleted from the scale. We can see that removal of any question, would result in a lower Cronbach's alpha. Therefore, we would not want to remove any these questions. It is also clear that the "**Corrected Item-Total Correlation**" values are all above the acceptable value of 0.5.

**Determining the relationship between Demographic factors (Level of education, Marital Status, Age group, Gender, Income level and Tenure) and Turnover Intentions.**

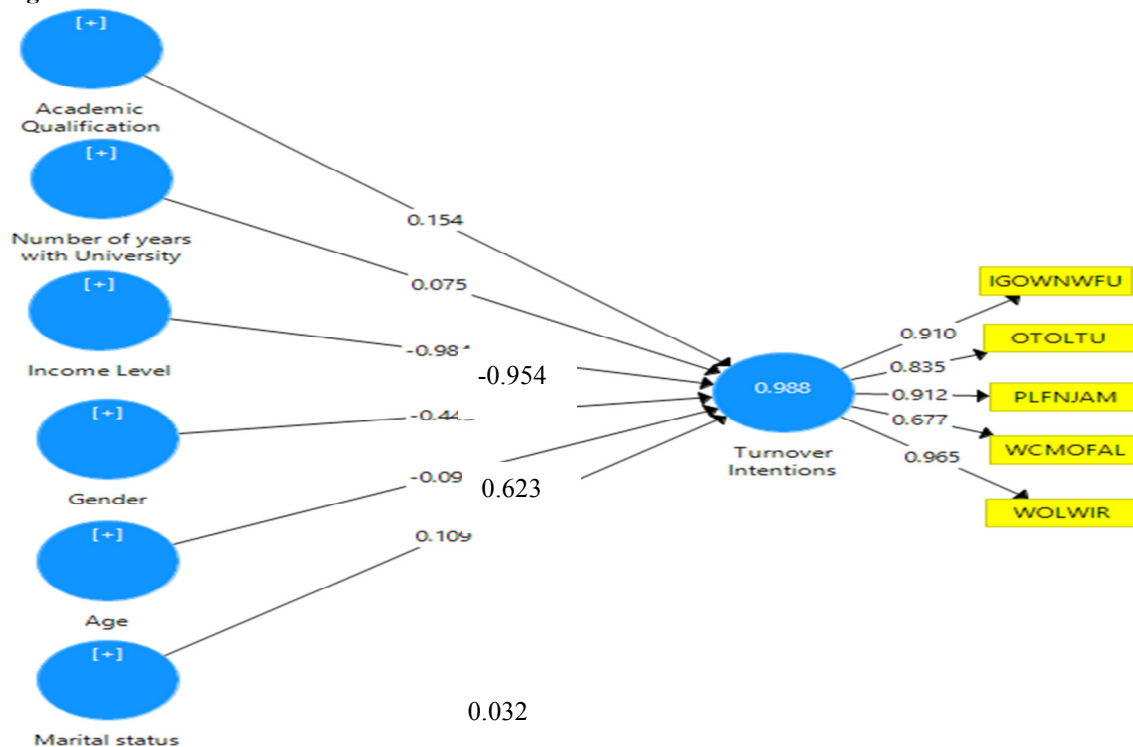
PLS path modeling estimation technique was adopted to determine whether a significant relationship exists between the Demographic factors (Level of education, Marital Status, Age group, Gender, Income level and Tenure) and Turnover Intentions.

Since a reflective measurement model is used, the following were examined;

- i. Explanation of target endogenous variable variance
- ii. Inner model path coefficient sizes and significance
- iii. Outer model loadings and significance
- iv. Checking Structural Path Significance in Bootstrapping

The PLS path modeling estimation is shown in Figure 1 below.

**Figure 1: PLS-SEM Results**



PLFNJAM - It is possible that I will look for a new job any moment from now

IGOWNWFU -If given the opportunity, I work for the University

OTOLTU - I often thought of leaving the

WOLWIR - I will only leave when I retire

WCMOFAL - I will create my own firm and leave

Examining the diagram, the following preliminary observations are clear:

**(i) Explanation of target endogenous variable variance**

The coefficient of determination,  $R^2$ , is 0.988 for the Turnover Intentions latent variable. This means that the six latent variables (Academic Qualification, Number of years with the university, Income level, Gender, Age and Marital Status) substantially explains 98.8% of the variance in Turnover Intentions.

Again, the reliability and validity of the latent variables is examined to complete the examination of the structural model.

All the outer loadings are greater than 0.70. Hence all the indicators are retained. This implies that significantly all the five latent variables contributes significantly in determining the turnover intentions of staff of the university.

**(ii) Inner model path coefficient sizes and significance**

a. With regards variables that has a negative effect on turnover intentions, The inner model suggests that Income Level has the strongest effect on Turnover Intentions

( $b_3 = -0.984$ ), followed by Academic Qualification ( $b_1 = -0.954$ ) and then Age ( $b_5 = -0.864$ ). This suggest that, majority of staff with high income levels or higher academic qualifications do not really have intentions to leave the University.

Again, it is evident that, older staff are far more unlikely to leave the university if given the opportunity.

b. The inner model suggests again suggests that number of years spent with the University, gender and marital status all have positive relationship with turnover intentions.

Number of years a staff spends with the University has the strongest effect on Turnover Intentions ( $b_2 = 0.623$ ), followed by Marital Status ( $b_6 = 0.040$ ) and then gender ( $b_4 = 0.032$ ). This suggest that staff who have spent more years with the university are far more likely to leave if given the opportunity.

The hypothesized path relationship between Marital Status and turnover intentions as well as gender and turnover intentions although positive, are not statistically significant. This is because their standardized path coefficient ( $b_6 = 0.040$ ) and ( $b_4 = 0.032$ ) respectively are both lower than 0.1.

c. Thus we can conclude that: Income Level, Academic Qualification, Age and Number of years spent with the University are all substantially, strong predictors of Turnover Intentions, but Marital Status and gender does not predict Turnover Intentions directly.

However, the bootstrap procedure will be used to test the significance of a structural path using T-Statistic.

Table 3 below presents the summary of all calculated p-values based on each of six hypothesis.

**Table 3: P-values of Path Coefficients (Inner Model) using Bootstrapping**

Hypothesis	Correlation	P-Values	Conclusion
H <sub>1</sub>	Academic Qualifications → Turnover Intentions	0.021	Significant
H <sub>2</sub>	Marital Status → Turnover Intentions	0.520	Not Significant
H <sub>3</sub>	Age group → Turnover Intentions	0.025	Significant
H <sub>4</sub>	Gender → Turnover Intentions	0.682	Not Significant
H <sub>5</sub>	Income Level → Turnover Intentions	0.011	Significant
H <sub>6</sub>	Tenure → Turnover Intentions	0.043	Significant

From Table 3, using a two-tailed *t*-test with a significance level of 5%, the path coefficient will be significant if the *T*-statistics is larger than 1.96 or P Value less than 0.05 (testing at 95% confidence level).

It is clear that, “Marital Status → Turnover Intentions” linkage (0.0520) and Gender → Turnover Intentions linkage (0.682) are not statistically significant since their P Values are greater than  $\alpha = 0.05$ . This confirms the earlier findings when looking at the PLS-SEM results visually (see Figure 1). All other path coefficients in the inner model are statistically significant (their P values are less than  $\alpha = 0.05$ ).

**Multiple Regression analysis to determine the relationship between Demographic factors that impact the possibility of a staff looking for a new job any moment from now**

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.996 <sup>a</sup>	.991	.991	.119

a. Predictors: (Constant), Academic Qualifications, Number of years I have worked for the University, Age, Income of employee

**Table 5: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.659	.049		74.046	.000
	Age	-.176	.021	.115	8.420	.000
	Income of employee	-.651	.009	-1.131	-69.794	.000
	Number of years I have worked for the University	.102	.008	.121	12.359	.000
	Academic Qualifications	-.184	.013	-.159	-13.727	.000

a. Dependent Variable: It is possible that I will look for a new job any moment from now

**Regression Equation 1:**

Possibility of a staff looking for a new job any moment from now = 3.659 - 0.651 (Income of employee) -0.184 (Academic Qualifications) +0.102 (Number of years I have worked for the University) -176 (Age).

**Multiple Regression analysis to determine the relationship between Demographic factors and the possibility of staff not wanting to work for the university if given the opportunity.**

**Table 6: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985 <sup>a</sup>	.971	.970	.241

a. Predictors: (Constant), Academic Qualifications, Number of years I have worked for the University, Age, Income of employee

**Table 7: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.454	.100		24.565	.000
	Age	-.938	.042	.550	22.243	.000
	Income of employee	-.949	.019	-1.474	-50.270	.000
	Number of years I have worked for the University	.228	.017	.242	13.658	.000
	Academic Qualifications	-.379	.027	-.293	-13.996	.000

a. Dependent Variable: If given the opportunity, I would not work for the University

**Regression Equation 2:**

Possibility of staff not wanting to work for the university if given the opportunity = 2.454 - 0.949 (Income of employee) -938 (Age) -0.379(Academic Qualifications) +0.228(Number of years I have worked for the University)



**Multiple Regression analysis to determine the relationship Demographic factors and how staff often think of leaving the university.**

**Table 8: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935 <sup>a</sup>	.874	.871	.452

a. Predictors: (Constant), Academic Qualifications, Number of years I have worked for the University, Age, Income of employee

**Table 9: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-1.183	.188		-6.308	.000
Age	-.487	.079	.316	6.156	.000
Income of employee	-.118	.035	-.202	-3.318	.001
Number of years I have worked for the University	.978	.031	1.151	31.215	.000
Academic Qualifications	-.407	.051	-.347	-7.992	.000

a. Dependent Variable: I often thought of leaving the University

**Regression Equation 3:**

Possibility of staff often thinking of leaving the university = -1.183 + 0.978 (Number of years I have worked for the University) -0.487 (Age) -0.407(Academic Qualifications) -0.118(Income of employee)

**Multiple Regression analysis to determine the relationship between Demographic factors and the possibility of staff leaving only when they retire.**

**Table 10: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.949 <sup>a</sup>	.900	.898	.361

a. Predictors: (Constant), Academic Qualifications, Number of years I have worked for the University, Age, Income of employee

**Table 11: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.127	.150		7.511	.000
Age	-.513	.063	.370	8.104	.000
Income of employee	-.533	.028	-1.020	-18.811	.000
Number of years I have worked for the University	.461	.025	-.603	-18.379	.000
Academic Qualifications	-.392	.041	-.372	-9.631	.000

a. Dependent Variable: I will only leave when I retire

**Regression Equation 4:**

The possibility of staff leaving only when they retire = 1.127 + 0.461 (Number of years I have worked for the University) -0.513 (Age) -0.392(Academic Qualifications) -0.533 (Income of employee)

**Multiple Regression analysis to determine the relationship between Demographic factors and the possibility of staff creating their own firms and leaving**

**Table 12: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.934 <sup>a</sup>	.872	.860	.322

a. Predictors: (Constant), Academic Qualifications, Number of years I have worked for the University, Age, Income of employee

**Table 13: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.836	.334		5.494	.000
	Age	-1.036	.141	-.715	-7.349	.000
	Income of employee	-.443	.063	-.810	-7.017	.000
	Number of years I have worked for the University	.527	.056	.659	9.437	.000
	Academic Qualifications	-.046	.091	-.042	-4.508	.000

a. Dependent Variable: I will create my own firm and leave

**Regression Equation 5:**

Possibility of staff creating their own firms and leaving = 1.813 + 0.527 (Number of years I have worked for the University) -1.36 (Age) -0.443 (Income of employee) -0.46 (Academic Qualifications)

**Conclusion on the multiple regression analysis**

From tables 4,6,8,10 and 12, in the regression analysis above, the R-squares are obtained which implies that “Income of Employee”, “Academic Qualifications”, “Number of years I have worked for the University”, and “Age”, accounts for at least 80.0 % of the variances in the dependent variables.

Again, from Tables 5, 7,9,11 and 13 from the regression analysis, all of the b-coefficients are statistically significant since their p-values are *smaller than 0.05*. Again, the tables give beta coefficients which are used to construct the regression equation.

Interestingly, the predictor variables “Age”, “Income of Employee” and “Educational Level”. All have negative regression co-efficient in the equations implies that, to be able to reduce turnover in the University, the university should make conscious efforts to support staff acquire higher academic qualification so that their income could be enhanced. The positive regression co-efficient of the predictor variable “Number of years I have worked for the University” in all the regression equations also implies that most of those who stay longer with lower academic qualification and lower income are still not willing to stay back and the university should take a look at that in order to reduce turnover.

**Discussion and Implication for Management**

The goal of the study was to understand the link between turnover and the following demographic factors: age, gender, education, tenure, marital status and income. The study to a very large level confirms previous studies regarding turnover intentions of university staff and other industry, but contradicts some of the results mentioned in the literature. The negative regression co-efficient of the predictor variables in the analysis and result implies that, to be able to reduce turnover in the University, the university should make conscious efforts to support staff acquire higher academic qualification so that their income could be enhanced. This would definitely result in staff staying longer with the University. The Institution should among other things the capacity of improving these independent variables. The study was in line with Maden (2014) since as a result of build up experience and organizational investment long served staff are reluctant to give up present jobs. So the hypothesis that tenure has a significant effect on turnover intention amongst staff of the University was accepted.

Gender and marital status of the respondents did not directly have any relationship with turnover intentions, hence did not confirm what Botsford-Morgan and King (2012) said that enhanced commitment to the firm comes from the male staff, confirmed, because they occupy better ranks than their female counterpart. This means there is no significant relationship in gender of the employee towards turnover intentions amongst staff of the

University. Also different from Salami (2008) who said that marriage has adverse effect on turnover intention of staff whereby it will be expensive for employees' family to rearrange for new jobs. Hence no is significant association between marital status and turnover intention of the University.

It was found that, the income level of an employee significantly affects his/her decision to quit or stay in the institution which accepted the study of Llorens and Stazyk (2010). According to the study, individuals with higher degree were of high quality, knowledge workers and high performing teams reduced the possibility of turnover in institutions as in Jayasingam and Yong (2013). Finally, the age of employee can influence his/her perception of job commitment and satisfaction (Wren et al., 2014). Behind this affirmation, were Bjelland et al. (2011), Couch (2011) and Lopina, Rogelberg, and Howell (2012), who after evaluating older and younger workforce, found that, a vast difference exit in workforce mobility and intentions to leave between them.

## Conclusion

The achievement of any firm is contingent on efficiency of the employees. Hence, employees are the spirit of all firms. The goal of this study was to unearth demographic factors predicting turnover intentions in female technical university. The demographic factors influencing employee turnover from the literature include: age, gender, education, tenure, marital status and income. The study differs a little in the academic environment. It was noticed that gender and marital status did not confirm the literature. It can be conclude that: Income Level, Academic Qualification, Age and Number of years spent with the University are all substantially, strong predictors of Turnover Intentions, but Marital Status and gender does not predict Turnover Intentions directly in the universities.

## Reference

- Ali, N. (2015). Factors affecting overall job satisfaction and turnover intention. *Journal of Managerial Sciences*, 2(2), 239-252.
- Ali Shah, I., Fakhr, Z., Ahmad, M.S., & Zaman, K. (2016). Measuring push, pull and personal factors affecting turnover intention:
- Akintayo, D., 2010. Work-family role conflict and organizational commitment among industrial workers in Nigeria. *Journal of Psychological and Counselling*, 2(1): 1-8.
- Baum, T. (2006). *Human Resource Management for the Tourism, Hospitality and Leisure: An International Perspective*. London: Delmar Thomson Learning.
- Baum, T. (2007). Human Resources in Tourism: Still Waiting for Change. *Tourism Management*, 1(28), 1383-1399. Brough and Frame (2004),
- Botsford-Morgan, W., & King, E. B. (2012). Mothers' psychological contracts: Does supervisor breach explain intention to leave the organization? *Human Resource Management*, 51, 629-649. doi:10.1002/hrm.21492
- Bryant, P. C., & Allen, D. G. (2000). Compensation, benefits and employee turnover: HR strategies for retaining top talent. *Compensation & Benefits Review*, 45, 171-175.  
doi:10.1177/0886368713494342
- Campbell, N. S., Perry, S. J., Maertz, C. P., Allen, D. G., & Griffeth, R. W. (2013). All you need is...resources: The effects of justice and support on burnout and turnover. *Human Relations*, 66, 759-782.  
doi:10.1177/0018726712462614
- Carnahan, S., Agarwal, R., & Campbell, B. A. (2012). Heterogeneity in turnover: The effect of relative compensation dispersion of firms on the mobility and entrepreneurship of extreme performers. *Strategic Management Journal*, 33, 1411-1430. doi:10.1002/smj.1991
- Chang, C., & Lyons, B. J. (2012). Not all aggressions are created equal: A multifoci approach to workplace aggression. *Journal of Occupational Health Psychology*, 17, 79-92. doi:10.1037/a0026073
- Chang, W. J., Wang, Y. S., & Huang, T. C. (2013). Work design-related antecedents of turnover intention: A multilevel approach. *Human Resource Management*, 52, 1-26. doi:10.1002/hrm.21515
- Chen, C., Mao, H., Hsieh, A. T., Liu, L., & Yen, C. (2014). The relationship among interactive justice, leader-member exchange, and workplace friendship. *The Social Science Journal*, 50, 89-95.  
doi:10.1016/j.socscij.2012.09.009
- Cokley, K., & Awad, G. H. (2013). In defense of quantitative methods: Using the "Master's Tools" to promote social justice. *Journal for Social Action in Counseling & Psychology*, 5(2), 26-41. Retrieved from <http://www.jsacp.tumblr.com>
- Couch, K. A. (2011). Tenure, turnover, and earnings profiles in Germany and the United States. *Journal of Business & Economics Research*, 1(9), 1-9. Retrieved from <http://www.berjournal.com>
- David (2008). Attitudes towards pay and promotion in the Malaysian higher educational sector. *Employee Relations*, 26(2), 137-150 <https://doi.org/10.1108/01425450410511052>
- Dinger, M., Thatcher, J. B., Stepina, L. P., & Craig, K. (2012). The grass is always greener on the other side: A test of present and alternative job utility on IT professionals' turnover. *IEEE Transactions on Engineering*

- Management*, 59, 364-378. doi:10.1109/TEM.2011.2153204
- Dessler, G., Sutherland, G., & Cole, N. D. (2009). Human resources management in Canada. : Pearson Education.
- Grissom, J. A., Nicholson-Crotty, J., & Keiser, L. (2012). Does my boss's gender matter explaining job satisfaction and employee turnover in the public sector. *Journal of Public Administration Research & Theory*, 22, 649-673. doi:10.1093/jopart/mus004
- Griffeth, R. W., Hom, P. W., & Gaetner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implication for the next millennium. *Journal of Management*, 26, 463-488. <http://dx.doi.org/10.1177/014920630002600305> Henneberger & Souza-Poza, 2007;
- Green, S. B., & Salkind, N. J. (2011). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (6th Ed.). Upper Saddle River, NJ: Prentice Hall.
- Islam, G. (2013) recognizing employees: reification, dignity and promoting care in management. *Cross Cultural Management: An International Journal*, 20(2), pp. 235 – 250.
- Igbar, A. (2010). An empirical assessment of demographic factors, organizational ranks and organizational commitment. *International Journal of Business and Management*, 5(3), 16- 27.
- Islam, T., Khan, S., Ahmad, U., & Ahmed, I. (2013). Organizational learning culture and leader- member exchange quality: The way to enhance organizational commitment and reduce turnover intention. *The Learning Organization*, 20, 322-337. doi:10.1108/TLO-12-2012- 0079
- Iverson, R., & Zatzick, C. (2011). The effects of downsizing on labor productivity: The value of showing consideration for employees' morale and welfare in high-performance work systems. *Human Resource Management*, 50, 29-44. doi:10.1002/hrm.20407
- Jayasingam, S., & Yong, J. R. (2013). Affective commitment among knowledge workers: The role of pay satisfaction and organization career management. *The International Journal of Human Resource Management*, 24, 3903-3920. doi:10.1080/09585192.2013.781520
- Kaplan, D. M., Wiley, J. W., & Maertz, C. P. (2011). The role of calculative attachment in the relationship between diversity climate and retention. *Human Resource Management*, 50, 271-287. doi:10.1002/hrm.20413
- Kwon, K., & Rupp, D. E. (2013). High-performer turnover and firm performance: The moderating role of human capital investment and firm reputation. *Journal of Organizational Behavior*, 34, 129-150. doi:10.1002/job.1804
- Khatri, N., & Fern, C. T. (2001). Explaining employee turnover in an Asian context. *Human Resource Management Journal*, 11 (1), 54-74. DOI: 10.1111/j.1748-8583.2001.tb00032.x
- Lambert, E. G., Cluse-Tolar, T., Pasupuleti, S., Prior, M., & Allen, R. I. (2012). A test of a turnover intent model. *Administration in Social Work*, 36, 67-84. doi:10.1080/03643107.2010.551494
- Lin, D., Hsien-Chang, K., & Lie-Huey, W. (2013). Chief executive compensation: An empirical study of fat cat CEOs. *International Journal of Business & Finance Research*, 7(2), 27- 42. Retrieved from <http://www.theibfr.com/ijbfr>
- Llorens, J. J., & Stazyk, E. C. (2011). How important are competitive wages? Exploring the impact of relative wage rates on employee turnover in state government. *Review of Public Personnel Administration*, 31, 111-127. doi:10.1177/0734371X10386184
- Lopina, E. C., Rogelberg, S. G., & Howell, B. (2012). Turnover in dirty work occupations: A focus on pre-entry individual characteristics. *Journal of Occupational & Organizational Psychology*, 85, 396-406. doi:10.1111/j.2044-8325.2011.02037.x
- Maden, C. (2014). Impact of fit, involvement, and tenure on job satisfaction and turnover intention. *The Service Industries Journal*, 34, 1113-1133. doi:10.1080/02642069.2014.939644
- Malaysian Department of Statistics (2012). Population distribution by local authority areas and mukims.
- Maqbool, F., & Murtaza, G. (2012). Moderating role of organisational commitment between job satisfaction and turnover intentions. *European Journal of Scientific Research*, 82(4): 564- 571.
- Messersmith, J. G., Guthrie, J. P., Ji, Y., & Lee, J. (2011). Executive turnover: The influence of dispersion and other pay system characteristics. *Journal of Applied Psychology*, 96, 457- 469. doi:10.1037/a0021654
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2013). *Applied multivariate research: Design and interpretation*. Los Angeles: Sage Publications.
- Meral, E., Irge, S., Seval, A., & Lutfihak, A. (2012). The impact of ethical leadership and leadership effectiveness on employee's turnover intention: The mediating role of work related stress: *Procedia-Social and Behavioral Science*, 58:289-297.
- Michel, J. W., Kavanagh, M. J., & Tracey, J. B. (2000). Got support? The impact of supportive work practices on the perceptions, motivation, and behavior of customer-contact employees. *Cornell Hospitality Quarterly*, 54, 161-173. doi:10.1177/1938965512454595

- Monks, J. (2012). Job turnover among university presidents in the United States of America. *Journal of Higher Education Policy & Management*, 34, 139-152.
- Mullins, J. L. (2016). *Management and Organisational Behaviour*. 4th Edition. London: Pitman Publishing.
- Miller, A. (2006) Principal turnover and student achievement. *Economics of Education Review*, 36, pp. 60-72.
- Ng, T. W., & Feldman, D. (2013). Does longer job tenure help or hinder job performance? *Journal of Vocational Behavior*, 83, 305-314. doi:10.1016/j.jvb.2013.06.012
- O'Neil, O. A., Stanley, L. J., & O'Reilly, C. A. (2010). Disaffected Pollyannas: The influence of positive affect on salary expectations, turnover, and long-term satisfaction. *Journal of Occupational & Organizational Psychology*, 84, 599-617.  
doi:10.1348/096317910X500801
- Okpara, J.O. (2004). Personal Characteristics as Predictors of Job Satisfaction: An Exploratory Study of IT Managers in a Developing Economy. *Information Technology and People* 17 (3): 327-338.
- Paul E. Spector, T. D.-Q. (2009). Cross-National Differences in Relationships of Work Demands, Job Satisfaction, and Turnover Intention With Work-Family Conflict. *Personnel Psychology*, 805-835.
- Piriyakul, J. Khantanaphad M. (2012). Absenteeism and Turnover of Hospital Employees. Greenwich CT JAI .
- Phillips, J. J. (2009). *Managing Employee Retention: A Strategic Accountability Approach*. Illustrated ed. s.l.:Routledge.
- Rost, K., & Weibel, A. (2013). CEO pay from a social norm perspective: The infringement and reestablishment of fairness norms. *Corporate Governance: An International Review*, 21, 351-372. doi:10.1111/corg.12018
- Ryan, J., Healy, R., & Sullivan, J. (2012). Oh, won't you stay? Predictors of faculty intent to leave a public research university. *Higher Education*, 63, 421-437. doi:10.1007/s10734-011-9448-5
- Salami, S. (2008). Demographic and psychological factors predicting organizational commitment among industrial workers. *Anthropologist*, 10(1): 31-38.
- Spector, P. E., Allen, T. D., Poelmans, S. A., Lapiere, L. M., Cooper, C. L., Michael, O., and Beham, B. (2012). Cross - national differences in relationships of work demands, job satisfaction, and turnover intentions with work-family conflict. *Personnel Psychology*, 60(4): 805-835.
- Simon, M., Muller, H. B., & Hasselhorn, H. M. (2010). Leaving the organisation or the profession a multilevel analysis of nurses' intention. *Journal of Advanced Nursing*, 66(3):616:26.
- Shaw, T.-Y. P. (2013, December 17). Turnover Rates and Organizational Performance: A Meta- Analysis. *Journal of Applied Psychology*, 268-309. doi:10.1037/a0030723
- Sgourev, S. V. (2011). Leaving in droves: Exit chains in network attrition. *Sociological Quarterly*, 52, 421-441. doi:10.1111/j.1533-8525.2011.01213.x
- Stanley, L., Vandenberghe, C., Vandenberg, R., & Bentein, K. (2013). Commitment profiles and employee turnover. *Journal of Vocational Behavior*, 82, 176-187. doi:10.1016/j.jvb.2013.01.011
- Shuck, B., Reio, T. G., & Rocco, T. S. (2011). Employee engagement: An examination of antecedent and outcome variables. *Human Resource Development International*, 14, 427-445. doi:10.1080/13678868.2011.601587
- Tepeci, M., & A. Bartlett, 2002. The hospitality culture profile: Individual values, organizational culture, and person organization fit as predictors of employee job satisfaction and behavioral intentions. *International Journal of Hospitality Management*, 21: 151-170.
- Taylor, M., and Finley, D. (2010) "Acculturation, assimilation, and retention of international workers in resorts". *International Journal of Contemporary Hospitality Management*, 22(5): pp. 681-692.
- TaTU, HR Unit (2017). Tamale Technical University Human Resource data.
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*, 37, 21-54. Retrieved from <http://www.misq.org>
- Wren, B., Berkowitz, D., & Grant, E. (2014). Attitudinal, personal, and job-related predictors of salesperson turnover. *Marketing Intelligence & Planning*, 32, 107- 123. doi:10.1108/MIP-04-2013-0061
- Yucel, I. (2012). Examining relationships among job satisfaction, organizational commitment and turnover intention: An empirical study. *International Journal of Business and Management*, 7, 44-58. doi:10.5539/ijbm.v7n20p44
- Yamane, T. (1967). *Statistics: An introductory analysis*. (2nd ed.). New York: Harper & Row.
- Yin, J., & K. Yang, 2002. Nursing turnover in Taiwan: a meta-analysis of related factors. *International Journal of Nursing Studies*, 39(6): 573-581.