Predicting Academic Staff Intention to Stay in Tanzanian Universities Using Job Embeddedness Model: Smart PLS Approach

Silver John Hokororo
Sokoine University of Agriculture
silverhoko@sua.ac.tz

Francis Michael
University of Dar es Salaam Business School
fmichaelx@gmail.com

Abstract: *Turnover is one of the reasons for the inadequacy of academic staff in Tanzanian universities as in many other African countries. This study examined the relationship between job embeddedness and academic staff Intention to Stay in Tanzanian Universities, as a key step towards combating the problem of turnover. A survey of 314 academic staff from selected public and private universities in Tanzania was conducted and Smart PLS Structural Equation Modeling was used in examining the relationship. Further, PLS-MGA was conducted to examine whether a significant difference exists in the influence of job embeddedness on the intention to stay among academic staff in Public and Private Universities. The findings indicated that Job Embeddedness sufficiently predicted academic staff Intention to Stay in Tanzania's universities, with organization fit and organization sacrifice exerting main influences. The relationships varied between public and private universities with stronger relationships in private than in public universities. It was concluded that job embeddedness is an important predictor of intention to stay, and its inclusion in retention models may improve retention of academic staff in Tanzania's universities. Private Universities in Tanzania may especially find more affirmative results in terms of retention, by improving the fit between their academic members of staff and their universities.*

Keywords: Job embeddedness, Academic staff, Intention to stay, Tanzania's universities.

Introduction

Disposition of academic members of staff, in terms of intellectual and creative abilities and commitment, largely affect the performance of a university as a frontier in the creation of knowledge and skills in human capital required for any country's socio-economic development. Empirical evidence indicates that many universities in African countries (Nyahongo, 2015; Tettey, 2010) and Tanzania in particular (Makulilo, 2012; URT, 2010, 2014), suffer from inadequacy of academic staff, where turnover stands to be one of the reasons for the problem. It has been reported that the turnover rate of academic staff in South African universities stood between 5% and 18% (Koen (2003) in Pienaar and Bester, 2008). In Ethiopia, a total of 120 faculty members left the Addis Ababa University College of Health Sciences in a period of 20 years between 1991 and

2011 (Hailu, et al., 2013). Of these 66.6% were at the rank of Assistant Professor and above. In Uganda, 160 out of 1502 academic staff left Makerere University, within one year, between 2011 and 2012 (Bisaso, 2017).

Documentary evidence of isolated cases shows that, between the year 2009 and 2013, a total of 102 academic staff (out of 840), left the University of Dodoma (UDOM) through resignation or termination (Nyahongo, 2015). On the other hand, an empirical study conducted by Mkumbo (2014) revealed that 44.5% of academic staff in public universities and 34.4% in private universities in Tanzania had positive attitudes towards alternative careers. Attitude and intention to leave are considered reliable antecedents of actual leaving, and they have been used as surrogate measures of turnover (Griffeth et al., 2000, Price 2001). According to Mkumbo (2014), academic staff who expressed favour for an alternative career comprised 45.5% of respondents from University of Dar Es Salaam (UDSM), 39.3% of those from Tumaini University (now University of Iringa - UOI), 39.1% from UDOM, and 34.8% of respondents from Saint John University of Tanzania (SJUT). The problem of academic staff turnover is especially critical currently, where the attractiveness of academic jobs is believed to have declined due to increased workloads and work stress, and reduced work autonomy (Pienaar and Bester, 2008) and relatively low compensation (Nyahongo, 2015).

The Tanzania Development Vision 2015 expresses the country's determination to be a nation that produces the number and quality of educated people who are sufficiently equipped with requisite knowledge and skills to solve the society's problems, to meet the challenges of development and to attain competitiveness at regional and global levels. Realization of this vision at the university level depends much on the availability of academic staff. It follows that universities, both public and private, find it increasingly important to invest in retaining their academic staff. This is because the knowledge and skills possessed by these employees are normally acquired over a long period of time, and are accompanied by extensive experiences which are difficult to replace once lost. It is not surprising on these bases to find that more researchers are interested in studying and understanding the mechanisms backing academic staff intention to stay. According to Ghosh and Gurunathan (2015) and Uzoka, et al. (2011), this is a useful step towards the designing of interventions for minimizing turnover.

Traditionally, employee retention has been associated with attitudes about one's current job together with the availability of an alternative job. The wisdom was that employees will stay in the organization if their emotional feelings of liking their jobs (job satisfaction) and attachment to their organizations (organizational commitment) are high, and their judgment of the current situation is favoured to that of the perceived/available alternative jobs (Mitchell et al., 2001). Empirical evidence however, has shown that, much as these traditional affective constructs are significantly associated with turnover, their contribution to variance in employee turnover has ranged from low (5%) to modest (25%) (Griffeth et al., 2000). As an extension of retention studies, Mitchell et al., (2001) came up with Job Embeddedness Theory (JET), which focuses on the non-affective construct termed Job Embeddedness (JE). The main focus of JET is on both, work and non-work aspects of employees that make them stay in the organization, and not what makes them leave, which is a focus of many traditional retention theories. The reasons which make employees stay in an organization are different from those which make them leave (Steel et al., 2002).

JET has been applauded as a promising avenue for understanding employee retention. This theory however, has been tested in different cultural and economic contexts, largely in America and Europe where the theory originated (Besich, 2005; Crossley et al., 2007), but the theory has been scarcely studied in the context of Africa, specifically in Cameroon (Karatepe and Ngeche, 2012), Egypt (Nafei, 2015), Ghana (Nicholas et al., 2016), Nigeria (Karatepe, 2013) and South Africa (Ferreira and Coetzee, 2013; Takawira and Coetzee, 2014; Van Dyke et al., 2013). To the best knowledge of the researchers, the only evidence of a study on job embeddedness in Tanzania's context is by Hokororo et al., (2018). Studies testing the relationships between JE and employee retention (Allen, 2006; Besich, 2005; Robinson, 2014) revealed a considerable variation of results in different contextual settings. This indicates that there is a lack of consensus on the generalizability of Job Embeddedness Theory.

The objective of this study was to test the applicability of JET in predicting academic staff intention to stay in Tanzania's Universities. Specifically, the study first, ascertained the predictive power of job embeddedness model, examining the relationship between job embeddedness specific dimensions and academic staff intention to stay in Tanzania's universities. Second, the study compared the relationship between job embeddedness and academic staff intention to stay in the public and private universities in Tanzania. Though both public and private universities are regulated by TCU, their priorities on specific employment policies are different (Mgaiwa and Poncian, 2016), which imply that they may require different retention interventions or different extent (saliency) of a given intervention.

Theoretical Review

This study examines Job Embeddedness Theory (JET) as an upcoming theory in explaining employee retention, among other organizational outcomes. According to JET, individuals would stay in their jobs because of the attaching forces called fit, links and sacrifices they have with their work organizations and their off the job communities (Mitchell et al., 2001). JE as a concept is defined by Mitchell et al., (2001) as a broad collection of influences on employee retention, which are like a net or web in which employees can become stuck or bound from leaving the organization. It comprises a sort of stuckness, inertia, or bias toward maintaining the status quo. Building on this definition, Lee et al., (2014) defined JE as the extent of an employee's stuckness or enmeshing, within a larger social system, and it results from numerous external or contextual forces in the organization and community that operates on a focal employee.

JET as perspective is different from the traditional perspectives, which associate employee turnover mainly with affective constructs of job satisfaction and organizational commitment (Michael, 2015), and also with perceived availability of alternative jobs. As opined by Mitchell, et al., (2001), the three forces of attachment in the two locations form the six dimensions of JE namely, organization fit, community fit, organization links, community links, organization sacrifices, and community sacrifices, which inhibit an employee from leaving the organization.

Mitchell and Lee (2001) and Holtom et al., (2006), defined *Fit* as the employee's perceived compatibility or comfort with an organization or with his/her community around. While *Organization Fit (OF)* explains the compatibility of an employee's personal values, career goals, and plan for future with the corporate culture and demand of his or her immediate job including

job knowledge, skills and abilities, *Community Fit (CF)* is the perceived compatibility or comfort with the community and the environment such as weather, social services, general culture, outdoor activities, political and religious activities, and entertainment, in the location where one resides. The contention of JET is that, the better the fit, the higher the likelihood that an employee will feel professionally and personally tied to remain in the organization.

Links, on the other hand, refers to the perceived connections, which may be formal or informal, that an individual has with other people, activities or institutions either on or off the job (Mitchell and Lee, 2001; Holtom et al., 2006). Accordingly, *Organization Links (OL)* are the formal and informal connections that an individual has with the organization elements such as departments and work-teams and with other individuals at work such as co-workers, bosses and mentors. C*ommunity Links (CL)* on the other hand connote the social, psychological and financial ties an individual has with the family, friends, groups, institutions and environment in the community outside the work. The theoretical underpinnings of JET suggest that, the more the links an individual has both in the organization and in the community, the more he/she is bound to the work organization.

Lastly, *sacrifice* is the perceived cost of material or psychological benefits that may be forfeited by organizational departure (Mitchell et al., 2001). Accordingly, *Organization Sacrifice (OS)* refers to personal losses such as giving up work colleagues, relevant projects or pleasant benefits, switching costs such as new health care, pension plans, due promotions, and sabbaticals, emanating from leaving an organization. On the other hand, *Community Sacrifice (CS)* is perceived when one has to leave a community, including leaving a safe and attractive neighbourhood, leaving a society in which one is senior, loved and respected, and leaving an easy commute. JET posits that the more an employee will have to give up when leaving, the harder it will be to quit the job in the organization (Holtom et al., 2006).

Empirical Studies

Empirical studies to validate JET in different contexts revealed varied results as manifested right from the findings of a work by Mitchell et al., (2001), for example. In this study, the overall JE and three of its dimensions namely, Organization Fit, Organization Link and Organization Sacrifice, correlated significantly positive with intention to stay, while all three dimensions related to the community had an insignificant correlation with intention to stay in one of the two samples studied. It has been established in subsequent empirical studies on JE (e.g. Besich, 2005, and Crossley et al., 2007), that JE and its dimensions have a relationship with employee intention to stay in their work organizations, and these relationships vary in different contextual settings.

A study specific to academic staff by Shafique et al., (2011) in Pakistan's Universities revealed that only two of the six dimensions of JE namely, organization fit and organization sacrifice had a significant relationship with intention to leave, while organization sacrifice and the rest of community job embeddedness dimensions had none. Though this study involved academic staff similar to our study, the cultural contexts, however, are different, where Pakistan ranks lower in individualism index (14) than Tanzania in East Africa (27) (Hofstede, 1983). According to Ramesh and Gelfand, (2010) culture influences the levels of JE. A study by Wheeler et al., (2010) revealed that, while organization job embeddedness had a negative relationship with leave intention among

academic staff at Midwestern University, community job embeddedness had an insignificant relationship contrary to the proposition of JET. These contradictory findings warrant further examination of JET in the context of our study.

Hypotheses Formulation

The underpinnings of JET formed the bases for the development of the hypotheses tested in this study. JET maintains that; Organization Fit, Organization Link, Organization Sacrifice, Community Fit, Community Link, and Community Sacrifice have a positive relationship with employee intention to stay in their jobs.

The following Hypotheses were therefore formulated:

H_1: *Job embeddedness model predicts the academic staff Intention to Stay in Tanzania's universities*

$H_1a…H_1f$: *Job embeddedness dimensions (OF, OL, OS, CF, CL, and CS) have a significant positive relationship with academic staff Intention to Stay in Tanzania's universities*
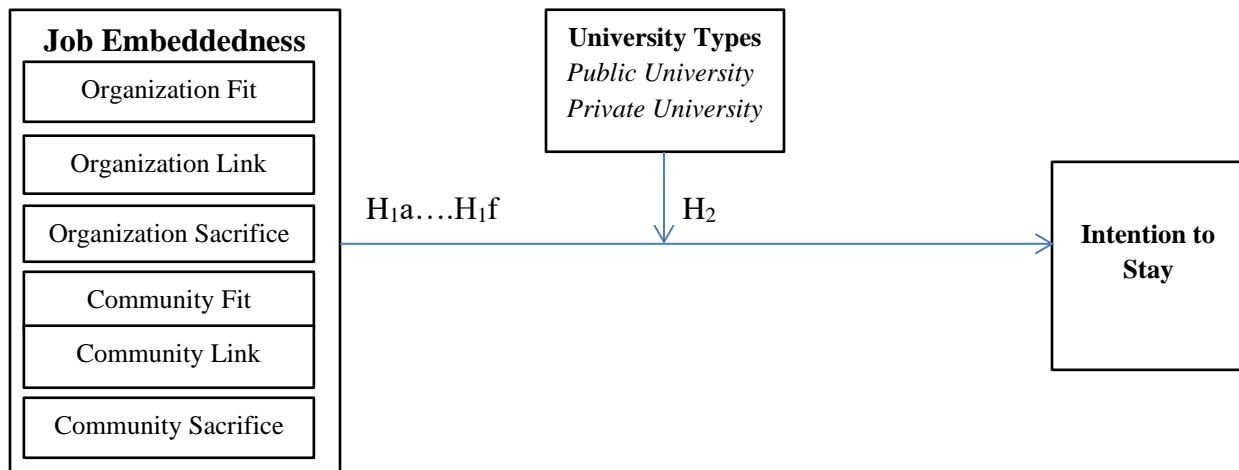

Figure 1. Conceptual Framework of the Study

Furthermore, empirical studies have revealed that there is a difference in turnover intention between academic staff in public and private universities in different countries. A study by Mapolisa (2015) found out that, the quit rate is more in private universities than in public universities in Zimbabwe. According to Mkulu (2018), the general trend globally is the movement of lectures from private to public universities. It was however, not certain how the relationship between job embeddedness, a non-traditional affective construct, and academic staff intention to stay in university would be affected by the type of university in which academic staff is working. Banking on these observations, it was hypothesized that;

H_2 *Relationship between job embeddedness and intention to stay differ between academic staff in public universities and private universities in Tanzania*

Research Methodology

Sampling and Data Collection

The population for this study was academic staff in public and private universities registered by the Tanzania Commission for Universities (TCU) in Tanzania as of September 2014 (TCU, 2014). Since the updated aggregate number of academic staff in all universities in the country was not available, the total number of academic staff in the studied universities, which was 2,373, represented the population of the study. Based on Krejcie and Morgan's (1970) rule of thumb, this population size corresponds to a sample size of 331 respondents. To accommodate for possible non-response (considered 20% for management studies in Tanzania, as estimated by Goodluck, 2009), a total of 410 questionnaires were distributed to academic staff who were randomly selected from sampling lists provided by five universities, including two public universities, (University of Dar Es Salaam (UDSM) and University of Dodoma (UDOM)), and three private universities (Saint Augustine University of Tanzania (SAUT), University of Iringa (UOI), and Saint John's University of Tanzania (SJUT)).

These universities were selected purposively to represent different types of university (public and private universities), relative age (old versus new as indicated by the registration dates), and relative size of university (number of permanent academic staff). University type and age criteria (as also used by Mkumbo, 2013), are considered important because they ensure representation of the major categories of universities in Tanzania. From the distributed questionnaires, 363 (89.8% response rate) were collected, and 314 found usable and so used in further analysis in our study.

Variables and their Measurement

The structured questionnaire used in data collection comprised three major parts. Part one comprised 12 questions inquiring the personal demographic information of respondents including the type of Employer University and respondent's academic disciplines.

University Type – describes the sector in which a university belongs, which also indicates its ownership. Two types of university namely public universities and private universities are found in Tanzania. Public Universities are the one owned by the government of Tanzania, and in the questionnaire, were represented by number 1. Private universities are the one privately owned, mainly by religious organizations. Private Universities were represented by number 2 in the questionnaire.

Job embeddedness was measured by a six dimensions scale adopted from Shafique et al., (2011). This scale, which is a customized version of the multi-item construct of Mitchell et al., (2001), had 36 formative items of job embeddedness construct. Shafique and colleagues applied this scale in a study of academic staff in universities. Part three of a questionnaire measured academic staff intention to stay in the universities, which is a reflective measure.

Intention to stay was measured by a 4 - item scale adopted and adapted from Besich (2005) Turnover Intention Scale. The scale was reworded and reverse coded to reflect retention instead of turnover.

In both, part two and part three of our questionnaire, respondents were asked to express their level of agreement or disagreement with the statements describing the constructs, on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The scales were tested in a pilot study to confirm their reliability and validity.

Data Analysis

First, the Statistical Package for Social Sciences (SPSS) for windows version 22 was used, in the descriptive analysis of the demographic characteristic of respondents which were presented in frequency distributions and percentage tables. Second, the Smart Partial Least Square Structural Equation Modeling (Smart PLS-SEM) was used in structural analysis, in examining the relationship between job embeddedness and academic staff intention to stay in Universities, and further, to see whether significant differences exist in the relationships, among the academic staff in Private and Public Universities. Prior to structural analysis, measurement models for both formative and reflective constructs were analysed for validity and reliability.

PLS Measurement Model

PLS path model comprising job embeddedness dimensions, which are exogenous formative constructs, and intention to stay, which is an endogenous reflective construct, was specified (Figure 2) and the measurement models for both were evaluated.

Formative measurement model was evaluated, as guided by Hair et al., (2017) first, for collinearity using outer Variance Inflation Factor (VIF), where a value below 5.0 was considered sufficient to indicate that collinearity is not a problem. Convergent validity was not tested, because job embeddedness scale used in this study had no reflective items required for redundancy analysis. However, VIF values, which assess how a formative construct is not correlated with other predictive constructs, provided an indirect indication of convergent validity. Formative indicators were also evaluated for the significance of the outer weight using bootstrap, where values of *p* less than 0.05 indicated that formative indicator has a significant relative contribution to the construct. Another rule of thumb given by Andreev et al., (2009), suggests that the desirable weights of the formative indicators should be 0.1 or above.

Reflective measurement model, on the other hand, was evaluated first, for size and significance of outer loadings, where a standardized outer loading of 0.708 or above is considered sufficient (Hair et al., 2017). Composite Reliability (CR) was also evaluated, where a value within a range of 0.70 – 0.90 indicates satisfactory internal consistency reliability of a construct. Finally, convergent validity (Average Variance Extracted = AVE) and discriminant validity (Fornell-Larcker Criterion) were estimated, where the values of AVE above 0.5 support convergent validity and Fornell-Larcker Criterion value of 0.000 support discriminant validity. Cross-loading and HTMT were not feasible, and so not estimated, because the model in this study had only one reflective construct, the IS.

PLS Structural Model

Before hypotheses testing, PLS structural model was assessed for collinearity among predictor constructs using VIF. According to Hair et al., (2017), a VIF above 5.0 among the predictor constructs indicates too high collinearity. Hypotheses' testing then was based on an assessment of

significance (p) and relevance of structural model relationships through bootstrapping procedure, assessment of Coefficient of Determination (R^2) and Effect Sizes (f^2). Predictive Relevance (Stone-Geisser's (Q^2) was not estimated since all exogenous (predictor) variables in the model used in this study were formative. Hair et al., (2017) provide rules of thumbs, where p-value of less than 0.05 indicates a significant relationship at 5%, and a larger path coefficient indicates relative greater effect of a particular exogenous variable on the endogenous latent variable. Further, R^2 values of 0.75, 0.50 and 0.25 for endogenous latent variables, indicate respective substantial, moderate, or weak predictive power of a model. The rule of thumb for f^2 is provided by Cohen 1988) that, values of 0.02, 0.15, and 0.35 respectively represent small, medium and large effects. A value below 0.02 indicates that exogenous variable has no substantive effect on the endogenous construct.

Hypotheses testing also involved testing of moderation effects to see whether or not, the university type had an effect on the relationships between job embeddedness and academic staff intention to stay in universities in Tanzania. This made use of PLS Multigroup Analysis (PLS-MGA), which tests whether differences between groups-specific path coefficients are statistically significant. Since a one-tailed test is used, moderation is indicated when a p-value is either very large ($> .95$) or very small ($< .05$) (Hair et al., 2017).

Research Findings and Discussion

Respondents' Characteristics
About 204 academic staff, accounting for 65.0% of respondents in this study was in public universities, while 110 which is roughly one third (35%) was in private universities. Relatively fewer academic staff in Tanzania's private universities has been associated with low investment in staff acquisition and development by these universities (Mgaiwa and Poncian, 2016). These respondents included 210 men (66.9%) and 104 women (33.1%). Women underrepresentation in academia is a common phenomenon, not only in Tanzania but also in many African universities (Mkumbo, 2014; Onsongo, 2011).

Measurement Model
Assessment of measurement model in this study involved evaluation of reflective constructs (intention to stay) and formative constructs (job embeddedness dimensions) as shown in Figure 2 below.
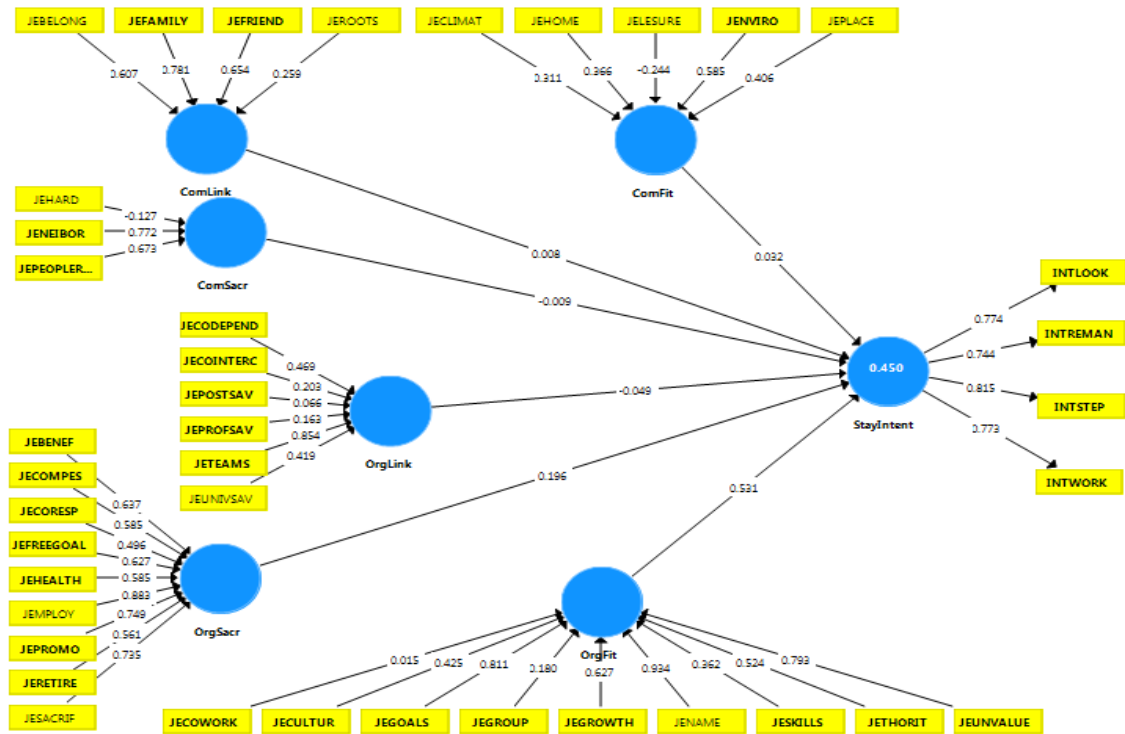
Figure 2. Job Embeddedness – Intention to Stay Path Model

Assessment of Reflective Measurement Model

Reflective measurement model evaluation assessed the size and significance of outer loadings, Composite Reliability (CR), convergent validity (AVE) and discriminant validity (Fornell-Larcker Criterion) of academic staff Intention to Stay. Table 1 and Table 2 present the assessment of reflective measurement model.

Table 1. Assessment of Intention To Stay Measurement Model

Construct	Indicator	Loading	*p*	CR	AVE
IS	IntLook	0.774	0.000	0.859	0.604
	IntRemain	0.744	0.000		
	IntStep	0.815	0.000		
	IntWork	0.773	0.000		

It is evident from the assessment of reflective measurement model in Table 1 above that the CR of 0.859 for IS, falls with a recommended range of 0.70 – 0.90, which indicates that the internal consistence reliability of a construct is satisfactory. It is also evident that the standardized outer loadings of all four reflective indicators are above the minimum threshold of 0.708 and are statistically significant. These indicators therefore are reliable reflections of the IS. This also shows that more than 50% (0.708^2) of variance in each indicator is explained by a construct. Lastly, the value of AVE above 0.5 provides evidence to support for convergent validity of indicators of IS.

Table 2. Assessment of Discriminant Validity (Fornell-Larcker Criterion) of Intention to Stay

Construct	CF	CL	CS	OF	OL	OS	IS
CF							
CL	0.330						
CS	0.130	0.183					
OF	0.226	0.281	0.169				
OL	-0.003	0.179	0.176	0.292			
OS	0.294	0.264	0.218	0.655	0.303		
IS	0.211	0.208	0.120	0.652	0.165	0.537	**0.777**

Discriminant validity of reflective indicators was measured by Fornell-Larcker Criterion. Since only one reflective construct (IS) was involved in this model, the square root of its AVE was compared with its correlations with all other latent constructs in the model, in this case, the formative constructs (Hair et al., 2017). It is evident from Table 2 that IS discriminated well as indicated by the value of the square root of AVE or Fornell-Larcker Criterion (0.777) that is larger than its correlations with the rest of the constructs. Discriminant validity was therefore supported.

Assessment of Formative Measurement Model

Table 3 indicates that, with exception of seven formative indicators of the six JE dimensions namely OF, OL, OS, CF, CL, and CS, all others had outer weight above 0.1, which is an acceptable minimum for an item to have impact on the construct it is connected to (Andreev et al., 2009). Of the seven low weighted indicators, five (JeSkills, JeBenef, JeCompes, JeCoresp and JeRetire) had significant factor loading (at $p < 0.05$) hence were retained as recommended by (Hair et al., 2017). The remaining two low weighted indicators (JeClimate and JeHome), though had insignificant loadings, were retained because of their theoretical importance to the Job embeddedness model. According to Jarvis et al., (2003) and Roy et al., (2012), merely statistical outcomes should not be the base for removing important items in a formative construct as this would adversely impact the content validity of the construct. The climate of the area and ownership of the house are the key attributes that theoretically determine the fit of individuals to their off-the-job communities.

Table 3. Assessment of Job Embeddedness Measurement Model

Constructs	Indicators	VIF	Loadings	*p*	Weights	*p*
OF	JeCowork	1.305	0.015	0.854	-0.154	0.072
	JeCulture	1.453	0.425	0.000	-0.115	0.184
	JeGoals	2.803	0.811	0.000	0.319	0.015
	JeGroup	1.423	0.180	0.052	-0.134	0.100
	JeGrowth	2.315	0.627	0.000	-0.114	0.354
	JeName	3.089	0.934	0.000	0.679	0.000
	JeSkills	1.394	0.362	0.000	0.048	0.534
	JeThorit	1.378	0.524	0.000	0.177	0.026
	JeUnvalue	2.442	0.793	0.000	0.181	0.070
OL	JeCodepend	1.281	0.469	0.076	0.268	0.416
	JeCointeract	1.247	0.203	0.466	-0.200	0.567
	JePostserv	1.879	0.066	0.815	-0.304	0.516
	JeProfserv	2.183	0.163	0.529	-0.381	0.459
	JeTeams	1.365	0.854	0.013	0.842	0.043
	JeUnivserv	2.259	0.419	0.079	0.661	0.227
OS	JeBenef	2.032	0.637	0.000	0.030	0.830
	JeCompes	1.861	0.585	0.000	0.048	0.700
	JeCoresp	1.303	0.496	0.000	0.065	0.599
	JeFreegoals	1.432	0.627	0.000	0.276	0.017
	JeHealth	1.983	0.585	0.000	0.117	0.332
	JeEmploy	2.695	0.883	0.000	0.432	0.001
	JePromo	2.277	0.749	0.000	0.140	0.264
	JeRetire	2.152	0.561	0.000	-0.077	0.571
	JeSacrif	1.505	0.735	0.000	0.320	0.012
CF	JeClimate	2.516	0.311	0.159	0.089	0.816
	JeHome	2.541	0.366	0.130	0.066	0.858
	JeLeisure	1.773	-0.244	0.464	-1.070	0.160

	JeEnviro	2.197	0.585	0.064	1.057	0.135
	JePlace	2.796	0.406	0.116	0.170	0.680
CL	JeBelong	1.281	0.607	0.016	0.395	0.217
	JeFamily	1.653	0.781	0.000	0.742	0.008
	JeFriend	1.272	0.654	0.005	0.492	0.106
	JeRoots	1.699	0.259	0.292	-0.545	0.095
CS	JeHard	1.179	-0.127	0.771	-0.545	0.365
	JeNeighbor	1.277	0.772	0.069	0.729	0.194
	JePeopleresp	1.262	0.673	0.059	0.546	0.204

Structural Model

Assessment of structural model involved evaluation of collinearity among predictor constructs using VIF, before testing hypotheses on relationships between job embeddedness dimensions and IS. Decisions on these hypotheses were guided by evaluation of significance (p) of structural relationships through bootstrapping procedure, and evaluation of Coefficient of Determination R^2 and Effect Sizes f^2 as recommended by Hair et al., (2017). These analyses were also used in the testing of hypothesis on moderation effects of the university type on the relationships between job embeddedness and academic staff intention to stay in universities using PLS-MGA. Table 4 presents the evaluation of structural model as indicated by the values of VIF, significance (p) and the effect sizes (f^2) of exogenous constructs, and the coefficient of determination of the model (R^2).

Table 4. Relationship Between Job Embeddedness Dimensions and Intention To Stay

Latent Constructs	VIF	β	p	f^2
CF	1.210	0.160	0.681	0.002
CL	1.217	-0.096	0.890	0.000
CS	1.084	0.117	0.876	0.000
OF	1.815	0. 664	**0.000*****	**0.282**
OL	1.166	-0.101	0.780	0.004
OS	1.901	0. 183	**0.002****	**0.037**
			R^2	
IS			0.45	

The findings in Table 4 show that all values of VIF are clearly below a threshold of 5, indicating that there is no threat of collinearity among the predictor constructs in the model. The findings also show that JE model adequately (45%) explains the variance in academic staff intention to stay in

the universities as indicated by the R^2 value of 0.45, with the two variables OS ($p = 0.002$) and OF ($p = 0.000$) registering significant relationship ($p < 0.05$). Further, the values of effect size (f^2) indicate that the same two exogenous variables, OS ($f^2 = 0.037$) and OF ($f^2 = 0.282$), had substantive (small to medium) contribution on the endogenous variable's R^2.

Hypothesis H_1
From the findings, it is evident that *Hypothesis (H_1),* which states that, *Job embeddedness model predicts the academic staff Intention to Stay in Tanzania's universities,* **is supported**. It is clear from the findings that job embeddedness predicts 45% of the academic members of staff intention to stay in their universities in Tanzania. According to Hair et al., (2017) this predictive power is moderate.

Hypotheses H_{1a}, H_{1b}, H_{1c}, H_{1d}, H_{1e}, and H_{1f}
The findings show that Organization Fit and Organization Sacrifice had *significant* positive relationships with Intention to Stay, *at $p < .001$* and $p < .05$ respectively, while Organization Link, Community Fit, Community Link, and Community Sacrifice had *insignificant* relationships with academic staff intention to stay.

From these findings, **Hypotheses H_{1a} and H_{1c} were supported**. This suggests that the more the academic staff perceives fit or compatibility between their own values, career aspirations, skills and knowledge, and the universities' culture and values, the more they will be bound to stay in the universities. Likewise, the more costly the academic staff finds severing this fit, the more they will be bound to stay. The salience of Organization fit and organization sacrifice on academic staff intention to stay is further substantiated by their significant contributions (f^2) on predictive power of the model.

On the other hand, **Hypotheses H_{1b}, H_{1d}, H_{1e} and H_{1f} were not supported**. This implies that there is no sufficient evidence in this study, to support the existence of significant relationships between Organization Link, Community Fit, Community Link and Community Sacrifice, with academic staff Intention to Stay in Tanzania's Universities. It was noted that, with exception of Organization Link, these insignificant constructs are related to off-the-job or community embeddedness, suggesting that, the factors in the community may not be important binding forces when academic members of staff in Tanzania's university are faced with the decision to stay in or leave their jobs. This, as also noted by Zhang et al., (2012), may be explained by the fact that individuals are encouraged to sacrifice themselves now and give more of their commitment to work for the future and long-term welfare of their families. Similar findings have been presented by Shafique et al., (2011).

Moderation Analysis
Objective two of this study sought to examine if there is a significant difference in relationships between job embeddedness and intention to stay among academic staff in public and private universities. Since our moderator variable, *university type*, was categorical, a multigroup analysis *PLS-MGA* was used in moderation analysis. Table 5 presents structural path coefficients (β) and significance (p) of their differences between the private and public universities groups.

Table 5. PLS-MGA Moderation Analysis

Structural Path	Private Universities		Public Universities		Path Coefficient (*β*) Difference	Significance (*p*) of Difference
	β	*p*	*β*	*p*		
CF ---> IS	0.160	0.024*	-0.125	0.363	0.285	0.952
CL ---> IS	-0.096	0.249	-0.166	0.292	0.070	0.668
CS ---> IS	0.117	0.219	0.059	0.479	0.058	0.690
OF ---> IS	0.664	0.000***	0.374	0.000***	0.290	**0.994***
OL ---> IS	-0.105	0.255	0.069	0.527	0.174	0.122
OS ---> IS	0.183	0.070	0.205	0.006**	0.023	0.428

The findings show that there was a significant difference in the relationship between job embeddedness and intention to stay among academic staff in private and public universities. This difference is particularly expressed by a significant difference ($p > .95$) in the path relating organization fit and intention to stay in the two groups. It was further noted that the relationship is stronger in private universities than in public universities as indicated by respective *β* values.

Hypothesis H₂

From the findings, it is evident that Hypothesis (H2), which stated that, *Relationship between job embeddedness and intention to stay differ between academic staff in public universities and private universities in Tanzania,* **was supported**. This implies that university type has a moderation effect on the relationship between job embeddedness and academic staff intention to stay in Tanzania's universities. This type of moderation is partial moderation, since the relationship is significant in both groups, (Baron and Kenny, 1986). Further, the stronger relationship in private than in public universities suggests that private universities are likely to realize more retention outcomes through improved compatibility between academic staff and the universities, than the public universities. The weaker effects of affective factors, such as pay and working conditions, which are known to be less favourable in private universities in Tanzania (Mgaiwa and Poncian, 2016), leave room for the effect of job embeddedness, a non-affective construct, to be more pronounced.

Conclusion

Job embeddedness model sufficiently predicts academic staff's intention to stay in Tanzania's Universities. Specifically, organization fit, which represents academic staff compatibility with the universities values, culture, career opportunities, and knowledge and skills requirement, and organization sacrifices, which are personal losses such as giving up work colleagues, relevant projects or pleasant benefits, switching costs such foregone due promotions, and sabbaticals, emanating from leaving an organization, forms the important dimensions of job embeddedness that influence academic staff intention to stay. It is also evident that private universities benefit more with job embeddedness as a driver of academic staff retention. It is recommended that, first, corporate strategic plans of the universities in Tanzania should embrace job embeddedness factors especially those encouraging fit between academic staff and universities as interventions for staff retention. Universities in Tanzania, and more especially the private universities, may find job

embeddedness as a valuable alternative retention approach that inherently relaxes the ordeals of unfavourable working conditions. Second, the revealed differential relationship between job embeddedness and intention to stay when university type is considered, informs the researchers on the role of moderator variables when job embeddedness theory is used in guiding research.

While evidence of the predictive ability of job embeddedness on academic staff intention to stay in universities has been provided in this study, we need to declare one inherent limitation that also points to the advancement of research in the body of knowledge. The scale used in measuring job embeddedness was applied for the first time in the context of the study. Though a measurement model was generally sufficient, the fact that some items had insignificant loadings may indicate that maybe they were not relevant in capturing the construct in the context. Future research may start with a qualitative study in order to establish the most relevant indicators of job embeddedness dimensions in the context of this study. We also recommend future studies to examine how other crucial boundary conditions such as academic disciplines of the academic members of staff may affect the relationship between job embeddedness and intention to stay in universities. Empirical evidence has shown that together with university type, the academic discipline is a very crucial attribute through which most of the behavioural and functional variations among academic staff are generated and strengthened (Jones, 2011).

References

Allen, D. (2006). Do Organizational Socialization Tactics Influence Newcomers Embeddedness and Turnover? *Journal of Management*. 32(2): 237-256.

Andreev, P., Heart, T., Maoz, H., and Pliskin, N. (2009). *Validating formative partial least squares (PLS) models: Methodological review and empirical illustration.* Paper presented at the International Conference on Information Systems (ICIS), Phoenix, AZ.

Baron, R. and Kenny, D. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*. 51(6): 1173-1182.

Besich, J. (2005). Job Embeddedness versus Traditional Models of Voluntary Turnover: A Test of Voluntary Turnover Prediction. A Thesis for award of PhD degree at University of North Texas, USA.

Bisaso, R. (2017). *Makerere University as a Flagship Institution: Sustaining the Quest for Relevance*, in Teferra, D. Flagship Universities in Africa. Palgrave-Macmillan, Switzerland.

Crossley, C., Bennett, R., Jex. S. and Burnfield, J. (2007). Development of Global Measure of Job Embeddedness and Integration into a Traditional Model of Voluntary Turnover, *Management Department Faculty Publication*. 34.

Ferreira, N. and Coetzee, M. (2013). The Influence of Job Embeddedness on Black Employees' Organizational Commitment. *Southern African Business Review*. 17(3): 239-255.

Goodluck, C. (2009). *Competitive Advantage in Small and Medium Enterprises: A Resource Based Analysis of Tanzanian Family and Non-Family Firms*. A Thesis for award of PhD at University of Dar es Salaam, Tanzania.

Gosh, D. and Gurunathan, L. (2015). Job Embeddedness: A Ten-Year Literature Review and Proposed Guideline. *Global Business Review*. 16(5): 856-866.

Griffeth, R., Hom, P. and Gaertiner, S. (2000). Meta-analysis of Antecedents and Correlates of Employee Turnover: Updates, Moderator Tests, and Research Implication for the Millennium. *Journal of Management.* 26: 463-488.

Hailu, A., Haile-Mariam, D., Fekade, D., Derbew, M. and Mekasha, A. (2013). Turnover Rate of Academic Faculty at the College of Healthy Sciences, Addis Ababa University: A 20 Year Analysis (1991-2011). *Human Resource for Health.* 11(61): 1-6.

Hair, J., Hult, G., Ringle, C. and Sarstedt, M. (2017). *A Primer in Partial Least Squares Structural Equation Modeling (PLS–SEM)*, 2nd Edition. Sage Publication, Los Angeles.

Hofstede, G. (1983). National Cultures in Four Dimensions: Research-Based Theory of Cultural Differences among Nations. *International Studies of Management and Organizations.* 1(2): 46-74.

Hokororo, S., Kitindi, E. and Michael, F (2018). Academic Staff Job Embeddedness: Model Dimensionality and Validation in Tanzania's Universities. *International Journal of Research-Granthaalayah.* 6(9): 278-290.

Holtom, B., Mitchell, T. and Lee, T. (2006). Increasing Human and Social Capital by applying Job Embeddedness Theory. *Organizational Dynamics.* 35(4): 316-331.

Jarvis, C., Mackenzie, S. and Podsakoff, P. (2003). Measurement Model Misspecification in Marketing and Consumer Research. *Journal of Consumer Research.* 30: 199-218.

Jones, W. (2011). Variation among Academic Disciplines: An Update on Analytical Frameworks and Research. *Journal of the Professoriate.* 6(1): 9-27.

Karatepe, O. (2013). Inking Perceived Ethical Climate to Performance Outcome: The Mediating Role of Job Embeddedness. *Economic Research.* 26(4): 77-90.

Karatepe, O. and Ngeche, R. (2012). Does Job Embeddedness Mediate the Effect of Work Engagement on Job Outcomes? A study of Hotel Employees in Cameroon. *Journal of Hospitality Marketing and Management.* 21(4): 440-461.

Krejcie, R. and Morgan, D. (1970). Determining Sample Size for Research Activities. *Education and Psychological Measurement.* 30: 607- 610.

Lee, T., Burch, T., and Mitchell, T. (2014). The Story of Why we Stay: A Review of Job Embeddedness, *Annual Review of Organizational Psychology and Organizational Behavior.* 1: 199–216.

Makulilo, V, (2012). Proliferation of Private Universities in Tanzania: Quality Compromise, *Wudpecker Journal of Educational Research.* 1(4): 51-66.

Mapolisa, T. (2014). Staff Retention Strategies in Zimbabwe's Public and Private Universities: Returnee Lecturers' Perspective, *International Research Journal of Teachers Education.* 2(1): 16-29.

Mgaiwa, S. and Poncian, J (2016). Public – Private Partnership in Higher Education Provision in Tanzania: Implication to and Quality of Education. *Bandung Journal of the Global South*, 3(6): 1-21

Michael, F. (2015). Hard and Soft Human Resource Management Compensation Practices on Employee Job Satisfaction. *ORSEA Journal.* 1(5): 161-172.

Mitchell, T., Holtom, B., Lee, T., Sablynski, C. and Erez, M. (2001). Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover. *Academy of Management Journal,* 44: 1102-1121.

Mitchell, T. and Lee, T. (2001). The Unfolding Model of Voluntary Turnover and Job Embeddedness: Foundations for a Comprehensive Theory of Attachment. *Research in Organizational Behaviour.* 23: 189-246.

Mkulu, D. (2018). Academic Staff Retention in Private Universities in Sothern Highland Zone Tanzania as a Strategy of Attaining Sustainable Development. *International Journal of Humanities and Social Science*. 8(5): 148 – 158.

Mkumbo, K. (2014). Prevalence of and Factors Associated with Work Stress in Academia in Tanzania. *International Journal of Higher Education*. 3(1): 1-11.

Nafei, W. (2015). The Effects of Job Embeddedness on Organizational Cynicism and Employee Performance: A Study on Sadat City University. *International Journal of Business Administration*. 6(1): 8-25.

Nicholas, A., Mensah, A. and Owusu, N. (2016). Stay or Leave? Using Job Embeddedness to Explain Turnover Intention among Hotel Staff in Ghana. *Journal of Management Research*. (3): 123-139.

Nyahongo, J. (2015). Improving Socio-Economic Environment to Promote Academic Staff Retention in Tanzanian Universities: Case Study of the University of Dodoma, in *Managing Change at Universities-A selection of Case Studies from Africa and Southern Asia*, Volume II. (Edited by Peter Meyer and Marc Wilde).

Onsongo, J. (2011). Promoting Gender Equity in Selected Public Universities in Kenya, *OSSREA*. [https://books.google.co.ke/books] site visited on 7th July, 2017.

Pienaar, C. and Bester, C. (2008). Retention of Academics in the Early Career Phase. *SA Journal of Human Resource management*. 6(2): 32–41.

Price, J, (2001). Reflections on the Determinants of Voluntary Turnover. *International Journal of Manpower.* 22(7): 600-624.

Ramesh, A. and Gelfand, M. (2010). Will they Stay or Will they Go? The Role of Job Embeddedness in Predicting Turnover in Individualistic and Collectivistic Cultures. *Journal of Applied Psychology*. 95(5): 807-823.

Robinson, R., Kralg, A., Solnet, D., Goh, E., and Callan, V. (2014). Thinking Job Embeddedness, not Turnover: Towards a better understanding of Frontline Hotel Worker Retention, *International Journal of Hospitality Management*. 36: 101-109.

Roy, S., Tarafdar, M. Ragu-Nathan, T. and Marsillac, E. (2012). The Effect of Misspecification of Reflective and Formative Constructs in Operations and Manufacturing Management Research, *Electronic Journal of Business Research Methods*. 10(1): 34-52.

Shafique, M., Qadeer, F., Ahman, M. and Rehman, R. (2011). Impact of Job Embeddedness on Leave Intention: An Understanding from Higher Education System. *African Journal of Business Management*. 5(30): 11794-11801.

Steel, R., Griffeth, R., and Hom, P. (2002). Practical Retention Policy for the Practical Manager, *Academy of Management Executive*. 16: 149-162.

Takawira, N., Coetzee, M. and Schreuder, D. (2014). Job Embeddedness, Work Engagement and Turnover Intention of Staff in Higher Education Institutions: An Exploratory Study. *SA Journal of Human Resource Management*. 12(1): 1-10.

TCU (2014). Tanzania Commission for Universities, List of Registered Universities and University Colleges in Tanzania: Status by July 2012. [www.tcu.go.tz] site visited on February 2016.

Tettey, W. (2010). *Challenges of Developing and Retaining the next Generation of Academicians: Deficit in Academic Staff Capacity at African Universities*. Partnership for Higher Education in Africa.

URT (2010). *Higher Education Development Programme 2010 - 2015: Enhanced Relevance, Access and Quality in Higher Education*. Ministry of Education and Vocational Training, Dar Es Salaam, Tanzania.

URT (2014). *MKUKUTA Annual Implementation Report 2013/14: Accounting for Results*, Ministry of Finance, Dar Es Salaam, Tanzania.

Uzoka, F., Mgaya, K., Shemi, A., Kitindi, E. and Akinnuwesi, A. (2011). Stay on IT or Quit: IT Personnel in Botswana, 2011 ACM SIGMIS CPR Conference, Antonio, Texas: 97-106.

Van Dyk, J., Coetzee, M., and Tebele, C, (2013). Organizational Commitment and Job Embeddedness of Services Staff with Critical and Scarce Skills. *South African Journal of Labour Relations*. 37(1): 61-78.

Wheeler, A., Harris, K., and Harvey, P. (2010). Moderating and Mediating HRM Effectiveness - Intent to Turnover Relationship: The Roles of Supervisors and Job Embeddedness, *Journal of Managerial Issues*. 12(2): 182-196.

Zhang, M., Fried, D. and Griffeth, R. (2012). A Review of Job Embeddedness: Conceptual, Measurement Issues, and Directions for Future Research. *Human Resource Management Review*. 22: 220-231.