

Importance of Trust in Managing Diversity in Higher Education Institutions and Performance Outcomes: The Case of Zambia

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Abstract

The objective of this research was to explore the relationship between trust and diversity among academic staff performance in higher education institutions in Zambia. A total of 267 HEI academic staff were chosen at random from 34 public and 9 private HEIs. Quantitative analyses were conducted using IBM SPSS Version 20 for descriptive statistics and SmartPLS 4 for structural equation modeling (SEM). A survey was used to collect data to measure trust and diversity; performance outcomes focused on employee commitment, engagement, productivity, and effectiveness. Results indicate that the hypothesized direct effects of diversity on trust and performance were not statistically supported, with only weak or negligible relationships observed. This indicates that diversity alone does not drive trust or performance within Zambian HEIs. Importantly, trust emerged as the critical factor, mediating the relationship between organizational conditions and enhanced performance outcomes. Thus, the study found that while diversity is a valued organizational attribute, its impact is realized primarily through its influence on trust, rather than as a direct driver of performance. An important conclusion of the findings is the challenge of unconscious biases (a mental process) and covert discrimination (the behaviour that perpetuates inequality) in diversity because they are problems that can lie unseen in the background of the diversity of HEIs.

Keywords: Trust, Diversity, Higher Education Institutions, Employee Performance.

1. Introduction

The dilemmas of trust exist as an inevitable feature of both broad social and specific organisational life because people live interdependent lives with other people (Kramer, 1999). When interaction of trustee and trustor results in positive outcomes it generates trust and gradually earns trustworthiness (a qualitative attribute worthy of the trust of others (Mayer et al, 1995), making the trustee reliable or dependable to the trustor. However, when the interaction between the trustee and the trustor results in negative outcomes, the trustor expresses distrust of the trustee (Tanny & Chowdhury, 2019).

As evidenced in Table 1.1, diversity is a complex social construct that influences personal identity and group social relationships (Ford & Kelly, 2005). Diversity is not a measure of race, ancestry, or nationality, but a self-perceived measure of cultural affiliation (Papadopoulos & Vance, 2019), which can weaken trust and cooperative norms between groups in HEIs. According to Imm (2021), failure to fully apply diversity management in the management of HEIs leads to poor worker trust, poor management and poor performance, while implementing the practices is one of the best ways to ensure employee trust, satisfaction, productivity and future growth.

Table 1.1: Dimensions of Diversity

Dimension of diversity		
Primary Dimensions	Secondary Dimensions	Tertiary Dimensions
• Race • Ethnicity • Gender • Age • Disability	• Religion • Lifestyle • Work experience • Economic status • Culture • Sexual orientation • Family status • Political orientation • Thinking style • Geographic origin • Nationality • Language • Education	• Beliefs • Assumptions • Group norms • Perceptions • Attitudes • Values • Feelings

Source: Goodman (2013). Dimensions of Diversity

Several studies have identified a lack of trust stemming from poor diversity management as one of the main causes of poor performance among academic staff in HEIs. Ayoko et al (2002) reported that there is substantial evidence that organisations with a diverse workforce experience more conflict and higher turnover, less trust, less job satisfaction, more stress, more absenteeism and more communication problems. They also suffer from poor cohesion and social integration. Studies by Brewer (1979); Tajfel (1970) reveal that when people view themselves and others as members of different groups, those outside the group are viewed less trustworthy compared to those within the group. Similarly, favoring those in one's group leads individuals to hold more positive views (and trust) of themselves and their own group, and more negative views (and distrust) of those outside their own group (Brewer, 1998). These factors indicate that diversity has to be managed to avoid undermining employees' social integration and effectiveness which can lead to lower performance in organisational work (Guillaume et al. 2013). Such studies suggest that trust will be negatively affected by diversity heterogeneity.

However, studies by Engen & van Kippenberg (2012) assert that if diversity is effectively managed to facilitate social integration, it can also lead to creativity and innovation. An ILO (April 2022) Report on diversity and inclusion reported that high levels of diversity and inclusion in the workplace are associated with greater productivity, innovation and workforce well-being, yet too little is being done to promote them, particularly among minority groups, meaning that enterprises, workers and societies are missing out on considerable potential benefits. Thomas (2006) aptly stated that diversity is like two sides of the same

coin where on the one hand, it can be a constant source of misunderstanding and conflict and, on the other hand, it can be a source of unending harmony and productivity in organisations. Diversity is the identified precursor for examining the significance of trust on performance outcomes.

2. Literature Review

2.1 Trust

Early studies on trust began in the 1960s, but it was the publication of important works on trust by Mayer et al (1995), McAllister (1995), and Rousseau et al (1998), that research on the topic began to increase, turning it into an influential construct in organisational behaviour (Newman et al (1998). Dirks and de Jong (2022) have reviewed the body of research on the concept of trust over the past quarter century from an evolutionary perspective and identified two waves that have shaped and advanced this concept. The first wave established foundational building blocks, while the second wave questioned assumptions and examined alternatives. A third wave from 2021 onwards is further anticipated, aimed at examining the implications of the first and second waves for workplace trust, where this study is intended to make a contribution.

Mayer et al (1995) defined trust as the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor that other party, which has become widely accepted by scholars on trust. McAllister (1995) clarified the distinction between cognition-based trust (evidence- driven process) and affect-based trust (driven by genuine concern and care for others, leading to reciprocation). Another important conceptual clarification concerns different referents of trust. Colquitt et al (2007) differentiated between referents based on their level within the organisational hierarchy from co-workers to supervisors, top management, as well as the organisation as a whole, resulting in trustees at different levels being associated with different dependencies and risks for the trustor. The dominant theoretical mechanisms on trust have been social exchange (reciprocal acts of help and exchanges of resources over time, Cropanzano & Mitchel, 2005), and attribution theory (individuals' causal explanations for events and occurrences and individual perceptions and judgments of others, Dirk & de Jong, 2022).

Word Values Survey (2010-2014) report which shows that Africa has the lowest trust index also found that Zambia ranks among the lowest trust levels in neighbours as well as strangers.

2.2 Trust in HEIs

Recently, Jameson et al. (2023) systematically reviewed the international literature on trust among staff in HEIs, assessing the value of the literature, research methods used, research focus, and overall findings. From 13 reference databases searched, 25 articles met the inclusion criteria, i.e. trust among all categories of university staff as this relates to colleagues, university management or the institution itself. Papers were reviewed from various countries including USA, Pakistan, the UK, Syria, Denmark, Indonesia, Bangladesh, Canada, Ukraine, and Sweden. A summary of results is presented in Table 1.2.

African universities do not rank favorably in international higher education assessments. According to The Times Higher Education 2021 World University Rankings, only 60 African universities are featured among the 1,500 institutions listed. Egypt leads with 21 universities, followed by South Africa with 10 (Zezeza, 2021). According to Zezeza (2021) promoting social trust and productive cultures for HEI transformation involves upholding academic freedom, sharing governance, promoting equity and diversity, fostering civility, improving communication, and embracing social responsibility. TrustAfrica's (2022) dialogue identifies policy inconsistencies as one reason trust in African HEIs is a concern. Even after fifty years of independence, transformation of higher education is still a matter of concern, particularly given frequent change of governments which disrupt stability due to administrative failures.

Table 1.2: Summary of Results of Literature on Trust among HEI Staff

Trust of staff in their leaders and institutions:	Trust of staff between each other:	Erosion of trust between managers, staff, and institutions:	Trust is supported if managers:
-Is strongly associated with organisational commitment, as is employee perception of workplace fairness; trust plays a mediating role in this. -Plays a role in reducing need for controls between staff and managers. -Plays a mediating role in the relationship of organisational initiatives e.g. HR practices and staff performance. -Is influenced by the nature of the organisation.	-Increases with increased interaction. -Supports knowledge-sharing, knowledge acquisition and assimilation, possibly because it supports enablers of knowledge-sharing, e.g. communication. -Is associated with staff self-efficacy. -In partnership with feelings of belonging, supports motivation and creativity. -Leads to organisational commitment and work-related vigor, via the satisfaction of psychological needs of relatedness and autonomy.	- Occurs: -as staff become more senior. -when staff experience bullying. -when staff perceive organisational politics, (e.g. self-serving behaviour) in operation, leading to ostracism. -when organisations and managers respond poorly to external challenges, e.g. by failing to resist the erosion of staff professional autonomy, or by adopting deterministic responses to government performance targets.	-Are accessible, communicate clearly, and have demonstrable competence. -Are reliable and consistent. -Demonstrate integrity and transparency in decision making. -Support levels of autonomy in their staff. -Mediate between external demands and internal institutional values. -Resist deterministic solutions to externally set targets.

	-Supports organisational change, developing pedagogy and welfare. -Is directly correlated with social cohesion.		-Engage in more collegiate governance.
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Source: Jameson et al (2023). A systematic scoping review and textual narrative synthesis of trust amongst staff in higher education settings

2.3 Diversity and Trust in HEIs

According to Pant & Vijava (2015) diversity is the way in which people differ from each other, and these differences among employees could arise due to their age, gender, race, ethnicity, educational background, sexual orientation, socioeconomic status, religious beliefs, political beliefs, experience, organisational function etc. Patrick & Kumar (2016) examined the potential barriers to workplace diversity and concluded that successfully managing diversity can lead to more committed, better satisfied, better performing employees and potentially better financial performance for an organization. In Africa, ethnic diversity has been the historic and prevalent question in political, social and economic activities. HEIs have not been spared this challenge; gender inequalities, minority marginalisation, and traditional norms and values that hinder participation of these groups is more evident in higher education and within some faculties where the ratio of men to women is high (trustafrica.org). Gender inequalities and minority marginalisation in South African HEIs have faced, and still face, major challenges in managing diversity due to its previous apartheid regime. Further, it was noted that diversity is conceptualised with the assumption that equity and redress should form part of institutional practices for managing and integrating diverse workforce in HEIs (Mampame, 2019). In Ethiopia, ethnic, religious, and linguistic diversities are considered to be significant distinguishing features, and diversity-related challenges are rooted in the social and political history, which seep into management of HEIs (Adamu, 2014).

Nyambeggera (2020) observed that diversity differences in organisations is a form of diversity that has been neglected in studies in most African HEIs, yet diversity without inclusion can become a basis for poor management of human resource and subsequent poor performance in the organisation. In agreement, Ruhumbu & Chawawa (2014) reported that HEIs worldwide are becoming increasingly diverse and its management is no longer a mere topical issue for debate but a reality to be confronted. Their study found that although the institutions understood the need for diversity management, they failed to not only effectively and adequately communicate diversity policies and strategies to all organisational members but also failed to ensure equality in terms of gender representation at management levels as women lag behind in leadership positions. Adamu (2022) identified several factors such as: absence of clear policy and strategy, lack of leadership commitment and skills, and politicization of ethnicity, that negatively affect diversity management in Ethiopian universities. Thus, as HEIs become more disparate and demands grow, academic cultures are more complex and contestations over equity, diversity and inclusion intensify (Zezeza, 2021). When diversity leads to negative attributes such as assumptions, racism, unconscious biases, discrimination, under-representation of minorities, whose consequences lead to faculty attrition, it becomes a threat to HEIs instead of an advantage (Pant & Vijava, 2015). This stresses the need for HEI leadership's and HR practices' involvement in diversity management and commitment to inclusion and respect for all forms of minority groups.

2.4 Trust and Performance Outcomes in HEIs

In the trust-performance linkage, according to Vanhala & Tzafrir (2021), if a company is able to set itself apart from its competitors and build up a higher level of trust, it could exploit the benefits related to organisational trust not to only increase its efficiency and effectiveness but also attract and retain its competent employees. Thus, organisations with a high level of trust between the organisation and its employees will perform better than those with a low trust level, because trust enhances employee engagement, commitment, effectiveness, and cooperation, and in turn job performance (Dirks & Ferrin, 2002).

Employee performance can thus be seen as the effective accomplishment of tasks, leading to the achievement of specific goals and objectives. It is a multidimensional concept that goes beyond financial measures and includes various dimensions and parameters of measurement. In HEIs, the performance of academic staff outcomes is important due to their effect on the quality of students' learning. Findings of a study by Nguyen (2023) in Vietnam on organisational factors that significantly affect lecturer performance in HEIs were identified as: institutional policies (salary, incentives, training, performance evaluation); work environment (leadership, colleague support, performance feedback, organisational communication); infrastructure (furniture, technology, noise, light); and workload (teaching and testing, research, community service). Employee performance can therefore be understood as the result of an action, whether excellent or not, and is often considered in terms of efficiency and effectiveness. Overall, employee performance is crucial for organizational success, as it leads to the accomplishment of goals, quality output, adherence to standards, and the optimal use of resources (<https://typeset.io/>).

Employee performance considers an employee's whole job, including their interaction with co-workers, ability to meet deadlines, and quality of work (Ovington, 2023). This means that performance indicators of commitment, engagement, productivity, and effectiveness are closely related. Employee **engagement**

measures the level of engagement and involvement of employees in their work and the organisation. According to Wishart (2023), highly engaged employees are driven by purpose, role clarity, shared values, trust, fairness and relationship with their managers. Employee **commitment** considers an employee's attachment and commitment to the organisation, assessed through their desire to spend their career with the organisation and their views on it as a great place to work. Commitment can be measured by analysing for instance, the turnover rate, level of productivity or the degree of absenteeism. Employee **productivity** and **effectiveness** go hand in hand. Employers and HR practices must focus on creating a positive work environment based on trust for employees. Employers also need to provide employees with the tools and resources necessary to fulfil their roles. An important benefit of measuring employee effectiveness is that it promotes employee growth and development by identifying their strengths and weaknesses, thereby allowing managers to allocate suitable tasks which match employees' skills, and also create tailored development plans and training so that employees can work on their weak points (Ovington, 2023).

Based on the foregoing, the objectives of the study were:

- a) To determine the influence of diversity on trust in HEIs in Zambia
- b) To determine the influence of trust on performance in HEIs in Zambia
- c) To assess the mediating role of trust on diversity in HEIs in Zambia

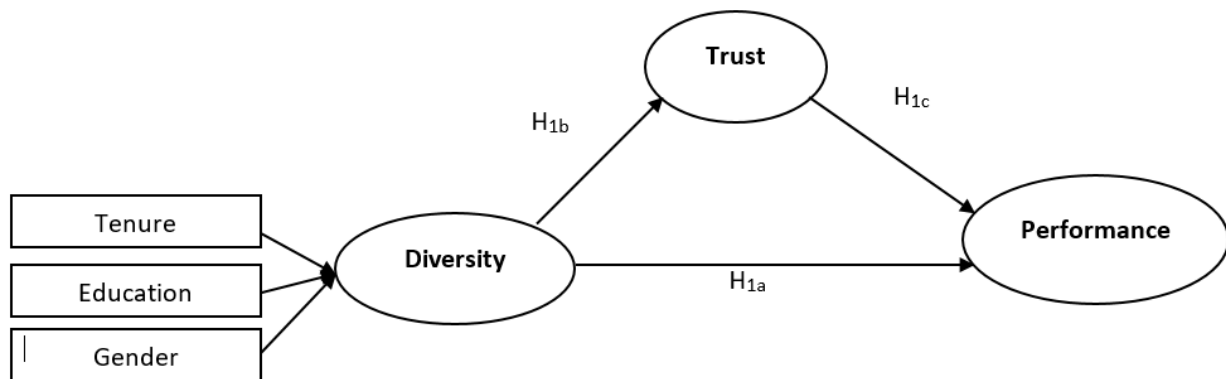
3. Theoretical Framework

Theories of diversity focus on an individual's reactions to those that are different from that individual. The various theories attempt to explain how diversity can be either harmful or beneficial to organisational outcomes. The assumption of the study is that lack of trust based on dissimilarities is harmful to performance outcomes in organisations. It was found that two diversity theories can be applicable to the study. The **Justification-Suppression Model (JSM)**, which suggests that genuine prejudices are not directly expressed but are restrained by beliefs, values, and norms that suppress them (Crandall & Eshleman (2003). The JSM describes when people act on prejudice. It proposes a two-step process: people have prejudices, but often feel conflicted and try to suppress them. Prejudices are learned early, reinforced by close relationships, and difficult to change. People use various strategies to justify their biases. Most people try to hide their prejudices, motivated by personal values or social pressure, since open prejudice is widely unacceptable and sometimes illegal. However, people may justify acting on prejudice—especially when tired, anonymous, or when social norms against prejudice are weak. The second theory is the **Similarity-Attraction Paradigm** (Byrne, 1971). While the cognitive diversity hypothesis highlights the benefits of diversity, the similarity-attraction paradigm explains its potential downsides. Research shows that members of diverse groups may feel less connected, have higher absenteeism, and be more likely to leave. Diversity can also lead to conflict and turnover. Similarity-attraction theory suggests that people are drawn to those who share similar attitudes and backgrounds, including race, age, sex, or socioeconomic status. Studies show job seekers prefer organizations that reflect their identity, but targeted recruitment can both attract and deter different groups, which reinforces opportunities to groups which already enjoy employment positions (Bye et al, 2014). This creates employee homogeneity, which, according to Schneider (1987), causes organizations to occupy a self-defeating and narrow ecological niche, and crystallizes disadvantage and discrimination. Schneider also observed that when employees feel dissimilar to others, they exit the organisation.

Despite the benefits that a diverse workforce may have, there are also challenges that can arise which trust-building under proper leadership and HR practices can address, which include reduced organisational citizenship behaviour and legal challenges based on various forms of discrimination such as age, origins, disability, race, religion, and gender where laws against such exist. The worst challenge is covert discrimination because it is not visible or identifiable, but has serious consequences as it can impact interpersonal interactions and affect employee performance. Lieberman et al. (2015) note that diversity gaps exist because biases are often subconscious and affect how people perceive the outside world, diverting attention from more rational explanations. Therefore, much as people have a natural tendency to like working with people like themselves, such behaviour can be exclusionary, discriminatory, and inequitable, hence the importance of embracing diversity and inclusivity values (Abbasi et al, 2023). Further, organisations require strict rules and regulations that protect employees who might be disadvantaged from people's natural tendency to be attracted to people similar to themselves. To enhance the degree of diversity, organisations should emphasize implementing diversity trainings and development programmes (Bunica & Vatamanescu, 2022). Effects of similarity attraction has an impact on diversity and requires self-reflection on the objectivity and fairness of decision making processes in organisations.

Choice of these theories underscores the need for managers to make efforts to understand the causes, effects, and ways or removing their influence on decision making processes (Bunica & Vatamanescu (2022), particularly because this is an era in which diversity and inclusion are prime considerations in the workplace. This includes institutions of higher learning.

Figure 3: Research Model



Based on the empirical evidence and the theoretical framework in considering the relationship between trust, diversity, and performance, the research model is presented in Figure 4 above, on which the following hypotheses have been drawn:

- H₁ There is a relationship between diversity and performance.
- H₂ There is a relationship between diversity and trust.
- H₃ There is a relationship between trust and performance.
- H₄ Trust mediates the relationship between diversity and performance.

4. Methodology

The study's approach was quantitative research design. The research strategy to investigate the relationships between variables without controlling any of them was correlational. Time horizon was cross-sectional, where data was collected and analyzed at a certain moment. A total of 267 academic staff from 43 universities completed the questionnaire.

4.1 Population and Sampling

The target population was academic staff from 60 HEIs in Zambia, (51 private and 9 public institutions), yielding a total of 5,597 (HEA Registry, 2024) academic staff. Of the 60 HEIs, 43 institutions responded to the invitation to participate in the study; 34 from private and all 9 public HEIs. 17 private HEIs did not participate in the study for various reasons, which left a population of 4,285 academic staff. Out of 311 questionnaires distributed, 276 responses were received. The remaining 35, all from private HEIs, were non-responsive. For a population of 4285, the recommended sample size using Yamane's (1967) formula with a standard 95% confidence level and a 5% margin of error ($3=0.05$) is approximately 366 respondents, computed as: $n = N / (1+N (e)^2)$. However, responses received numbered 276. Due to the rather small sample size, data analysis was done using Smart PLS-SEM.

4.2 Data Collection

A survey questionnaire was the primary data-collection instrument. The questionnaire was an adaptation of a combination of several, pre-existing, validated sources, including: Clark & Pane (1997), Tzafirir & Dolan (2004), Huff & Kelly (2003), Cummings & Bromiley (1996) on Trust items; Koopmans et al. (2012) on Employee Performance, Connelly et al. (2016) on Diversity. A Likert scale ranging from 1 to 5 was used: 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree. A pilot study was conducted with a small group that did not participate in the main study to ensure the questionnaire's clarity and validity. To collect the quantitative data, the operational definitions that translate abstract concepts such as trust into quantifiable measures (self-ratings of feelings) were used.

4.3 Presentation and Data Analysis

A total of 43 HEA-accredited HEIs participated, with 267 valid responses from 311 distributed questionnaires, yielding a strong response rate of 89%. The sample consisted of 145 participants from public HEIs and 131 from private HEIs. Data were entered and coded in SPSS, screened for errors, missing values (coded 99), and outliers. The Kolmogorov-Smirnov test confirmed non-normality for all 40 items, justifying the use of non-parametric tests. The main analyses were conducted using SmartPLS 4, which is appropriate for complex models with latent variables, small sample sizes, and non-normal data.

4.4 Respondents Characteristics

Respondents characteristics show that the sample predominantly comprised male academic staff (69.6%), with females representing 24.6%. Most respondents were aged 40-60 (39.9%), while those under 20 or over 70 were rare (1.1% each). Bachelor's degree holders were the largest educational group (39.9%). Followed by master's (28.6%), and PhD holders (18.1%). Most participants had five to ten years of service (40.6%), and the vast majority were Zambian citizens (93.1%).

4.5 Non-Response Bias

A common noticeable cause of non-response bias observed in the present study was the inclusion of questions likely to be skipped, such as age, level of education, and length of service. Analyzing non-response bias is important for evaluating data quality, ensuring the validity of statistical findings, and drawing reliable conclusions. In the present study, 25% primary survey items were selected for non-response bias analysis using respondent characteristic variables. The sample of 276 respondents was divided into two groups; the first and last 25% of respondents who returned surveys were designated for analysis, and an independent-samples t-test was conducted to compare the mean responses of the two groups. The results, evaluated at a 95% confidence level, suggest that late respondents are similar to early respondents ($p > 0.05$) across the questionnaire items. On the other hand, a significant difference would indicate potential bias. While this method does not eliminate the possibility of non-response bias, the findings suggest that non-response bias was unlikely to pose a significant threat to the validity of the study.

4.5 Common Method Variance

Common Method Variance (CMV), defined as a systematic error that stems from a common method used to measure the constructs of the study (Podsakoff et al., 2003). In this study, both the independent and dependent variables were calculated using the same, or common response, that is, ordinal scales. The study assessed the potential presence of CMV which could bias the relationships among modelled constructs by using Harman's single-factor test. All the measurement items were subjected to Principal Components Analysis (PCA) using an un-rotated solution. According to Podsakoff & Organ (1986), the emergence of a single factor, or a general factor accounting for the majority of the variance, would indicate the presence of CMV. In this study, the PCA yielded a 16-factor solution. None of the factors accounted for more than 50% of the variance, indicating that CMV is not a major concern in this dataset.

4.6 Descriptive Statistics

Generally, the mean scores ranged between 2.601 and 4.753, indicating a strong tendency among respondents to agree or strongly agree with questionnaire statements. This suggests positive perceptions in these domains. Standard deviations were clustered around 1.0, indicating a fair degree of consensus among the respondents. Lower standard deviations, particularly those around <0.5 (e.g., EPC 1, EPP4, EPP5, EPP6) imply a tightly clustered response pattern and reinforce the interpretation of shared attitudes or behaviours. There was a presence of negative skew (clustering around higher response categories) for two items in particular, T5 (-3.038) and T6 (-3.886), which exhibit pronounced high negative skewness, confirming the earlier observation that most participants rated the two items favourably. Kurtosis values were positive, the most extreme being T3 (10.091) and T6 (15.663), revealing a leptokurtic distribution, indicating that responses were not only skewed towards agreement but also concentrated around the mean. The responses were therefore uniformly in agreement, reflecting consensus or a social desirability bias.

5. Measurement Model Estimation

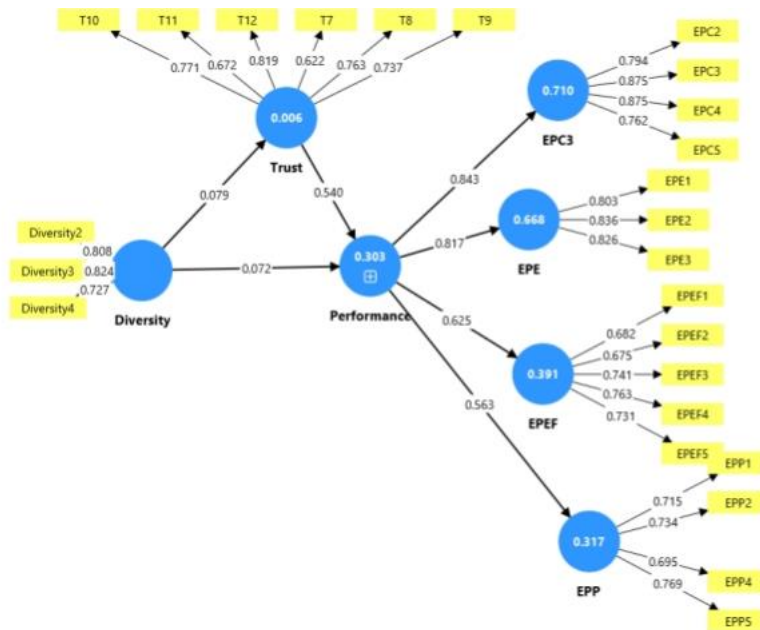


Figure 5: PLS Measurement Model Estimation

The model focused on determining the influence of diversity on trust in public and private universities in Zambia, and on assessing the influence of trust on performance. The model analysed the influence of diversity on performance, with the assumption that trust is essential for leveraging the full potential of a diverse workforce. It first ensured the validity and reliability of the measurement model by assessing the indicator reliability, internal consistency, and discriminant and convergent validity, before analysing the structural relationships between diversity, trust, and performance.

Indicator Reliability

In the study model, the outer loadings of the indicators were inspected to identify those below 0.65. Several were excluded, resulting in enhanced AVE and composite reliability values as follows: AVE: Performance - 0.625, Diversity - 0.604, Trust - 0.538. Composite Reliability: 0.894, which are in line with benchmarks of 0.5 and 0.7, respectively (Hair et al. 2013). The final estimated path model is illustrated in the measurement model in Figure 5.

Outer Loadings and Internal Consistency Reliability

It has been established that composite reliability is more widely recognised as a more appropriate measure than the traditional to Cronbach's alpha. Assessment of internal consistency reliability results for the Model demonstrates composite reliability coefficients of 0.715 (Diversity), 0.873 (Performance), and 0.832 (Trust), all of which fall within the recommended range of between 0.60 and 0.95 (Hair et al. 2013) as shown in Table 3. The outer loadings render support to the reliability of the measurement model.

Table 3: Outer Loadings and Internal Consistency Reliability

Construct Variables)	(Latent Sub-Dimensions Indicators	Composite Reliability	Outer Loadings
Diversity		0.770	
	Religion: Diversity 2		0.808
	Social Status: Diversity 3		0.824
	Tribe: Diversity 4		0.726
Trust		0.832	
	T7		0.625
	T8		0.763
	T9		0.741
	T10		0.768
	T11		0.670
	T12		0.816
Employee Performance		0.895	
	Commitment		
	EPC2		0.793
	EPC3		0.875
	EPC4		0.876
	EPC5		0.761
	Engagement		
	EPE1		0.805
	EPE2		0.841
	EPE3		0.818
	Effectiveness		
	EPEF1		0.687
	EPEF2		0.680
	EPEF3		0.739
	EPEF4		0.755
	EPEF5		0.734
	Productivity		
	EPP1		0.714
	EPP2		0.733
	EPP4		0.697
	EPP5		0.768

Convergent Validity and Discriminant Validity

According to Fornell-Larcker (1981), the AVE serves as a metric for evaluating convergent validity. In this study, for Model 3, the AVE values for the latent constructs presented in Table 5.15 exceed the recommended threshold of 0.50, indicating substantial convergent validity.

Table 4: Convergent Validity and Discriminant Validity

	Diversity	Performance	Trust
Diversity	0.777		
Performance	0.065	0.791	
Trust	0.084	0.632	0.733

6. Evaluation of the Structural Model in PLS-SEM

6.1 Collinearity Assessment

Referencing Hair et al. (2013), a Variance Inflation Factor (VIF) value of 5 or higher signals problematic collinearity. In this analysis, the collinearity assessment summarised in Table 5 shows that all VIF values are below 5, indicating that multicollinearity is not a significant concern in the structural model.

Table 5: Collinearity Assessment

Construct	VIF	Collinearity Problem? (VIF>5?)
Diversity > Performance	1.177	NO
Diversity > Trust	1.000	NO
Trust > Performance	1.015	NO

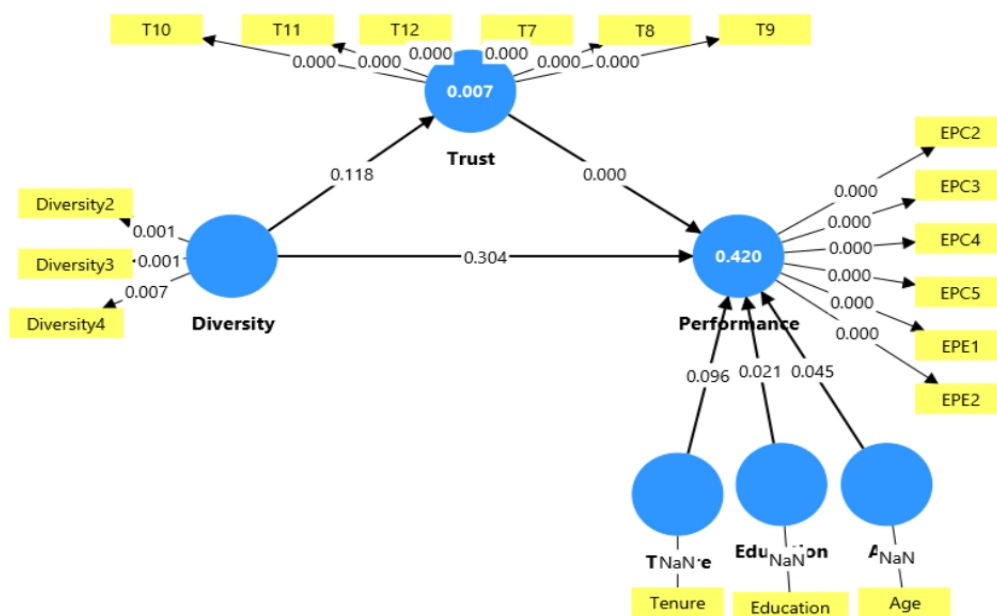


Figure 6: Structural Model Estimation

6.2 Coefficient Determination (R^2)

The coefficient of determination is a key indicator of the model's explanatory power. In this model, constructs of interest are Trust and Performance. As established by Hair et al., (2013), an R^2 of 0.50 explains moderate variance; an R^2 of 0.25 indicates weak variance, and 0.70 indicates a strong explanatory power. In the present study, the PLS path model estimation diagram indicates the R^2 value for Performance as 0.420, meaning 42.0% of the variance in the endogenous variable is explained by the Diversity. This value is generally considered moderate, according to guidelines by Chin (1998), but Hair et al. (2011) classify R^2 values between 0.33 and 0.67 as weak, leaning towards moderate. The R^2 value of 0.007 for Trust means only 0.7% of the variance in the endogenous variable (Performance) is explained by the independent variables (Diversity 2, 3, and 4) in the model. This value is well below the threshold as guidelines in PLS-SEM suggest R^2 value should be at least 0.10 for the variance explained to be considered minimally adequate to have some predictive relevance. 0.007 is therefore classified as having a none or very weak effect size, as reflected in the 0.000 p-value in Table 5.17.

6.3 Path Coefficient

Table 6: Significance Testing of the Structural Model Path Coefficients

	Path	Path Coefficients	t-values	p-values
H1	Diversity > Performance	0.080	0.512	0.304
H2	Diversity > Trust	0.078	1.187	0.118
H3	Trust > Performance	0.487	14.74	0.000

6.4 Predictive Relevance Q^2

It has been established that the Q^2 statistic enables the researcher to ascertain the extent to which observed data points for indicators of endogenous constructs can be accurately predicted through the model. This assessment was done using the Blindfolding Algorithm and yielded results presented in Table 5.18.

Table 7: Results of Determination (R^2) and Predictive Relevance (Q^2)

Endogenous Latent Variables	R^2 Value	Q^2 Value
Trust	0.007	-0.003
Performance	0.420	-0.004

According to Henseler et al. (2014), a higher R^2 indicates a good model fit and a higher degree of explained variance, while a positive Q^2 indicates the model has predictive power. In this study, the R^2 value for Performance (0.420) indicates moderate predictive accuracy, while the negative Q^2 of -0.004 indicates weak, unacceptable predictive accuracy. The R^2 value for Trust (0.007) has a weak predictive accuracy, and the negative Q^2 of -0.003 also indicates a weak, unacceptable predictive accuracy. The negative Q^2 values for both constructs are less than zero, indicating that the model has no predictive relevance.

6.5 The f^2 Effect Size

Interpreting Table 5.19 and referring to the already acknowledged f^2 common benchmarks (> 0.35 large effect, $0.15 - 0.35$ medium, $0.02 - 0.15$ small effect), the path coefficient of 0.080 coupled with a minimal f^2 of 0.002 indicates a negligible negative relationship between diversity and performance, indicating that diversity does not significantly impact performance. The path coefficient of 0.078 is also an indication of a weak positive relationship between diversity and trust, and is supported by an f^2 of 0.015. The path coefficient of 0.487 and the f^2 of 0.680 indicate a robust positive relationship between trust and performance, suggesting that trust directly improves performance outcomes.

Table 8: Results of f^2

Diversity, Trust, and Performance		
	Path Coefficient	f^2 Effect Size
Diversity > Performance	0.080	0.002
Diversity > Trust	0.078	0.015
Trust > Performance	0.487	0.680

Table 9: Summary of Hypothesis Testing

	Hypothesis	Supported? YES/NO
H1	Diversity > Performance	NO
H2	Diversity > Trust	NO
H3	Trust > Performance	YES

Table 9 summarizes the hypothesized relationships among the variables. The direct effects of diversity on both trust and performance are not supported (H1 and H2), while the relationship between trust and performance (H3) is significant at the $p < 0.005$ level.

Summary of Findings

- Composite reliability acceptable for Diversity (0.770), Trust (0.832), Performance (0.895); AVE values indicated strong convergent validity.
- No collinearity issues were detected ($VIF < 1.2$).
- R^2 values for Performance was moderate (0.420) but extremely low for Trust (0.007).
- Path coefficients were:
 - Diversity $\rightarrow$ Performance: 0.080, $t = 0.512$, $p < 0.304$ (not significant).
 - Diversity $\rightarrow$ Trust: 0.078, $t = 1.187$, $p = < 0.118$ (not significant).
 - Trust $\rightarrow$ Performance: 0.487, $t = 14.74$, $p = 0.001$ (significant)
- Effect sizes (f^2) were negligible for Diversity's impact on Performance and Trust, but large for Trust's impact on Performance ($f^2 = 0.680$).
- Predictive relevance (Q^2) was negative for both constructs, indicating poor predictive power.

7. Discussion

The first objective, to determine the influence of diversity on Trust in HEIs in Zambia examined the impact of diversity on trust within HEIs and findings indicate only a weak positive relationship (path coefficient = 0.078; $f^2 = 0.015$), with statistical tests confirming that the relationship between diversity and trust is not significant (Diversity $\rightarrow$ Performance, $p = 0.560$; Diversity $\rightarrow$ Trust, $p = 0.191$). This suggests that, in the studied context, diversity does not meaningfully influence trust among academic staff.

This result is consistent with prior research showing inconclusive or mixed effects of diversity on trust and performance (Schaffer, 2014; Dinesen et al., 2018). The literature often posits that diversity can undermine social integration and trust due to increased potential for conflict (Tajfel, 1981; Gallaume et al., 2012). However, the current study's weak positive association hints at potential benefits if diversity is managed effectively.

It is important to note that successfully managed diversity can lead to enhanced commitment, satisfaction, and performance. An alternative explanation for the current study's weak positive association, and a challenge to practice, could lie in identifying unconscious biases (Steinpreis et al., 1999; McCormick, 1998), observed in this study under the justification-suppression model of diversity theory, which suggests that genuine prejudices are not directly expressed but are restrained by beliefs, values, and norms that suppress them. By applying the justification-suppression model, this study advances diversity theory by contextualising unconscious bias in Sub-Saharan HEIs. The challenge for HEIs lies in addressing unconscious biases and fostering inclusive environments, as highlighted by Steinpreis et al. (1999) and McCormick (1998). Overall, while diversity alone does not appear to strongly influence trust in Zambian HEIs, targeted efforts to promote genuine inclusion may yield more positive outcomes.

The second objective was to determine the influence of trust on employee performance in HEIs in Zambia. A central contribution of this study is the robust evidence that trust is a key predictor of both individual and institutional performance in HEIs. The effect of trust on performance was statistically significant (Diversity: $p = 0.000$). These results provide clear support for the alternative hypotheses and firmly reject the null.

These findings echo the work of Fulmer & Gelfand (2012), Liu (2018), Covey & Conant (2016), Efawati et al. (2020), Shore et al. (2006), and Judge & Colquitt (2004), all of whom highlight the critical role of trust in fostering greater commitment, engagement, productivity, and effectiveness. In high-trust environments, academic staff are more likely to collaborate, innovate, and deliver superior outcomes, ultimately advancing the mission of HEIs. This underscores the strategic importance of trust-building initiatives within HEIs, as they directly contribute to enhanced performance at both the individual and institutional levels.

The third objective was to assess the mediating role of trust on diversity. The study investigated whether trust mediates the relationship between diversity and performance. The mediation analysis revealed that the indirect effect of diversity on performance via trust was not statistically significant—mirroring the

weak direct effect of diversity observed earlier. This suggests that its role in linking diversity to performance remains limited in the current context.

Table 10: Mediation Analysis Results

Total Effects			Direct Effects			Indirect/Specific Effects				VAF %	Result
Coeff .	t-value	p-value	Coeff .	t-value	p-value	Coeff .	t-value	p-value			
0.018	0.207	0.418	-0.035	0.512	0.304	0.053	1.170	0.119	H: DV>TR>P F	294 %	No mediation

For H: (DV > TR > PF), the indirect effect exceeds the total effect, resulting in a VAF over 100%. This suggests the mediation is inconsistent or possibly due to suppression, meaning the direct and indirect effects are working in opposite directions, with no clear mediation.

Finally, multi-group analysis (MGA) was performed to examine whether the structural relationships in the model differ significantly between public and private groups. According to Ringle et al. (2024), SmartPLS provides MGA results that allow testing whether predefined data groups differ statistically in their group-specific parameter estimates (e.g., outer weights, outer loadings, and path coefficients) using a permutation procedure. MGA is an advanced form of moderation because it tests whether the relationships in the models are significantly different across predefined groups. This makes it useful because it provides deeper insights than simple moderation analysis, showing how a moderator variable affects the entire structural model rather than just a single relationship.

The initial analysis was run in the standard PLS-SEM algorithm on the models. Using the MGA tool, the bootstrapping process performed the statistical test to determine if the differences were significant. In the MGA results, a probability value of 0.05 or lower (or a confidence interval of 0.95 or higher) indicates a statistically significant difference between the groups for a specific path coefficient. If the difference is significant, examining the group-specific path coefficients is necessary to understand the direction and strength of the relationship within each group.

MGA included three approaches: non-parametric bootstrap MGA, the parametric test, and the Welch-Satterthwaite test. Across all three methods, the p-values for the differences in path coefficients between public and private groups were above the commonly used significance threshold of 0.05 for all relationships. This means that none of the examined paths show a statistically significant difference between the groups.

Table 11: Overall Summary of MGA Results

Path	Difference (Public-Private)	2-tailed (Public-Private) p-value
Diversity>Performance	-0.039	0.712
Diversity>Trust	0.067	0.834
Trust>Performance	-0.190	0.056

The closest to significance was the path **Trust → Performance** ($p = 0.056$ for bootstrap MGA, $p = 0.051$ for the parametric test, and $p = 0.053$ for the Welch-Satterthwaite test), suggesting a possible trend but not reaching conventional significance.

Interpretation of these results is that firstly, the challenge of unconscious biases in diversity is a problem that lies unseen in the background of the diversity of HEIs. Assumptions and unconscious biases are inevitable in human beings, and there are biases in the selection process of faculty. For instance, results of a study by Steinpreis et al (1999) in America indicated a gender bias that both female and male psychologists in academia were more likely to select a male career researcher than an equally qualified woman. McCormick (1998) also found that potential applicants were eliminated based on what graduate school they attended; the bias was that the highest ranked candidates came from elite graduate institutions. For reasons such as these examples, Lewicka (2022) recommends that trust should be included in the content of training programmes for university management and lecturers, covering issues related to areas of trust violations, such as diversity and inclusion, prevention of unethical actions, and fair treatment. The diversity of HEI's faculty, staff and students influences their strength, productivity, and intellectual personality (Fine & Handelsman, 2010). While some studies argue that the benefits of diversity outweigh the challenges because it enhances the richness of the teaching and research environment, diversity also creates challenges for leaders and human resource practices in fostering diversity and inclusion as important aspects. Further, results suggest that the effects of the control variables age, education, and tenure, as well as trust and performance-related constructs are consistent across both groups.

8. Conclusions and Recommendations

The first objective examined the impact of diversity on trust within HEIs. The findings indicate only a weak positive relationship, with statistical tests confirming that the relationship between diversity and trust is not significant. In the studied context, diversity does not meaningfully influence trust among academic staff.

The second objective explored the influence of trust on performance in HEIs in Zambia. The results provide clear support for the alternative hypotheses and firmly reject the null, suggesting that in high-trust environments, academic staff are more likely to collaborate, innovate, and deliver superior outcomes, ultimately advancing the mission of HEIs.

The third objective investigated whether trust mediates the relationships between diversity and performance. The mediation analysis revealed that the indirect effect of diversity on performance via trust was not statistically significant—mirroring the weak direct effect of diversity observed earlier.

MGA results comparing public and private groups reveal that none of the structural relationships exhibited significant differences between private and public HEIs.

In summary, the hypothesized direct effects of diversity on trust and performance were not statistically supported, with only weak or negligible relationships observed. This indicates that diversity alone does not drive trust or performance within Zambian HEIs. Importantly, trust emerged as the critical factor, mediating the relationship between organizational conditions and enhanced performance outcomes. Thus, the study finds that while diversity is a valued organizational attribute, its impact is realized primarily through its influence on trust, rather than as a direct driver of performance. Despite the benefits that a diverse workforce may have, there are also challenges that can arise which only proper leadership can address, including reduced organisational citizenship behaviour and legal challenges based on various forms of discrimination such as age, origins, disability, race, religion, and gender where laws against such exist. The worst challenges are: covert discrimination, because it is not visible or identifiable, but has serious consequences as it can impact interpersonal interactions and affect employee performance, and unconscious bias. The two are deeply connected, because unconscious bias is a primary driver behind covert discrimination, such as through micro-aggressions, unequal work assignments, or unfair hiring practices. Thus, while unconscious bias is a mental process, covert discrimination is the behavior that perpetuates inequality.

Recommendations

Policymakers: Policy makers in both public and private HEIs should develop and enforce guidelines that mandate inclusive diversity initiatives. It is recommended that such policies be given priority in organizational governance.

University Management: The challenge of unconscious biases in diversity is a problem that lies unseen in the background of HEIs' diversity. Assumptions and unconscious biases are inevitable in human beings, and there are biases in the selection process of faculty. Trust should be included in the content of training programmes for university management and lecturers, covering issues related to areas of trust violations, such as diversity and inclusion, prevention of unethical actions, and fair treatment. Much as some studies argue that the benefits of diversity outweigh challenges because it is a source of enhancing the richness of the environment of teaching and research, diversity creates a challenge for leaders and HR practices in relation to fostering diversity inclusion as an important aspect.

University leaders and management practitioners should leverage these findings to inform strategic decision-making and foster positive workplace attitudes and behaviours. Applying these insights can increase stakeholder loyalty, enhance institutional reputation, and improve performance management. Regular performance reviews and targeted interventions will help identify skills gaps and promote continuous improvement.

Professional Training: HEIs should prioritize professional development and training programs that empower leaders to build trust through transparency, integrity, and inclusive leadership. Investing in such programs will help attract and retain diverse talent, ensuring that leadership practices align with the demands of a competitive higher education environment.

Academic Contribution: The empirical data presented in this study contributes to knowledge by contextualizing diversity-trust dynamics within Zambian HEIs, a setting underrepresented in the global literature. It is intended to contribute to theoretical development of trust in respect of performance in higher education, which is argued to be under-explored. The findings should encourage educational authorities to translate these insights into practices that elevate trust in HEIs.

9. Limitations and Suggestions for Further Research

This study provides valuable insights into the relationship between trust, diversity, and performance outcomes in Zambian higher education institutions. However, several limitations must be acknowledged.

First, the cross-sectional design restricts the ability to infer causality; the observed associations between trust, diversity, and performance may vary over time. Future studies should adopt longitudinal designs to capture the dynamic evolution of trust and its impact on performance.

Second, the reliance on self-reported survey data introduces the possibility of response bias, as participants may have provided socially desirable answers. Incorporating multiple data sources, such as interviews, focus groups, or institutional records, would strengthen validity.

Third, the study's focus on Zambian HEIs limits generalizability to other cultural and institutional contexts. Comparative, multi-country research would help identify contextual differences and similarities in trust-building mechanisms. A further limitation on the generalizability of the findings is that the sample size was only 267, partly due to the reluctance of certain foreign-owned private HEIs to participate.

Fourth, while the study employed Smart PLS-SEM to test mediation, additional moderators and control variables such as organisational culture, or other diversity dimensions could provide a more nuanced understanding of the trust-performance relationship.

Finally, the literature review highlighted overlapping definitions of trust without fully integrating them into a unified theoretical framework. Future research should streamline conceptual models and deepen theoretical integration, particularly with Social Exchange Theory, to enhance explanatory power.

Future inquiries could also explore qualitative approaches to capture the lived experiences of academic staff, thereby enriching the quantitative findings. Additionally, examining the role of distrust alongside trust may provide a more balanced understanding of employee relations in HEIs. By addressing these limitations, subsequent studies can build on the present findings to advance both theory and practice in higher education management.

Despite these limitations, the study's use of validated instruments and robust analytical techniques strengthens the credibility and generalizability of the results. Careful documentation of the population and sampling approach ensures transparency and reproducibility.

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