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Competency Mapping and Staff Retention: Evidence from Public Universities in the Central Region of Uganda

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Abstract: *Competence mapping is increasingly becoming an important talent management tool for improving staff retention and stability. In Uganda, public universities have tried different approaches to reduce staff turnover, but there is little evidence about how well these efforts work. Even though the government has raised salaries for university staff, these institutions still face high turnover rates. One possible reason is that competence mapping has not been given enough attention as a way to keep staff. This study therefore examined the effect of competence mapping on staff retention in public universities in Central Uganda. The study employed an explanatory cross-sectional survey design with quantitative approach for data collection. Questionnaires were administered to 331 academic and administrative staff. Data were analysed using Structural Equation Modeling (SEM). The Model revealed good fit indices (CFI = 0.957, TLI = 0.952, PNFI = 0.890, RMSEA = 0.049, SRMR = 0.061. Findings revealed that staff capabilities have the strongest predictor of staff retention (β = 0.481, t-value = 7.918, p-value < 0.000), followed by knowledge and skills (β = 0.398, t = 4.177, p < 0.000), and the least predictor was staff experience (β = 0.249, t = 3.577, p = 0.001). The study concludes that all the three predictors of the study have a positive and significant effect on staff retention in public universities. The study recommends that public universities should; institutionalise competence mapping by integrating it into recruitment, placement, performance management, and promotion, integrate all the three dimensions of competence mapping into human resource strategy, as well as develop competency-based human resource policies and align competence development with career progression so as to influence staff retention in public universities.*

Keywords: *Competence Mapping, Staff Retention, Public Universities, Uganda.*

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1. Introduction

Higher education institutions worldwide are increasingly recognising staff retention as essential for sustaining academic excellence and organisational performance. In Uganda's public universities, retaining talented academic and administrative staff has become a major challenge due to growing competition for skilled personnel, limited financial resources, and increased international labour mobility, with high staff turnover undermining teaching, research productivity, institutional memory, and service delivery. Competence mapping has emerged as a strategic human resource management practice that identifies, assesses, and aligns employees' knowledge and skills, capabilities, and experience with organisational needs to enhance workforce utilisation, employee development, and retention. Despite extensive research on talent

management and employee retention, limited empirical evidence exists on the influence of competence mapping dimensions on staff retention in Uganda's public universities. This study addresses this gap by examining whether competence mapping, through its dimensions of knowledge and skills, capabilities, and experience, significantly influences staff retention in public universities in Uganda.

As competition for skilled employees intensifies, employee retention has become a strategic priority in human resource management, requiring organizations not only to attract talent but also to identify, develop, and retain employees whose competencies align with organizational needs. Competency mapping provides a systematic approach to identifying and assessing employees' knowledge, skills, abilities, and experience, thereby improving person–job fit, enhancing performance, and supporting retention (Shivanjali et al., 2019). The concept of staff retention has also evolved from merely preventing turnover to encompassing employees' intention to stay, organisational commitment, loyalty, engagement, and continued employment, all of which are shaped by effective human resource practices (Price, 1977; Allen et al., 2010; Hom et al., 2017; Armstrong & Taylor, 2023; Rothwell, 2024). Human Capital Theory (Becker, 1964; Schultz, 1961) and the Resource-Based View (Barney, 1991) further explain that employees' competencies are valuable strategic resources that can be developed and aligned with organizational objectives through competency mapping, thereby strengthening commitment and long-term retention.

When it comes to managing talent, competency mapping is a crucial practice that's widely recognized. However, its impact on employee retention is still unclear, mainly because it depends on how well it's integrated with other human resource strategies. These strategies include career development, supportive leadership, learning opportunities, and recognition systems. Researchers like Bartram, Huselid, and Collings have all weighed in on this topic, but the effectiveness of competency mapping remains a mystery. Most research has focused on talent management as a whole, without really drilling down into the specifics of competency mapping and its effects on employee retention. This is especially true in public universities in developing countries, where there's a real lack of empirical evidence.

Previous studies haven't done much in exploring how competency mapping influences employees' intentions to stay, their commitment, and loyalty. Few have used Structural Equation Modeling to examine these relationships, which is a significant gap in this field. For public universities, this gap is particularly important to address. When experienced academic and administrative staff leave, it can have a major impact on teaching, research, mentorship, and overall institutional performance. That's why this study aims to investigate whether competency mapping really does influence employee retention in public universities. By shedding some light on this topic, we hope to inform talent management theory and practice, and provide some much-needed guidance for universities looking to retain their top talent.

1.1 Statement of the Problem

Competency mapping is now seen as a key talent management tool that helps organisations identify, develop, and use employees' knowledge, skills, and experience to improve staff retention (Rothwell, 2024). Even though talent management is gaining attention as a strategic HR approach and the government has increased salaries for staff in Uganda's public universities, these institutions continue to lose experienced academic and administrative staff (NCHE Report, 2025). This loss affects performance, continuity, and knowledge retention (Ministry of Education Human Resource Report, 2025). Although financial incentives have been widely discussed in policy related to retention, there is little evidence on whether competency mapping helps retain staff in Uganda's public universities.

Most existing studies focus on general talent management and are based in different institutions or regions, so the role of competency mapping in public universities in Central Uganda is not well understood. This gap led to the current study, which looks at how competency mapping affects staff retention among academic and administrative staff in these universities using structural equation modeling (SEM).

1.2 Research Question

Does competence mapping significantly influence staff retention in public universities in Uganda?

Purpose of the study: To examine the effect of Competence Mapping on Staff Retention in Public Universities in the Central Region of Uganda.

1.3 Objective

The study was guided by the following objectives:

1. To examine the effect of knowledge and Skills on Staff Retention
2. To examine the effect of capabilities on Staff Retention
3. To examine the effect of experience on Staff Retention

1.4 Research Hypothesis

H_1: Knowledge and Skills have a positive and significant effect on Staff Retention

H_2: Capabilities have a positive and significant effect on Staff Retention

H_3: Experience has a positive and significant effect on Staff Retention

Conceptual Framework

COMPETENCY MAPPING (IV)

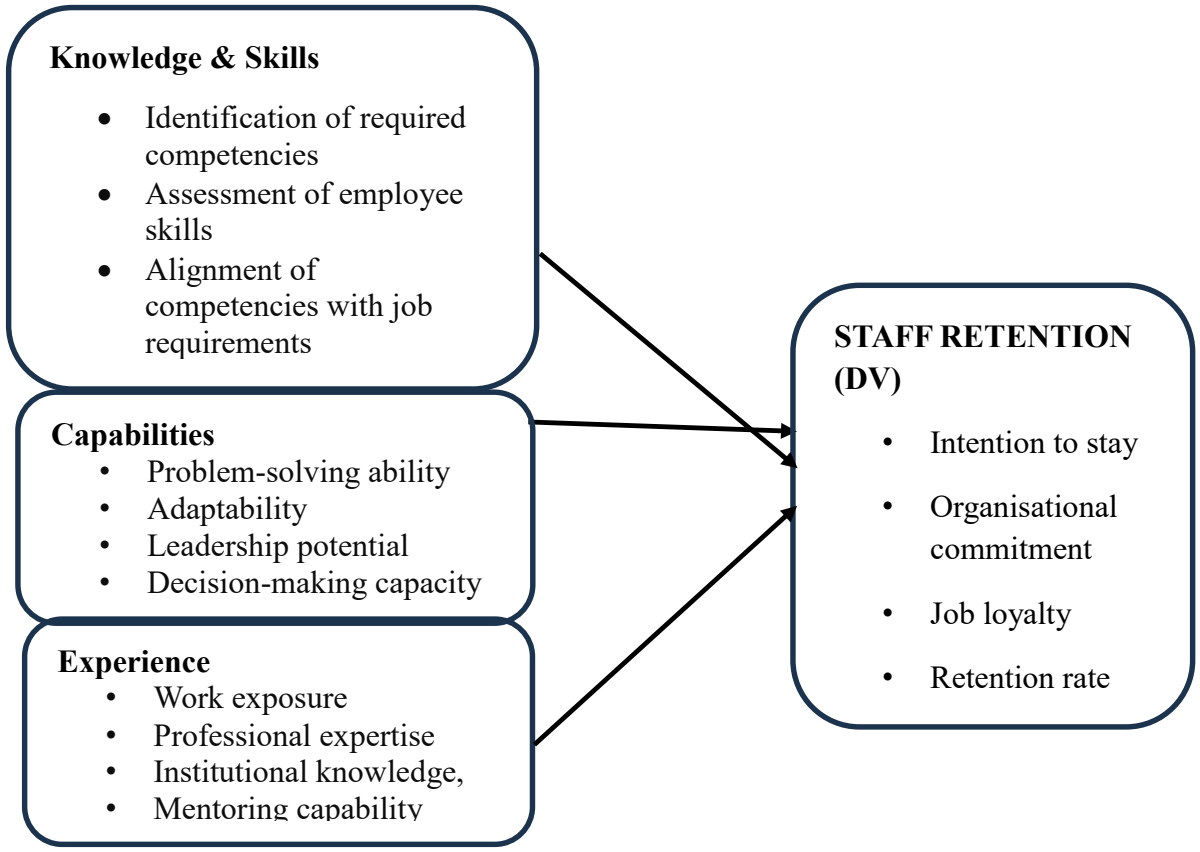


Figure 1: Conceptual Framework

Source: *Adapted from Armstrong (2019), Noe (2017), Jantan (2009), and Baum (2008) and modified by the researcher.*

2. Literature Review

2.1 Competency Mapping

Competency mapping means finding out the key skills, knowledge, and behaviors needed to succeed in certain jobs or across an organisation. This helps with hiring, training, and development and is important for evaluating how employees perform. In today's knowledge-based economy, having skilled employees is vital for success, so many organisations try to make sure their staff have the right abilities as business and economic conditions change.

Competence is the mix of knowledge, skills, and attitudes needed to do a job well, showing what good performance looks like (Srivastava, 2014). Competency mapping finds the main skills, roles, and tasks in an organization by figuring out what abilities are needed for each job and for the company as a whole. For any well-run company, it is

important to clearly define each role and the skills needed. Competency mapping also points out the knowledge, skills, and behaviors needed to do a job well. It often uses a SWOT analysis to help people see their strengths, weaknesses, opportunities, and threats for career growth (Chouhan & Srivastava, 2014).

Today, organisations struggle not just to manage employees but also to keep them, since skilled staff are key to staying competitive. Helping employees perform better can make them more likely to stay, but finding the right people still takes a lot of time and effort (Bidisha Lahkar Das, 2013).

2.2 Staff Retention

Staff retention is a major concern in human resource management because competition for skilled workers is rising, and losing employees is expensive. Organisations spend a lot on hiring, training, and developing staff, so keeping talented people is important for maintaining performance and staying competitive (Armstrong & Taylor, 2023; Dessler, 2020). In higher education, retention matters even more since academic and administrative staff have unique skills that are hard to replace. When experienced staff leave, it can disrupt teaching, research, and administration, which hurts the institution's effectiveness (Nyamboga, 2026). As a result, retention strategies now focus not just on stopping people from leaving, but on creating a workplace where employees want to stay.

Although most agree that retention is important, there is still debate about how to measure it. Some researchers prefer objective data like retention rates, employee tenure, and workforce stability. Others believe that subjective measures, such as intention to stay and job loyalty, are better at predicting future choices (Hom et al., 2017). Recent studies are increasingly favoring perceptual measures because they capture employee attitudes and psychological attachment, which can reveal potential turnover before it happens. This view shows why psychological indicators matter when studying retention.

2.3 Competency Mapping and Staff Retention

Competency mapping is a human resources strategy that helps organizations identify, develop, and leverage employees' strengths to improve performance. First introduced by McClelland in the 1970s, this approach shifted the focus from traditional assessments to competencies, which are better indicators of job success than intelligence or academic records. Competencies include knowledge, skills, and personal qualities that help employees do their jobs well. By creating competency frameworks, organisations can identify the skills needed for each role, assess their current workforce, and plan training to address any gaps (McClelland., 1973). Today, amid rapid technological change and greater competition, leveraging employee competencies is key to building a strong workforce and staying ahead (Sanghi, 2017).

Competency mapping helps organisations retain employees by matching their skills and career goals with company needs. When companies understand what employees are good at and where they can grow, they can offer better career paths, recognition, and job assignments. This leads to higher engagement and commitment. Studies show that employees who see opportunities to develop their skills and advance are more satisfied and less likely to leave (Dizon., 2020). Competency mapping also helps to place people in jobs that match their abilities, which boosts satisfaction and reduces turnover (Aguirre & Assunção, 2020). Since hiring and training new staff is expensive, keeping employees through good competency management saves both time and money (Dizon., 2020).

2.4 Theoretical Review

2.4.1 Human Capital Theory (Becker & Schultz, 1960) and Resource-Based View Theory (Barney, 1991)

HCT theory states that knowledge, skills, competencies, and experience of an employee are imperative assets that help organisations be more industrious and perform better (Becker & Schultz, 1960; Sweetland, 1996). The theory highlights that investing in staff training and career development builds individual abilities and brings long-term benefits to organisations. In this study, HCT is used to explain how competence mapping practices like knowledge and skills, staff capacities, and employee experience help retain staff by developing their skills and increasing their commitment to public universities. Although HCT is important, it has been criticized for focusing mainly on the economic value of employees and not considering enough the psychological, social, and organisational factors that affect staff retention. In addition, there is also limited evidence showing a direct link between human capital investments and organisational results (Hanushek & Woessmann, 2012).

Because of this limitation, the study also employs the Resource-Based View Theory to explain how organisations can use human capital strategically to achieve long-term success. Resource-Based View Theory (Barney, 1991) The Resource-Based View (RBV) Theory suggests that organisations gain a lasting competitive edge by having resources that are valuable, rare, inimitable, and cannot be replaced (Barney, 1991).

For talent management, knowledge, skills, expertise, and experience of staff are seen as key resources that help organisations perform better (Guthridge et al., 2008; Lewis & Heckman, 2006). Practices like knowledge identification, staff experience, and capabilities help organisations build and keep these important resources, which improves the overall performance of an institution. For public universities, RBV shows that keeping skilled academic and administrative staff helps preserve knowledge and supports high standards in teaching, research, and community engagement. However, some critics say RBV mainly perceives employees as resources and does not focus enough on what motivates individuals or their work experiences, which can affect their decision to stay or leave. Additionally, because RBV highlights the importance of developing and keeping valuable staff, it is a useful theory for understanding how talent management practices relate to staff retention.

2.4.2 Knowledge and skills, and Employee Retention

Competence mapping helps organizations identify the knowledge, technical skills, and behaviors needed for effective work, and then compare these needs with what employees already have. By finding gaps, organizations can plan training or mentoring to boost performance and keep employees longer (Campion et al., 2011; Dubois & Rothwell, 2004). Over time, competence mapping has grown from a basic HR tool into a key part of strategic management, supporting ongoing learning and development for long-term success (Vnoučková et al., 2022; Gallardo-Gallardo et al., 2020).

Human Capital Theory says that when organizations help employees build their knowledge and skills, they are more likely to keep those employees. These skills are valuable because they boost productivity and performance. Becker (1964) pointed out that investing in employee development builds commitment and loyalty. Recent HR research agrees, showing that people are more likely to stay with companies that offer ongoing learning and career growth (Noe et al., 2023; Armstrong & Taylor, 2023). Strong talent management programs that focus on continuous learning help keep talented staff, increase job satisfaction, and lower turnover (Collings et al., 2019; Noe et al., 2023).

In higher education, developing staff skills is especially important because the sector focuses on creating and sharing knowledge. Both academic and administrative staff need ongoing training to remain competitive. Studies show that offering research support, professional development, mentoring, and educational funding helps staff feel more committed and likely to stay (Noe et al., 2023; Dessler, 2020). Even in African universities with limited resources, ongoing professional development is linked to higher motivation and commitment among staff (Nguyen et al., 2022).

While most agree that skill development helps retain staff, some researchers say it is not enough on its own. Armstrong and Taylor (2023) point out that development opportunities matter, but Hausknecht et al. (2009) stress the need for competitive pay, supportive leadership, and good working conditions. Recent research shows that combining skill development with other talent management practices keeps staff more effectively than training alone (De Winne et al., 2019; Vnoučková et al., 2022). So, skill development should be included in a broader retention plan.

Some experts debate whether investing in employee development can have unintended effects. As employees gain new skills, they may become more appealing to other employers, which could lead to higher turnover if organizations do not offer career growth or rewards (Benson et al., 2004). On the other hand, when skill development is combined with opportunities for advancement, recognition, and succession planning, employees often feel more engaged and are less likely to leave (Collings et al., 2019; Gallardo-Gallardo et al., 2020). In Ugandan public universities, skill development is important but is often limited by budget constraints and slow promotion processes. Retaining staff depends on factors such as funding, leadership, and career opportunities. Although skill development can improve competence and satisfaction, more research is needed in developing countries, especially in Uganda, to fully understand its effects on staff retention.

2.4.3 Staff Capabilities and Employee Retention

Skills like problem-solving, adaptability, leadership, and decision-making help employees handle complex tasks and support an organization's long-term success. These abilities go beyond technical knowledge and are key to competence mapping, which helps organizations find skill gaps and plan training to improve performance and retention (Collings et al., 2019; Campion et al., 2011; Garavan et al., 2012). Studies show that strong problem-solving skills boost employee confidence, satisfaction, and commitment, making them less likely to leave (Bandura, 1997). Adaptable employees are more resilient and engaged, which is especially important for dealing with today's rapid technological and digital changes (Griffin et al., 2010).

Leadership and decision-making skills are important for everyone, not just managers, and they play a big role in keeping employees. These skills can be built through coaching, mentoring, and leadership programs, which help people feel more committed and less likely to leave (Cappelli & Keller, 2014; Collings et al., 2019). When employees are empowered to make decisions, they feel

more motivated and committed (Spreitzer, 1995; Thomas & Velthouse, 1990). Still, other factors like rewards, opportunities for career growth, and a positive workplace culture are also important (Al Ariss et al., 2014; Gallardo-Gallardo et al., 2020).

While building employee skills is helpful, it can also create a retention paradox. If there are no opportunities for career growth, skilled employees may leave (Campbell & Im, 2016). Good capability development should include succession planning and a culture of trust (Rousseau, 1995; Collings et al., 2019). This issue is especially important for public universities undergoing educational reforms, underscoring the need for more research in developing countries.

2.4.4 Experience and Staff Retention

Staff experience plays a key role in competency mapping because it shows the practical knowledge, judgment, and expertise people gain over time, helping organisations reach their goals (Armstrong & Taylor, 2023; Collings et al., 2022). In public universities, experienced academic and administrative staff have important knowledge about policies, systems, and the culture of the organisation, which makes them valuable for long-term institutional success. When institutions recognise staff experience, they improve retention since this experience is strategic resources that goes beyond formal qualifications and helps staff solve complex problems (CIPD, 2024).

Gaining work experience is important for building skills, confidence, and the ability to handle a range of tasks. For academic staff, activities such as teaching, research, and community engagement help them grow professionally and remain committed. Administrative staff benefit from taking on governance and management roles. When employees get meaningful assignments that help them develop, they are more likely to stay at their institutions. On the other hand, a lack of challenging work can lead to frustration and thoughts of leaving (Armstrong & Taylor, 2023; Collings et al., 2022; Deas & Coetzee, 2021). This idea fits with Human Capital Theory, which sees work experience as an investment that makes employees more valuable and committed to their organisations (Becker, 1993).

When employees build up professional expertise over time, it improves teaching, administration, and student support. This makes experienced staff hard and expensive to replace (Armstrong & Taylor, 2023; Deas & Coetzee, 2021). Universities that reward expertise with promotions, career growth, and professional development help boost employee confidence, satisfaction, and retention (Owusu-Agyeman, 2022). Experience also provides staff with valuable institutional knowledge, which supports better decision-making and keeps operations running smoothly (García-Martín et al., 2026). Still, universities should pair staff retention with knowledge-sharing mechanisms so that important expertise is not lost when people leave (García-Martín et al., 2026). In Uganda's public universities, using staff experience in competency mapping supports succession planning, improves performance, and promotes long-term staff retention.

3. Methodology

This study used an explanatory cross-sectional survey design and a quantitative approach with Structural Equation Modeling (SEM) to test the proposed relationships. SEM was chosen because it allows for the evaluation of multiple latent constructs at once, accounts for measurement errors, and provides reliable estimates of both direct and indirect effects (Hair, Black, Babin, & Anderson, 2019).

The study focused on academic and administrative staff from three public universities in central Uganda: Makerere, Kyambogo, and Uganda Management Institute. Out of a total population of 2,569, a sample of 331 respondents was selected. Stratified random sampling was used for academic staff, while simple random sampling was used for administrative staff.

Data was collected using a self-administered questionnaire with closed-ended items on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), based on validated scales from previous studies by Kenyi (as cited in Gerald et al., 2026). Of the 331 questionnaires distributed, 260 were completed and returned, resulting in a response rate of 79%, which is considered sufficient according to Creswell (2023). Competence mapping was assessed by looking at staff knowledge and skills, capabilities, and experience. Staff retention was measured by intention to stay, organisational commitment, job loyalty, and retention rate (Armstrong & Taylor., 2023). To make sure the measurement items were clear, valid, and reliable, a pilot study was carried out. This study produced a Cronbach's alpha coefficient above 0.7 for all constructs, showing acceptable internal consistency.

The data was analysed quantitatively to explore relationships and effects, using SPSS (version 28) for preliminary tests and JASP (version 0.19.1) for Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) before running SEM analysis. Several preliminary tests, including the Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity, were done to check if the dataset was suitable, as shown in Table 1 below.

Table 1: Kaiser-Meyer-Olkin and Bartlett'sTest of Sphericity

Test	Value
KMO (Overall)	0.779
Batlett's test of sphericity (X^2)	1317
df	66.000
P-value	< 0.001

Source: *Primary data (2026)*

The dataset was tested for sampling adequacy using the KMO criterion, and the overall value was 0.779, which is above the threshold of 0.7, implying sufficient sampling adequacy. A Battlet'stest of sphericity was in addition conducted, and the test was significant ($p < 0.001$), confirming appropriateness of factor analysis Kaiser (as cited in Nkansah (2018). The researcher ensured ethical considerations throughout the study by seeking informed consent from participants, treating all responses with anonymity and confidentiality, ensuring that data were solely for research purposes, and obtaining approval from the research ethics committee before data collection.

4. Results and Discussion

4.1 Exploratory Factor Analysis

Upon confirming the suitability of the data set, Exploratory Factor Analysis (EFA) was conducted to establish the factor structure of the constructs, and only factors with eigenvalues above 1 were considered for the subsequent confirmatory factor analysis(CFA). Only items with factor loadings of 0.5 and above whose uniqueness values were less than 0.7 were retained to improve construct validity (Hair., 2019).

Table 2*:* **Factor Loadings for staff Knowledge and Skills**

	Factor 1	Factor 2	Uniqueness
KS2	0.756		0.464
KS4	0.733		0.515
KS5	0.635		0.521
KS8	0.576		0.563
KS9	0.569	0.449	0.534
KS1	0.448		0.388
KS3	0.410	0.437	0.504
KS6	0.428	0.507	0.763
KS7		0.708	0.388

Note. Applied rotation method is varimax.

Exploratory Factor Analysis (EFA) was conducted to assess the dimensionality of knowledge and skills factor (KSF). Principal Component Analysis with Varimax rotation was employed to determine the extent to which the measurement items represented the underlying latent construct. For Factor 1 had the following loadings**;** KS2 (0.756), KS4 (0.733)**,** KS5 (0.635)**,** KS8 (0.576), and KS9 (0.569)**.** These factor loadings exceed the recommended threshold of 0.50 hence they were retained. Three items, KS1 (0.448)**,** KS3 (0.410 on Factor 1 and 0.437 on Factor 2)**,** and the secondary loading of KS9 (0.449 on Factor 2)**,** did not meet the 0.50 threshold hence were dropped. This interpretation is consistent with recommendations by Hair et al., (2019) who noted that factor loadings of 0.50 or higher are generally considered practically significant in

exploratory factor analysis, particularly in studies with moderate to large sample sizes.

Table 3: **Factor Loadings for Staff Capabilities**

	Factor 1	Factor 2	Uniqueness
CAP3	0.756		0.403
CAP9	0.733		0.440
CAP7	0.635		0.496
CAP5	0.576		0.512
CAP10	0.569	0.449	0.475
CAP2	0.548		0.628
CAP1	0.410	0.437	0.549
CAP4	0.428	0.407	0.560
CAP6		0.708	0.434
CAP8		0.692	

Results from the table reveal that the construct capability was captured using six indicators which had a threshold of 0.5 and above. The highest was CAP 3 (0.757), while the least was CAP 2 (0.548). However, 5 items were dropped since they didn't meet the required threshold of o.5 and above (Hair et al., 2022). From the results, one factor (Factor1) was extracted because factor 2 had only two factor loadings (CAP6 & CAP8) implying that capability as a competence mapping construct was unidimensional. Much as the two items loaded well on factor two, they could not form a complete factor since by principle the factor should have a minimum of 3 items loading on it (Creswell (2023). The uniqueness values for the retained items ranged between 0.403 and 0.628, all of which were below the recommended upper limit of 0.70 (Costello & Osborne, 2005). These findings indicate that a substantial proportion of the variance in each retained item was explained by the common factor.

Table 4: **Factor Loadings for Staff Experience**

	Factor 1	Factor 2	Uniqueness
EXP7	0.756		0.403
EXP9	0.733		0.440
EXP4	0.635		0.496
EXP3	0.576		0.512
EXP11	0.569		0.475
EXP2		0.547	0.628
EXP6		0.537	0.549
EXP1		0.507	0.560
EXP5		0.408	0.434
EXP8		0.492	0.487

***Table 5*:** **Factor Loadings for Staff Retention**

	Factor 1	Factor 2	Uniqueness
SR7	0.756		0.403
SR9	0.733		0.440
SR10	0.635		0.496
SR6	0.576		0.512
SR1	0.569	0.449	0.475
SR4	0.448		0.628
SR5	0.510	0.437	0.549
SR3	0.428	0.407	0.560
SR8		0.408	0.434
SR2		0.692	0.487
		0.487	0.744

Note. Applied rotation method is varimax.

***Table 4*:** **Factor Loadings for Staff Experience**

	Factor 1	Factor 2	Uniqueness
EXP10		0.476	0.590
CAM10		0.487	0.744

Note. Applied rotation method is varimax.

Table 4 above presents the exploratory factor analysis (EFA) results for staff experience construct of competency mapping using varimax rotation. The analysis extracted two underlying factors, indicating that experience is a multidimensional construct within competence mapping.

The first factor comprises of five items (EXP7, EXP9, EXP4, EXP3, and EXP11), with factor loadings ranging from 0.569 to 0.756. EXP7 (0.756) and EXP9 (0.733) recorded the highest loadings, suggesting that they are the strongest indicators of the first dimension of experience. All items on this factor exceeded the recommended loading threshold of 0.50, demonstrating satisfactory convergent validity and confirming that they adequately measure the underlying construct. The second factor consists of six items (EXP2, EXP6, EXP1, EXP5, EXP8, and EXP10). Three items (EXP2 = 0.547, EXP6 = 0.537, and EXP1 = 0.507) met the recommended minimum loading of 0.50, indicating acceptable representation of the second dimension. However, EXP5 (0.408), EXP8 (0.492), and EXP10 (0.476) fell below the 0.50 threshold, suggesting relatively weak associations with the factor and indicating that these items were dropped in subsequent analyses for SEM.

From table 5 above, using a loading threshold of 0.50, the factor analysis results indicate that SR7, SR9, SR10, SR6, SR1, SR5, and SR2 were retained because they loaded significantly on their respective factors. These items adequately represent the staff retention construct and are therefore suitable for further analysis. However, items SR4, SR3, and SR8 were dropped because their factor loadings were below the acceptable threshold of 0.50,

indicating that they did not contribute sufficiently to explaining the underlying staff retention construct. The uniqueness values ranged from 0.403 to 0.628 for the retained items, implying that between 37.2% and 59.7% of the variance in these items were explained by the extracted factors

.

Model Fit Assessment

Table 6: ***Fit indices***

Index	Value
Comparative Fit Index (CFI)	0.957
Tucker-Lewis Index (TLI)	0.952
Parsimony Normed Fit Index (PNFI)	0.890
Root mean square error of approximation (RMSEA)	0.049
Standardized root mean square residual (SRMR)	0.061

Note. *Apart from the PNFI, the fit indices are scaled up a bit because of the categorical variables in the data*

Based on the acceptable threshold, CFI>0.90, RMSEA<0.08, SRMR<0.08, GFI ≥ 0.90, PNFI ≥ 0.6, and the proposed model exhibited a good fit to the data and was suitable for hypothesis testing (Hu & Bentler, 1999; Browne & Cudeck, 1993).

Structural Model

To examine the structural model, Onyx was employed by testing the hypothesised effects of knowledge and skills, capabilities, and experience on staff retention. Path coefficients (β-values), t-values, and p-values were examined to determine the strength and magnitude of each relationship. Fit indices which included comparative fit index (CFI), Root mean Square Error of Approximation, and standard Root Mean Squared Error (SRMR), were employed to evaluate the model fit.

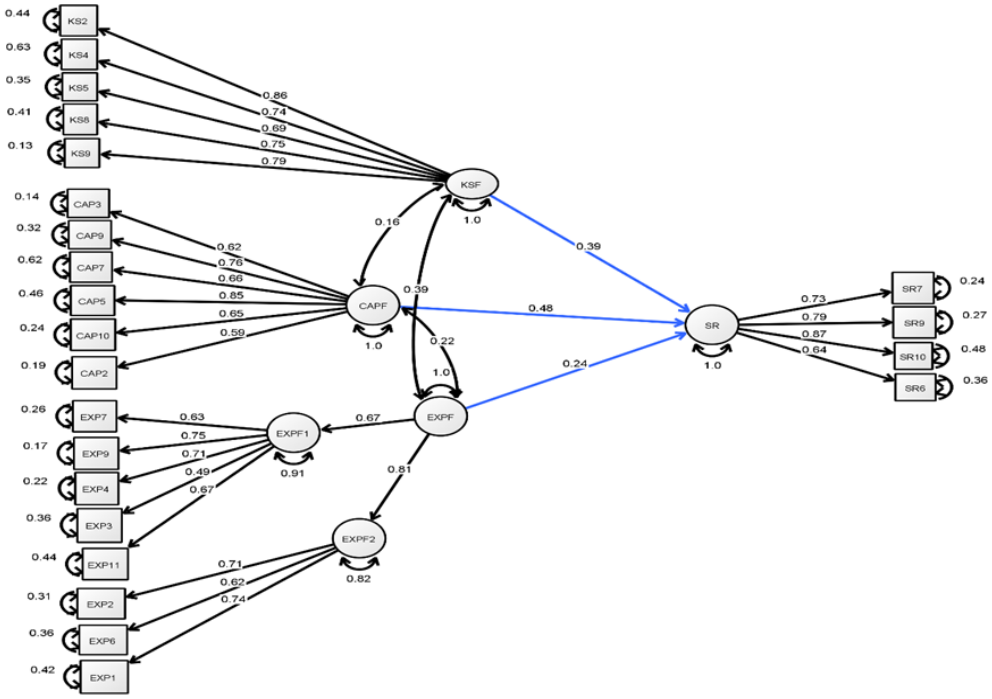


Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.652[a]	.425	.418	.64445

a. Predictors: (Constant), KS, CAP & EXP

Findings in table 7 revealed that the model explains 42.5% (R^2 = 0.425) of the variance in staff retention (SR) revealing a moderate explanatory power. The adjusted R^2 0.418 (41.8%) implies that the model is stable with minimal over-fitting (Hair, at el., 2019). The results further imply that competency mapping predicts staff retention in public universities by 41.8% with it constructs of knowledge and skills, capability, and experience, while the remaining percentage is accounted for by other factors not considered in this study.

Table 8: Coefficients[a] of Competency Mapping on Staff Retention

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.045	.405		5.065	.000
	Experience	.333	.093	.249	3.577	.001
	Knowledge & Skills	.352	.084	.398	4.177	.000
	Capability	.603	.090	.481	7.918	.000
a. Dependent Variable: Staff Retention						

Source: Primary data (2025)

Findings from primary data revealed that all the three predictors of the study; knowledge and skills (KS), capability (CAP), and Experience (EXP) have a positive and significant effect on staff retention (CAP) as the strongest predictor ($\beta = 0.481$, t-value = 7.918, p-value < 0.000), this was followed by KS ($\beta = 0.398$, t = 4.177, p < 0.000), and the least predictor was EX ($\beta = 0.249$, t = 3.577, p = 0.001). This implies that any improvement in the studied constructs positively and significantly increases staff retention of academic and administrative staff of public universities in the central region of Uganda. The model exhibit moderate explanatory power and agrees with the recommendations of (Hair et al., 2019).

Table 9: Summary of Hypotheses and SEM Structural Path Results

Hypothesis	Path	Beta(β)	t-value	P-value	Decision
H_1	KSF → SRF	0.398	4.177	.001	Supported
H_2	CAPF → SRF	0.481	7.918	.000	Supported
H_3	EXPF → SRF	0.249	3.577	.000	Supported

Regression Equation: $SRF=\beta_0 +0.398KSF+0.481CAPF+0.249EXPF+\varepsilon$

Findings from the above table revealed that capability ($\beta = 0.481$, t-value = 7.918, p-value < 0.000), knowledge and skills ($\beta = 0.398$, t = 4.177, p < 0.001), and experience ($\beta = 0.249$, t = 3.577, p = 0.000) all have a positive and significant effects on staff retention with their t-values above the threshold of 1.96 implying that the findings are significant at 5% confidence level (McClave, Sincich, & Benson, 2018; Hair, Black, Babin, & Anderson, 2019; Field, 2018). Staff Capability was found to be the best predictor of staff retention.

DISCUSSION

The findings were considered in conjunction with existing research on competence mapping and staff retention, with a focus on knowledge and skills, staff capabilities, and experience among academic and administrative staff in public universities in Central Uganda. Structural equation modeling (SEM) revealed that all three aspects of competence mapping had positive and statistically significant effects on staff retention. This confirms that competence mapping is an important talent management practice for keeping staff.

Knowledge and skills had a positive significant effect on staff retention ($\beta = 0.398$, $t = 4.177$, $p < .001$). This means that improving staffs' technical skills, professional knowledge, and learning opportunities increases their likelihood of staying at the institution. This result supports Human Capital Theory, which states that investing in employees' knowledge and skills increases their value to organisations and helps build long-term employment. It also matches with the Resource-Based View, which sees employee knowledge and skills as key resources that give organisations an advantage. These findings are in agreement with Armstrong and Taylor (2023) and Dessler (2020), who found that organisations investing in competence development help to keep more staff because they see more chances for professional growth. Dizon (2020) also found that ongoing competence development increases commitment to the organisation and lowers the desire to leave. Based on these results, public universities should regularly find skill gaps and offer targeted training and professional development.

Staff capabilities were found to be the strongest factor in predicting staff retention ($\beta = 0.481$, $t = 7.918$, $p < .001$). This means that employees who are better at problem-solving, adapting, leading, and making decisions are more likely to stay at their institutions. This result supports the Resource-Based View, which asserts that unique employee skills give organisations a lasting advantage. By using competency mapping, public universities can find and build these skills, prepare future leaders, and offer career opportunities that help employees stay committed. These findings are in line with Collings et al. (2022), who found that organisations with highly capable employees have more stable workforces, and with Gallardo-Gallardo et al. (2016), who showed that developing employee skills through talent management increases commitment and lowers turnover.

Staff experience also had a positive and significant effect on staff retention ($\beta = 0.249$, $t = 3.577$, $p < .001$). Much as its effect was the smallest, experience still matters because employees with more work exposure, knowledge of the institution, and mentoring skills are more likely to stay. This supports Human Capital Theory, which perceives experience as an investment that boosts productivity and value. The result also matches with De Vos et al. (2021), who found that experienced staff are more committed due to their knowledge and networks, and Aguinis (2023), asserted that recognising experience through mentoring, coaching, and career growth helps keep staff. In public universities, experienced staff offer memory, stability, and mentorship that help the organisation succeed.

In nutshell, the findings demonstrate that competency mapping greatly improves staff retention. Staff capabilities had the biggest impact, followed by knowledge and skills, and experience. The results suggest that public universities should use competency mapping in hiring, staff development, performance reviews, succession planning, and career management to help retain both academic and administrative staff

5. Conclusion and Recommendations

5.1 Conclusion

The study findings revealed that competence mapping plays an important role in retaining academic and administrative staff in public universities. Structural equation modeling (SEM) indicates that knowledge and skills, capabilities, and experience all positively affect staff retention. Among these, capabilities have the strongest effect, followed by knowledge and skills, then staff experience. This suggests that competency mapping strengthens employees' skills, commitment, and desire to remain at their institutions. As a result, public universities should incorporate competency mapping into their talent management strategies to build a skilled, dedicated, and sustainable workforce capable of achieving long-term institutional goals.

5.2 Recommendations

Therefore, the study recommends that

1. Public universities should make competency mapping part of their processes, including recruitment, placement, performance management, promotion, and ongoing competency assessments. This helps identify strengths, address skill gaps, and improve how well staff fit their roles.
2. Since staff capabilities have a strong effect on staff retention, public universities should focus on leadership development, mentoring, coaching, cross-functional assignments, and management training to build problem-solving, adaptability, and leadership skills.
3. Ongoing professional development, such as workshops, research training, digital skills programs, and sponsorship, should be expanded to boost knowledge, competence, job satisfaction, and commitment. Structured mentoring, succession planning, knowledge-sharing forums, and career progression programs can help experienced staff support long-term retention.
4. Finally, human resource policies should be based on demonstrated skills rather than just years of service, thereby improving both staff retention and university performance.

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