# The Effect of Employee Engagement on Talent Management and Employee Performance: A Mediation Model

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## **Abstract**

The purpose of the study was to examine the mediating effect of employee engagement on the relationship between talent management and employee performance among academic staff of public universities in Uganda. The study used cross-sectional and quantitative research methods. A sample of 536 academic staff was randomly selected from a population of 3,335 academic staff of public universities in Uganda using the Yamane sampling formula with due regard to effect size and statistical power. A closed-ended questionnaire was used to collect data. Process macro version 3.2 and the bootstrapping approach were used to test the research hypotheses. The study outcome revealed a significant positive effect of talent management on employee engagement; a significant positive effect of employee engagement on employee performance; and a significant positive effect of talent management on employee performance. Employee engagement had a significant mediating effect on the relationship between talent management and employee performance among academic staff of public universities in Uganda. The research outcomes provide the basis for the management of public universities in Uganda to integrate the research model as a framework for engaging academic staff to enhance employee performance in the university to achieve the university's goals and objectives. The research is one of the few studies undertaken in public universities in Uganda and makes an important contribution to the literature by bringing out the complementary mediating effect of employee engagement on the relationship between talent management and employee performance among academic staff of public universities in Uganda.

Keywords: Employee Performance, Talent Management, Employee Engagement, Academic Staff and Public Universities.

JEL Classification: M1, M50

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## 1. Introduction

Employee performance is regarded as an important business concept that has gained business prominence and research interest among researchers and practitioners in the last decade (Mone et al., 2011). Employee performance has the ability to enhance service provision, competitiveness, organizational growth, and efficiency in the public sector (Cania, 2014). Employee performance refers to the physical and psychological ability that employees display when performing tasks (Anjum et al., 2014) usually assessed in terms of quality, quantity, and interpersonal effectiveness (Sopiah et al., 2020). Performing employees lead to efficient use of resources, better workmanship, quality output, adherence to standards, effective performance (Yukl, 2008), customer satisfaction, and achievement of organizational goals and objectives. Performance of academic staff in higher educational institutions like universities involves teaching, research, supervision, publication, innovation, consultancy, and community services (Jyoti & Bhau, 2015), whose roles contribute to the achievement of the UNESCO Education Development Agendas of quality education and learning, provision of knowledge and skills, and provision of flexible lifelong and life-wide learning opportunities through formal, non-formal, and informal means to attain sustainable development goals (Elfert, 2015).

The fundamental question is whether academic staff in public universities are prepared to meet the sustainable development goals (Elfert, 2015) in the wake of skill mismatch, joblessness, and intolerance of the graduates emerging from universities across the world as there are scanty studies on the factors influencing academic staff performance in public universities (Kasule et al., 2016). Likewise, limited information exists on how academic staff participate in universities' academic activities (Enders et al., 2013), as little is known about the contribution of academic staff towards enhancement of university performance. Furthermore, the causal factors of employee performance remain unclear in academic settings where academic staff are expected to perform their roles to accomplish universities' goals (Richard et al., 2009). The prevailing literature postulates that organizations face several challenges and behavioral patterns like staff engagement, efficiency, and high-performance expectations (El-Kot & Leat, 2008) that limit the achievement of goals. Thus, the need for effective human resource management in the areas of job engagement, job satisfaction, and organizational efficiency to attain competitive advantage (Fiorito et al., 2007).

Job behaviors like engagement and satisfaction are among the valuable resources and strategic imperatives for gaining competitive advantage (Ologbo & Sofian, 2013). Studies have recognized that talent management is a source of job engagement and performance, which hinges on human capital theory that emphasizes the connection between employee skills, knowledge, and abilities as a source of competitive advantage (Becker, 1964; Dixit & Dean, 2018). Consequently, human resource qualities are critical in determining employee engagement and work outcomes that align talent management activities to the strategic objective of delivering public goods to current and potential employees through engagement (Garrow & Hirsh, 2008), since educational institutions'

effectiveness rests on human resource efficiency and staff management tactics. Amazingly, the public sector is confronted with intense competition for talent as there is a chronic talent shortage (Macfarlane et al., 2012). Notably, little research attention has focused on talent management in public sectors to define talent, attract, maintain, and develop talents for the achievement of the public sector's objectives (Gallardo & Thunnissen, 2016; Thunnissen et al., 2013). The majority of the talent management studies have focused on private sectors and multi-national organizations in developed countries (Vaiman & Collings, 2013), where some of the empirical findings were generated using data from public and private sectors (Kim & Scullion, 2011; Sonnenberg et al., 2014), overlooking the sectoral differences. However, few talent management studies centre on public sectors like health care institutes (Groves, 2011; Powell et al., 2012), or higher education institutions, creating ground for further research to examine talent management in public universities (Van den Brink et al., 2013).

Christensen and Lgreid (2007) support the quest for research on talent management in the context of the public sector by following the complex and institutional mechanisms that shape employment relationships and human resource management in public universities (Kehoe & Wright, 2013; Paauwe, 2004; Wright & McMahan, 2011). Furthermore, previous scholars call for more research on talent management in different countries and sectors using various theoretical frameworks and research designs (Collings et al., 2011; Meyers & Van Woerkom, 2014; Thunnissen et al., 2013) while taking into account internal and external organizational contexts that were overlooked in previous studies (Gallardo-Gallardo & Thunnissen, 2016). Few studies have examined the link between talent management, employee engagement, and performance in tertiary institutions (Nazir & Islam, 2017) to understand how talent management transmits its effect on employee engagement to influence discretionary performance behaviors (Karatepe et al., 2013), yet higher education institutions' success cannot be achieved without talented, engaged, satisfied, committed, and motivated academic staff (Christensen et al., 2020). Studies on personnel substances show that employee competence, engagement, and performance in higher education are not well examined (Aboramadan et al., 2019). Employee engagement is important in terms of talent management and work-related behaviors (Karatepe, 2011). The social exchange theory supports the linkage on the ground that employees reciprocate organizational actions with extraordinary performance contingent on management support (Cropanzano & Mitchell, 2005). The dominant literature supports the view that talent management and employee engagement are among the key factors that account for variations in employee performance (Sopiah et al., 2020). Research studies reveal that talent management practices (e.g. recruitment, on-boarding, selection, mentoring, learning and development, career growth, reward and recognition) enhance employees' ability to drive employee engagement and job performance (Shahzad et al., 2008; Shahzadi et al., 2014).

Amin et al. (2014) note that improving academic excellence in educational institutions depends on talent management practices that enhance job performance among academic staff (Wall & Wood,

2005), evident in the university's credibility, image, reputation, and community growth that enhance academic staff energy to achieve the university's goals (Christensen et al., 2020). Several studies have concentrated on the relationship between talent management and improved performance (Boudreau & Ramstad, 2007; Cappelli, 2008; Collings & Mellahi, 2009; Huselid et al., 2005; Salim Zahargier & Balasundaram, 2011; Sheehan, 2012). Conversely, scanty information exists on employee engagement as a mediator on the relationships between talent management and employee performance in public universities. Most studies on talent management and employee performance focused on other sectors, overlooking the education sector, particularly public universities. A new phase of study that integrates employee engagement as a mediator in the relationship between talent management and employee performance provides the alternative means to achieve universities' goals and objectives. Therefore, there is a need to examine the underlying mechanisms through which employee engagement can leverage employees' exceptional qualities to achieve organizational goals (Thunnissen & Buttiens, 2017), since employee engagement contributes to human capital development and sustainable development goals (Decker et al., 2016; Molefe & Sehularo, 2015).

Employee engagement is linked to Kahn's (1990) theory of personal engagement that harnesses an employee's self-drive during role performance; where employees express themselves physically, cognitively, and emotionally (Kahn, 1990). Research on positive organizational behavior focuses on employee engagement as a way to improve employee work outcomes (Bakker & Schaufeli, 2008). Employee engagement accounts for the variation in performance levels by clarifying responsibilities, establishing standards of behavior, reducing stress, and minimizing conflict (Jackson & Schuler, 1985; Tubre & Collins, 2000) that increases job performance, task performance, productivity, and discretionary efforts (Demerouti et al., 2010). Macey and Schneider (2008) argue that managerial practices and behaviors affect performance through psychological engagement. However, engaging employees in recent years has been one of the greatest challenges due to the confusing landscape among researchers in regards to theoretical perspectives, conceptual definitions, and measurement approaches (Sahu et al., 2017). Researchers and practitioners envisage that employee engagement is poorly developed and understood in theory and practice (Lee et al., 2016; Li, Sun et al., 2020) as there is a lack of unified definitions and measurements in public sectors. Studies report a low level of employee engagement among employees worldwide.

According to the Gallup Institute, 15% of employees are fully engaged, while 85% are disengaged (Motyka, 2018). The causes of disengagement relate to a lack of support rendered to attain performance objectives (Forbes, Freeman, McCombes, & Humphris, 2014). However, amidst the challenges, employee engagement is regarded as an important concept that mediates the relationships between human resource management practices and work outcomes (Shantz et al., 2016). Conspicuously, research evidence supporting the mediating effect of employee engagement on performance outcomes in public universities is scanty (Alfes et al., 2013; Menguc et al., 2013).

Public universities are at the apex of creation and dissemination of knowledge to spearhead creativity and innovation among individuals, communities, and societies. Academic staff in these public universities are at the forefront of creation and dissemination of knowledge, which justifies studying their performance to improve academic staff's capacity to create and disseminate knowledge to various stakeholders. However, in recent years, public universities and other public tertiary institutions (i.e. Makerere University, Kyambogo University, Mbarara University of Science and Technology, Gulu University, etc.) have faced significant challenges with employees as the performance of academic staff in these institutions continues to be described as poor, low, declining, and unsatisfactory (Solomon & Ayebale, 2017) as evidenced by deteriorating work standards, low morale, low level of publications and rising incidents of academic staff absenteeism, sparking wide condemnation among students and the general public (Solomon & Ayebale, 2017), yet it is not clear whether the unsatisfactory performance levels among academic staff in public universities is attributable to talent management and employee engagement strategies employed by the public universities. Thus, the study sought to examine the relationship between talent management, employee engagement and employee performance in a mediated model to provide an alternative explanation to academic staff performance in public universities in Uganda.

The rest of the paper proceeds as follows: Section two presents the literature review and hypothesis development. Section three describes the methodology applied in the study. Section four presents the findings, followed by Section five, which presents the implications and conclusion.

#### 2. Literature Review

#### 2.1. Theoretical Review

Human Capital Theory (HCT) is an economic theory developed by Schultz (1961) that considers knowledge and skills as part of human capital. Human capital is endowed with skills, knowledge, and abilities (KSAs) that are regarded as of economic value to a firm (Becker, 1964). The composition of human capital competencies makes employees feel confident in performing their tasks and develop a high degree of commitment, loyalty, and engagement to achieve organizational goals (Wood & Menezes, 1998). A firm should invest in KSAs using human resource management practices since such practices are linked to firm performance (Arthur, 1994). The investment in human capital involves direct and indirect costs, which are justified if they produce economic returns to a firm in terms of increased employee productivity and firm performance. The costs and benefits derived from human capital investment can be evaluated using economic criteria like net present value and internal rate of return to ascertain the value addition of human resource practices as proposed by the utility analysis theory that quantifies the value of improvement in employee productivity to recruitment, selection, training, and retention strategies (Boudreau, 1983). If the return is positive, the firm will invest time and money in its employees. That is viewed as a means of increasing workers' capabilities to perform activities of economic

value. The higher the value of an employee to a firm, the more likely the firm will invest in human resource activities (Truss, 2001). HCT recognizes the importance of the composition of the human capital pool, human resource management practices, and their potential in contributing to performance, which constitutes a framework that forms the building block for analyzing the interaction between the employees and the firm to attain economic value. From the economic standpoint, all activities that enhance the KSAs of the workforce, productivity, and performance of a firm are considered to be of economic value. The KSA value is expressed in terms of productivity. Human resource management practices enhance employee KSAs through selection procedures or training that boost employees' KSAs and impact positively on firm performance.

Social Exchange Theory (SET) suggests that management practices and exchanges in social interaction contribute to positive exchange relationships between employees and their employers. This positive exchange creates a bond between the employer and employees, which the employees reciprocate with favorable attitudes and behavior that translate into performance (Marescaux et al., 2013). Geetha and Mampilly (2012) explain that the basic assumption underlying Social Exchange Theory is that when employees view organizational practices as satisfying, employee engagement will develop in response to the organizational practice. Employees thus reciprocate this through positive organizational behaviors like employee engagement, where engagement is exchanged for material and non-material resources provided by the organization. Grounded on the social exchange theory, it is reasonable to state that management practices lead to employee engagement and performance among academic staff of public universities.

## 2.2. Hypotheses Development

#### 2.2.1. Talent Management and Employee Engagement

Talent management is an organizational imperative intended to attract, develop, deploy, and retain talented employees with the goal of achieving organizational objectives (Cappelli & Keller, 2014). For the organization to attain the required objective, management needs to design mechanisms that will make employees congruent with organizational goals. Such mechanisms may include talent management and employee engagement, which have been extensively studied in management literature in the past decade (Saks & Gruman, 2014) by researchers and academicians. Despite the extensive research interests, there is a lack of empirical evidence on the effect of talent management on employee engagement in the management literature. Yet, engaged employees provide a competitive advantage since engaged employees work toward organizational success, as expounded in a resource-based view (Joo & Mclean, 2006) and supported by the practice view that engaged employees register increased productivity and low turnover. The Corporate Leadership Council Study (2011) supports the view by asserting that organizations using talent management as a business strategy drive employee engagement by 23%, leading to an increase in business performance and revenue generation. Mohammed (2015) notes that organizations investing in talent

management record a rise in employee engagement and organizational success. Dhanalakshmi and Gurunathan (2014); Järvi and Khoreva (2020) reveal a positive and significant effect of talent management on employee engagement. Hence, we hypothesize that H1. Talent Management has a positive effect on Employee Engagement.

#### 2.2.2. Employee Engagement and Employee Performance

Employee engagement plays a vital role in enhancing employee performance. Employee engagement affects the sustainability of the university goals, leading to university performance with better quality of work, taking into consideration the cognitive, emotional, and physical conditions at work (Kahn, 1990). Work quality considers employees' energy and vigor exhibited at work while engrossed in professional work to improve job performance (Kim & Koo, 2017). Employee engagement provides the means through which physiological and psychological needs stimulate work enthusiasm for greater work outcomes. Al-momani (2018) found employee engagement has a significant effect on employee performance in telecommunications in Jordan. Dajani (2015) concluded that employee engagement is a significant predictor of employee performance. A metaanalysis of 8,000 business units in 36 companies found that employee engagement is linked to business performance (Harter, Schmidt, & Hayes, 2002). Xanthopoulou et al. (2009) found a link between the work engagement of restaurant workers and daily financial returns. The study further establishes a link between employee engagement and labor productivity through ability, motivation, and organizational factors that link employee performance to organizational goals. When employees are engaged in their job, they exhibit three behaviors (say, stay, and drive) that determine the level of engagement, loyalty, and performance, triggering the mechanisms under which employees work vigorously to attain performance goals. Thus, the study hypothesizes that: H2. Employee Engagement has a positive influence on Employee Performance.

#### 2.2.3. Talent Management and Employee Performance

Talent management is a vital tool for enhancing employee performance (Turyahebwa et al., 2022) that resonates with the talent nurturing process (Lawler III, 2008) as exemplified in human capital theory, which forms an important part of an organization to fulfill task-related activities for the enhancement of performance and productivity. Talent management provides employees with job-specific skills for task performance, building employees' capacity to use technology, share knowledge, be creative, be self-driven, and improve customer care and business knowledge. Mohammed (2015) affirms that successful talent attraction, development, and retention reinforces organizational success. The Society of Human Resources Management (2012) survey reveals that talent management enables employees to focus on driving revenue, which results in performance improvement. Competence-enhancing strategies are geared towards improving employee performance by inculcating job-related skills that elicit behavioral change, learning, and

organizational performance. Organizational performance is improved through employee training tailored toward job requirements to reduce turnover, conflict, and absenteeism and improve market share, quality, and productivity (Huselid et al., 2005). Uddin and Arif (2016) studied talent management and organizational performance in the retail sector in Bangladesh. The findings show that talent attraction, selection, and retention are positively related to the performance of retail staff. Sopiah et al. (2020) studied talent management, work engagement, and their impact on nurses' performance in Indonesia. The result confirms that talent management has a positive and significant effect on nurses' performance, lending support to numerous studies (Mkamburi & Kamaara, 2017) indicating that talent management leads to a remarkable improvement in employee performance. Hence, we hypothesize that H3. Talent Management has a positive effect on Employee Performance.

# 2.2.4. The Mediating effect of Employee Engagement

Employee engagement refers to the simultaneous employment and expression of a person's preferred self in task behaviors that ratify the connection between work and personal presence and active performance (Kahn, 1990). Anitha (2014) explains that employee engagement's effect on employee performance is linked to human competence as a source of a firm's competitive advantage that cannot be imitated by competitors to achieve performance goals (Anitha, 2014). Human resources is known for achieving a higher level of performance attached to competence possessed by employees and subsequent engagement techniques applied. Saks (2006) notes that engaged employees trust the organization, and that translates into higher performance. Engaged employees perform better than disengaged employees due to their positive emotions and state of mind at work (Bakker & Demerouti, 2008). Previous studies have established a positive and significant relationship between antecedents of employee engagement and consequences (Saks, 2006). Employee engagement has been found as a mediating variable in several outcome studies. Mensah, Bawole, and Wedchayanon (2016) suggest that talent management is related to employee performance mediated by work engagement. Mohammed (2015) notes that talent management is related to company performance through work engagement, showing that talent management practices influence work engagement and employee performance. Barkhuizen, Mogwere, and Schutte (2014) lend support to the finding that work engagement plays a mediating role in job resources and company performance.

Direct effects of independent variables on dependent variables must not be required when testing for mediation, as mediation can be statistically significant in the absence of direct relationships. Furthermore, Rucker et al. (2011) recommend that a non-significant direct effect should not be considered as a condition in the process of testing mediation. Therefore, the present study upholds the recommendations of Rucker et al. (2011) and Zhao et al. (2010) that specify that employee engagement meets the criteria to be considered as a mediating variable, coupled with

previous research that states that employee engagement can be used as a mediating variable in work-related outcomes (Ram & Prabhakar, 2011; Saks, 2006). Nonetheless, few studies have examined the mediating effect of employee engagement on the relationship between talent management and employee performance in the academic literature. Thus, the study hypothesizes that: H4. Employee Engagement mediates the relationship between Talent Management and Employee Performance.

#### 2.2.5. Research Model

The integration of the research hypotheses formulated involved the development of a research model after an intensive review of literature on the variables (see Figure 1) that synthesized the associations between talent management, employee engagement, and employee performance in a synchronized research model.

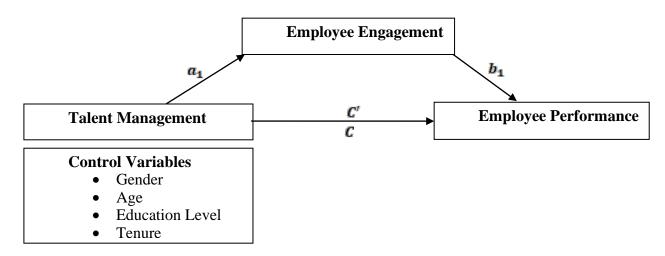


Figure 1. Research Model

# 3. Research Methodology

The study used a cross-sectional and quantitative method where a closed-ended self-administered questionnaire was used to collect data among academic staff of public universities in Uganda. The choice of academic staff is based on the fact that academic staff are the disseminators of knowledge through teaching, research, innovation, and community engagement for the delivery of university education and services to clients. Academic staff are in a position to rate their feelings and behaviors on the tasks they perform on a daily basis. The study population was 3,335 academic staff, from which a sample of 536 was drawn using the Yamane formula of 1967 (Israel, 1992) with due consideration to effect size and statistical power (Comrey & Lee, 1992) to support study hypotheses (Delice, 2010). A random sampling method was applied to select respondents from the academic units to reduce sampling errors and biases (Collings & Mellahi, 2009). The data was collected with approval from the management of public universities. 468 valid responses were collected, representing an 87.3% response rate that is above 50% acceptable response rate in quantitative studies. Data collected was analyzed using SPSS version 23 to generate descriptive and inferential statistics.

#### 3.1. Measurement of variables

The variables under investigation were: employee performance, talent management, and employee engagement. Employee performance was measured using the Individual Work Performance Questionnaire Version 0.1 with constructs: teaching, research, publication, and community engagement (Hussaini et al., 2020; Yusuf & Ogbudinkpa, 2017) on 40 items linked to the 7-Point Likert scale ranging from 1-"Strongly Disagree" to 7-"Strongly Agree". Talent management was measured using four dimensions of talent attraction, deployment, development, and talent retention (Kamal & Lukman, 2017; Yener et al., 2017) on 31 items linked to a seven-point Likert scale; strongly disagree (1) and strongly agree (7). Employee engagement was measured on the Utrecht Work Engagement Scale developed by Schaufeli and Bakker (2003) Bakker and Demerouti (2008); Hakanen (2002); Prochazka et al. (2017); Schaufeli and Bakker (2003); Yi-wen and Yi-qun (2005), with subscales of vigor, dedication, and absorption containing 17 items scored on a seven-point rating scale ranging from 1-Never to 7-Always. The summary of the measures of the variables is provided in Table 1 below.

Table 1. Summary of the Measures of the Variables

Variable	Constructs	Source	Measurement	Sample items
Employee	Publication	Koopmans et al.	Employee	I always publish
Performance		(2011)	performance was	articles in local peer
		Koopmans et al.	measured using	reviewed journals.
		(2013)	Individual Work	
	Community	Hussaini, Noma,	Performance	
	Engagement	and Rugga	Questionnaire	I participate in cultural
		(2020);	Version 0.1. The	and social gatherings in
		Widyastuti and	instrument was	the community.
		Hidayat (2018);	modified to suit	
	Teaching	Yusuf and	the study context.	
		Ogbudinkpa	The measures	I start my lectures at
		(2017)	contained 40 items	the right time.
			linked to 7-Point	
	Research		Likert scale	I do participate in the
			ranging from 1-	departmental research
			"Strongly	dissemination
			Disagree" to 7-	workshops.
			"Strongly Agree".	
Talent	Talent Retention	Yener, Gurbuz,	Talent	My University rewards
Management		and Pinar (2017)	management were	top-performing
		Kamal and	measured on four	academic staff.
	Talent Attraction	Lukman (2017)	constructs with 31	
			items linked to	My University builds
			seven point Likert	up talent pool at every
			scale; 1-Strongly	level of the University.
			Disagree and 7-	
	Talent		Strongly Agree	My University places
	Deployment			emphasis on skill,
				interests and
				capabilities of
				academic staff during
				deployment.
	Talent			
	Development			My University
				identifies career
				development needs for

				academic staff.
Employee	Absorption	Bakker and	Employee	I get carried away
Engagement	•	Demerouti	engagement was	when I am working.
		(2008); Hakanen	measured using	
		(2002);	Utrecht Work	
	Vigor	Prochazka,	Engagement Scale	I put in a lot of energy
		Gilova, and	containing vigor,	in my work.
		Vaculik (2017);	dedication and	
		Schaufeli and	absorption with 17	
	Dedication	Bakker (2003);	items scored on	I derive a sense of
		Yi-wen and Yi-	seven-point rating	inspiration from my
		qun (2005)	scale ranging from	job.
			1-Never to 7-	
			Always.	

#### 3.2. Factor analysis

The study used exploratory factor analysis (EFA) based on principal component analysis to determine the validity and reliability of the measurement models of the variables. EFA was applied to examine the patterns of data and reduce the data to a manageable level. The principal component analysis using the Varimax rotation method and Kaiser-Meyer Olkin normalization to examine the factor structure (Hair, Ringle, & Sarstedt, 2013) where factors with Eigenvalue greater than one unit were retained and items with factor load  $\geq 0.50$  were adopted, and used in further analysis (Marsh, Morin, Parker & Kaur, 2014). Highly correlated items were clustered to form one factor based on the Eigenvalues and degree of importance to the composite variables. The validity of the composite variables was based on factor loadings and average variance extracted. Employee performance had four factors all were significant and retained. Ten items were deleted from the factor structure and the retained factor included; publication (Eigen Values = 6.164, Variance = 20.548%), community engagement (Eigen Values = 4.623, Variance = 15.410%), teaching (Eigen Values = 3.682, Variance = 12.273%) and research (Eigen Values = 1.757, Variance = 5.857%); accounting for 54.088% variance with a Kaiser-Meyer Olkin (KMO) = .912 and Bartlett's test of sphericity of approximate chi-square = 6827.260, df = 435, p < .001, signifying significant relationships and sufficient to measure employee performance (Field, Miles, & Field, 2012). The factor structure of employee performance presented in Table 2 reveals the importance of the component parts and weights of the items on each construct.

Table 2. Rotated Component Matrix for Employee Performance

Table 2. Rotated Component Matrix for E.	Publication .	Community	Feaching	Research
	Pub	Con Eng	Теас	Resc
I always publish articles in local peer reviewed journals	.834			
My research articles have been published in newspapers/magazines	.812			
I have co- authored a book	.806			
I publish my research articles with the university	.792			
I regularly publish in International peer reviewed journals	.791			
I have authored a book	.782			
My conference papers are published in conference proceedings	.775			
My published work is always cited by other researchers	.715			
I collaborate with colleagues to do research publication	.555			
I participate in community events like conferences, seminars, sport activities, trade shows and exhibitions in the community		.710		
I participate in cultural and social gatherings in the community		.683		
I participate in public ceremonies, awards, competitions, and community events		.661		
I contribute to charitable organizations within the community		.654		
I support the communities where I work and live		.652		
I participate in discussions that raise issues of social responsibility		.644		
I ensure safe, ethical and efficient use of data obtain from the community		.631		
I provide public lectures and talk shows to build collaboration with community organizations		.564		
I continuously expand the frontiers of knowledge, innovation and technology to improve people's well-being in the		.524		
community  I participate in research dissemination and knowledge sharing in the community		.512		
I have social and networking skills to involve community in research activities		.500		
I mark all the tests, assignments and examinations given to students			757	
I do administer tests, assignments, and field/practical work to			739	

students in every course unit I teach

Rotation converged in 6 iterations.

I attend to my lectures according to the assigned timetable			.711	
I start my lectures at the right time			.693	
I release the course work results to students before examination commences			.642	
I return all course work marked scripts to students			.624	
I end my lectures at the right time			.595	
I read and correct students' projects			.544	
I do participate in the departmental research dissemination				.684
workshops				.004
My University has a research policy that guides academic staff				.646
in doing research				.040
Eigen Value	6.164	4.623	3.682	1.757
Variance (%)	20.548	15.410	12.273	5.857
Cumulative Variance (%)	20.548	35.958	48.231	54.088
KMO = .912, Bartlett's Test of Sphericity = 6827.260, df = 435, s	sig = .000			
Extraction Method: Principal Component Analysis. Rotation Met	thod: Var	imax with	n Kaiser N	Normalization.

Similarly, talent management was made up of four constructs of talent retention, talent attraction, talent deployment, and talent development which were significant and retained. Ten items were deleted from the factor structure, the factors extracted in order of importance were; talent retention (Eigen Values = 4.938, Variance = 23.512%), talent attraction (Eigen Values = 2.995, Variance = 14.262%), talent deployment (Eigen Values = 2.463, Variance = 11.729%) and talent development (Eigen Values = 2.359, variance = 11.231%). The four factors explain 60.734% variance with Kaiser-Meyer Olkin with sampling adequacy = .940; indicating the adequacy of the sample for factor analysis (Field, 2009). The Bartlett's test of sphericity of approximate chi-square = 4653.011, df = 210, p < .001, denoting significant relationships with each other and sufficient to measure talent management as presented in Table 3.

Table 3. Rotated Component Matrix for Talent Management

	ion	tion	/ment	Falent Developmen ;
	Talent Retention	Talent Attraction	Talent Deployment	Talent Develog
My University rewards top-performing academic staff	.784	·		
My University creates an environment where academic	.757			
staff are excited to work	.131			
My University provides academic staff with salary				
adjustments as they master significant skills for the job	.755			
My University creates an environment where academic	.715			
staff ideas are listened to and valued	.713			
My University has developed programs for retaining high- potential academic staff	.692			
My University recognizes good work of academic staff	<b>6</b> 90			
and celebrates academic achievement	.689			
My University creates a culture where academic staff	.682			
passionately believe in what they do	<= 1			
My University empowers academic staff to make decisions	.674			
My University identifies talent that makes maximum				
contribution to the University success		.790		
My University differentiates talent based on their		.790		
contribution to University's objectives		.718		
My University builds up talent pool at every level of the				
University  University		.700		
My University identifies all-important positions that are				
aligned with the University strategies		.588		
My University has a system that makes talented people		507		
aspire to join the University		.587		
My University deploys academic staff with creative			.728	
thinking in key positions			.726	
At my University, deployment of academic staff is based				
on policies, procedures and practices that are responsive to			.713	
student's needs				
My University places emphasis on skill, interests and			.679	
capabilities of academic staff during deployment				
My University organizes orientation programme for newly			.608	
recruited academic staff				

Normalization. Rotation converged in 6 iterations.

My University has policies that encourage career development and growth opportunities for academic staff				.767		
My University identifies career development needs for academic staff						
My University has a clear career path for academic staff				.656		
The training activities for the identified academic staff				627		
require financial resources				.627		
Eigen Value	4.938	2.995	2.463	2.359		
Variance (%)	23.512	14.262	11.729	11.231		
Cumulative Variance (%)	23.512	37.774	49.503	60.734		
KMO=.940, Bartlett's Test of Sphericity = 4653.011, df =21	$0, \operatorname{sig} = .0$	000				
Extraction Method: Principal Component Analysis. Ro	otation N	Method:	Varimax	with Kaiser		

Relatedly, employee engagement is composed of three factors of vigor, dedication, and absorption that were significant and retained. The factors extracted in order of importance include; absorption (Eigen Values = 2.275, Variance = 22.750%), followed by vigor (Eigen Values = 1.837, variance = 18.371%) and dedication (Eigen Values = 1.540, variance = 15.397%). Seven items were deleted from the factor structure. The three factors of employee engagement account for a 56.518% variance in employee engagement. The factors generated a Kaiser-Meyer Olkin and sampling adequacy of .731, above 0.5; depicting the adequacy of the sample for factor analysis (Field, 2013). The Bartlett's test of sphericity of approximate chi-square = 773.451, df = 45, p < .001, indicating that the factors had significant relationships with each other and sufficient to measure employee engagement as observed in Table 4.

Table 4. Rotated component matrix for employee engagement

	Absorption	Vigor	<b>Dedication</b>
I get carried away when I am working	<b>∢</b> .775	<u> </u>	Ω
When I am working, I do not pay attention to what is around me	.753		
I am always taken up in my work	.722		
It is difficult to detach myself from my job	.681		
I put in a lot of energy in my work		.835	
I have a strong passion for the work that I do		.778	
When I get up in the morning, I feel like going to work		.656	
I derive a sense of inspiration from my job			.706
I am enthusiastic about my job			.700
I enjoy my job when it is challenging			.614
Eigen Value	2.275	1.837	1.540
Variance (%)	22.750	18.371	15.397
Cumulative Variance (%)	22.750	41.121	56.518
KMO=.731, Bartlett's Test of Sphericity = 773.451, df = 45, sig = .0	000		
Extraction Method: Principal Component Analysis. Rotation	Method:	Varimax	with Kaiser

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

#### 3.3. Reliability Statistics

The instruments were subjected to Cronbach alpha and factor analysis to determine the reliability of the research instruments that were calculated using Cronbach alpha in SPSS. The results of the reliability test after data reduction revealed that two variables, employee performance  $\alpha = 0.900$  and talent management  $\alpha = 0.925$  met the threshold of  $\alpha = 0.700$ , except employee engagement  $\alpha = 0.643$  did not meet the threshold advanced by Holmbeck and Devine (2009). However, the statistical result is supported by Hair et al. (2013), who argued that  $\alpha = 0.600$  is considered to have average reliability and can be relied on to conduct statistical analysis, as further supported by Garson (2012). Hence, we can deduce that the research instruments attained an acceptable degree of reliability, which allowed them to conduct meaningful statistical inferences as per the results shown in Table 5.

Table 5. Reliability statistics

Study Variables	Number of items	Cronbach Alpha (α)
Employee performance	40	0.900a
Talent management	31	0.925a
Employee engagement	17	0.643b

Notes: aten items deleted, bseven items deleted

# 4. Findings

## 4.1. Demographic characteristics

The respondents' information concerning gender, age, education level, and tenure was gathered, analyzed, and presented. The result for gender shows that 65% of the respondents were male while 35% were female. The findings on the age group demonstrate that the majority of the respondents were between 31 and 40 years of age, representing 46.6%, followed by 41–50 years with 32.5%, 51–60 years represented by 11.5%, below 30 years with 7.7%, and above 60 years were represented by 1.7%. The results for education indicated that 60.9% of the respondents had master's degrees, followed by 30.3% with Ph.D., and lastly, those with bachelor's degrees were 8.8%. The result for tenure shows that the academic staff who served the universities for 6–10 years were 41.2%, followed by those in the range of 1–5 years, representing 26.9%, while those in the range of 16–20 years were 6.2%, and those who served for over 20 years were 1.3%. The result of the demographic characteristics of the respondents with their attributes are shown in Table 6 below:

Table 6. Demographic characteristics

Demographic characteristics	Attributes	Number of respondents	Percentage responses	
Gender	Male	304	65.0	
	Female	164	35.0	
	Total	468	100.0	
Age	Below 30 years	36	7.7	
	31-40 years	218	46.6	
	41-50 years	152	32.5	
	51-60 years	54	11.5	
	Above 60 years	8	1.7	
	Total	468	100.0	
Education Level	Master Degree	285	60.9	
	PhD	142	30.3	
	Bachelor Degree	41	8.8	
	Total	468	100.0	
Tenure	1-5 years	126	26.9	
	6-10 years	193	41.2	
	11-15 years	114	24.4	
	16-20 years	29	6.2	
	Above 20 years	6	1.3	
	Total	468	100.0	

#### 4.2 Correlation Statistics

Table 7 presents the correlation matrix of talent management, employee engagement, and employee performance. The result shows statistically significant positive correlations between talent management and employee performance (r = .606, p .01), talent management and employee engagement (r = .492, p .01), and employee engagement and employee performance (r = .433, p .01). The correlation coefficients were low, moderate, and high. The highest correlation was observed between talent management and employee performance and a modest correlation between talent management and employee engagement, while employee engagement and employee performance reported the lowest coefficient. The mean of a seven point scale was constructed for the study variables on the measurement scales. The results show that the scales were reliable in areas such as talent management (Mean = 5.64 SD =.808), employee engagement (Mean =.605, SD =.493), and employee performance (Mean = 5.75, SD =.630). The standard deviation reported was less than one unit, showing that the individual responses did not differ significantly from each other. The findings reveal that the academic staff exhibited good performance in their routine activities, which is

attributed to worthy talent management practices and employee engagement strategies instituted by the public universities in Uganda.

Variables		N	Mean	SD	1	2	3
Talent Management	(1)	468	5.64	.808	1.000		
Employee Engagement	(2)	468	6.05	.493	.492**	1.000	
Employee Performance	(3)	468	5.75	.630	.606**	.433**	1.000

Table 7. Correlation Statistics

## 4.3. Hypotheses Testing

Regression analysis was run in SPSS using Process Macro version 3.2 applying the 5,000 bootstrap sampling with 95% confidence intervals to test for the research hypotheses using Hayes (2013) Model 4 where employee engagement was specified as a mediator causally interacting with talent management and employee performance. The pathway approach of MacKinnon, Cheong, and Pirlott (2012) was applied to estimate and interpret the direct and indirect effects. Before the hypotheses testing, the study examined the effects of gender, age, education, and tenure as control variables in the hierarchical regression model. The result indicates that gender ( $\beta = -.134$ , p = .134), age ( $\beta = -.030$ , p = .641), education ( $\beta = -.060$ , p = .523), and tenure ( $\beta = .023$ , p = .691) were insignificant. The study tested the effect of talent management on employee engagement. The results show that talent management has a significant positive effect on employee engagement (=.444, p = .001), supporting H1. The study went further to test the effect of employee engagement on employee performance. The findings support H2 by demonstrating a significant positive effect of employee engagement on employee performance (=.226, p = .001). The study went further to examine the effect of talent management on employee performance. The findings support H3 by indicating that talent management has a significant positive effect on employee performance (=.508, p = .001).

The estimation of the mediation model began by stating the model parameters as expressed in the three regression equations. The first equation represents employee engagement as the mediator (M), the second equation represents employee performance as the dependent variable (Y), and the third estimates the direct effect and total effects as: (i)  $M = a_1 X + \epsilon_s$  (ii)  $Y = b_1 M + \epsilon_s$  (iii)  $Y = CX + b_1M + \varepsilon$ . Employee engagement was found to be a significant mediator in the talent management relationship between and employee performance ( $\beta = .101$ , SE = .023, CI = .059, .149) when the product approach was used to establish the mediating effect of employee engagement on the model represented by  $a_1 \times b_1$  (.444 x .226). The total effect was computed by  $a_1 x b_1 + C' (.444 x .226) + .508 = .609$ and significant  $(\beta = .609, p < .001).$ 

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The overall model accounted for 39.2% of the variance in employee performance  $(\beta = .609, p < .001)$ , R2 = .392, F (5,462) = 59.490, p < .001. As a result, H4 supports the mediation effect of employee engagement on talent management and employee performance relationship. The establishment of mediation takes us to establishing the type of mediation present in a research model. Zhao et al. (2010) provide a step-by-step procedure for testing mediation, classifying mediation types, and interpreting mediation results. Following the guidance of Zhao, Lynch and Chen (2010), the study discovered that employee engagement has a complementary mediation effect on talent management and employee performance, with the mediation effect  $(\beta = .101^{***})$  and direct effect  $(\beta = .508^{***})$  all of which point towards a positive direction. The overall result for the mediation model is shown in Table 8.

Model 2 Model 1 Model 3 (Total Effect) (EE)(EP) Variables β β p-v β p-v p-v Constant .314 .109 -.564 .002 -.487 .009 Gender -.134 .134 -.017 .816 -.048 .538 -.030 Age .641 .079 .148 .072 .201 Education -.060 .523 .099 .117 .130 .153 .691 Tenure .023 .047 .331 .052 .297 C' = .508TM $a_1 = .444$ .000 000. .609 .000 EE  $b_1 = .226$ .000 R .435 .658 .626 R2 .190 .433 .392 **MSE** .819 .574 .615 58.714\*\*\* F 21.607\*\*\* 59.490\*\*\* Mediation  $a_1 x b_1$  (.444 x .226).  $\beta = .101, SE = .023$ CI = .059,.149

Table 8. Hypotheses Test Statistics

**Note:** \*\*\*p <.001, **EP** = Employee Performance, **EE**=Employee Engagement, **TM** = Talent Management.

# 5. Discussion

The paper aims at examining the mediating effect of employee engagement on the relationship between talent management and employee performance. This objective was achieved by testing the effect of talent management on employee engagement. The study found that talent management had a significant positive effect on employee engagement. This validates the popular belief that talent management offers employees the opportunity to develop their competencies (i.e., knowledge, skills, and abilities) to engage in assigned tasks. Talent management practices incorporated by management play a critical role in influencing employee engagement at work. Talent management practices demonstrate management commitment toward human capital development in the organization, resulting in employee engagement. Talent management is fundamental in engaging employees to achieve business objectives (Piansoongnern et al., 2011). Employee engagement is aligned with career development as a component of talent management that creates a feeling that

career development opportunities are likely to have positive effects on the employee with a twinkle effect on organizational performance.

The results on the effect of employee engagement on employee performance reported a significant positive effect. This indicates that employee engagement induces an employee to exhibit hidden talents that the organization uses to improve performance in key functional areas on prescribed tasks to achieve the university's goals and objectives. The employee displays some degree of the mental state of mind when executing tasks to arrive at desired performance levels with a high degree of proficiency and accuracy. Employee engagement incorporates employees' willingness to invest extra energy, vigor, and dedication to accomplish set goals. Employees will always channel their effort towards realizing set goals, consequently affecting performance levels (Locke & Latham, 1990). This argument is in line with earlier studies that indicate that creating an engaged workforce helps in improving performance (Saks, 2006), and productivity (Harter et al., 2002) in the service industry (Hakanen et al., 2008), since employee engagement increases employee performance and lowers turnover (Lisbona et al., 2018).

The findings on the effect of talent management on employee performance reported a significant effect of talent management on employee performance. The outcome implies that when academic staff are provided with the necessary talents through talent attraction, training, and onboarding, academic staff will perform exceptionally well. The university's talent management practices, like attraction, provide the university with talented employees who can display a high level of performance for the growth of the university, which enhances the university's image. This finding is in line with Turyahebwa, Agaba, Sunday, Byamukama, and Kalembe (2022), who argued that talent management has a positive effect on employee performance. When organizations properly manage employees' talent, the performance of such employees is expected to improve, with a significant impact on the university's competitive advantage (Lawler III, 2008). The application of talent attraction, deployment, development, and retention is needed to meet job requirements by aligning employee competencies to job-related skills to stimulate behavioral change, learning, and organizational performance. Mohammed (2015) asserts that talent attraction, development, and retention reinforce organizational performance. Talent management provides employees with job-specific skills required for task performance, offering the ground to build employees' capacity to use technology and share knowledge to improve customer care and business knowledge.

The finding on mediating suggests that employee engagement has a significant mediating effect on the relationship between talent management and employee performance. This was confirmed by complementary mediation results, where talent employee engagement plays a complementary role in influencing employee performance. The result follows Zhao et al. (2010) interpretation of mediation, which reports that if the direct and indirect paths move in the same direction, the mediation is interpreted as complementary. The result verifies the mediation effect of

employee engagement in complementing talent management initiatives in enhancing employee competence that might be linked to employee behaviors in influencing employee actions to produce the required results on assigned tasks (Dysvik & Kuvaas, 2008). Employees usually reciprocate management actions such as talent development and retention with positive results like performance (De Cuyper & De Witte, 2011) to achieve common goals (Dysvik & Kuvaas, 2013). The employee feels obliged to respond with greater engagement. The level of engagement is a function of perceived benefits after the execution of tasks beyond expectations that result in high-performance outcomes (Kahn, 1990). The findings are consistent with those of Hoque, Awang, Siddiqui, and Sabiu (2018) and are supported by social exchange theory (Homans, 1961). Therefore, the mediation effect of employee engagement on the relationship between talent management and employee performance must be evaluated. This provides the premise to argue that talent management practices influence employee engagement with a profound impact on academic staff performance to supplement the existing body of knowledge on mediation as one of the models of employee performance.

# 6. Implications

The study provides theoretical insight on the linkage between talent management, employee engagement, and employee performance that follows human capital and social exchange theories to build on the existing body of knowledge in human resource management and organizational behavior. The human capital theory presumes that employees channel their effort toward accomplishing goals that translate into performance based on the competence possessed by employees and motivational mechanisms provided at a workplace that direct behaviors and actions to achieve performance goals. The study builds on mediation theory as employee engagement has been found to have a complementary mediation in the relationship between talent management and employee performance among academic staff of public universities. The presence of employee engagement in the talent management-employee performance relationship moves in a positive direction, which provides the avenue for the usage and application of the model in other contexts.

The study emphasized the importance of employee engagement. Management of public universities should create a high-engagement work culture using two-way communication where management communicates feedback to employees on matters concerning talent management as a competence enhancement strategy to enhance employee performance. The study shows that it is possible to increase employee performance through employee engagement and talent management. Implying that the study's two established paths (talent management - employee engagement - employee performance) and the direct path (talent management - employee performance) are linked to increases in employee performance.

Talent management is an important factor in enhancing employee performance directly and through employee engagement. Public universities should focus on talent management since employee engagement influences employee performance directly and indirectly at different levels with differing degrees of importance and magnitude. Developing a talent management strategy is a way of strengthening employee engagement among academic staff for greater work outcomes. Talent management can be developed easily through positive engagement strategies that impact employees' creativity, innovation, adaptability, and empowerment in the workplace and provide the means for employees to develop competence to have control over their work for greater work outcomes.

## 7. Conclusion

The study determines the mediating effect of employee engagement on the relationship between talent management and employee performance among academic staff of public universities in Uganda. Employee engagement plays a significant mediating role in the relationship between talent management and employee performance. Employee engagement has the potential to increase or reduce employee performance among academic staff at public universities. The variations in employee performance depend on management strategies employed, including talent acquisition, retention, deployment, and talent development strategies that support skills and knowledge development in public universities. Skills and knowledge application increase employees' zeal and energy to engage positively with the universities for improved academic staff performance that impacts goal achievement. Employee engagement is of paramount importance in engaging academic staff in learning, development and career progression for greater work outcomes.

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