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TALENT DEVELOPMENT AND EMPLOYEES' PERFORMANCE IN PUBLIC UNIVERSITIES

Jolly Nyesigire Kakkayi[1],
Alice Ngele Mwazuna[2i],
Moses Agaba[3],
Ezra Munyambonera[4]
[1]PhD Student,
Kabale University,
Uganda
[2,3]Lecturer,
Department of Business Studies,
Kabale University,
Uganda
[4]Lecturer,
Department of Economics and Statistics,
Kabale University,
Uganda

Abstract:
This study examined the effect of talent development practices on employee performance in selected public universities in Uganda's Western Region. The study was guided by Maslow's Hierarchy of Needs Theory, and a convergent parallel mixed methods design was employed, integrating a cross-sectional survey of academic and administrative staff with key informant interviews. Both quantitative and qualitative data were collected from 320 respondents, which included both academic and administrative staff of the two selected public universities (Mbarara University of Science and Technology and Kabale University). Quantitative data was analyzed using structural modelling techniques, and qualitative insights were explored thematically. Findings indicated that talent development had a positive and significant effect on academic staff performance but had little effect on administrative staff performance. The study contributes to theory by extending Maslow's Hierarchy of Needs through demonstrating how specific HR practices, such as development, map onto esteem, safety and belonging needs in resource-constrained public universities. Practically, the study recommends talent development initiatives aligned with performance expectations, while underscoring the importance of leadership and responsive human resource systems in strengthening performance in public universities.

[i] Correspondence: email alice.ngele@gmail.com

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1. Introduction

Talent development is the processes that allow individuals to advance from a current level of comprehension and capability to a future level where higher-level skills, knowledge and competencies are required (Boadu *et al.*, 2014). According to the talent management survey report of 2006, throughout the development process, learning and development techniques, interactions and approaches are integrated. Talent development is the organizational process of assisting individuals in aligning their professional development with the goals of the business. This means assessing an employee's aptitude and goals and helping them acquire the information and abilities required to achieve their goals and satisfy the needs of the company. Putting money into programmes for staff development can raise productivity. Universities can assist personnel in developing their skills and expertise by providing training, workshops, mentorship programmes, and staff development initiatives (Fegley, 2006)

Furthermore, talent development also refers to the formal and informal practices organizations use to enhance the skills, knowledge and competencies of high-potential employees in alignment with organizational goals (Garavan *et al.*, 2016). In addition to that, talent development encompasses the continuous process of fostering and growing employees' abilities, enhancing their potential, and preparing them for future roles within the organization, often through targeted learning and career opportunities (Collings & Mellahi, 2019). Talent development is again defined as the set of practices aimed at improving employee performance and future potential by identifying critical development needs and providing learning opportunities and experiences that drive both individual and organizational success (Lewis & Heckman, 2020). Besides, talent development encompasses strategic effort by organizations to nurture the skills, abilities and leadership capacity of employees, focusing on both current performance enhancement and long-term career growth (Vaiman *et al.*, 2019).

In the context of an organisation, an employee's performance is usually described as their individual contribution to the accomplishment of the organisation's objectives. Employee performance in public universities refers to the extent to which academic and administrative staff effectively execute their roles in line with the institution's mission and objectives. For academic staff, performance was measured through teaching quality, research output, and community engagement, while for administrative staff, performance was assessed based on productivity, quality of work, timeliness, efficiency, and effectiveness. The workforce is the primary source of competitive advantage for service-oriented organisations (Luthans *et al.*, 2010). The commitment performance approach, in particular, cherishes employee voice and sees them as assets or resources. The effectiveness of an organisation is greatly impacted by the performance of its employees. In the past, an employee's performance was determined by what they did or did not do. Product quality, output volume, employee cooperation, effectiveness, timeliness of production and availability at work are some of the variables that can be

used to assess an employee's performance (Güngör, 2011). Furthermore, employee performance is the result of the contribution of workers towards achieving goals. It may also be used to describe the process, results, relevance and success of an organisation (Rodriguez *et al.*, 2017). According to (Chams & García-Blandón, 2019), performance is the degree to which specific activities are completed in relation to predefined or established standards for accuracy, completeness, cost and speed. Increased production, ease of use of new technologies and highly motivated staff are indicators of strong employee performance. When evaluating performance, a variety of factors can be considered, including productivity, efficiency, effectiveness, quality and timeliness measurements (Nassazi, 2013).

While efficiency is the ability to accomplish the desired objectives with the least amount of resources available, effectiveness is the ability of personnel to meet the intended goals or targets (Teo & Low, 2016). Cost effectiveness is defined as minimizing waste, reducing unit costs and reducing production time, as well as adhering to a budget that is based on certain resource levels (cash, labor or time), as recorded and tracked in agencies' fiscal year budgets (US Office of Personnel Management). The ratio of output to input serves as a substitute for productivity (Riccucci *et al.*, 2019). The ability of a product or service to satisfy stated or implied needs is referred to as quality (Kotler *et al.*, 2002). The ultimate product's effectiveness, accuracy, and/or quality are all measured by the quality of the output. Qualities can include things like effectiveness, usefulness, appearance, and accuracy. Universities should concentrate on establishing a welcoming atmosphere that enables staff members to accomplish excellent work. The pace, timing and date (if any) of the work's production are all considered aspects of timeliness (timely delivery of tasks). Timeliness, in the words of Swaan *et al.* (2018), is the capacity of a system to react within the designated period. Universities ought to give staff members the tools and assistance they need to do assignments on time.

1.1 Objective of the Study

- To examine the effect of talent development on employees' performance in Public Universities in Uganda.

1.2 Research Question

- What is the effect of talent development on employees' performance in Public Universities in Uganda?

1.3 Research Hypothesis

- **H_{01}:** Talent development does not significantly affect employees' performance in Public Universities in Uganda.

2. Literature Review

2.1 Theoretical Review

This study is underpinned by Maslow's Needs Hierarchy Theory, propounded by Abraham Maslow in 1943 (Navy, 2020). It investigated human motivation by explaining the human instinct of curiosity. He stated the human needs which were summarized in five needs: physiological, safety, social, self-esteem and self-actualisation. Moreover, this need creates the motivation that affects the individual's behaviors, and this need should be filled to satisfy the individual. Moreover, Maslow expounded his theory in 1954 through his book Motivation and Personality. He argued that the unsatisfied need creates tension and imbalance, and to get balance, you have to take care of each need in order to motivate the unsatisfied needs. According to Maslow's theory of needs hierarchy, people are motivated to satisfy their higher needs when their lower ones are met by prioritising their needs (Feigenbaum & Smith, 2020). Abraham Maslow maintained that people have a continually developing inner drive that has immense potential and that they are inherently good (McCleskey & Ruddell, 2020a). In 1943, Maslow developed the requirements hierarchy system, which is a popular framework for categorizing human needs. Maslow's Hierarchy of Needs is used by several organisations for designing their motivational strategies, including public universities (Baker & Hart, 2008).

2.2 Conceptual Review

2.2.1 Talent Development

In a perfect business world, because of strong competition, institutions should develop their talented employees to enable them to become productive more rapidly (Malmgren, 2016). Hence, the talent development process needs to be embedded within staffing processes and be regarded as a successful measure for institutions to improve the skills of their highly qualified individual staff members (Wu *et al.*, 2016; Moayedi, 2016). According to Beardwell (2014), talent development is considered a critical resource of differentiation and sustainable competitive advantage, which is strategically important for an institution's success. For instance, the development of talent working within higher education institutions also assists in retaining talented employees, which in turn assists in increasing university rankings and profits (Lynch, 2015). University rankings are aligned with the talent of high-performing employees, and these talented individuals contribute significantly to a university's performance by recruiting new students, conducting professional teaching, conducting high-level research and securing research funding (Lynch, 2015; Bradley, 2016). Indicators measuring university performance are heavily vested in the talent workforce available in the university.

Developing talent is essential for Ugandan public universities. To develop employees' skills, organisations often use several methods, amongst these being training, professional development, career management, continuous learning, coaching, mentoring and succession planning. Warnich *et al.* (2015) assert that training is a deliberate intervention for employees to acquire skills, competencies and attitudes that will enhance organisational performance in their present jobs, and most of these are

short-term in nature. Furthermore, the same authors elucidate that training is a deliberate intervention to address present or future shortfalls. Additionally, Warnich. *et al.* (2015) indicate that development is almost the same as training because both concepts are concerned with improving work performance. However, the same authors further explain that development is a comprehensive long-term learning intervention and is a learning endeavor aimed at the growth of individuals by obtaining diverse sorts of information, skills and behaviors. It provides employees with fresh insights about themselves in the long term, allowing them to reach their full potential.

Career management is another important component of talent development in an organisation. It includes employers' efforts aimed at influencing the career development of either individuals or groups of employees (Arnold, 1997). Despite the fact that career management itself is an individual's responsibility, it must be shared with the employer, who must then play a supportive role (Shreuder & Coetzee, 2012). Coaching is another method that may be utilized to help employees develop their talent and skills. It is a one-on-one interaction involving a professional coach and an employee. The purpose of coaching is to help employees perform better at work (Schutter & Steyn, 2015). Additionally, Bennet (2011) affirms that the effectiveness of coaching and its potential to improve performance and efficiency lies in eliminating any obstructive patterns of behavior. Mentoring is another method for developing employees, particularly new staff members. It can be described as an ongoing support provided by a senior employee (mentor). Mentoring involves managing and helping new employees to support them through tough transitions by easing the path, encouraging, leading and training them in the organisation (Fletcher, 2012).

2.2.2 Employee Performance

Performance is a description of the level of achievement of the implementation of an activity program or policy in realizing the goals, objectives, vision, and mission of the organization as outlined in the strategic planning of an organization (Moeheriono & Si, 2012). Employee performance is a systematic and integrated strategy to boost an organization's effectiveness by enhancing employee performance and building the capacities of teams and individual contributors (Chien *et al.*, 2020). As noted by Otoo *et al.* (2019), performance is correlated with output quality and timeliness, presence at work, effectiveness of work accomplished and efficiency of work completed. It can also be described as the successful completion of a task as determined by previously established standards for correctness, completeness, cost and speed (Ezeanyim & Theresas, 2019a). Additionally, Armstrong and Mitchell (2019) define Employee performance as an organised, systematic and integrated approach to increasing productivity within an organisation through the development of individual and team contributors as well as improved employee performance. Performance is correlated with timeliness and quality of output, presence and attendance at work, productivity of finished work, and effectiveness of completed work. However, according to Armstrong (2014), performance is the accomplishment of work in relation to predetermined standards for correctness,

completeness, cost, and time. Results-based evaluations of employee performance are the norm. However, another way to look at it is in terms of behavior.

Employee performance in public universities refers to how well academic and administrative staff carry out their duties to achieve the university's goals. Academic staff performance is measured by teaching quality, research output and community engagement, while administrative staff performance is assessed through productivity, quality of work, timeliness, efficiency and effectiveness (National Council for Higher Education, 2016). Armstrong (2020) further iterates that his performance shows how staff contribute to the overall success of the university. Employee performance in public universities refers to the extent to which academic and administrative staff effectively execute their roles and responsibilities to achieve institutional goals in teaching, research, community engagement, and administrative service delivery. In the higher education context, performance is multidimensional, encompassing both quantitative outputs (e.g., number of publications, timely completion of administrative tasks) and qualitative outcomes (e.g., teaching quality, research impact, service effectiveness).

2.3 Empirical Review

2.3.1 Talent Development and Employee Performance

According to (Galagan *et al.*, 2019), Talent development is a critical component of improving organisational performance, productivity and outcomes. It does this through creating the policies, procedures and frameworks that support learning to maximize individual performance and by working with business leaders to align development activities with strategic business priorities and outcomes. Several studies have been conducted in the context of talent development and employee performance. For instance, Wesonga & Van Der Westhuizen (2024) investigated the effect of talent development on organizational performance within the context of Maasai Mara University in Kenya. Their study revealed a significant relationship between talent development and organizational performance, accounting for 20.4% of the variance in performance, thereby confirming the critical role of human resource development in enhancing institutional outcomes. Abdullahi *et al.* (2022) conducted a study to examine the effect of talent management practices on employee performance among academic staff in Malaysian private universities, with employee engagement acting as a mediating variable. The researchers employed both descriptive and quantitative research approaches and used a combination of simple random sampling and stratified sampling techniques to select a total of 314 academic staff. Data were gathered through a structured questionnaire and analyzed using structural equation modeling through the partial least squares method and bootstrapping procedures. The findings revealed that talent management practices, particularly succession planning, promotion and performance appraisal, had a significant positive influence on employee performance, and that employee engagement significantly mediated this relationship.

Bigabwenkya and Binta (2024) examined the influence of employee development initiatives on the retention of academic staff at Kyambogo University in Uganda. Their study was informed by Job Embeddedness Theory, and using an explanatory survey

design and a quantitative approach, they sampled 159 academic staff through stratified random sampling and collected data using structured questionnaires. Results revealed a significant positive relationship between employee development and academic staff retention ($r = 0.489^{**}$, $p = 0.000$), and regression analysis confirmed that employee development accounted for 23.2% of the variation in staff retention ($F = 33.010$, $p < 0.01$). They concluded that professional growth opportunities such as mentoring, workshops, and further training positively influenced staff retention. Shiebbe (2021) conducted a study on the effect of talent development on workers' performance, concentrating on Benue State University, Makurdi. This study specifically looked into the effects of career development, coaching, and mentoring at Benue State University. A questionnaire was the instrument used to collect data for the study, which had a survey design. The 1,974 employees who comprised the study's sample. Multiple regression analysis was used to analyse the data. According to the study's findings, Benue State University employees' performance was highly impacted by career development, coaching, and mentoring.

Musakuro and De Klerk (2021) conducted a qualitative study exploring the perceived challenges of talent management within the South African higher education sector. Guided by the interpretivist research paradigm, the study employed semi-structured interviews with a purposive sample of seven human resource professionals. Data were analyzed using content analysis to gain deep insights into workforce planning, compensation and rewards, training and development, succession planning, recruitment, selection, and performance management—areas found to hinder effective talent management practices at the institution. Burhan Ismael *et al.* (2021) examined the role of training and development in enhancing organizational effectiveness, focusing on employees from private universities. The study employed a qualitative approach and utilized a structured questionnaire to collect data from 102 respondents selected through simple random sampling. The data were analyzed using SPSS, and the findings confirmed a significant relationship between training and development and organizational effectiveness.

Tagesse (2018) conducted a study to examine the effect of training and development on employee performance at Asku Plc, Ethiopia. The researcher adopted a descriptive and correlational research design and utilized questionnaires as the primary tool for data collection. Out of the 148 questionnaires distributed, 140 were successfully returned, offering a high response rate. Data were analyzed using SPSS version 23, applying descriptive statistics (mean and standard deviation), correlation, and regression analysis. The study relied on both primary and secondary sources, using a five-point Likert scale to structure the closed-ended questionnaire items. The findings revealed a strong and positive correlation between employee performance and various dimensions of training and development. Specifically, there was a high correlation between employee performance and training design ($r = 0.402$, $p < 0.001$), on-the-job training ($r = 0.305$, $p < 0.001$), and off-the-job training ($r = 0.354$, $p < 0.001$). Regression analysis further demonstrated that training design had the strongest influence on employee productivity, with a beta coefficient of 0.065.

Bigabwenkya and Binta (2024) conducted an explanatory survey at Kyambogo University, Uganda, involving 159 academic staff with a 68.2% response rate, using quantitative questionnaires analyzed with SPSS. Their findings indicated that employee development (ED) initiatives, while positively correlated with academic staff retention, did not significantly translate into enhanced employee performance. The authors concluded that despite investment in development, the lack of alignment with job-specific needs limits performance outcomes. Consequently, based on the literature reviewed, the following hypothesis was proposed:

- **H_{03}:** Talent development has no significant effect on employee performance in public universities.

3. Methodology

3.1 Research Design and Approach

This study adopted a convergent parallel mixed methods research design within a cross-sectional framework, underpinned by the pragmatic philosophical paradigm. This design involved the simultaneous collection of quantitative and qualitative data at a single point in time, with each dataset analyzed independently before being merged during interpretation to provide a comprehensive understanding of the phenomenon**.**

3.2 Target Population

The target population for this study were 1,156 stakeholders of the selected public universities. Accordingly, the target population for this study included the Human Resource Directors, Council members, Top management, Teaching staff and non-teaching staff from Mbarara University of Science and Technology (MUST) and Kabale University (KAB).

3.3 Sample Size

The sample size for the study was determined in two categories. First, the researcher determined the sample size for the Human resource directors and top management employees of the selected categories, and since the population was small, a census of all 12 respondents was conducted. Secondly, the researcher then used the Yamane (1967) formula to determine the sample size for the university council members, teaching staff and administrative staff, which yielded a sample of 308 respondents. Therefore, the total sample size for the study was 320 respondents.

3.4 Sampling Techniques

Purposive sampling was used to select 12 respondents who were key informants in this study: Two (2) HR Directors and ten (10) senior management personnel. Additionally, proportional simple random sampling was applied in order to categorize the rest of the respondents and to ensure each one was given a chance to participate in the study: teaching staff, non-teaching staff, and University Council members.

3.5 Data Collection

A closed-ended questionnaire consisting of 5-point Likert scale questions was used to gauge respondents' attitudes, opinions and beliefs. An Interview guide, which involved face-to-face interaction between the researcher and the key informants, was also used to collect qualitative data.

3.5 Data Analysis

Quantitative data were analyzed using descriptive statistics, including means, standard deviations and frequencies to summarize the characteristics of the sample. The dataset was then exported to Jeffreys's Amazing Statistics Program (JASP) software to conduct Structural Equation Modeling (SEM), which allowed for simultaneous estimation of multiple relationships between latent variables. Qualitative data were analysed using NVivo software (version 12.2), which facilitated systematic coding and thematic analysis.

Table 1: Population, Sample size and Sampling Procedures

Category of Respondents	Target Population	Sample Size	KAB	MUST	Sampling Technique
HR Directors	2	2	1	1	Purposive Sampling
Top Management	10	10	5	5	Purposive Sampling
Council Members	53	14	7	7	Proportionate Simple Random Sampling
Teaching Staff	695	187	94	93	Proportionate Simple Random Sampling
Non-teaching Staff	396	107	54	53	Proportionate Simple Random Sampling
Total	**1156**	**320**	**161**	**159**	

Source: Kabale University & MUST, HR Department Records, 2023; modified by the researcher.

4. Results and Discussion

4.1 Response Rate

A total of 380 questionnaires were distributed to the respondents across the two public universities in South Western Uganda, and 320 were successfully completed and returned, yielding a 100% response rate for the intended sample size.

4.2 Objective: To Explore the Effect of Talent Development on the Performance of Employees in Public Universities

The analysis of the effect of talent development on employee performance in public universities reveals contrasting outcomes for academic and administrative staff. For administrative staff, the standardized estimate for the effect of talent development on employee performance is -0.054 ($z = -0.511$, $p = 0.609$, 95% CI: -0.26 to 0.153), indicating a negligible and statistically non-significant relationship (a negative and non-significant effect). This suggests that within this sample, talent development initiatives do not have

a measurable impact on administrative staff performance. Training opportunities may be either inadequate, misaligned, or poorly implemented, possibly explaining why development does not translate into better performance. In contrast, for academic staff, the effect is positive and statistically significant, with a standardized estimate of 0.220 (z = 2.082, p = 0.037, 95% CI: 0.005 to 0.168). This result indicate that talent development efforts such as training, mentorship and professional growth opportunities are associated with improved performance among academic staff. Also, that professional development, continuous training and mentorship directly enhance academic staff performance, particularly in teaching, research and publications output and community engagement.

Table 2: Findings on Effect of Talent Development and Employee Performance

					95% Confidence interval	
Relationship	**Std. estimate**	**Std. Error**	**z-value**	**P**	**Lower**	**Upper**
TD → EPd	-0.054	0.105	-0.511	0.609	-0.26	0.153
TD → EPc	0.220	0.042	2.082	0.037	0.005	0.168
*TD= Talent Development	*Epd=Employee performance (Administrative Staff)			*Epc=Employee Performance (Academic Staff)		

Source: Field Data (2025).

These findings highlight the need for differentiated talent development strategies in public universities. While academic staff appear to benefit directly from talent development initiatives, administrative staff may require more targeted or context-specific approaches to realise performance gains. The results suggest that a one-size-fits-all approach to talent development may not be effective across different staff categories. The academic staff, who often possess higher qualifications and greater professional independence, may not find general talent development programs impactful to their specialized needs whereas the administrative staff may benefit more directly from structured training initiatives such as periodic trainings in IT, finance management and/ or record management, which they would apply in their day-to-day roles, thus improving their performance.

4.3 Qualitative Analysis

The qualitative analysis shows that talent development is a structured and valued practice among both administrative and academic staff in public universities in South Western Uganda. For administrative staff, talent development is characterized by formal processes such as mentoring, study leave, inter-university exchange programs, on-the-job training, and intentional succession planning. As one respondent described, *"Professional development is done through mentoring, provision of pathways for further leave, granting of study leave, and support in meeting financial obligations."* These initiatives are supported by capacity-building workshops and continuous professional development opportunities, though their reach is sometimes limited by funding and staffing constraints.

Administrative staff perceive talent development as directly contributing to increased productivity, job security, retention, and career advancement. The link is clear:

"The more talent development is emphasized, the better engagement and productivity become, hence affecting quality output positively." Quality of output is measured through hours worked, presence, document quality, and performance appraisals. However, barriers such as irregular attendance, lack of commitment, and heavy workloads can undermine output. Strategies that support high-quality work include job security, improved remuneration, recognition, provision of necessary tools, and a conducive work environment. Despite these positive perceptions, challenges such as limited budgets, low staffing, and the risk of staff leaving after training persist, making the implementation of effective talent development programs difficult.

Among academic staff, talent development is closely linked to continuous professional development, regular training, mentorship, and coaching. Opportunities for career advancement, such as study leave, promotion, and internal recruitment, are highly valued and seen as pathways to both personal and institutional growth. One academic staff member noted, *"Staff development programme that enables individuals to pursue further studies,"* while another highlighted, *"Leave with pay (study leave), research, publications, and community engagement are key indicators of quality output, with consistent faculty engagement leading to better student outcomes and institutional reputation" "Improved student outcomes and consistent faculty engagement leads to better mentoring and support for students."* Recognition and reward systems, as well as supportive leadership and a positive work environment, further enhance the impact of talent development.

However, academic staff also face significant challenges, including limited funding, heavy workloads, inadequate infrastructure, and slow decision-making processes, all of which can hinder the effectiveness of talent development initiatives. *"Limited funds to implement all strategies for talent development"* was a common concern. Despite these obstacles, there is a strong belief that talent development, when adequately supported, leads to improved engagement, productivity, and quality of teaching, research, and community service.

The qualitative results highlight that talent development anchored in structured programs, mentorship, and opportunities for advancement plays a direct and practical role in enhancing employee performance in public universities. The most compelling staff voices emphasize that the more talent development is prioritized and resourced, the greater the engagement, productivity, and quality of output, though persistent resource and workload challenges must be addressed for these benefits to be fully realized, with motivational practices.

4.4 Exploratory Factor Analysis (EFA) - Talent Development (TD)

Talent Development showed KMO values of 0.904 for academic staff and 0.902 for administrative staff, both well above 0.5, and Bartlett's test of sphericity was significant ($p < 0.001$), confirming the data's appropriateness for factor analysis. For academic staff, three components were extracted from 15 items, together explaining 67.32% of the total variance. For administrative staff, three components were also extracted, accounting for 66.59% of the variance. All items loaded above 0.3 on their respective factors. Parcels were created based on these loadings and labeled as TD1, TD2, and TD3 for both groups

Table 3: Talent Development Academic Staff Factor Loadings

	Factor 1	Factor 2	Factor 3	Parcel
TD2	0.763			TDv1
TD3	0.757			
TD1	0.745			
TD5	0.695			
TD4	0.687			
TD6	0.563			
TD14		0.875		TDv2
TD15		0.839		
TD13		0.819		
TD12			0.680	TDv3
TD9			0.658	
TD8			0.581	
TD11			0.519	

Note: Applied rotation method is varimax.

For academic staff, three factors were extracted using the varimax rotation method, with all items showing loadings above the 0.5 threshold, indicating strong associations with their respective factors. Items TD2, TD3, TD1, TD5, TD4, and TD6 loaded on Factor 1 and were grouped as parcel TDv1. Items TD14, TD15, and TD13 loaded on Factor 2 and were combined as parcel TDv2. Items TD12, TD9, TD8, and TD11 are loaded on Factor 3, forming parcel TDv3. This parceling approach ensures that each group of items reflects a distinct dimension of Talent Development. These results indicate that the TD items are well represented by their respective factors in academic staff groups. The use of varimax rotation ensured orthogonality of the factors, enhancing the clarity and reliability of the measurement model. The parceling approach further supports construct validity by grouping items with strong and coherent loadings, facilitating subsequent analyses.

Table 4: Talent Development Administrative Staff Factor Loadings

	Factor 1	Factor 2	Factor 3	Parcel
TD8	0.789			TDd1
TD7	0.707			
TD9	0.703			
TD11	0.620			
TD12	0.591			
TD6	0.552			
TD4		0.816		TDd2
TD3		0.779		
TD2		0.747		
TD1		0.631		
TD14			0.840	TDd3
TD13			0.819	
TD15			0.744	

Note: Applied rotation method is varimax.

The factor loadings for Talent Development (TD) items among administrative staff are presented in Table 4 above. For administrative staff, a similar three-factor structure was observed. Items TD8, TD7, TD9, TD11, TD12, and TD6 loaded on Factor 1 and were grouped as parcel TDd1. Items TD4, TD3, TD2, and TD1 loaded on Factor 2 and were combined as parcel TDd2. Items TD14, TD13, and TD15 loaded on Factor 3 and were grouped as parcel TDd3. All retained items exhibited loadings above 0.5, supporting the robustness of the factor structure. These results indicate that the TD items are well represented by their respective factors in administrative staff groups. The use of varimax rotation ensured orthogonality of the factors, enhancing the clarity and reliability of the measurement model. The parceling approach further supports construct validity by grouping items with strong and coherent loadings, facilitating subsequent analyses.

Table 5: Employee Performance Academic Staff Factor Loadings

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Parcel
EPT3	0.729					EPf1
EPT6	0.726					
EPT4	0.717					
EPT7	0.683					
EPT2	0.683					
EPT11	0.646					
EPT1	0.624					
EPT8	0.547					
EPT10	0.474					
EPT5	0.473					
EPC3		0.818				EPf2
EPC2		0.623				
EPC1		0.616				
EPR6		0.576				
EPC6		0.502				
EPR5		0.463				
EPC4		0.450				
EPC7			0.830			EPf3
EPC8			0.828			
EPC9			0.797			
EPC10			0.621			
EPR11				0.553		EPf4
EPR13				0.537		
EPR12				0.537		
EPR7				0.481		
EPR14				0.429		
EPR10				0.407		

The factor loadings for Employee Performance (EP) items among academic staff are presented in Table 5 above. It can be noted that four factors were extracted using the varimax rotation method, with all items demonstrating loadings above the 0.4 threshold, indicating strong associations with their respective factors. Specifically, items EPT3, EPT6, EPT4, EPT7, EPT2, EPT11, EPT1, EPT8, EPT10, and EPT5 loaded on Factor 1 and

were grouped as parcel EPf1. Items EPC3, EPC2, EPC1, EPR6, EPC6, EPR5, and EPC4 loaded on Factor 2 and were combined as parcel EPf2. Items EPC7, EPC8, EPC9, and EPC10 loaded on Factor 3 and were grouped as parcel EPf3. Items EPR11, EPR13, EPR12, EPR7, EPR14, and EPR10 loaded on Factor 4 and were combined as parcel EPf4. This parceling approach ensures that each group of items reflects a distinct dimension of Employee Performance. These results indicate that the EP items are well represented by their respective factors in both academic staff groups.

Table 6: Employee Performance Administrative Staff Factor Loadings

	Factor 1	Factor 2	Factor 3	Parcel
T4	0.797			EPp1
T3	0.774			
QO4	0.767			
QO5	0.720			
T6	0.686			
QO7	0.680			
T2	0.679			
T7	0.668			
T5	0.663			
QO6	0.661			
QO3	0.661			
T1	0.511			
EE3		0.874		EPp2
EE5		0.787		
EE4		0.758		
EE6		0.732		
EP10		0.692		
EP2		0.683		
EP7		0.553		
EP1		0.548		
EP6		0.513		
EE18			0.792	EPp3
EE19			0.759	
EE17			0.736	
EE11			0.727	
EE8			0.657	
EE9			0.639	
EE7			0.630	
EE16			0.570	
EE12			0.502	

Note: Applied rotation method is varimax.

The factor loadings for Employee Performance (EP) items among administrative staff are presented in Table 6. Three factors were identified using the varimax rotation method. Items T4, T3, QO4, QO5, T6, QO7, T2, T7, T5, QO6, QO3, and T1 loaded strongly on Factor 1 and were grouped as parcel EPp1. Items EE3, EE5, EE4, EE6, EP10, EP2, EP7, EP1, and EP6 loaded on Factor 2 and were combined as parcel EPp2, while items EE18, EE19, EE17,

EE11, EE8, EE9, EE7, EE16, and EE12 loaded on Factor 3 and were grouped as parcel EPp3. All retained items exhibited loadings above 0.5, supporting the robustness of the factor structure. These results indicate that the EP items are well represented by their respective factors in both academic and administrative staff groups. The use of varimax rotation ensured orthogonality of the factors, enhancing the clarity and reliability of the measurement model. The parceling approach further supports construct validity by grouping items with strong and coherent loadings, facilitating subsequent analyses.

4.5 Model Testing

This section details the examination of relationships between talent development and employees' performance. The data analysis was conducted in two phases. Initially, the validity of the constructs and the overall model fit were assessed through confirmatory factor analysis (CFA), focusing on the measurement model. Subsequently, structural equation modeling (SEM) was employed to investigate the hypothesized relationships.

4.5.1 Measurement Model for Talent Development for Academic Staff

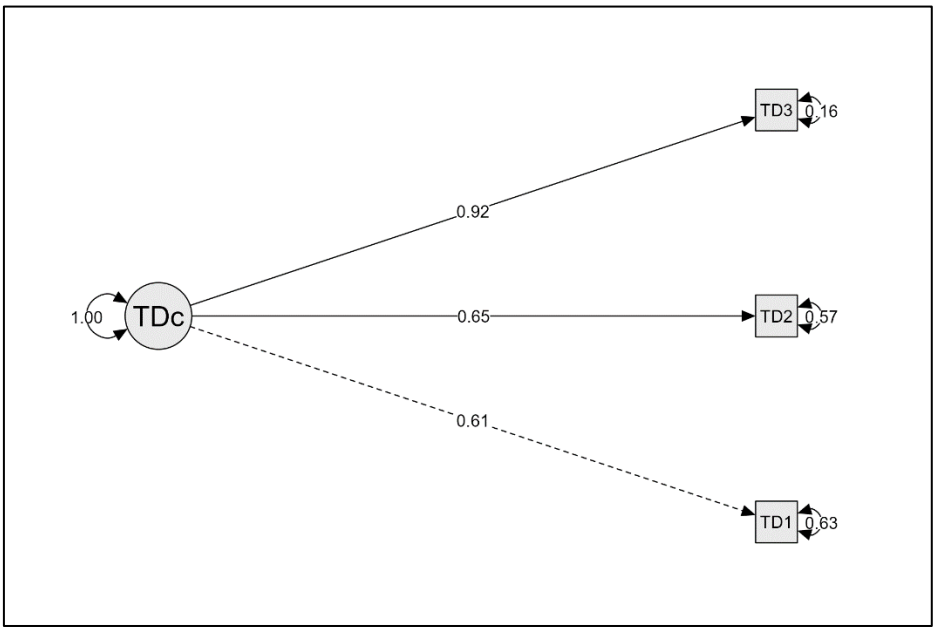

Figure 1: Measurement Model for Talent Development for Academic Staff

Figure 1 presents the measurement model for Talent Development among academic staff. The diagram shows strong relationships between the latent construct Talent Development and its observed variables (TDt1, TDt2, and TDt3), each with path coefficients exceeding 0.7. This indicates that all three observed variables are robust indicators of the Talent Development construct for academic staff, reflecting a well-constructed and reliable measurement model.

4.5.2 Measurement Model for Talent Development for Administrative Staff

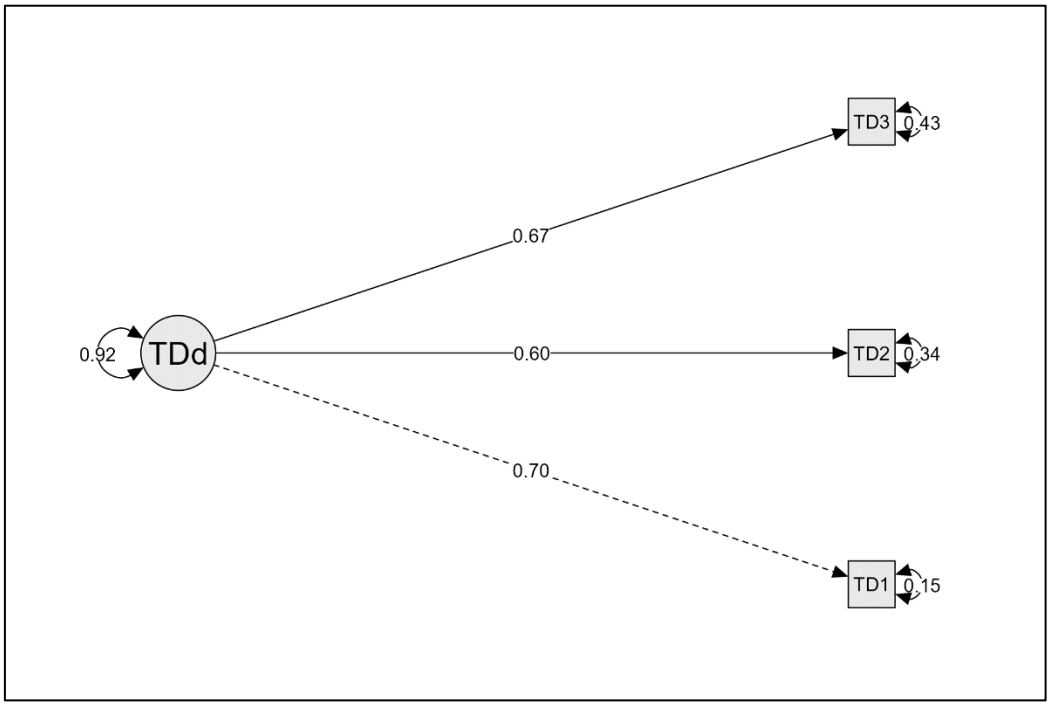

Figure 2: Measurement Model for Talent Development for Administrative Staff

Figure 2 displays the measurement model for Talent Development among administrative staff. The path diagram demonstrates strong relationships between the latent construct Talent Development and its observed variables (TDm1, TDm2 and TD3), as both have path coefficients greater than 0.6. These results suggest that both TDm1, TDm2 and TD3 are highly effective indicators of Talent Development for administrative staff, supporting the reliability of the measurement model.

4.6 Model Fit

The Chi-square statistic was employed to measure the model fit. Ideally, its p-value should exceed 0.05, indicating that the hypothesis of a perfect fit cannot be rejected. However, it is important to recognize that the Chi-square test is highly sensitive to sample size. In this research, the Chi-square statistic was utilized to assess the adequacy of the models. The results showed that all Chi-square p-values were not significant, implying that the measurement models demonstrated a good fit.

Table 7: Fit Indices Table for Measurement Models

Construct	Group	CFI	TLI	RMSEA	SRMR
Talent Development	Academic Staff	1.000	1.012	0.000	0.042
	Administrative Staff	1.000	1.001	0.000	0.002
Employee Performance	Academic Staff	1.000	0.910	0.000	0.000
	Administrative Staff	1.000	1.030	0.000	0.000

Table 7 above summarizes the fit indices for each measurement model for both academic and administrative staff.

4.6.1 Talent Development

The fit indices for academic staff (CFI=1.000, TLI=1.012, RMSEA=0.000, SRMR=0.042) and administrative staff (CFI=1.000, TLI=1.001, RMSEA=0.000, SRMR=0.002) are all above the required thresholds, confirming a very good model fit.

4.6.2 Employee Performance

For academic staff (CFI=1.000, TLI=0.910, RMSEA=0.000, SRMR=0.000) and administrative staff (CFI=1.000, TLI=1.030, RMSEA=0.000, SRMR=0.000), the fit indices indicate that the measurement models are suitable for further structural equation modeling analysis.

5. Discussions

The study hypothesis stated that talent development does not have a significant positive effect on employee performance. The results from this study show contrasting outcomes for academic and administrative staff in public universities. The quantitative findings revealed a divergent influence of talent development on academic and administrative staff performance in public universities in Uganda. For academic staff, talent development exhibited a positive and statistically significant effect (a significant positive effect); ($\beta = 0.220$, $z = 2.082$, $p = 0.037$, 95% CI: 0.005 to 0.168). The null hypothesis was therefore rejected, indicating that initiatives such as training, mentoring, and academic workshops meaningfully enhanced teaching, research and publications output, and community engagement within this sample. In contrast, for administrative staff, talent development had a negative but statistically insignificant influence (a negative and non-significant effect); ($\beta = -0.054$, $z = -0.511$, $p = 0.609$, 95% CI: -0.26 to 0.153). The study therefore failed to reject the null hypothesis, implying that development programs for administrative staff neither positively nor significantly contributed to improving their performance.

These findings highlight the context-specific nature of talent development outcomes. For academic staff, the significant results affirm previous studies. For instance, Wesonga *et al.* (2024) found that participation in development programs increased scholarly productivity and pedagogical effectiveness in Kenyan public universities. Similarly, Abdullahi *et al.* (2022) reported that structured frameworks significantly enhanced research capacity and innovation potential in Nigerian institutions. However, the insignificant effect among administrative staff is consistent with Shiebbe *et al.* (2021), who argued that many African universities offer generic training programs that fail to address the specific demands of support roles. Musakuro *et al.* (2021) further noted that when development activities are perceived as routine or compliance-driven, staff engagement remains low, and outcomes are minimal. These mixed findings suggest that

the effectiveness of talent development depends not only on its existence but also on contextual relevance, program content, and levels of staff participation.

Theoretically, the positive results among academic staff resonate with Maslow's Hierarchy of Needs, which posits that growth-related needs such as self-actualization and professional advancement enhance performance. Likewise, the Egalitarian Theory, which emphasizes equal access to development opportunities as a foundation for organizational justice, is supported in this case. The insignificant results for administrative staff, however, raise questions about whether equal provision of development opportunities translates into equal performance outcomes, pointing to a need for tailored and role-specific interventions. Qualitative findings show that administrative staff benefit from structured and inclusive talent development programs, which directly contribute to their productivity and retention. However, academic staff face challenges such as limited access to resources and inconsistent support, which may explain the lack of measurable impact on their performance. The egalitarian approach suggests that for talent development to be effective, universities must apply these initiatives equitably and address the specific needs of each staff category. Lussier (2019) and Gallardo-Gallardo *et al.* (2013) argue that inclusive talent management practices foster engagement and performance across the workforce, but only if barriers to access and participation are addressed.

Qualitative results reinforce these theoretical insights. Administrative staff describe talent development as directly contributing to increased productivity, job security, and career advancement, but also note challenges such as limited budgets and the risk of staff leaving after training. Academic staff value professional development, mentorship and career advancement, but face significant obstacles including inadequate funds, heavy workloads and slow decision-making processes.

6. Conclusions and Recommendations

6.1 Conclusions

The findings revealed that talent development significantly improved performance among academic staff but had no measurable effect on administrative staff in public universities. For academic staff, professional growth opportunities such as training, mentorship and research workshops directly contributed to enhanced teaching, research and community engagement. In contrast, the non-significant results for administrative staff indicate that existing development frameworks may not adequately address their professional needs. Routine-based roles, limited growth pathways, or poorly aligned training programs may explain why development initiatives did not translate into measurable performance improvements. This suggests that development interventions in public universities must not only be inclusive but also tailored to the distinct expectations of academic and administrative staff. Hence, while academic staff performance benefits directly from talent development, administrative staff require more context-specific and practically oriented programs to achieve similar performance outcomes.

6.2 Recommendations

Public universities should adopt a differentiated talent development approach that is sensitive to the distinct nature of academic and administrative roles. For academic staff, talent development should go beyond conventional training and include research funding, sabbaticals, academic mentorship, writing retreats and international collaborations to directly enhance research and teaching performance. For administrative staff, emphasis should remain on technical training, digital skills development and career coaching, which have shown measurable impact on operational performance.

Universities should also tailor talent development initiatives to the specific needs of academic and administrative staff, recognizing that a one-size-fits-all approach is not effective. For administrative staff, continue to invest in structured training, mentoring and professional growth opportunities, as these have a proven positive impact on performance. For academic staff, address barriers such as heavy workloads and limited resources to enable greater participation in development programs. Provide targeted support for research, publications, and career advancement. Apply talent development strategies inclusively, ensuring all staff have equal access to opportunities, in line with the Egalitarian Theory. Monitor and evaluate the effectiveness of development programs regularly, using feedback from staff to refine and improve offerings. Ensure commensurate funding for staff post-graduate training as a core part of staff development.

6.3 Contribution of the Study

This study reveals a differential effect of talent development, demonstrating its significance among academic staff but not administrative staff in public universities in Uganda. The findings contribute by contextualizing the effectiveness of training, mentoring, and professional development initiatives within higher education. They emphasize that uniform development strategies may not produce consistent results across different staff categories, highlighting the need for tailored, role-specific approaches. For policymakers and HR practitioners, this insight reinforces the importance of designing development programs that align with the unique professional trajectories of academic and administrative staff.

Conflict of Interest Statement

We, the authors of this article, declare no conflict of interest of any form. We wish to declare that we did not receive funds from any organization to conduct this study, and the resources used were purely from the authors' own sources.

About the Author(s)

Jolly Nyesigire Kakkayi is a PhD student in Business Management (HRM option) at Kabale University in Uganda. Currently working as an Assistant Lecturer at Kabale University in the Faculty of Economics and Management Sciences, Department of Business Studies. Her main research interests are in Human Resource Management. She also has a passion for Auditing and Taxation Management.

Alice Ngele Mwazuna (PhD) holds a Doctor of Philosophy degree in Business Administration (Marketing option) from Jaramogi Oginga Odinga University of Science and Technology, Kenya (March 2023). Currently working as a Marketing Lecturer at Kabale University in Uganda, Department of Business Studies. Her main research interests are in the areas of consumer behavior, marketing research and product differentiation & innovation.
ORCiD: https://orcid.org/0000-0001-7537-9391
Prof. Moses Agaba is an Associate Professor and Associate Dean in the Faculty of Economics and Management Science and Department of Management Science at Kabale University, Uganda. He holds a Bachelor's degree in Law (LLB), a Master's in Business Administration (MBA) and a PhD in Business Management (KIU) specializing in Management Science (BM). He specializes in General Management, Strategic Planning and Management, Operations Management, Marketing Management, Business Ethics and Commercial Law.
ORCiD: https://orcid.org/0000-0003-3867-9357
Dr. Ezra Francis Munyambonera holds a PhD in Economics from Makerere University, Uganda (2013). Currently, he is working as a Senior Lecturer at Kabale University in Uganda and Head of the Department of Economics and Statistics.

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