

Article

The Role of Talent Management in Enhancing Employee Retention: Mediating the Influence of Psychological Empowerment

Dalila B. S. Menezes * , Megi Gumashivili and Kiti Kanokon

School of Management and Economics, University of Electronic Science and Technology (UESTC),
Chengdu 611731, China

* Correspondence: dalila_menezes@hotmail.com

Abstract: In this study, the mediating effect of psychological empowerment (PE) is examined along with the impact of talent management (TM) in improving employee retention (ER). Companies increasingly realize how important strategic TM is in retaining talented workers and promoting organizational success in today's cutthroat business world. Using a cross-sectional survey of 226 employees across multiple sectors in São Tomé and Príncipe, this study examines TM's effects on ER through PE's mediating role. This research demonstrates that TM has a significant positive effect on ER and that PE mediates the relationship between TM and ER. Organizations can create an environment that nurtures commitment, motivation, and long-term retention by empowering employees through targeted TM practices. According to this study, PE is crucial in connecting TM tactics to better ER results, advancing HRM theory. The findings support the theories that PE mediates the interaction between TM and ER and that TM positively impacts ER and PE. To maintain a competitive edge in the modern workforce, HR professionals looking to boost employee engagement, satisfaction, and loyalty will find this study offers helpful insights.

Keywords: talent management; employee retention; psychological empowerment; human resource management



Academic Editor: Lucian-Ionel Cioca

Received: 2 March 2025

Revised: 1 April 2025

Accepted: 2 April 2025

Published: 7 April 2025

Citation: Menezes, D.B.S.; Gumashivili, M.; Kanokon, K. The Role of Talent Management in Enhancing Employee Retention: Mediating the Influence of Psychological Empowerment. *Sustainability* **2025**, *17*, 3277. <https://doi.org/10.3390/su17073277>

Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Human capital represents the most vital resource for organizational productivity and long-term competitive advantage [1]. In today's knowledge economy, talented employees—particularly those capable of driving organizational success—constitute a critical asset that requires careful management [2]. Effective talent management (TM) has consequently emerged as a strategic imperative, encompassing the systematic identification, development, and retention of high-potential employees who can create organizational value [3,4].

The importance of TM is particularly evident in its relationship with employee retention, which directly impacts organizational performance and stability [5,6]. High retention rates boost workforce productivity and enhance overall organizational effectiveness by reducing the costs and disruptions associated with turnover [7,8]. Extensive research has established that talent management practices (TMPs) significantly improve staff retention [9–11]. However, two critical limitations persist in current understanding. First, while studies confirm TMPs' positive outcomes, the psychological mechanisms driving these effects—particularly how TMPs influence retention-related attitudes, like organizational commitment and job satisfaction—remain underexplored [12]. Second, existing research has predominantly examined these relationships in stable, resource-rich contexts, leaving gaps in knowledge about how they function in developing economies facing talent

scarcity and high migration [13]. Psychological empowerment comprising employees' sense of meaning, competence, self-determination, and impact offers a promising lens to address these gaps [14]. Research suggests that empowered employees demonstrate more significant commitment, job satisfaction, and retention [15,16]. However, the potential mediating role of empowerment in the TMP–retention relationship remains underemployed, particularly in resource-constrained contexts where talent retention poses unique challenges [17].

These challenges are acutely evident in São Tomé and Príncipe (STP), where labor market dynamics create exceptional retention pressures. Recent policy changes, notably Portugal's simplification of visa applications for CPLP members (Law 18/2022; Regulatory Decree No. 4/2022), have accelerated the brain drain, with skilled professionals increasingly migrating abroad [18]. This exodus, combined with STP's small population and geographic isolation, has created an urgent need for context-specific retention strategies [19].

Therefore, this study examines how TM practices enhance employee retention in STP, focusing on psychological empowerment as a mediating mechanism. Our research makes three key contributions. First, it extends TM theory by elucidating the psychological pathways linking TMPs to retention outcomes. Second, it provides empirical evidence from STP's understudied labor market context. Third, it offers practical insights for organizations operating in similar resource-constrained environments. The findings will inform tailored approaches to talent retention that account for universal psychological principles and context-specific constraints.

2. Literature Review and Hypothesis Formulation

2.1. Talent Management

Today's dynamic and competitive business environment has made talent management an essential component of corporate success. Early researchers, such as Cappelli [20], argued that TM involves recognizing, nurturing, and strategically utilizing individuals who possess the necessary skills and abilities to propel the organization toward its goals, a process he defines as identifying, developing, and deploying individuals possessing the competencies required to accomplish the organizational objective, turning identifying and developing the right talent into one of the key challenges in talent management. Lewis and Heckman [21] pointed out that the war for talent is about finding the best people and creating a setting that fosters their development and growth. This means that companies must take a strategic approach to managing their workforce that aligns with their overarching company goals [22]. Organizational performance has been demonstrated to improve using talent management techniques. Organizations that used talent management strategies like leadership development, succession planning, and performance management reported improved organizational performance, as stated by Scullion and Cullings [23]. Likewise, Kim and McLean [24] discovered a favorable correlation between corporate culture and talent management strategies, which correlated with job satisfaction and employee engagement.

However, it is crucial to consider the context in which talent management is implemented. According to Sparrow et al. [25], effective talent management requires an awareness that it is a customized process that must be tailored to each organization's unique requirements and circumstances rather than a general approach. According to Hewlett et al. [26], this is especially crucial in companies with diverse workforces since talent management procedures need to be customized to fit the requirements of various employee groups.

According to Ulrich et al. [27], HR managers' perceptions of talent management methods were correlated with their talent philosophies, which were linked to the competencies

needed for effective talent management. The three talent theories that were found by the study were leadership talent, organizational talent, and individual development. According to the study, HR managers with a more organizational-focused personnel mindset were more likely to use leadership development and succession planning. Modern talent management has evolved from static role filling to a dynamic, systemic process where organizations and employees co-create value through ongoing adaptation [28,29]. This perspective recognizes that critical roles and required competencies shift continuously. Cappelli and Keller [30] found that there is a 28–32% role transformation every 3 years in professional services. Employee aspirations and organizational needs exist in constant negotiation, and TM systems must balance organizational imperatives with individual growth trajectories [31,32].

Contemporary talent management operates as a complex adaptive system where organizations and employees co-create value through ongoing partnerships [33]. Building on Ibarra's [34] work on protean careers, we conceptualize TM as a bidirectional negotiation of expectations and opportunities, an emergent process where both organizational needs and individual aspirations evolve dynamically, and a portfolio of flexible practices that support mutual adaptation [35,36].

2.2. Employee Retention

Employee retention refers to an organization's ability to retain its workforce over time. Research suggests this capacity is influenced by factors such as employee trust in management and affective commitment to the organization [37]. Therefore, the company needs to maximize retention by raising the percentage of employees who want to stay with the company instead of quitting because of pressure from the company. Employee retention has been a major topic of study in the academic literature of human resource management since knowledge has become a crucial economic asset [38]. The broad definition of employee retention is the capacity to maintain a consistent human resource. Trust and organizational passion are often linked to this.

In social businesses, employee retention is essential, especially in the healthcare sector, where the loss of seasoned staff can negatively affect patient care [39]. Since high staff turnover rates in social organizations can result in lower output, more recruiting expenses, and a negative impact on organizational performance, they have been a concern in recent years [40].

According to Eisenberger et al. [41], various factors affect employee retention, including organizational culture, leadership style, employee engagement, job satisfaction, career development opportunities, and perceived organizational support. For instance, a study on the impact of talent retention tactics on employees' attitudes toward their jobs found that employees are likelier to remain with a company that supports them [42]. According to a different study on the motivation and retention of primary healthcare workers in rural health facilities, the important factors affecting the retention of trained healthcare professionals include organizational support, career development possibilities, and job satisfaction [43].

Perceived organizational support has been found to play a significant role in employee retention, with employees who feel supported by their organization being more likely to return favorably with favorable attitudes and actions, such as increased job satisfaction and retention [41]. This is consistent with the social exchange theory, which posits that employees form relationships with their organizations based on exchanging benefits and rewards [44]. Employees who feel that their organization provides adequate benefits and rewards are likelier to stay with it. Employees who feel supported by their organization are

more likely to stick with it, especially in the face of difficult working conditions, according to another study on the effect of perceived organizational support on employee retention [42].

According to these research findings, companies can increase employee retention by offering them sufficient advantages and incentives, like chances for professional growth, job satisfaction, and organizational support [41]. Additionally, research indicates that maintaining talent is critical for employee well being and corporate performance [45]. Reduced stress, better mental health, and job satisfaction are all more likely for workers who feel supported by their company [41].

2.3. Psychological Empowerment

Psychological empowerment has emerged as a key focus in organizational behavior research, particularly for its demonstrated effects on employee motivation and retention [46]. According to Thomas and Velthouse [47], it describes the procedure for giving people the freedom to guide their work and make choices that impact their position and company. As important as assigning work or granting workers more autonomy is creating an atmosphere where people feel secure, knowledgeable, and inspired enough to take responsibility for their jobs [14]. Psychological empowerment's four dimensions (impact, competence, self-determination, and meaning) operate energetically with psychological contract theory [48]. When organizations fulfill talent management obligations through empowerment practices (e.g., skill development, decision-making autonomy), employees perceive this investment as honoring the relational contract [49]. This triggers reciprocal commitment through social exchange processes, particularly in contexts like São Tomé and Príncipe where formal contracts may be limited. The psychological contract thus provides the "why" behind empowerment's retention effects—employees who feel their implicit expectations are met through TM interventions are more likely to reciprocate with organizational commitment [50].

Impact refers to the sense of making a difference and influencing the organization [51]. According to Martinko and Gardner [52], the impact is the opposite of learned helplessness. Furthermore, impact and locus of control are not the same thing. While the work environment influences impact, internal locus of control is universal.

Being competent is having the ability and effectiveness to perform one's job [53]. According to Bandura [54], competence is comparable to agency beliefs, personal mastery, or effort–performance expectancy.

An employee's sense of purpose and significance in their work is called meaning [47], which is the alignment of beliefs, attitudes, and actions with the demands of a job [55,56].

The autonomy and freedom to choose and act are referred to as self-determination [57]. Making choices regarding work methods, pace, and effort are instances of self-determination, demonstrating autonomy in the beginning and continuance of work behaviors and processes [58,59]. These four components are critical in understanding how psychological empowerment affects employee outcomes. Afram et al. [13] found that employee empowerment and organizational performance have a positive link, highlighting the impact of empowerment on overall organizational success.

This study discovered that employee empowerment is a precursor to enhanced employee engagement, showing a higher level of job satisfaction, motivation, and commitment, contributing to a more productive and efficient workforce [60].

Extant research has also shown that psychological empowerment positively impacts employee outcomes such as job satisfaction, organizational commitment, and retention [61]. Psychological empowerment was positively correlated with organizational commitment and job satisfaction among hotel sector employees, according to Seibert [46].

These findings are also supported by a recent study by Wang and Li [62], which states that employees benefit from empowered leadership through the mediating role of psychological empowerment. Furthermore, a meta-analytic review by Zhang and Bartol [63] found that empowering leadership impacted employee creativity and that there was a mediating role of psychological empowerment in this relationship. Stanescu et al. [64] found that empowering leadership impacted employee innovation behavior through psychological empowerment's mediating role, highlighting the importance of empowering leadership in promoting employee innovation likely to feel empowered, increasing retention [65]. Lee and Ok [66] also found that empowering leadership had a positive impact on employee job satisfaction and organizational commitment through the mediating role of psychological empowerment, highlighting the importance of empowering leadership in promoting employee job satisfaction and organizational commitment.

2.4. Relationship Between Talent Management and Employee Retention

Talent management practices have significantly impacted employee retention across various industries and organizational settings [67–69]. Studies conducted in private universities, small- and medium-sized enterprises, and IT firms consistently demonstrate a positive relationship between effective talent management strategies and improved employee retention rate settings [67,69,70].

It is interesting to note that although most research backs up this association, certain studies point out other elements that affect how well talent management works to keep personnel.

According to Alqudah et al. [67], information sharing has favorably influenced the relationship between employee engagement and retention. Additionally, organizational trust plays a significant role in moderating how employee retention is affected by talent management [68,71]. According to this study, talent management strategies can also improve employee outcomes, including engagement and job satisfaction. A study by Jiang et al. [72] found that workers who thought their companies had a good talent management system expressed greater engagement and job satisfaction. Similarly, a study by Park and Kim [73] found that talent management tactics and employee retention were highly correlated.

The literature concludes that a company's capacity to retain valuable personnel can be greatly improved by implementing comprehensive talent management procedures [74,75]. When developing and implementing talent management strategies, companies must consider factors such as organizational trust, employee engagement, and the specific needs of their workforce [70]. In light of the explanation above, this study could suggest that talent management improves employee retention. Consequently, the following theory was put forth by this study:

Hypothesis 1 (H1). *Talent management will be positively associated with employee retention.*

2.5. Relationship Between Talent Management and Psychological Empowerment

Talent management and psychological empowerment have a synergistic relationship in which good talent management techniques directly increase employees' sense of empowerment. Recruiting, training, and retaining talented workers is known as talent management, and it offers them opportunities for advancement, fulfilling employment, and recognition. The extant literature recognizes that identifying critical positions within an organization is a key component of successful talent management [76,77]. Organizations can strategically align their TM practices, including succession planning, reward, development, and recruitment, with the aspects of psychological empowerment by focusing on identifying critical positions [14,78]. Meaning, competence, self-determination, and impact are the four main psychological empowerment components fostered by these variables.

Talented individuals possess exceptional abilities and are successful in various tasks or roles within a specific sector, as claimed by Deery and Jago [79]. Thunnissen et al. [11] state that TMPs such as recruiting, identifying, choosing, training and development, succession planning, and keeping bright workers valuable to a company help grow their potential. Organizational performance and results, such as job happiness, productivity, and, ultimately, psychological empowerment, are impacted when TM is implemented [80]. According to Maynard et al. [81], psychological empowerment is a comprehensive kind of employee motivation that is a primary driving force for immediate success and long-term sustainable performance. According to Oseghale et al. [82], training enhances the abilities necessary to accomplish organizational goals. It also boosts group, individual, and organizational efficiency, giving workers a sense of empowerment and accomplishment [83].

Another TMP is career management, often known as succession planning, which is a technique used to ensure businesses or institutions use their skilled personnel by assigning them to the appropriate positions at every organizational level. According to De Vos and Dries [9], the employees are the primary focus of succession planning. In succession planning, additional horizontal or vertical promotion is considered, i.e., whether an employee's talents will be enhanced in the same role or promoted to a higher level [84–86]. Accordingly, talent management techniques improve workers' psychological empowerment [46,87]. Furthermore, organizational culture and leadership style are examples of contextual elements that impact the relationship between psychological empowerment and talent management. To maximize the performance of HR systems, including talent management methods, Lepak and Snell [88] stress the importance of matching them with organizational practices. The favorable impacts of talent management on psychological empowerment, for instance, can be enhanced by an inclusive and encouraging corporate culture. Similarly, leadership style has a significant impact on shaping employees' perceptions of empowerment. Transformational leadership, which cultivates trust, inspiration, and personalized attention, can strengthen the effect of talent management on psychological empowerment, according to Den Hartog and Belschak [89]. These contextual elements highlight the interconnectedness of psychological empowerment and talent management, indicating that their relationship is not discrete but rather integrated. Therefore, this study made the following hypothesis based on the arguments above:

Hypothesis 2 (H2). *Talent management will be positively associated with psychological empowerment.*

2.6. Relationship Between Psychological Empowerment and Employee Retention

Psychological empowerment has been shown to have a significant positive relationship with employee retention and related factors. Studies have found that psychological empowerment, as conceptualized by Spreitzer [14], is positively associated with organizational commitment, work engagement, and employee retention [67,90,91]. The dimensions of psychological empowerment, including meaningfulness, self-efficacy, impact, and self-determination, have been found to predict organizational learning and commitment [90,92].

Interestingly, while most studies support a positive relationship between psychological empowerment and retention-related outcomes, there are some contradictions. For instance, Safari et al. [92] found no significant relationship between trust (a component of psychological empowerment) and organizational learning. Furthermore, Bani et al. [90] needed to discover a connection between organizational commitment and expertise.

In general, psychological empowerment is a key component of talent retention plans. Several organizational factors and employee outcomes have been demonstrated to be mediated by it [93–95]. Employers who want to increase employee psychological empowerment can introduce practices like meaningful work, self-efficacy, and self-determination [96,97].

Klerk [98] asserts that psychological empowerment and retention are significantly correlated. He concluded that training leaders to empower their employees would benefit businesses. This would result in higher levels of psychological empowerment, employee engagement, and talent retention. Thus, the following hypothesis was established based on the logic above:

Hypothesis 3 (H3). *Psychological empowerment will be positively associated with employee retention.*

2.7. The Mediating Role of Psychological Empowerment in the Relationship Between Talent Management and Employee Retention

Psychological empowerment is a key mediating factor in the relationship between talent management and employee retention, enhancing the impact of talent management tactics on employee engagement and loyalty. When organizations invest in talent management strategies, such as skill development, career progression opportunities, and recognition programs, they promote a sense of autonomy and competence among employees. Workers are more likely to be content with their occupations and remain with the company if they feel more connected [99,100]. As a result, businesses that successfully integrate psychological empowerment into their talent management initiatives usually see lower turnover rates and greater retention rates.

Moreover, by fostering psychological empowerment, organizations can strengthen the emotional connection between employees and the workplace, which increases their commitment and reduces the likelihood of voluntary turnover [101]. Talent management strategies that focus on employees' well being, growth, and recognition improve individual performance and contribute to a more stable and loyal workforce [14,47]. Psychological empowerment plays a crucial role in enhancing the effectiveness of talent management by regulating the relationship between employee retention and talent management tactics. Employee empowerment is expected to improve retention and give businesses a more resilient and long-lasting workforce [99,100].

Development and career possibilities have a psychological impact on employee satisfaction. Schuckert et al. [102] state that psychological empowerment creates a foundation for employees' creative activity. In light of this, it can be concluded that TM is a useful medium for increasing PE to meet employee innovative work behavior (IWB). Therefore, the arguments above support and point to the following hypothesis:

Hypothesis 4 (H4). *Psychological empowerment will mediate the positive relationship between talent management and employee retention.*

2.8. Significance of This Study for São Tomé and Príncipe

This study is important for São Tomé and Príncipe because it can address important workforce issues in the particular setting of an island nation with a growing economy. Among the issues facing São Tomé and Príncipe are a lack of skilled workers, a competitive global labor market, and financial limitations. The competitive global labor market, a shortage of experienced employees, and financial limitations are challenges that São Tomé and Príncipe face in their attempts to retain qualified experts. The processes that increase employee retention must be understood and improved to promote sustainable development, lessen brain drain, and promote local knowledge.

The talent management techniques discussed in this paper can help São Tomé and Príncipe develop a capable workforce. Businesses in this sector might gain from effective people management by creating strategies that boost psychological empowerment among employees, which would raise commitment, motivation, and job satisfaction.

2.9. Conceptual Model

The conceptual model in this study explores the interplay between talent management, psychological empowerment, and employee retention. Specifically, this model investigates the indirect and direct impact of talent management on employee retention and the mediating influence of psychological empowerment (Figure 1).

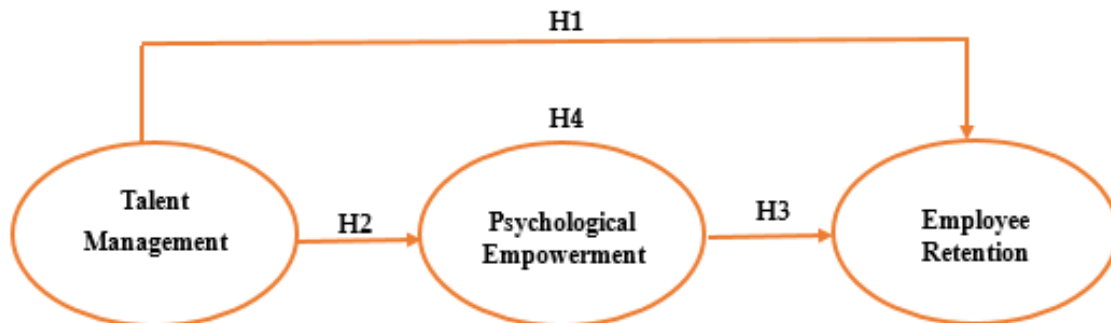


Figure 1. Conceptual model. (Source: authors' own figure).

According to Hypothesis 1 (H1), talent management positively impacts employee retention. Retaining top talent requires effective talent management techniques that foster employee engagement and satisfaction, which include hiring, training, and career development [103,104].

According to Hypothesis 2 (H2), talent management positively impacts psychological empowerment. Talent management techniques improve employees' views of autonomy, competence, and impact by providing worthwhile possibilities for professional growth and recognizing individual contributions [14,105].

Hypothesis 3 (H3) shows that psychological empowerment and employee retention are positively correlated. Workers who feel empowered are more likely to be committed and satisfied with their jobs, which reduces the likelihood that they will leave the company [14,46].

According to Hypothesis 4 (H4), the relationship between talent management and employee retention is mediated by psychological empowerment. In addition to having an indirect or direct impact on retention, talent management programs also promote empowerment, which increases workers' motivation to stick with the company [14,47].

This conceptual model, which considers both the direct effects of talent management and the intermediary role of psychological empowerment, can help us fully understand the relationship between talent management and employee retention.

3. Method

3.1. Research Design

The empirical investigation was carried out in São Tomé and Príncipe (STP), with a focus on the public and private sectors, including industries such as energy and resource management, tourism, transportation, communication, manufacturing, finance, and trade. While this broad scope allowed us to capture a wide range of organizational contexts, we did not explicitly explore the nuanced differences between sectors in our analysis.

3.2. Sample Size and Procedures

A structured questionnaire instrument with two sections was utilized to collect data. In the first, demographic data were gathered which focused primarily on gender, age, and academic qualification due to constraints in data collection and the availability of detailed information. The items assessing talent management, psychological empowerment, employee retention, and organizational culture were the main focus of the second portion.

A sample size of 226 employees across public and private sectors in Sao Tome and Principe was chosen to test the hypotheses from all the sectors with a population of 10,000. This number was determined using the Krejcie and Morgan table, a widely recognized method for calculating sample sizes in research with a t-value of 1.96 for alpha of 0.05 and a degree of accuracy of 0.05 for categorical data [106]. The researchers used an online questionnaire to gather information from various sectors. A survey questionnaire is one of the easiest and most common methods for collecting data because it can quickly reach many respondents, is cost effective, and allows respondents the freedom to answer challenging questions without the concern of being judged or rejected by the researcher. Consequently, an online survey questionnaire was used to obtain the most pertinent information for assessing the role of talent management in enhancing employee retention. In the survey cover letter to sectors, we clarified that participation was optional and that confidentiality would be maintained. The research was conducted for a period of 8 months from April 2024 to October 2024. Respondents were asked to indicate their level of agreement using a 5-point Likert scale (strongly agree, agree, not sure, disagree, and strongly disagree) with statements regarding the role of talent management in enhancing employee retention across various sectors.

3.3. Measures

The survey items were adopted from established scales in prior studies and adapted to the São Tomé and Príncipe (STP) context. The translation process involved three key steps: (1) a bilingual expert translated the items into Portuguese, followed by back-translation into English by an independent translator to ensure accuracy; (2) a panel of local experts reviewed the translated items for cultural relevance and clarity; and (3) the adapted survey was pilot tested with a small sample to identify and resolve any issues related to comprehension or interpretation. Talent management was measured using a 4-item subscale focusing on identifying critical positions, adopted by Jayaraman et al. [107]. An example item is “My institution identifies the critical positions aligned with business strategies”. Employee retention was measured using an 11-item scale adopted by Iqbal [108] and Kyndt [109], with both scales utilizing the validated Portuguese version developed by Schuch [110]. An example item is “I love working for this institution”. Psychological empowerment dimensions, meaning, competence, self-determination, and impact were measured using the measuring empowerment questionnaire with a total of 12 items adopted from Nasar [111] and Spreitzer [14] and employed the validated Portuguese version developed by Serrenho [112]. Example items are “The work that I do is very important to me” (meaning); “I have mastered the skills necessary for my job” (competence); “I have significant autonomy in determining how I do my job” (self-determination); and “I have significant influence over what happens in my department” (impact).

3.4. Statistical Tools for Data Analysis

Multiple regression, frequency distribution, mean, standard deviation, and other descriptive statistics were analyzed using the Statistical Package for Social Sciences (SPSS) version 27. Confirmatory factor analysis (CFA) was also conducted using Analysis of Moment Structure (AMOS) version 27. The mediating effects were examined using the Hayes Process Macro. A statistical method used in multivariate statistics to explain the initial structure of a sizable collection of variables is called exploratory factor analysis, or EFA [113]. Following the EFA procedure, reliability, discriminant validity, and numerous other statistical analyses are examined using confirmatory factor analysis (CFA). Additionally, the CFA test improves comprehension of the constructs’ nature. Internal consistency reliability, indicator reliability, convergent validity, and discriminant validity are used

to validate the measurement model throughout the EFA and CFA. Cronbach's alpha or composite dependability (CR) assesses internal consistency and dependability.

4. Results and Discussion

4.1. Demographic Characteristics

The statistics summary of the respondent's demographic is presented in Table 1, which contains the gender, age bracket, and education level. For gender, the sample is predominately female at 58.4%, while 41.6% of respondents were males out of a total of 226 respondents. This distribution shows that there is a noticeable predominance of females in the sample, reflecting a gender imbalance. This imbalance in gender may reflect the demographic patterns in the sectors the sample was taken from. In the age range distribution of the respondents, the largest age range is 44.2%, which lies within 31–40 years with a total of 100 respondents. The next significant age range is 34.5%, which has a total of 78 respondents and lies above 40 years, while 20.4% with 46 respondents is within the range of 21–30 years. Below 20 years, we have a few respondents with 0.9% or two respondents. With regards to educational level, 3.5%, or eight respondents, had a high school certificate, while 7.1%, or sixteen respondents, had a diploma. Also, 124 of the respondents, the highest percentage (54.9%), had a degree, followed by 78 respondents, 34.5%, who had a master's degree and above.

Table 1. Statistical summary of respondent's demographic information.

Item	Categories	Frequency	Percentage (%)	Mean	Std.
Gender	Male	94	41.6	1.58	0.494
	Female	132	58.4		
Age range	Below 20 years	2	0.9	3.12	0.756
	20–30 years	46	20.4		
	31–40 years	100	44.2		
	Above 40 years	78	34.5		
	High school certificate	8	3.5		
Educational level	Diploma	16	7.1	3.20	0.720
	Degree	124	54.9		
	Master's and above	78	34.5		

Sample size (N = 226).

4.2. Exploratory Factor Analysis (EFA)

Factor analysis was performed to ascertain the fundamental link between the construction indicators. This method assists in quantitatively distilling indicators into a comprehensible framework, according to Saunders [114]. Given its ability to identify indicators for developing the relationship model more accurately, the factor analysis was deemed appropriate.

EFA is used to prepare the datasets to evaluate measurement models. The datasets satisfied all reliability and validity requirements, and the various rounds of analysis supported the expected loadings for the observed variables. Varimax rotation and Kaiser normalizations were used with principal component analysis to reduce the data. The rotation converged into five iterations to classify the variables into the appropriate components and attain parsimony. Additionally, because the factor analysis is theoretically based and adheres to Marcoulides [115], the fixed number of factors option was chosen for the extraction. The results categorized the variables into three factors and demonstrated sufficient correla-

tions between the variables for additional insightful model analysis. The dataset verified the observed variables' validity, reliability, and loadings to reach the required criteria.

In examining the sampling adequacy, Kaiser–Meyer–Olkin (KMO) measured the sampling adequacy index. The permissible range for KMO measurements of sample adequacy is 0.70, according to Saunders [114]. We used Bartlett's test of sphericity to analyze the correlation matrix's factorability.

According to Table 2's findings, factor analysis was suitable for the model since the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was 0.818, higher than the 0.70 criterion. Furthermore, Bartlett's test of sphericity has degrees of freedom at 91 and a chi-square approximation of 2257.239, which is significant (p -value < 0.05).

Table 2. KMO and Bartlett's test of our model.

Kaiser–Meyer–Olkin	0.819	
Bartlett's Test of Sphericity	Approx. Chi-Square	2257.239
	Df	91
	Sig.	0.000

The variables' identified commonalities were another crucial metric that was looked at, and by determining the indicators to extract, communities extracted on each variable were evaluated. Similarly, for the first iteration, communality values of a potentially relevant variable must produce an extraction value (eigenvalues) larger than 0.50 [116]. Conventional high values of 1.0 and 0.5 were used for the eigenvalue and factor loadings, respectively [116]. The majority of the items in the commonality extraction had acceptable loadings above 0.5 and showed a cumulative extraction sum of squared loadings for the three factors, revealing a total variance of 68.316% (please see Table S1 in the Supplementary Material for total variance explained). This demonstrated adequate correlations between the items created for the model's construct. A rotated component matrix was used to the easily determine, identified and interpret values. During factor analysis, several items were deleted based on statistical and theoretical grounds [117], including items with low factor loadings (<0.50), cross-loadings, or cultural misinterpretation, as identified during pilot testing. This rigorous process ensured the reliability, validity, and cultural appropriateness of the measures for the STP.

4.3. Confirmatory Factor Analysis (CFA)

In confirmatory factor analysis (CFA), we reflectively modeled each indicator with its corresponding latent constructs. The imports from the CFA justify and confirm the relationships between the observed measures and their corresponding latent variables. As discrepancies were outlined, the observed modification indices were examined to determine further opportunities to improve the model. Accordingly, the error term measurement items were co-varied to obtain a decent fit for the research measurement model. We evaluated the measurement models' fit by various indices provided by AMOS, including the Tucker–Lewis fit index, comparative fit index (CFI), degrees of freedom (dfs), incremental fit index (IFI), root mean square error of approximation (RMSEA), and normed fit index (NFI). The results of the CFA in our model revealed ($\chi^2 = 169.129$, $df = 68$, $p < 0.001$, CFI = 0.955, TLI = 0.939, IFI = 0.955, NFI = 0.927, RMSEA = 0.081, RMSEA 90% CI [0.066, 0.097] (please see Table S2 in Supplementary Material statistics of the measurement model fit indices). The measured index values in our model met the thresholds to a significant extent, indicating that the mea-

surement model has acceptable predictive power. Nevertheless, the model demonstrated satisfactory results since all important metrics [118] were satisfied.

The model exhibits a good fit based on the assessment criteria for the current CFA model. Additionally, all computed estimates for the path of the items to their latent variables were, in the majority of cases, sufficiently higher than 0.50, which further affirms the values obtained for the fit indexes. Once more, the standardized residual co-variances were consulted to outline discrepancies in the proposed and estimated models (please see Table S3 in the Supplementary Material for factor loadings and construct validity of model testing).

4.4. Validity and Reliability

The ability of an instrument to assess its intended purpose for a latent component is known as validity. Each measurement model in this research was subjected to convergent and discriminant validity. As indicated by Table S3 and Figure 2 (i.e., factor loadings and construct validity of model testing), convergent validity is attained in this research once every item in the measurement model demonstrates statistical significance in the model. The convergent validity was also confirmed after calculating the average variance extracted (AVE). The amount of the construct that is extracted is indicated by the AVE. For each construct to be considered genuine, its AVE must be 0.5 or higher. Our model's AVE in this investigation varied from 0.563 to 0.721. Therefore, as indicated in Table 3, every AVE value was greater than 0.5. This implies that all measures recorded a high degree of reliability. Accuracy measurement is the focus of construct validity. It is exemplified by discriminant validity and convergent validity [114] and suggests that convergent validity be assessed using the following three standards: (1) CR should be 0.7 or higher to indicate adequate convergence or internal consistency; (2) variance extracted (VE) should be 0.5 or greater to suggest adequate convergent validity; and (3) all standardized factor loading estimates (found in Table S4) should be greater than 0.5, ideally 0.7 or higher. Our model satisfied all three requirements, according to the CFA results in Table 3.

Table 3. Pattern matrix ^a.

	Rotated Component Matrix ^a		
	Component		
	1	2	3
TM1		0.723	
TM2		0.738	
TM3		0.843	
TM4		0.872	
PE1	0.848		
PE2	0.787		
PE3	0.866		
PE4	0.810		
PE5	0.711		
PE6	0.617		
PE7	0.558		
ER2			0.648
ER4			0.936
ER11			0.931

Extraction method: principal component analysis. Rotation method: Varimax with Kaiser normalization.

^a Rotation converged in 5 iterations.

Discriminate validity refers to a construct different from other constructs and is assessed using a single criterion suggested by Saunders [114]. For any construct, the correlation between all constructs is less than the square root of the average percent of variance

extracted (AVE). The correlation between all constructs is less than the square root of the AVE for each construct, as Table 4 demonstrates. The discrimination validity has also met the conditions.

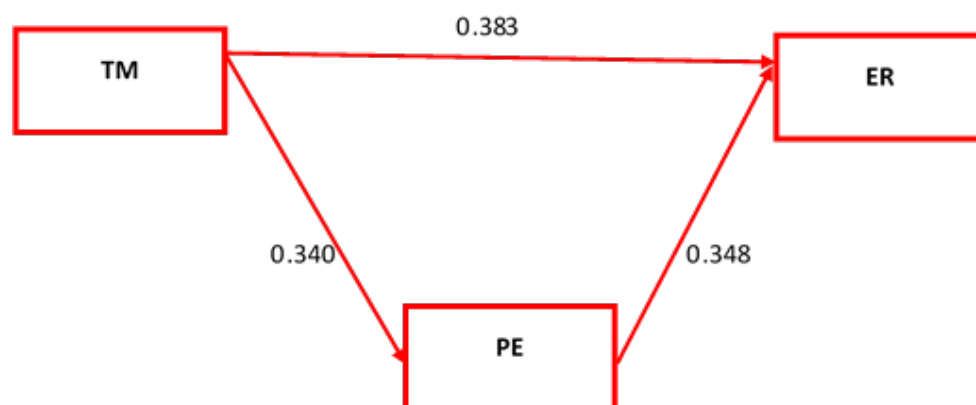


Figure 2. Mediator model.

Table 4. Descriptive statistics, reliability and validity coefficients, and correlations.

Variables	Mean	Standard Dev.	CA	CR	AVE	1	2	3
1 Talent management	2.874	0.872	0.858	0.813	0.634	0.796		
2 Psychological empowerment	3.700	0.721	0.887	0.898	0.563	0.411 ***	0.750	
3 Employee retention	3.160	1.048	0.860	0.883	0.721	0.417 ***	0.370 ***	0.849

*** $p < 0.001$; the diagonal is the square root of the AVE for each construct.

Internal reliability was tested to determine the consistency level of the instruments used in our research. The Cronbach's alpha (CA) value is the indicator used to understand the reliability coefficient for the independent and dependent variables. The CA value in this research ranged between 0.858 and 0.887. This shows that all the constructs were above the minimum requirement of 0.6. The composite reliability (CR) in our study indicated the reliability and internal consistency of the latent constructs. A value of $CR > 0.7$ is required to achieve composite reliability for a construct. Table 3 shows that all CRs ranged between 0.858 and 0.887. This shows that composite reliability criteria were met. Cronbach's alpha values for all constructs, demonstrating high internal consistency (talent management: $\alpha = 0.813$; psychological empowerment: $\alpha = 0.898$; employee retention: $\alpha = 0.883$) and confirmatory factor analysis (CFA), confirmed convergent and discriminant validity, with all factor loadings exceeding 0.5 and average variance extracted (AVE) values above 0.50.

4.5. Hypotheses Test

After confirming the reliability and validity of the measurement, multiple linear regression analysis was conducted using SPSS version 27 at 95% confidence intervals to confirm the hypothesis. The analysis showed a significant model summary. For Hypothesis 1 (H1), $F_{(1224)} = 47.112$, $p < 0.001$, adjusted $R^2 = 0.170$ and $R^2 = 0.174$. The analysis shows that talent management positively impacts employee retention ($\beta = 0.417$, $t = 6.864$, $p < 0.001$). Hence, H1 was supported. For Hypothesis 2 (H2), $F_{(1224)} = 45.479$, $p < 0.001$, adjusted $R^2 = 0.165$ and $R^2 = 0.169$. The analysis shows that talent management positively impacts psychological empowerment ($\beta = 0.411$, $t = 6.744$, $p < 0.001$). Hence, H2 was supported. For Hypothesis 3 (H3), $F_{(1224)} = 35.615$, $p < 0.001$, adjusted $R^2 = 0.133$ and $R^2 = 0.137$. The analysis shows that psychological empowerment and employee retention are positively

correlated ($\beta = 0.370$, $t = 5.968$, $p < 0.001$). Hence, H3 was supported. Table 5 provides a summary of the results for coefficients and the significance of the model.

Table 5. Coefficients and significance of the model.

Model	Model Coefficients					Hypothesis Decision
	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients	t-Value	p-Value	
H1: TM ---> ER	0.501	0.073	0.417	6.864	0.000 **	Supported
H2: TM ---> PE	0.340	0.050	0.411	6.744	0.000 **	Supported
H3: PE ---> ER	0.538	0.090	0.370	5.968	0.000 **	Supported

** path coefficient significant at 1% (0.01).

4.6. Mediating Role Hypothesis Test

To test our mediator hypothesis, we used the PROCESS macro for SPSS version 4.2, with model 4 selected to analyze multiple regression using the bootstrap approach (5000 bootstrap samples) [119]. Support was found for the hypothesis that psychological empowerment (PE) mediated the relationship between talent management and employee retention (ER). As presented in Figure 2 (mediator model) and Table 6 (model summary of the mediator results), TM was positively associated with PE ($a = 0.340$) and PE was positively associated with ER ($b = 0.348$). The direct relationship between TM and ER was significant with PE as mediating ($c' = 0.383$, $p < 0.001$, $95\%CI[0.229, 0.536]$), while for the indirect effect ($ab = 0.118$, $95\%CI[0.046, 0.204]$), suggesting that PE mediates the association between TM and ER (H4 was supported).

Table 6. Model summary of the mediator results.

Outcome Variable		PE					ER					
		B	SE	t	β	p	B	SE	t	β	p	
TM	<i>a</i>	0.340	0.050	6.744	0.411	0.000	<i>c'</i>	0.383	0.078	4.914	0.318	0.000
PE	-	-	-	-	-	-	<i>b</i>	0.348	0.094	3.697	0.240	0.000
<i>R</i> ² = 0.169, 95% CI[0.240,0.439]					<i>R</i> ² = 0.221, 95% CI[0.229,0.536] [0.163, 0.534]							
<i>F</i> (1224) = 45.479, <i>p</i> < 0.001					<i>F</i> (2223) = 31.720, <i>p</i> < 0.001							
Direct effect (s) of TM on ER:												
		Effect			SE			LLCI			ULCI	
		0.383			0.078			0.229			0.536	
Indirect effect (s) of TM on ER:												
		Effect			BootSE			BootLLCI			BootULCI	
PE		0.118			0.039			0.049			0.200	
Completely standardized indirect effect (s) of TM on ER:												
		Effect			BootSE			BootLLCI			BootULCI	
PE		0.098			0.033			0.040			0.167	

4.7. Discussion

The results of this study are extremely important for HRM practices because they highlight how crucial strategic talent management (TM) is to promoting employee retention, particularly when psychological empowerment is considered. These insights give HR executives practical ways to increase company performance regarding employee happiness

and retention while streamlining current operations. According to the first hypothesis (H1), which is consistent with the fundamental ideas of HRM, talent management positively impacts employee retention. Talent management in HRM is more than just finding and employing the top applicants; it also involves making sure that workers stay inspired, engaged, and dedicated to the company throughout time. The findings align with the existing literature that highlights the importance of talent management in reducing turnover rates [77] and also support the idea that HRM should prioritize establishing a structured and supportive work environment for employees, enhancing their experience through ongoing training, career progression, competitive benefits, and satisfying work.

HR professionals should integrate career development opportunities, performance management, training, and reward systems to manage personnel effectively. These approaches directly impact retention rates since they increase organizational commitment and employee engagement. By implementing effective TM, HRM can help organizations build a more loyal and satisfied workforce, ultimately increasing output while lowering turnover-related expenses.

The second significant finding, as per H4, relates to the mediation role of psychological empowerment. The data show that psychological empowerment is major in mediating the relationship between TM and employee retention. In particular, TM encourages a sense of ownership and intrinsic motivation in workers by giving them autonomy, decision-making authority, and chances to improve their skills. Increased corporate commitment and, as a result, higher staff retention result from this improved empowerment. The concept of psychological empowerment is central to understanding why TM impacts retention. Our mediation findings align with those of Xiaoli and Xiaopeng [120]. We uniquely demonstrate that the direct relationship between TM and ER is significant with PE as a mediator ($c' = 0.383$, $p < 0.001$, 95% CI [0.229, 0.536]), while for the indirect effect ($ab = 0.118$, 95% CI [0.046, 0.204]), suggesting that PE mediates the association between TM and ER (H4 is supported).

Empowered employees are likelier to feel a sense of purpose and connection to their work, leading to greater job satisfaction and a reduced desire to leave the organization [14]. According to the results, TM that promotes empowerment is good for personal growth and a major factor in organizational stability. Consequently, HRM should concentrate on tactics that improve psychological empowerment, like decentralized decision making, open communication, and giving workers the tools they need to succeed.

Employee retention can be enhanced by incorporating TM and psychological empowerment into HRM procedures. The report recommends that HR managers create and execute TM strategies that emphasize luring top talent and empowering staff members during their employment.

5. Practical Implications and Recommendations

Addressing the challenges of talent retention in São Tomé and Príncipe (STP), it is evident that this study has significant practical implications. Organizations should prioritize creating an empowering work environment by integrating talent management (TM) practices that foster psychological well being and employee growth. By implementing strategies, such as mentoring programs, internal job rotations, and recognition systems, organizations can enhance psychological empowerment, which not only improves retention but also boosts employee engagement and job satisfaction. Additionally, we propose tailored TM initiatives, including customized succession planning to develop high-potential employees for leadership roles and reward systems to motivate employees and reinforce retention. To further support these efforts, we recommend government-level incentives and region-specific HR policies, such as tax incentives for employee development, public-private

partnerships to fund TM initiatives, and scholarship-and-return programs that provide higher education opportunities abroad with contractual agreements for graduates to work in STP. As highlighted by De Vos and Dries [9], tailoring TM practices to national and cultural contexts is critical for their applicability and effectiveness. These recommendations aim to address STP's unique challenges, such as brain drain and resource constraints, while enhancing the sustainability of talent management efforts.

6. Study Limitation and Future Research

Although this study offers insightful information on the connections among TM, psychological empowerment, and employee retention, more contextual elements that might affect these connections could be investigated in future studies. For example, examining the effects of leadership styles, industry-specific factors, and regional or cultural variations may be useful to understand better how TM methods can be tailored to different organizational contexts. Additionally, longitudinal research may be conducted to assess the long-term effects of TM on employee empowerment and retention. A significant drawback of this research is its cross-sectional methodology, which limits our capacity to deduce causal links between psychological empowerment, employee retention, and TM practices. According to Podsakoff et al. [121], common method bias (CMB) can compromise the validity of the results from single-wave survey research.

Some of the key limitations of our study are the lack of control for certain demographic and occupational variables, such as job type, hierarchical position, and years of professional experience. These variables could play a significant role in shaping talent management practices, psychological empowerment, and retention outcomes. Their omission may introduce confounding biases and limit generalization. The public sector may face distinct challenges related to bureaucratic structures and budget constraints, while the private sector may be more influenced by competitive pressures and profit-driven goals. Similarly, industries such as tourism and energy may have unique operational contexts that shape their talent management strategies. By not delving into these sectoral differences, our study may overlook important confounding factors that could affect the generalization and validity of the findings. Also, its applicability to other locations or businesses is due to its concentration on a particular geographic area (São Tomé and Príncipe).

Other potential mediators or moderators could influence this relationship in the mediating role of psychological empowerment (PE) in the relationship between talent management (TM) and employee retention (ER). For instance, perceived organizational support (POS), leader-member exchange (LMX), and career commitment have been shown to play significant roles in employee retention and could be explored in future studies. To strengthen the argument for PE as the key mechanism, future research could test comparative mediation models, examining the relative importance of PE alongside other mediators. Additionally, moderated mediation models could be used to investigate how contextual factors, such as organizational culture or leadership style, influence the TM-PE-ER relationship. These approaches, as discussed by Hayes [119], would provide a more comprehensive understanding of the underlying processes and boundary conditions.

Future studies should aim to incorporate these additional variables to provide a more comprehensive understanding of the factors influencing talent management, psychological empowerment, and employee retention, consider longitudinal designs to offer stronger proof of causality, and also conduct more granular analyses of sector-specific dynamics. This could involve comparing talent management practices and outcomes across different industries or examining how sectoral characteristics moderate the relationships between psychological empowerment and retention. Such studies would provide deeper insights into the contextual factors that shape organizational behavior in small, developing

economies, like STP. We also suggest that future research should highlight the necessity of a longitudinal design to solve these constraints. This would give more proof of causal links and enable an analysis of changes over time. Additionally, adding time-lagged or multi-source data, as recommended by Podsakoff et al. [121], may lessen CMB and improve the findings' robustness.

7. Conclusions

This study's findings highlight how important psychological empowerment (PE) and talent management (TM) are to improving employee retention (ER) in the human resource management (HRM) domain. In particular, the results show that TM and ER are highly correlated, with PE mediating this association. HR practitioners can create more successful retention strategies if they comprehend the complex interplay between TM, PE, and ER. HRM may establish a workplace where workers feel appreciated, inspired, and driven to contribute significantly to the company's success by funding talent management initiatives that empower staff members. Additionally, the analysis validates this study's findings, showing that PE mediates the relationship between TM and ER, TM positively affects PE, and TM favorably impacts ER.

This proves that increasing employee empowerment is essential to raising retention rates. HRM may cultivate devoted and engaged staff by emphasizing talent management and empowerment to maintain a competitive edge in the modern workplace. The outcomes of this research emphasize that effective talent management strategies that prioritize employee empowerment are beneficial for employee satisfaction and vital for long-term retention and organizational success [122,123].

Supplementary Materials: The following supporting information can be downloaded at <https://www.mdpi.com/article/10.3390/su17073277/s1>, Table S1: Statistics summary of respondents demographic information; Table S2: Total variance explained; Table S3: Statistics of the measurement model fit indices; Table S4: Factor Loadings and Construct Validity of Model Testing; Figure S1: Construct with 27 items; Figure S2: Construct with 14 items

Author Contributions: Conceptualization, D.B.S.M.; methodology, D.B.S.M.; formal analysis, D.B.S.M.; data curation, D.B.S.M. and K.K.; writing—original draft preparation, D.B.S.M. and M.G.; writing—review and editing, D.B.S.M., K.K. and M.G. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: All participants provided written informed consent before completing the survey, in accordance with the Declaration of Helsinki, and researchers guaranteed the anonymity of data. The Ethics Committee of the University of Electronic Science and Technology determined that our data collection posed no risk and was thus exempt from ethics submission.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. Written informed consent was obtained from the participant(s) to publish this paper.

Data Availability Statement: Data are available upon request due to restrictions.

Acknowledgments: We extend our heartfelt gratitude to all participants who graciously shared their valuable time and insights for this study.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Pasban, M.; Nojehdeh, S.H. A Review of the Role of Human Capital in the Organization. *Procedia-Soc. Behav. Sci.* **2016**, *230*, 249–253.

2. Gallardo-Gallardo, E. The meaning of talent in the world of work. In *Global Talent Management*; Taylor&Francis Group: Abingdon, UK, 2018; pp. 33–58.
3. Gallardo-Gallardo, E.; Thunnissen, M.; Scullion, H. Talent management: Context matters. *Int. J. Hum. Resour. Manag.* **2019**, *31*, 457–473. [\[CrossRef\]](#)
4. Haslberger, A.; Vaiman, V. Self-initiated expatriates: A neglected source of the global talent flow. In *Talent Management of Self-Initiated Expatriates: A Neglected Source of Global Talent*; Palgrave Macmillan: London, UK, 2013; pp. 1–15.
5. Gooderham, P.N.; Mayrhofer, W.; Brewster, C. A framework for comparative institutional research on HRM. *Int. J. Hum. Resour. Manag.* **2019**, *30*, 5–30.
6. Malik, F.; McKie, L.; Beattie, R.; Hogg, G. A toolkit to support human resource practice. *Pers. Rev.* **2010**, *39*, 287–307. [\[CrossRef\]](#)
7. Farashah, A.; Blomquist, T.; Al Ariss, A.; Guo, G.C. Perceived employability of skilled migrants: A systematic review and future research agenda. *Int. J. Hum. Resour. Manag.* **2023**, *34*, 478–528. [\[CrossRef\]](#)
8. Sumarni, M. Pengaruh employee retention terhadap turnover intention dan kinerja karyawan. *Akmenika Upy* **2011**, *8*, 20–47.
9. De Vos, A.; Dries, N. Applying a talent management lens to career management: The role of human capital composition and continuity. *Int. J. Hum. Resour. Manag.* **2013**, *24*, 1816–1831.
10. Kontoghiorghe, C. Linking high performance organizational culture and talent management: Satisfaction/motivation and organizational commitment as mediators. *Int. J. Hum. Resour. Manag.* **2016**, *27*, 1833–1853. [\[CrossRef\]](#)
11. Thunnissen, M.; Boselie, P.; Fruytier, B. A review of talent management: ‘infancy or adolescence?’. *Int. J. Hum. Resour. Manag.* **2013**, *24*, 1744–1761.
12. Pawar, A.; Cahyono, B.T.; Indrati, K.; Siswati, E.; Loupias, H. Validating the effect of talent management on organisational outcomes with mediating role of job empowerment in business. *Int. J. Learn. Intellect. Cap.* **2022**, *19*, 527–547.
13. Afram, J.N.; Manresa, A.; Mas-Machuca, M. The impact of employee empowerment on organisational performance: The mediating role of employee engagement and organisational citizenship behaviour. *Intang. Cap.* **2022**, *18*, 96–119.
14. Spreitzer, G.M. Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Acad. Manag. J.* **1995**, *38*, 1442–1465.
15. Fernandez, S.; Moldogaziev, T. Empowering public sector employees to improve performance: Does it work? *Am. Rev. Public Adm.* **2011**, *41*, 23–47.
16. Kim, S.Y.; Fernandez, S. Employee empowerment and turnover intention in the US federal bureaucracy. *Am. Rev. Public Adm.* **2017**, *47*, 4–22.
17. Kigo, S.K.; Gachunga, H. Effect of talent management strategies on employee retention in the insurance industry. *Strateg. J. Bus. Chang. Manag.* **2016**, *3*, 977–1004.
18. Jerónimo, P. Mobility and rights in the Portuguese-speaking world: A lusophone citizenship in bits and pieces. In *The Art of Moving Borders: Liber Amicorum Hildegard Schneider*; Eleven: The Hague, The Netherlands, 2022.
19. Burmann, M.; Perez, M.H.; Hoffmann, V.; Rhode, C.; Schworm, S. Highly skilled labour migration in europe. *IFO DICE Rep.* **2018**, *16*, 42–52.
20. Cappelli, P. Talent management for twenty-first century. *Harv. Bus. Rev.* **2008**, *86*, 74.
21. Lewis, R.E.; Heckman, R.J. Talent management: A critical review. *Hum. Resour. Manag. Rev.* **2006**, *16*, 139–154.
22. Boudreau, J.W.; Ramstad, P.M. Talentship, talent segmentation, and sustainability: A new HR decision science paradigm for a new strategy definition. *Hum. Resour. Manag.* **2005**, *44*, 129–136.
23. Scullion, H.; Collings, D.G. Global talent management: Introduction. In *Global Talent Management*; Routledge: Oxford, UK, 2011; pp. 19–32.
24. Kim, J.; McLean, G.N. An integrative framework for global leadership competency: Levels and dimensions. *Hum. Resour. Dev. Int.* **2015**, *18*, 235–258.
25. Sparrow, P.; Cooper, C. Organizational effectiveness, people and performance: New challenges, new research agendas. *J. Organ. Eff. People Perform.* **2014**, *1*, 2–13. [\[CrossRef\]](#)
26. Hewlett, S.A.; Marshall, M.; Sherbin, L. How diversity can drive innovation. *Harv. Bus. Rev.* **2013**, *91*, 30.
27. Ulrich, D.; Kryscynski, D.; Brockbank, W.; Ulrich, M. *Victory Through Organization: Why the War for Talent Is Failing Your Company and What You Can Do About It*; McGraw-Hill: New York, NY, USA, 2017.
28. Meyers, M.C.; van Woerkom, M.; de Reuver, R.S.; Bakk, Z.; Oberski, D.L. Enhancing psychological capital and personal growth initiative: Working on strengths or deficiencies. *J. Couns. Psychol.* **2015**, *62*, 50–62. [\[CrossRef\]](#)
29. Menezes, D.B.; Gumashvili, M.; Wang, G. The Function of Artificial Intelligence in Business Continuity Management. In Proceedings of the 2024 21st International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP), Chengdu, China, 14–16 December 2024; IEEE: New York, NY, USA; pp. 1–6.
30. Cappelli, P.; Keller, J.R. The historical context of talent management. In *The Oxford Handbook of Talent Management*; Oxford University Press: Oxford, UK, 2017; Volume 1.

31. Kim, S.; Vaiman, V.; Sanders, K. Strategic human resource management in the era of environmental disruptions. *Hum. Resour. Manag.* **2022**, *61*, 283–293. [CrossRef]
32. Swailes, S. Responsible talent management: Towards guiding principles. *J. Organ. Eff. People Perform.* **2020**, *7*, 221–236. [CrossRef]
33. Schiemann, W.A.; Seibert, J.H.; Blankenship, M.H. Putting human capital analytics to work: Predicting and driving business success. *Hum. Resour. Manag.* **2018**, *57*, 795–807. [CrossRef]
34. Ibarra, P. What's Next? *Public Management* 2020. Available online: https://scholar.google.com/scholar?q=Ibarra,+P.+WHAT%E2%80%99S+NEXT?+Public+Management+2020.&hl=en&as_sdt=0,5 (accessed on 1 April 2025).
35. Cappelli, P.; Tavis, A.; Burrell, L.; Barton, D.; Carey, D.; Charan, R. The new rules of talent management. *Harv. Bus. Rev.* **2018**, 16–21.
36. Harsch, K.; Festing, M. Dynamic talent management capabilities and organizational agility—A qualitative exploration. *Hum. Resour. Manag.* **2020**, *59*, 43–61. [CrossRef]
37. Finnegan, R.P. *The Power of Stay Interviews for Engagement and Retention*; Society for Human Resource Management: Washington, DC, USA, 2012.
38. Ekhsan, M.; Parashakti, R.; Sudiro, A. Talent management and employee retention: The partial mediating role of organizational commitment. In Proceedings of the International Conference on Environmental and Technology of Law, Business and Education on Post COVID-19, ICETLAWBE 2020, Bandar Lampung, Indonesia, 26 September 2020.
39. Hurst, E.; Li, G.; Pugsley, B. Are household surveys like tax forms? Evidence from income underreporting of the self-employed. *Rev. Econ. Stat.* **2014**, *96*, 19–33. [CrossRef]
40. Klein, F.; Diskin, R.; Scheid, J.F.; Gaebler, C.; Mouquet, H.; Georgiev, I.S.; Pancera, M.; Zhou, T.; Incesu, R.-B.; Fu, B.Z.; et al. Somatic mutations of the immunoglobulin framework are generally required for broad and potent HIV-1 neutralization. *Cell* **2013**, *153*, 126–138. [CrossRef]
41. Eisenberger, R.; Huntington, R.; Hutchison, S.; Sowa, D. Perceived organizational support. *J. Appl. Psychol.* **1986**, *71*, 500–507.
42. Rhoades, L.; Eisenberger, R. Perceived organizational support: A review of the literature. *J. Appl. Psychol.* **2002**, *87*, 698–714. [PubMed]
43. Dolea, C.; Stormont, L.; Braichet, J.-M. Evaluated strategies to increase attraction and retention of health workers in remote and rural areas. *Bull. World Health Organ.* **2010**, *88*, 379–385. [PubMed]
44. Blau, P.M. Justice in social exchange. *Sociol. Inq.* **1964**, *34*, 193–206.
45. Bakker, A.B.; Demerouti, E. Multiple levels in job demands-resources theory: Implications for employee well-being and performance. In *Handbook of Well-Being*; Noba Scholar: Melbourne, Australia, 2018; Volume 255.
46. Seibert, S.E.; Wang, G.; Courtright, S.H. Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *J. Appl. Psychol.* **2011**, *96*, 981–1003.
47. Thomas, K.W.; Velthouse, B.A. Cognitive elements of empowerment: An “interpretive” model of intrinsic task motivation. *Acad. Manag. Rev.* **1990**, *15*, 666–681.
48. Rousseau, D.M. Psychological and implied contracts in organizations. *Empl. Responsib. Rights J.* **1989**, *2*, 121–139.
49. Zhao, H.; Wayne, S.; Glibkowski, B.C.; Jesus, B. The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Pers. Psychol.* **2007**, *60*, 647–680.
50. Coyle-Shapiro, J.A.; Conway, N. Exchange relationships: Examining psychological contracts and perceived organizational support. *J. Appl. Psychol.* **2005**, *90*, 774–781.
51. Ashforth, B.E. The experience of powerlessness in organizations. *Organ. Behav. Hum. Decis. Process.* **1989**, *43*, 207–242.
52. Martinko, M.J.; Gardner, W.L. Learned helplessness: An alternative explanation for performance deficits. *Acad. Manag. Rev.* **1982**, *7*, 195–204. [CrossRef]
53. Gist, M.E. Self-efficacy: Implications for organizational behavior and human resource management. *Acad. Manag. Rev.* **1987**, *12*, 472–485. [CrossRef]
54. Bandura, A. Human agency in social cognitive theory. *Am. Psychol.* **1989**, *44*, 1175–1184. [CrossRef] [PubMed]
55. Brief, A.P.; Nord, W.R. Work and meaning: Definitions and interpretations. In *Meaning of Occupational Work*; Lexington Books: Toronto, ON, Canada, 1990.
56. Hackman, J.R. Work redesign and motivation. *Prof. Psychol.* **1980**, *11*, 445–455. [CrossRef]
57. Deci, E.L.; Connell, J.P.; Ryan, R.M. Self-determination in a work organization. *J. Appl. Psychol.* **1989**, *74*, 580–590. [CrossRef]
58. Bell, N.E.; Staw, B.M. People as sculptors versus sculpture: The roles of personality and personal control in organizations. In *Handbook of Career Theory*; Cambridge University Press: Cambridge, UK, 1989; pp. 232–251.
59. Spector, P.E. Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Hum. Relat.* **1986**, *39*, 1005–1016. [CrossRef]
60. Froese, F.J.; Jommersbach, S.; Klautzsch, E. Cosmopolitan career choices: A cross-cultural study of job candidates' expatriation willingness. *Int. J. Hum. Resour. Manag.* **2013**, *24*, 3247–3261. [CrossRef]

61. Laschinger, H.K.S.; Finegan, J.; Shamian, J. The impact of workplace empowerment, organizational trust on staff nurses' work satisfaction and organizational commitment. *Health Care Manag. Rev.* **2001**, *26*, 7–23. [[CrossRef](#)]
62. Li, H.; Shi, Y.; Li, Y.; Xing, Z.; Wang, S.; Ying, J.; Zhang, M.; Sun, J. Relationship between nurse psychological empowerment and job satisfaction: A systematic review and meta-analysis. *J. Adv. Nurs.* **2018**, *74*, 1264–1277. [[CrossRef](#)]
63. Zhang, X.; Bartol, K.M. A Cross-Level Integrative Model. In *The Oxford Handbook of Creativity, Innovation, and Entrepreneurship*; Oxford University Press: Oxford, UK, 2018; pp. 31–46.
64. Stanescu, D.F.; Zbucea, A.; Pinzaru, F. Transformational leadership and innovative work behaviour: The mediating role of psychological empowerment. *Kybernetes* **2021**, *50*, 1041–1057.
65. Liu, F.; Chow, I.H.-S.; Zhang, J.-C.; Huang, M. Organizational innovation climate and individual innovative behavior: Exploring the moderating effects of psychological ownership and psychological empowerment. *Rev. Manag. Sci.* **2019**, *13*, 771–789.
66. Lee, A.; Willis, S.; Tian, A.W. Empowering leadership: A meta-analytic examination of incremental contribution, mediation, and moderation. *J. Organ. Behav.* **2018**, *39*, 306–325.
67. Alqudah, N.F. Knowledge sharing and innovation in business organization: A literature review. *Hum. Syst. Manage.* **2023**, *42*, 471–485.
68. Baba, V.V. On globalizing business training in Africa: Toward a theory of business education and managerial competence. *Afr. J. Manag.* **2018**, *4*, 137–157.
69. Ismail, I.I.; Abdelkarim, A.; Al-Hashel, J.Y. Physicians' attitude towards webinars and online education amid COVID-19 pandemic: When less is more. *PLoS ONE* **2021**, *16*, e0250241.
70. Chopra, M.; Balaji, L.N.; Campbell, H.; Rudan, I. Global health economics: The Equitable Impact Sensitive Tool (EQUIST)—development, validation, implementation and evaluation of impact (2011 to 2022). *J. Glob. Health* **2023**, *13*, 04183. [[PubMed](#)]
71. Chitsaz-Isfahani, A.; Boustani, H.R. Effects of talent management on employees retention: The mediate effect of organizational trust. *Int. J. Acad. Res. Econ. Manag. Sci.* **2014**, *3*, 114–128.
72. Jiang, K.; Liu, D.; McKay, P.F.; Lee, T.W.; Mitchell, T.R. When and how is job embeddedness predictive of turnover? A meta-analytic investigation. *J. Appl. Psychol.* **2012**, *97*, 1077–1096.
73. Park, J.; Kim, S. The differentiating effects of workforce aging on exploitative and exploratory innovation: The moderating role of workforce diversity. *Asia Pac. J. Manag.* **2015**, *32*, 481–503.
74. Al-Dalameh, M.; Heder, M.; Dajnoki, K. The effect of talent management practices on employee turnover intention in the information and communication technologies (ICTs) sector: Case of Jordan. *Probl. Perspect. Manag.* **2020**, *18*, 59–71.
75. Narayanan, M.; Chen, E.; He, J.; Kim, B.; Gershman, S.; Doshi-Velez, F. How do humans understand explanations from machine learning systems? An evaluation of the human-interpretability of explanation. *arXiv* **2018**, arXiv:1802.00682.
76. Boudreau, J.W.; Ramstad, P.M. *Beyond HR: The New Science of Human Capital*; Harvard Business Press: Brighton, MA, USA, 2007.
77. Collings, D.G.; Mellahi, K. Strategic talent management: A review and research agenda. *Hum. Resour. Manag. Rev.* **2009**, *19*, 304–313. [[CrossRef](#)]
78. Becker, B.E.; Huselid, M.A. Strategic human resources management: Where do we go from here? *J. Manag.* **2006**, *32*, 898–925. [[CrossRef](#)]
79. Deery, M.; Jago, L. Revisiting talent management, work-life balance and retention strategies. *Int. J. Contemp. Hosp. Manag.* **2015**, *27*, 453–472. [[CrossRef](#)]
80. Lawler, E.J. An affect theory of social exchange. *Am. J. Sociol.* **2001**, *107*, 321–352. [[CrossRef](#)]
81. Maynard, M.T.; Gilson, L.L.; Mathieu, J.E. Empowerment—Fad or fab? A multilevel review of the past two decades of research. *J. Manag.* **2012**, *38*, 1231–1281. [[CrossRef](#)]
82. Oseghale, R.O.; Malik, A.; Nyuur, R.B.; Pereira, V.; Ellis, F.Y. Drivers of training and talent development: Insights from oil and gas MNCs in Nigeria. *Hum. Resour. Dev. Int.* **2018**, *21*, 509–531.
83. Gomes, I.P.; Menezes, I.; Coimbra, J.L. Psychological empowerment as a predictor of quality in training: A glance at the Portuguese context. *J. Qual. Educ.* **2011**, *2*, 11.
84. Dries, N.; Pepermans, R. “Real” high-potential careers: An empirical study into the perspectives of organisations and high potentials. *Pers. Rev.* **2008**, *37*, 85–108. [[CrossRef](#)]
85. Javed, A.; Yasir, M.; Majid, A. Is social entrepreneurship a panacea for sustainable enterprise development? *Pak. J. Commer. Soc. Sci. (PJCSS)* **2019**, *13*, 1–29.
86. Meyers, M.C.; Woerkm, M.V.; Dries, N. Talent—Innate or acquired? Theoretical considerations and their implications for talent management. *Hum. Resour. Manag. Rev.* **2013**, *23*, 305–321.
87. Majid, A.; Abdullah, M.T.; Yasir, M.; Tabassum, N. Organizational inertia and change portfolio: An analysis of the organizational environment in developing countries. *Afr. J. Bus. Manag.* **2011**, *5*, 383–388.
88. Lepak, D.P.; Snell, S.A. The human resource architecture: Toward a theory of human capital allocation and development. *Acad. Manag. Rev.* **1999**, *24*, 31–48.

89. Den Hartog, D.N.; Belschak, F.D. When does transformational leadership enhance employee proactive behavior? The role of autonomy and role breadth self-efficacy. *J. Appl. Psychol.* **2012**, *97*, 194–202. [[PubMed](#)]
90. Bani, M.; Yasoureini, M.; Mesgarpour, A. A study on relationship between employees' psychological empowerment and organizational commitment. *Manag. Sci. Lett.* **2014**, *4*, 1197–1200.
91. Rayan, A.R.M.; Sebaie, A.S.M.; Ahmed, N.A. The mediating role of psychological empowerment in the relationship between the empowering leadership behavior and work engagement: A study applied on the cement sector in Upper Egypt. *Int. J. Bus. Manag.* **2018**, *13*, 18–30.
92. Safari, K.; Haghighi, A.S.; Rastegar, A.; Jamshidi, A. The relationship between psychological empowerment and organizational learning. *Procedia-Soc. Behav. Sci.* **2011**, *30*, 1147–1152.
93. Bantha, T.; Nayak, U. The relation of workplace spirituality with employees' innovative work behaviour: The mediating role of psychological empowerment. *J. Indian Bus. Res.* **2021**, *13*, 223–235.
94. Mushtaq, A.; Mehmood, H. Impact of Job crafting intervention on psychological empowerment, Work Engagement, and Affective Well-being in teachers. *J. Prof. Appl. Psychol.* **2023**, *4*, 98–116.
95. Nguyen, T.P.L.; Doan, H.X. Psychological empowerment and employees' creativity in Vietnam telecommunications enterprises: The mediating role of creative process engagement and intrinsic motivation. *Int. J. Emerg. Mark.* **2023**, *18*, 3264–3282.
96. Alagarsamy, S.; Mehroliya, S.; Aranha, R.H. The mediating effect of employee engagement: How employee psychological empowerment impacts the employee satisfaction? A study of Maldivian tourism sector. *Glob. Bus. Rev.* **2023**, *24*, 768–786.
97. Namasivayam, K.; Guchait, P.; Lei, P.-W. The influence of leader empowering behaviors and employee psychological empowerment on customer satisfaction. *Int. J. Contemp. Hosp. Manag.* **2014**, *26*, 69–84.
98. De Klerk, S.M. Investigation of Leadership Empowerment Behaviour, Psychological Empowerment, Work Engagement and Turnover Intention in a Chemical Industry. Master's Thesis, North-West University, Kirkland, WA, USA, 2013.
99. Dysvik, A.; Kuvaas, B. Exploring the relative and combined influence of mastery-approach goals and work intrinsic motivation on employee turnover intention. *Pers. Rev.* **2010**, *39*, 622–638.
100. Luthans, F.; Youssef, C.M. Emerging positive organizational behavior. *J. Manag.* **2007**, *33*, 321–349.
101. Bakker, A.B.; Demerouti, E. The job demands-resources model: State of the art. *J. Manag. Psychol.* **2007**, *22*, 309–328.
102. Schuckert, M.; Kim, T.T.; Paek, S.; Lee, G. Motivate to innovate: How authentic and transformational leaders influence employees' psychological capital and service innovation behavior. *Int. J. Contemp. Hosp. Manag.* **2018**, *30*, 776–796.
103. Collings, D.G.; Scullion, H.; Caligiuri, P.M. Global talent management: An introduction. In *Global Talent Management*; Routledge: Oxford, UK, 2018; pp. 3–15.
104. Sparrow, P.; Farndale, E.; Scullion, H. Globalizing the HR architecture: The challenges facing corporate HQ and international-mobility functions. In *Strategic Talent Management: Contemporary Issues in International Context*; Cambridge University Press: Cambridge, UK, 2013; pp. 254–277.
105. Narayanan, A.; Rajithakumar, S.; Menon, M. Talent management and employee retention: An integrative research framework. *Hum. Resour. Dev. Rev.* **2019**, *18*, 228–247.
106. Krejcie, R.V.; Morgan, D.W. Determining sample size for research activities. *Educ. Psychol. Meas.* **1970**, *30*, 607–610.
107. Jayaraman, S.; Talib, P.; Khan, A.F. Integrated talent management scale: Construction and initial validation. *Sage Open* **2018**, *8*, 2158244018780965.
108. Iqbal, S.; Hashmi, M.S. Impact of perceived organizational support on employee retention with mediating role of psychological empowerment. *Pak. J. Commer. Soc. Sci. (PJCSS)* **2015**, *9*, 18–34.
109. Kyndt, E.; Dochy, F.; Michielsen, M.; Moeyaert, B. Employee retention: Organisational and personal perspectives. *Vocat. Learn.* **2009**, *2*, 195–215.
110. Schuch, C.D.O.S. Os Impactos da Gestão de Talentos e do Suporte do Supervisor na Autoeficácia de Servidores Públicos. Ph.D. Thesis, Universidade Federal de Santa Maria, Santa Maria, Brazil, 2023.
111. Nassar, M.A. Psychological empowerment and organisational change among hotel employees in Egypt. *Res. Hosp. Manag.* **2017**, *7*, 91–98.
112. Serrenho, R.B.P. Work Empowerment: A Quantitative Study of the Leadership and Psychological Empowerment Impact in Job Performance. Master's Thesis, Universidade de Evora, Évora, Portugal, 2021.
113. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*; Vectors; Cengage Learning EMEA: Andover, UK, 2010; p. 816.
114. Saunders, M.; Lewis, P.; Thornhill, A. Research onion. In *Research Methods for Business Students*; Pearson: Bloomington, MN, USA, 2009; pp. 136–162.
115. Marcoulides, G.A.; Chin, W.W.; Saunders, C. A critical look at partial least squares modeling. *MIS Q.* **2009**, *33*, 171–175.
116. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E.; Black, W.; Anderson, R. *Multivariate Data Analysis*, 8th ed.; Cengage Learning EMEA: Andover, UK, 2019.

117. Hinkin, T.R. A brief tutorial on the development of measures for use in survey questionnaires. *Organ. Res. Methods* **1998**, *1*, 104–121.
118. Hu, L.T.; Bentler, P.M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct. Equ. Model. A Multidiscip. J.* **1999**, *6*, 1–55.
119. Hayes, A.F. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*; Guilford publications: New York, NY, USA, 2017.
120. Liu, X.; Ren, X. Analysis of the mediating role of psychological empowerment between perceived leader trust and employee work performance. *Int. J. Environ. Res. Public Health* **2022**, *19*, 6712. [[CrossRef](#)]
121. Podsakoff, P.M.; MacKenzie, S.B.; Lee, J.-Y.; Podsakoff, N.P. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J. Appl. Psychol.* **2003**, *88*, 879–903.
122. Datta, P.; Balasundaram, S.; Aranha, R.H.; Chandran, V. The paradox of workplace flexibility: Navigating through the case of Career Pandit. *Emerald Emerg. Mark. Case Stud.* **2023**, *13*, 1–33.
123. Saks, A.M. Antecedents and consequences of employee engagement. *J. Manag. Psychol.* **2006**, *21*, 600–619.

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.