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Attracting talent as a catalyst for sustaining learning organisations — a South African perspective

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Orientation: Although talent is a strategic asset for achieving organisational success, most higher education institutions (HEIs) struggle to attract talented academics required to compete.

Research purpose: The primary purpose of this study was to examine talent attraction practices that create a competitive advantage for South African HEIs.

Motivation for the study: The study was necessary to enhance the competitiveness of HEIs through talent attraction practices such as recruitment and selection, job analysis and employer branding.

Research approach/design and method: The concurrent mixed-methods approach was used to analyse the quantitative and qualitative data independently. A sample size of 347 was selected from three South African HEIs. However, the data were collected from only 277 respondents using questionnaires (265) and interviews (12). The quantitative data were analysed using Statistical Package for the Social Sciences (version 27.0) and Analysis of Moment Structures (version 29.0). The qualitative data were analysed using thematic analysis.

Main findings: The quantitative results showed a significant positive relationship between recruitment and selection, job analysis, employer branding and competitive advantage. The qualitative findings confirmed that talent attraction strategies created a competitive advantage for HEIs by hiring highly talented employees.

Practical/managerial implications: The research findings could be a viable tool to create value for HEIs by adopting different talent attraction strategies to acquire highly talented employees.

Contribution/value-add: This study sheds more light on the talent attraction practices that create value for HEIs.

Keywords: competitive advantage; employer branding; job analysis; recruitment and selection; talent attraction; talent management.

Introduction

Lately, society and corporate entities have moved from the traditional economy to the knowledge-based economy that requires knowledge and highly talented intellectual capital (Choong & Leung, 2022). While the traditional economy relies on traditional production factors, a knowledge-based economy depends on knowledge, information and a skilled workforce (Baum et al., 2009). This paradigm shift in society and the world of work requires employees to shift jobs and be willing to acquire new skill sets. This implies that only talented employees with the appropriate knowledge, skills and abilities (KSAs) can survive in the modern economy. The aforementioned argument emphasises the importance of the knowledge-based view (KBV) of the firm and higher education institutions (HEIs) to produce the knowledge required for the knowledge-based economy. Knowledge-based view of the firm considers knowledge and talent as the strategic assets that create value for organisations (Barney, 1991). From the KBV standpoint, talent remains the most valuable resource for today's knowledge-based economy because it delivers success for an organisation (Kerr, 2020).

Several governments, policymakers and practitioners have acknowledged the growing role of HEIs in the knowledge-based economy. Trinh (2023) believes that HEIs are not only a prerequisite for economic development but also play a vital role in sociopolitical stability and the human development index. The rapid changes in economic structures, industries and labour markets required a demand for rapid knowledge development, which HEIs play an essential role in this regard. In view of this, Gallardo-Gallardo et al. (2020) argue that talent attraction, development and retention have become priorities for most organisations, including HEIs in the competitive

business environment because talent is arguably the most valuable resource. Among organisational resources, talent delivers the highest competitive advantage for organisations. As the phrase 'competition for talent' was introduced by McKinsey in 1998, talent management (TM) has been perceived as a strategic tool for mitigating human resource management (HRM) challenges in the business environment (Chambers et al., 1998). Therefore, it suffices to conclude that the sustainability of HEIs lies in their ability to attract, develop and retain exceptional talent.

According to Pirzada et al. (2021), intellectual capital or talent is an essential resource in the competitive business environment that delivers success for an organisation. This makes TM the best strategic tool for achieving business success. Maker (2021) argues that from the perspective of intelligence and creativity, exceptional talent consists of three elements:

> [T]he ability and willingness to address complex problems in the most effective, efficient, economical, ethical, or elegant ways; the ability and willingness to solve different problems, from well-structured and known to ill-structured and novel most effectively, efficiently, economically, ethically, or elegant ways; and a highly integrated and interconnected knowledge structure within different fields. (p. 161)

The war for superior talent in HEIs arose because of the defection of academics from one institution to another (Samuel & Chipunza, 2013). The so-called 'competition for talent' presents enormous challenges for HEIs regarding talent attraction and retention. Gurmessa and Tefera (2019) found that compared to older academics, younger academics experienced higher levels of intention to quit. When commenting further, Mokgojwa et al. (2018) claim that the attraction of quality academics into HEIs remains a key hurdle. Also, Lesenyeho et al. (2018) argue that South African HEIs faced unprecedented challenges in attracting talents to academic positions. According to Lesenyeho et al. (2018), the factors that attract the best talent to academic positions in South African HEIs include career development and advancement, opportunities to contribute to decision-making, employer branding and prestige, job security, work-life balance, intellectual stimulation, innovation, opportunity to apply skills and autonomy.

Owing to the challenges facing HEIs, Farooq et al. (2017) argue that to remain highly competitive, HEIs must attract highly talented academics to assist with the teaching and learning process and innovation to find solutions to the turbulent changes in the education environment. Also, Musakuro and De Klerk (2021) acknowledged that HEIs need to attract and retain academic talent to attain the target levels of education and skills development as well as to achieve their vision and mission.

Other scholars, practitioners and policymakers have also proposed different strategies, such as TM (Harsch & Festing, 2020), knowledge management (Mohd Kamal et al., 2020), governance and managing change (Vlachopoulos, 2021) to attract, develop and retain talent. Among these strategies, this study focusses on TM practices because they support policies and strategies for change in HEIs to attract the academic talent required to create value.

The concept of TM has recently gained remarkable attention from researchers and human resource (HR) practitioners (Järvi & Khoreva, 2020). According to Lockwood (2006), TM broadly represents integrated strategies and systems to increase organisational productivity by attracting, developing and retaining talent, as well as utilising employees with the appropriate skills and abilities to meet the present and future needs of the business. It is clear that TM focusses on attracting, developing and retaining highly talented employees required by firms to compete in the business environment.

Nevertheless, this study examines talent attraction practices that promote the sustainability of HEIs because most of these experience a shortage of highly skilled employees because of their inability to compete for superior talent in the competitive environment. Musakuro and De Klerk (2021) point out that HEIs lag behind in the 'war for talent' compared to the industry. Musakuro and De Klerk (2021) add that South African academics are poorly remunerated relative to other professions in the industry. A further study by Musakuro (2022) reveals that TM practices in South African HEIs are poorly managed, leading to the inability to attract and retain high-quality academics. It is argued that, although TM emerged as a growing field in management literature, several questions remain, such as: What is the practical applicability of TM in organisations? What happens in practice, and why? (Thunnissen & Gallardo-Gallardo, 2017). Therefore, HEIs need to manage academic talent more effectively and efficiently to avoid talent shortages.

From the empirical point of view, Al-Dalahmeh (2020) postulates that there is scarce research on TM practices that contribute to the attraction of employees in HEIs. Thus, there is a scarcity of research on talent attraction practices and processes that deliver sustainable competitive advantage for South African HEIs. Against this background, the study aimed to examine talent attraction practices and processes that deliver sustainable competitive advantage for South African HEIs. This article is structured in the following way, (1) theoretical literature and hypotheses development, (2) theoretical framework, (3) conceptual model, (4) research methods, (5) results, (5) discussion, (6) theoretical implications, (7) managerial implications, (8) limitations and directions for future studies and (9) conclusion and recommendations.

Literature review and hypotheses development

This section reviews the empirical and theoretical literature that relates to HEIs, TM and competitive advantage. The section focusses on the clarification of the term talent, TM, current trends and issues in South African HEIs, talent attraction strategies, the concept of competitive advantage and hypothesis development.

Clarification of the term talent and talent management

Van Zyl et al. (2017) believe that the limited conceptual definition and theoretical foundation of talent makes it difficult to adopt an appropriate methodology for discovering talent within the work setting. Al-Dalahmeh (2020) confirms that the term 'talent' has no universally acceptable definition. Tyskbo (2023) also shares a similar view that while TM is a key priority for many practitioners and policymakers, the conceptual meaning of talent remains unclear. Therefore, this study responds to the calls from previous scholars by exploring how HEIs conceptualise talent. According to Joubert (2007), talent represents an individual's ability to repeatedly inspire, energise and arouse others' emotions. For Gallardo-Gallardo and Thunnissen (2016), talent is defined as employees who combine excellent resources with outstanding performance. Based on the views expressed by the aforementioned authors, this study considers talent as individuals who have the potential to add value to organisational performance through their knowledge, contribution, skills and sacrifices. This is because, in this modern era, HEIs need high-quality employees capable of creating value for the institution.

Collings and Mellahi (2009) see TM as activities and processes that involve identifying and attracting, developing, engaging, maintaining and deploying talent, which are of great value to organisations to enable them to succeed. According to Son et al. (2020), TM represents broad activities and processes that involve identifying key positions that create competitive advantage; developing a talent pool of high potential to fill key positions; developing differentiated intellectual capital to facilitate filling key positions with high potential incumbents and ensuring sustained commitment to the organisational goals.

Current trends and issues in South African higher education institutions

Throughout the world, there is a common understanding that HEIs contribute to economic growth and development and human capital index. Pouris and Inglesi-Lotz (2014) discover that HEIs contribute to social and economic development through four major missions, including the formation of human capital, building knowledge bases, knowledge transfer and integration and maintaining knowledge. On the contrary, Sebola (2023) contends that South African public universities have yet to make noticeable contributions to the national human capital development in the specific scientific fields, which the national labour market and economy require.

The Department of Higher Education and Training (DHET) (2021) reports that the South African higher education environment comprises 26 public universities and 131 private institutions of higher learning. Statistics revealed that in 2021, South Africa universities enrolled approximately 1 138 011 (VitalStats, 2021). The current South African statistics suggest that about 57 507 academics are engaged in teaching and research in public universities and 131 private institutions of higher learning (ChaaCha & Oosthuysen, 2023). The analysis of the statistics suggests an imbalance between the total number of enrolled students and academics. For this reason, DHET has introduced several interventions to mitigate the imbalance through various programmes, including the New Generation of Academics Programmes, Staffing South Africa's Universities Development Programme, Existing Academics Capacity Enhancement Programme and Supplementary Staff Employment Programme (ChaaCha & Oosthuysen, 2023).

In addition, these interventions aim to nurture future generations of academics and develop staff capacity. Building the capacity of present and future academics is imperative in South African HEIs that have been historically challenged with transformation issues from a staffing and student perspective. Besides these challenges, the diversified students and staff entering South African HEIs necessitate new ways and approaches to teaching, learning and research (ChaaCha & Oosthuysen, 2023). Teaching and learning within the South African landscape have recently witnessed a paradigm shift as the focus is now on technological advancements. ChaaCha and Oosthuysen (2023) advocate that academics function well when the following factors are present: organisational support, relationships, autonomy and technology.

Based on the previous discussion, academics are mandated to perform optimally using technology; hence, attracting, developing and retaining skills, knowledge and resources becomes continuous to keep abreast of new developments and innovations. Talent management plays a vital role in this regard by meeting the needs of academics to improve their performance. In the South African higher education sector, there is a growing concern about the supply and availability of academics in the future because baby boomers are near their retirement age, suggesting that more academics will be leaving the workforce than those entering the sector (Musakuro, 2022). In light of this, it becomes clear that TM is poorly managed by South African HEIs. This study will be a viable tool for HEIs to attract talented academics required to function effectively in the competitive industry.

Talent attraction strategies

Tarique and Schuler (2010) defined talent attraction as the process where an organisation competes for superior talent in the competitive environment. Csordás (2020) contends that most talented employees are looking for organisations that offer them challenging and meaningful jobs and development opportunities. Mabaso and Dlamini (2018) argue that, compared to the industry, HEIs failed to attract the most talented employees because of the poor implementation of TM. This study responds to the call made by Sparrow and Makram (2015), who stated that organisations should adopt TM to capture, leverage and protect talent. Reymert et al. (2023) found that while limited institutional

prestige affects the attraction of the best researchers into Norwegian HEIs, in the United Kingdom, salary levels served as the main barrier to attracting academic talent. Although most HEIs in South Africa have implemented TM policies, practices and processes, they still face the challenges of attracting talent, including employer branding, job security and work-life balance (Lesenyeh et al., 2018). This study found that although HEIs faced the daunting task of attracting high-quality talent, most empirical studies focussed largely only on talent development and retention. This study addressed the research gap by exploring talent attraction practices and processes that create sustainable competitive advantage for South African HEIs.

The concept of competitive advantage

Barney (1991) believes that competitive advantage refers a firm's internal nonimitable resource. According to Barney (1991), competitive advantage represents a firm's value-creating strategy, which cannot be copied by other competitors in the present or future. By contrast, Porter (1985) conceptualises competitive advantage in three ways: cost leadership, differentiation and focus on competitors who wish to distinguish themselves from those who are 'stuck in the middle' without success. Porter's (1985) definition explains that a firm's ability to produce a product or service at a minimal cost can contribute to a sustainable competitive advantage. The remaining elements of definition relate to the value perceived by the customers who either see specific attractive elements in the offering (differentiation) or feel that all their needs are being met by the competitor products and services.

Contrary to the views expressed by the aforementioned authors, Abiwu and Martins (2022) suggest that in the current competitive market, competitive advantage is not only achieved by doing something better than other rivals or producing products and services at a lower cost. Instead, a competitive advantage is achieved through a firm's ability to identify, attract, develop, integrate and maintain talented employees. This assertion is consistent with the assumption of the KBV of the firm theory, which states a firm can only achieve competitive advantage through the knowledge possessed by its employees (Barney, 1991). Wujarso et al. (2021) also concur that a sustainable competitive advantage could be achieved through human capital and strategic measures.

Hypothesis development

Adeosun and Ohiani (2020) found that organisations can leverage salary, branding, referral and job security to attract highly competent employees. The extant literature shows no consensus among scholars concerning talent attraction strategies that deliver competitive advantage for HEIs. However, this study focusses on recruitment and selection, job analysis and employer branding because it is believed that they received less scholarly attention and strongly impact the competitive advantage of HEIs.

It is imperative to note that recruitment and selection are different HR activities with varied meanings. While recruitment involves searching, identifying, attracting, catching and inspiring a large pool of applicants to apply for vacancies in the organisation (Anwar & Abdullah, 2021), selection involves hiring suitably qualified applicants who can successfully perform the job (Prabhu et al., 2020).

Tlaiss et al. (2017) discover that recruitment and selection act as valuable weapons for firms that have good quality talent. Almansoori et al. (2021) found that recruitment and selection are significant factors that can influence competitive advantage and organisational performance. There is a common understanding that acquiring and retaining highly skilled employees through recruitment and selection process are essential for a firm's image, leading to value creation. However, Vincent (2019) contends that although hiring the right talent is critical for a firm's success, many organisations fail to design and implement an effective and reliable recruitment process and policy to attract the top-notch talent needed to compete. Although recruiting the right talent creates a sustainable competitive advantage for organisations, such studies are scarce in South African HEIs. In view of this, the following hypothesis was proposed:

H1: Recruitment and selection positively impact sustainable competitive advantage in HEIs.

Ele et al. (2019) assert that job analysis is the bedrock of all HRM functions that help identify tasks, responsibilities, duties and human attributes (i.e. KSAs) required by job holders to perform a task. Siddique (2004) argues that job analysis is an important source of competitive advantage in its own right and merits the due attention of HR professionals, as well as line and top management. By contrast, Almannie (2015) found that job descriptions and job analysis in different departments of school districts were weak. The overall results indicate that job analysis and description exist in the medium range, indicating that schools need to improve job analysis to remain competitive (Almannie, 2015). Similarly, Sharif and Karim (2017) aver that the concept of job analysis is not popular in most organisations; hence some employees have negative perceptions about this aspect. In view of this, the following hypothesis was proposed:

H2: Job analysis positively impacts sustainable competitive advantage in HEIs.

According to Theurer et al. (2018), employer branding has received much scholarly interest from practitioners and academics in today's competitive business environment. Ambler and Barrow (1996) coined the concept of employer branding, which represents a set of functional, economic and psychological support provided through employment and acknowledged by the hiring firm. Theoretically, employer branding represents the sustained efforts made by organisations to remind employees and potential candidates that they are the employer of choice (Lloyd, 2002). In management literature, employer branding refers to an

approach that maintains a firm's image to attract and retain talented and committed employees (Ahmad & Daud, 2016).

A study by Adeosun and Ohiani (2020) suggests that firms can leverage on brand name to attract and recruit quality talent. Also, Muhammad and Shaikh (2021) found that employer branding dimensions (application, development, social and economic values) contribute to a firm's competitive advantage. Therefore, employer branding could be applied in HEIs to increase the effectiveness of recruiting and retaining staff by investing in it. However, Smith (2018) contends that the dominant employer branding paradigm lacks interest in processes because most studies focussed mainly on measurable outcomes associated with employer brand. For instance, existing studies focussed largely on employer branding and organisational performance (Tumasjan et al., 2020), employee attraction and retention (Ahmad et al., 2020), personal branding, corporate branding and corporate reputation and employee emotional bonding (Budhiraja, & Yadav, 2020). Brosi and Welpe (2015) argue that it is regrettable that the academic sector is mostly unrecognised because employer branding strategies are not comprehensively utilised. Despite large empirical studies (Chiṭu, 2020; Yameen et al., 2021) have established that employer branding activities help HEIs to attract and retain top talented employees, the number of studies on the interplay between employer branding and competitive advantage is very scarce in HEIs to confirm or refute other findings. In view of this, the following hypothesis was proposed:

H3: Employer branding positively impacts sustainable competitive advantage in HEIs.

For organisations, including HEIs to achieve sustainable competitive advantage, they have to amalgamate ideas and talents from within and outside the organisation because this creates diversity and synergy within the firm. According to Kraichy and Walsh (2022), employers should adopt the appropriate methods to acquire candidates for business operations and competitive advantage. Shet and Nair (2022) share a similar view that organisations should adopt the most appropriate strategies to acquire talent that affects their competitiveness. It is not surprising that almost all researchers have confirmed that talent attraction is vital to the growth and success of HEIs. However, little attention is paid to how talent strategy delivers a competitive advantage for HEIs. Hence, this current study addresses the gap in research by determining the relationship between talent attraction and competitive advantage in South African HEIs. In view of this, the following hypothesis was proposed:

H4: Talent attraction positively impacts sustainable competitive advantage in HEIs.

Theoretical framework

This study is supported by the KBV of the firm. This theory has received scholarly attention from researchers in various fields, especially HRM and organisational learning (Cook & Yanow, 1995). The theory assumes that knowledge constitutes an important resource that creates value for organisations (Barney, 1991). The KBV of the firm theory is an extension of the resource-based view (RBV) of the firm, which is made possible by capabilities (Barney, 1991). According to Grant (1996), from the KBV standpoint, knowledge is considered the most important factor of production and primary source of organisational success. From the perspective of the KBV of the firm, knowledge represents a strategic resource that does not lose value when compared with other factors of production, including land, capital and entrepreneurship. This implies that the ability of HEIs to succeed does not depend on physical or material resources but lies with a set of intangible knowledge-based capabilities.

There are two schools of thought situated in the KBV of the firm. The first school of thought assumes knowledge is an important organisational strategic resource (Grant, 1996). Although the RBV of the firm acknowledges the relevance of knowledge in creating value for organisations (Barney, 1991), the proponents of KBV critiqued that the RBV does not go far enough. In a critique of the RBV, Kaplan et al. (2001) failed to provide a clear distinction between different types of knowledge-based capabilities required by firms such as HEIs to achieve competitive advantage. The second school of thought shares the ideas of Spender (1996) on the importance of collective knowledge, tacit and social knowledge. According to Nonaka (1994), tacit knowledge represents the subjective technical know-how that is difficult to formalise, define and share with others. Thus, tacit knowledge is challenging to imitate or share. Hence, it is difficult for rivals or competitors to copy, constituting a competitive advantage for organisations. As tacit knowledge is highly personal and difficult to formalise, its transformation and dissemination remain a challenge. By contrast, social knowledge or capital is considered a key driver of tacit knowledge sharing (Hau et al., 2013). The second school of thought provides more insight into different kinds of behaviour, individuals' weaknesses and a firm's knowledge-based activities and processes, considering that individuals are restricted by bounded rationality (Spender, 1996). Because of individual weakness, it is argued that not all knowledge at a firm's level can be seen in an individual's head, hampering knowledge sharing.

The KBV of the firm is the theoretical lens that underpins the study, given that it considers knowledge to be a competitive nature of the firm and, therefore, constitutes a vital component of the business strategy. When properly adopted, this theory can deliver a sustainable competitive advantage for HEIs through knowledge sharing and integration. Knowledge sharing is a knowledge management process and structure that ensures optimum utilisation of knowledge resources to enhance performance (Mehmood et al., 2022). Thus, knowledge sharing is a social interaction where people exchange experiences, skills and knowledge across the firm. On the other hand, knowledge integration denotes the ability of employees to convert knowledge into action using their competence and expertise. Morone and Taylor (2012) state that knowledge integration allows firms to turn their

resources into innovation to create a competitive edge. Mehmood et al. (2022) suggest that developing a sustainable competitive advantage lies with knowledge sharing and integration because they allow firms to connect with different external sources for knowledge acquisition, attract knowledge from diverse sources, internalise new knowledge and utilise the knowledge for innovative activities in the competitive markets. As the KBV of the firm underscores the relevance of knowledge in developing a firm's competitiveness, it provides a good starting point to understand better how HEIs could create a competitive advantage through knowledge sharing and integration.

Conceptual model

Figure 1 is the conceptual model that supports this study. The conceptual model illustrates the intercorrelation between the independent (recruitment and selection, job analysis and employer branding) and dependent variables (sustainable competitive advantage). The model explains that recruitment and selection, job analysis and employer branding are the most effective talent attraction strategies that deliver competitive advantage for HEIs. In their conceptual model, Lyria et al. (2017) consider recruitment and selection and employer branding as the unique talent attraction strategies in organisations. Yadav and Singh (2021) acknowledge that recruitment and selection aimed at attracting highly competitive and qualified candidates required to create a competitive advantage. Furthermore, Bilińska-Reformat and Stańczyk (2018) suggest that developing strong employer branding strategies will create a sustainable competitive advantage for an organisation.

Research design and methodology

This section describes the research design and method adopted to find answers to the research problem and test the proposed hypotheses.

Research method

The study combined deductive and inductive approaches to investigate the talent attraction strategies that impact competitive advantage of South African HEIs. While the former has its origin in quantitative research, the latter has its origin in qualitative research. The deductive approach allowed the researcher to identify and test the best-fit theory that underpins the study. Also, the deductive approach was
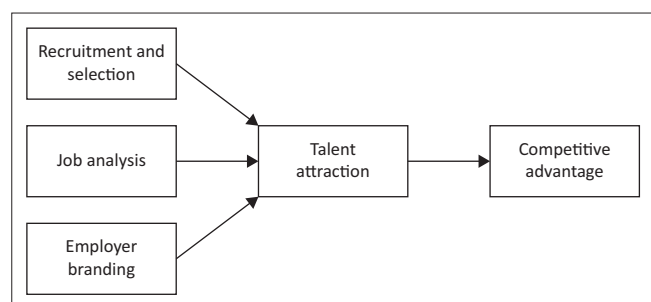

FIGURE 1: Talent attraction and sustainable competitive advantage.

adopted because it helps to test the research hypotheses formulated to address the research problem and questions. On the other hand, the inductive approach was used to understand the research phenomenon better. Integrating deductive and inductive approaches in this study, provided a better opportunity to address the objective and subjective processes in developing new knowledge of the subject matter.

Research strategy

The study adopted a descriptive and exploratory strategy to describe and provide adequate understanding of the talent attraction strategies that create value or deliver sustainable competitive advantage for HEIs. A descriptive research design was applied in the quantitative phase to adequately explain interplay between talent attraction strategies and competitive advantage in HEIs. Siedlecki (2020) postulates that descriptive research helps prevent manipulating research variables. The descriptive research enabled the researcher to use different statistics to make sense of the data. On the other hand, exploratory research was used in the qualitative phase to provide an in-depth analysis of how talent attraction strategies impact competitive advantage.

Research approach

A cross-sectional study was conducted to collect and analyse the data from the participant at the same time. The mixed-methods approach was employed to understand the contradictions between the qualitative and quantitative results. A concurrent mixed-methods approach was used to analyse the quantitative and qualitative data independently. Tashakkori et al. (2020) state that concurrent mixed-methods approach allows the researcher to incorporate the findings into meta-inferences, having separated the quantitative and qualitative results.

Research location

The study involved three South African HEIs located in three provinces. These institutions were selected because studies (Lesenyeho et al., 2018; Musakuro, 2022) have found that they are experiencing a myriad of challenges in attracting and retaining talent. Another reason for choosing these institutions was access to large amounts of information. The three HEIs have granted the researcher permission to conduct the study. Also, the written consent of the respondents was obtained prior to the data collection.

Target population and sampling method

The target population (N = 3613) included academics and professional service staff in the three HEIs. The population distribution in each institution is as follows: Institution A = 1363, Institution B = 1208 and Institution C = 1042. The study applied the 95% confidence level and 5% confidence interval. Equation 1 was used to determine the sample size:

$$\text{Sample size} = \cfrac{\cfrac{z^2 \times p(1-p)}{e^2}}{1 + \left(\cfrac{z^2 \times p(1-p)}{e^2 N} \right)} \qquad \text{[Eqn 1]}$$

where

N is the population size
e is the margin of error (percentage in decimal form)
z is the z-score
P is the population.

Therefore, using the aforementioned formula, the appropriate sample size was 347. The study adopted stratified and purposive sampling techniques to select the sample. Stratified sampling is a type of probability sampling applied in quantitative research to obtain a representative of a good sample. Etikan and Bala (2017) point out that stratified sampling involves subdividing the target population into strata of the homogeneous group and choosing items from each stratum to generate the sample. In this study, the population (academics) was first divided into subgroups, and then decisions were made on which strata were to be included. For example, the target population was categorised into universities, faculties and departments, and samples were drawn from each stratum. The stratified sampling helped reduce sample bias. By contrast, purposive sampling is a type of nonprobability sampling used in qualitative research to elicit specific information from subjects with adequate knowledge of the subject matter (Etikan & Bala, 2017). Purposive sampling was used to gather relevant information from the professional service staff, who have adequate information and knowledge regarding talent attraction and competitive advantage in HEIs.

Data collection method

The data were collected using structured questionnaires and semi-structured interviews. The questionnaire was first piloted to determine its reliability and validity before collecting the primary data. While the reliability of the measuring instrument was determined by Cronbach's coefficient alpha, the validity was determined by computing exploratory factors analysis (EFA). The pilot study results indicated the measuring instrument was reliable and valid. Hence, the same instrument could be adopted in similar studies. Moreover, Kaiser-Meyer-Olkin (KMO) and Bartlett's test as well as measure of sampling adequacy (MSA) were employed to determine the adequacy of the sample. The KMO and Bartlett scores range from 0 to 1, reaching 1 when the items are perfectly estimated and free from error, where ≥ 0.90 is marvellous, ≥ 0.80 is meritorious, ≥ 0.70 is middling, ≥ 0.60 is mediocre, ≥ 0.50 is poor and < 0.50 is unacceptable. The result of the MSA was 0.915. From the statistical point of view, the data set met the sampling adequacy and sphericity requirements for EFA. Therefore, there were no validity and reliability issues in this study.

The study variables (i.e. recruitment and selection, job analysis, employer branding, talent attraction and competitive advantage) were assessed on a 5-point Likert response scale, ranging from strongly agree (5) to strongly disagree (1). The questionnaire consisted on 26 items: recruitment and selection (7 items), job analysis (5 items), employer branding (6 items) and competitive advantage (8 items). Talent attraction was determined by aggregating the items that measure recruitment and selection, job analysis and employer branding. While quantitative data were collected from 265 respondents (academics), Zoom interviews were conducted with 12 professional service staff (faculty and departmental Heads, HR managers and Deans). All participants consented to the interviews being audio-taped.

Data quality and integrity

In terms of the quantitative study, Cronbach's coefficient alpha and EFA were computed to determine the data quality and integrity. The results of the pilot study suggest no validity and reliability issues. In the case of qualitative research, data quality and integrity were determined through trustworthiness criteria such as credibility, dependability, confirmability and transferability. The credibility of the research findings was determined through prolonged interaction with the participants, peer debriefing and data triangulation. The dependability of the findings was achieved through peer review. The confirmability of the findings was achieved through triangulation and audit trials. Also, the transferability of the findings was determined through a detailed description of the research processes and methods.

Data analysis

The Statistical Package for the Social Sciences (SPSS), 27.0, and Analysis of a Moment Structures (AMOS), 27.0, were used for analysing quantitative data. Exploratory factor analysis was computed to test the validity and common method bias in the study. To address validity issues, which often lead to inaccurate conclusions, the examination of variance that is associated with the measuring instrument was applied. Testing bias is very important, especially a self-constructed question was used to collect the data, and the predictor and criterion constructs are collected from a single source. Herman's one-factor test for common method bias was applied. The findings showed that Factor 1 explained 43.90% of the total variance, which does not meet the threshold (50%). Therefore, the findings confirm that common method bias is not an issue in the study. The qualitative data were transcribed manually and analysed using thematic analysis.

Ethical considerations

The ethical clearance was approved by the University of KwaZulu-Natal Humanities and Social Sciences Research Ethics Committee (ethical clearance number: HSSREC/00000852/2019). A written informed consent was distributed to all respondents, which contained relevant information, including research methods, research procedures and description of the participants. Regarding confidentiality and provisions of the *Protection of Personal Information Act (POPIA)*

of 2021, a confidentiality clause was included in the consent form to assure the participants that the data collected will be used solely for the intended purposes. In terms of anonymity, the participants' personal information, including names, was replaced with pseudonyms in the research and journal publications. To reduce the possibility of bias, stratified sampling was used to ensure that the sample was representative of the population. Additionally, no incentive was used to induce the participants to participate in the study. The participation in this study was purely voluntary.

Results

Reliability and validity

Table 1 shows the reliability and validity of the self-constructed questionnaire. The reliability scores range between 0.77 (for job analysis) and 0.95 (for competitive advantage and talent attraction). Evidently, the variables measured in this study had a reliability score exceeding the threshold ($a = 0.700$). Hence, the study has no reliability issue. Moreover, the findings revealed that the composite reliability (CR) of all variables is greater than 0.77, which implies that the CR of the items in the measurement model is accurate.

To determine the validity of the questionnaire, EFA using the component matrix was performed. A careful examination of the scree plot revealed that four factors were extracted, including Factor 1 (job analysis), Factor 2 (employer branding), Factor 3 (recruitment and selection) and Factor 4 (competitive advantage). These four factors explained 62.7% of the variance

of the questionnaire. The findings indicated that all the items had acceptable loadings of > 0.30. Statistically, the measuring instrument used was valid and can therefore be adopted by scholars for similar studies. To determine convergent validity, the rule of thumb suggests that CR > 0.7, CR > average variance extracted (AVE) and AVE > 0.5. Composite reliability and AVE results are greater than 0.5 (see Table 4).

To assess the sample adequacy, KMO and Bartlett's test were used (See Table 2). The results suggest that the MSA score was 0.938 (marvellous). From the statistical point of view, the requirements of sampling adequacy were met. Therefore, the sample was adequate for this study.

To provide further interpretation of the results, descriptive statistics, including mean, standard deviation (SD) and correlation, were employed (see Table 3). Pearson's correlation was used to analyse the strength of the relationship between variables measured in the study (see Table 3). Using the scale of 1–5, the results of all the variables measured (recruitment and selection, job analysis, employer branding, talent attraction and competitive advantage) had very high mean values, exceeding the threshold (mean = 3.00). This implied that the respondents perceived recruitment and selection, job analysis, employer branding and talent attraction as the predictors of competitive advantage. Additionally, the results of the correlations showed a strong positive intercorrelation between recruitment and selection and competitive advantage ($r = 0.884$, $p < 0.001$). Also, a

TABLE 1: Reliability and validity of the measuring instrument.

Variables	Cronbach's alpha (a)	CR	AVE	Item	Weights
Recruitment and selection	0.85	0.85	0.620	RSP7	0.745***
				RSP4	0.743***
				RSP6	0.737***
				RSP1	0.733***
				RSP5	0.722***
				RSP2	0.703***
				RSP3	0.694***
Job analysis	0.77	0.76	0.530	JA2	0.784***
				JA5	0.782***
				JA3	0.776***
				JA1	0.715***
				JA4	0.571***
Employer branding	0.84	0.84	0.523	EB6	0.846***
				EB4	0.834***
				EB5	0.765***
				EB2	0.695***
				EB1	0.677***
				EB3	0.659***
Competitive advantage	0.94	0.94	0.671	CA1	0.835***
				CA2	0.772***
				CA3	0.820***
				CA4	0.846***
				CA5	0.855***
				CA6	0.827***
				CA8	0.802***
				CA7	0.794***

Source: Abiwu, L. (2021). Intangible outcomes of talent management practices in selected South African higher education institutions. Doctoral thesis. University of KwaZulu-Natal
***, *p*-value < 0.001.
AVE, average variance extracted; CR, composite reliability.

TABLE 2: Kaiser-Meyer-Olkin and Bartlett's test.

KMO and Bartlett's test		
Kaiser-Meyer-Olkin measure of sampling adequacy		0.938
Bartlett's test of sphericity	Approx. Chi-square	4533.674
	df	325.000
	Sig.	0.000

Source: Abiwu, L. (2021). Intangible outcomes of talent management practices in selected South African higher education institutions. Doctoral thesis. University of KwaZulu-Natal
Approx., approximate; KMO, Kaiser-Meyer-Olkin; *df*, degree of freedom; Sig., significance.

TABLE 3: Mean, standard deviation and correlation.

Variables	Mean	SD	1	2	3	4
Recruitment and selection	4.37	0.56667	-	-	-	-
Job analysis	4.43	0.53635	0.599**	-	-	-
Employer branding	4.39	0.59394	0.777**	0.643**	-	-
Talent attraction	4.35	0.54739	0.844**	0.773**	0.888**	-
Competitive advantage	4.24	0.79885	0.574**	0.571**	0.667**	0.884**

Source: Abiwu, L. (2021). Intangible outcomes of talent management practices in selected South African higher education institutions. Doctoral thesis. University of KwaZulu-Natal
**, *p*-value < 0.01.
SD, standard deviation.

TABLE 4: Construct validity.

Constructs	RSP	JA	EB	CA	CR	AVE	MSV	ASV
RSP	0.599	-	-	-	0.85	0.620	0.430	0.335
JA	0.777	0.643	-	-	0.76	0.530	0.273	0.241
EB	0.844	0.773	0.888	-	0.84	0.523	0.522	0.385
CA	0.0574	0.571	0.667	0.884	0.94	0.671	0.456	0.324

Source: Abiwu, L. (2021). Intangible outcomes of talent management practices in selected South African higher education institutions. Doctoral thesis. University of KwaZulu-Natal
ASV, average shared squared variance; AVE, average variance extracted; CA, competitive advantage; CR, composite reliability; EB, employer branding; JA, job analysis; MSV, maximum shared variance; RSP, recruitment and selection.

moderate positive relationship existed between job analysis and competitive advantage ($r = 0.599$, $p < 0.001$). In addition, a strong positive relationship occurred between employer branding and competitive advantage ($r = 0.643$, $p < 0.001$).

In addition, the structural equation modelling was computed to test the hypotheses via AMOS. This suggests the need for EFA and the confirmatory factor analysis (CFA) to determine the validity and reliability of the questionnaire used to collect the data before they are used in the structural model. Exploratory factor analysis helped to purify the data. The results reveal no validity and reliability issues in forming variables measured in the study. Moreover, various criteria such as Chi-square value (CMIN/degree of freedom [df]), goodness-of-fit index (GFI), root mean square error of approximation (RMSEA), a normed fit index (NFI), comparative fit index (CFI), Tucker-Lewis index (TLI) and incremental fit index (IFI) were used to test the model fit. The model showed an acceptably good fit. The results showed that the goodness-of-fit indexes indicate an excellent fit of the model with the data. All the paths in the structural model showed a high significance level ($p < 0.001$).

The results of the model fit analysis (CMIN/df) are shown in Table 5.

The GFI for the measurement model was computed with the corresponding GFI, CFI, TLI and NFI values. The findings revealed that these values were above the threshold (0.819), and the RMSEA score was 0.046 (See Table 6).

Also, linear regression analysis was used to analyse the relationship between the dependent variable (competitive advantage) and independent variables (recruitment and selection, job analysis, employer branding and talent attraction) (see Table 7). Results indicated an R-squared score of 0.592 as well as an adjusted R-squared score of 0.351. This implies that the model (competitive advantage) predicts 59.2% of the variations in talent attraction practices. The result is significant at 1% ($p < 0.01$), suggesting a significant positive relationship between the dependent and independent variables. The beta (β) and the corresponding p-values for recruitment and selection ($\beta = 0.829$, $t = 2.574$, $p < 0.005$), job analysis ($\beta = 0.771$, $t = 3.410$, $p < 0.000$), employer branding ($\beta = 1.130$, $t = 4.298$, $p < 0.000$) and talent attraction ($\beta = -1.724$, $t = -2.473$, $p < 0.005$), respectively, indicated that job analysis and employer branding have a strong significant impact on competitive advantage, followed by recruitment and selection. However, talent attraction made a negative contribution towards the model. While H1, H2 and H3 are accepted, H4 is considered unaccepted.

The qualitative findings are further provided to either support or refute the quantitative findings. As mentioned, 12 participants were interviewed, including academics, Deans and HR managers. Four themes emerged as the talent attraction strategies influencing competitive advantage in HEIs job analysis, employer branding, recruitment and selection and salary. Figure 2 illustrates the themes that form the basis of the findings.

Theme 1: Job analysis

The findings confirmed that job analysis positively impacted competitive advantage in South African HEIs. Most participants ($N = 8$) pointed out that job analysis is an important HR tool for identifying and attracting highly skilled employees needed to achieve a competitive advantage.

TABLE 5: Model fit analysis.

Model	NPAR	CMIN	df	P	CMIN/df
Default model	127	1355.315	863	0.000	1.570

Source: Abiwu, L. (2021). Intangible outcomes of talent management practices in selected South African higher education institutions. Doctoral thesis. University of KwaZulu-Natal

NPAR, number of distinct parameters; df, degree of freedom; P, significance value; CMIN/df, minimum discrepancy divided by degree of freedom.

TABLE 6: Model fit analysis.

Model	CFI	GFI	NFI	TLI	RMSEA
Default model	0.925	0.819	0.819	0.918	0.046

Source: Abiwu, L. (2021). Intangible outcomes of talent management practices in selected South African higher education institutions. Doctoral thesis. University of KwaZulu-Natal

CFI, comparative fit index; GFI, goodness-of-fit index; NFI, normed fit index; RMSEA, root mean square error of approximation; TLI, Tucker-Lewis index.
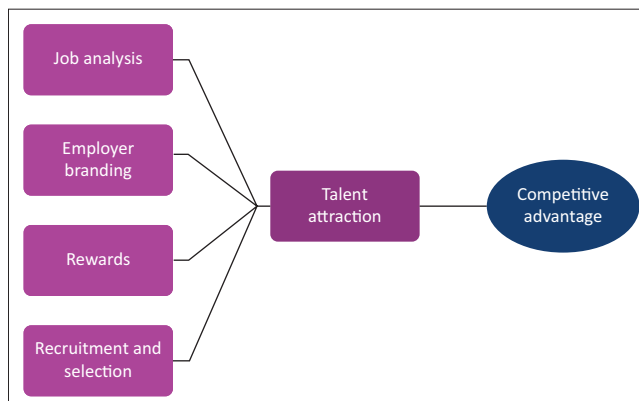

Source: Abiwu, L. (2021). Intangible outcomes of talent management practices in selected South African higher education institutions. Doctoral thesis. University of KwaZulu-Natal

FIGURE 2: Talent attraction strategies that influence competitive advantage.

TABLE 7: The relationship between talent attraction practices and sustainable competitive advantage.

Independent variables	R	R-squared value	Adjusted R-squared value	F	Beta	T	P
-	0.719†	0.516	0.509	-	-	-	0.000‡
Recruitment and selection	-	-	-	-	0.829	2.574	0.011
Job analysis	-	-	-	-	0.771	3.410	0.000
Employer branding	-	-	-	-	1.130	4.298	0.000
Talent attraction	-	-	-	-	-1.724	-2.473	0.014
Constant	-	-	-	-	-	-1.045	0.297

Source: Abiwu, L. (2021). Intangible outcomes of talent management practices in selected South African higher education institutions. Doctoral thesis. University of KwaZulu-Natal

†, represents intercept or constant term.

‡, represents the slope coefficient or regression coefficient.

This is evident in the response of Participant 1, who responded the following:

'To some extent, job analysis can also be part of attraction strategies. This is because it communicates essential information to the job seekers concerning the job requirements, description of the job's duties, skills, and knowledge required.' (Participant 1, Male, Institution B)

Theme 2: Employer branding

The study found that employer branding is an effective HRM strategy that increases organisational attractiveness. The ($N = 12$) participants expressed interest in working with institutions with a good image as employers. The overall findings showed that given the war for talent, HEIs had branded themselves as the employer of choice to attract high performers that would help them achieve a competitive advantage. For example, a participant from Institution A expressed the following views: 'Every institution is interested in attracting talented and committed employees. One of such strategies is employer branding. Employer branding is a modern concept which projects the image of an organisation' (Participant 7, Female, Institution A).

Theme 3: Recruitment and selection

Recruitment and selection constitute an important HRM practice that creates talented applicants to apply for job vacancies in an organisation. Most participants ($N = 9$) expressed that recruitment and selection helped to identify and attract competent, knowledgeable and qualified applicants into South African HEIs. The findings are supported by the opinions expressed by Participant 11 from Institution C, who said: 'Recruitment and selection practices aim to identify, attract and choose applicants who meet the job recruitment. Recruitment and selection practices attracted many qualified applicants to the University' (Participant 11, Male, Institution C).

Theme 4: Rewards

Unlike the results from the quantitative study, the qualitative findings revealed that salary and benefits provided by HEIs helped attract high-quality and talented academics. Most participants ($N = 8$) shared similar views that salary and benefits are key components of TM practices that attracted them to HEIs. Participant 8 following views:

'[S]upporting the findings: Employees will be willing to remain working with institutions that can offer them something better than other institutions. Therefore, if the University wants to retain highly qualified staff, it should offer them attractive remuneration.' (Participant 8, Female, Institution A)

Discussion

To address the general objective of the study, four hypotheses were proposed and tested.

Hypothesis 1 analysed the intercorrelation between recruitment and selection and competitive advantage in HEIs. The quantitative and qualitative results have established that the relationship between recruitment and selection and competitive advantage was statistically significant. These findings also confirmed the results of previous research, which established a statistical relationship between recruitment and selection and sustainability (Almansoori et al., 2021; Hamza et al., 2021). According to Hamza et al. (2021), recruitment and selection aimed at attracting high-potential applicants required to achieve a competitive advantage. The views expressed by the aforementioned authors suggest that the sustainability of HEIs depends on their ability to recruit and select applicants with the appropriate KSAs. However, Vincent (2019) argues that although recruiting talent is essential for a firm's success, most of them fail to design an effective and reliable recruitment policy to attract top-notch talent to remain competitive to attract the top-notch talent needed to compete.

Furthermore, **H2** assessed the relationship between job analysis and competitive advantage in HEIs. The quantitative and qualitative studies confirmed that job analysis had a positive relationship with competitive advantage. The study established that a detailed job analysis could assist HEIs in attracting applicants who meet the job description and specifications. The findings are consistent with the existing study by Siddique (2004), who discovers that job analysis creates a competitive advantage for organisations, requiring the attention of HR professionals and managers. On the contrary, Almannie (2015) discovers that job descriptions and job analysis in some schools were weak; hence it failed to produce the necessary outcomes. Although job analysis is not a novel concept, it is disappointing that such studies are still limited in HEIs (Sharif & Karim, 2017).

Hypothesis 3 analysed the relationship between employer branding and competitive advantage in South African HEIs. The quantitative and qualitative findings revealed that employer branding positively contributed to the competitiveness of South African HEIs. The study found that a distinctive employer branding strategy could lure top candidates into various academic positions in HEIs. Minchington (2010) suggests that employer branding acts as a glue for attracting and retaining talented employees in organisations. According to Muhammad and Shaikh (2021), employer branding creates a competitive advantage for organisations by attracting high-potential and committed employees. However, Smith (2018) contends that the dominant employer branding paradigm lacks interest in processes because most studies focussed largely on outcomes associated with the employer brand. Brosi and Welpe (2015) also point out that it is regrettable that the academic sector is mostly unrecognised because employer branding strategies are not comprehensively utilised. Although a large number of studies have established that employer branding activities help HEIs to attract and retain top talented employees (Chiţu, 2020; Yameen et al., 2021), it is surprising that the number of studies on the interplay between employer branding and competitive advantage in South African HEIs remains very scarce to confirm or refute other findings.

Lastly, **H4** ascertained the relationship between talent attraction and competitive advantage. While the quantitative results indicated that talent attraction made a negative contribution towards competitive advantage, the qualitative findings supported the idea that talent attraction has the potential to deliver a competitive advantage for HEIs by hiring a highly talented workforce. The findings are supported by previous studies that revealed that talent attraction remains the central issue in South African HEIs (Lesenyeho et al., 2018). According to Lesenyeho et al. (2018), the factors that attract the best talent to academic positions in South African HEIs include career development and advancement, opportunities to contribute to decision-making, employer branding and prestige, job security, work-life balance, intellectual stimulation, innovation, opportunity to apply skills and autonomy. Therefore, for HEIs to achieve a sustainable competitive advantage, they have to amalgamate ideas and talents from within and outside the organisation because this creates diversity and synergy within the firm. This assertion is consistent with the premise of the KBV of the firm, which assumes that knowledge possessed by employees represents an important resource that delivers a competitive advantage for organisations (Penrose, 1959).

Managerial implications

The study has some managerial implications for the management of HEIs worldwide. The research findings could be used as a viable tool to create a sustainable competitive advantage for firms and HEIs worldwide through talent attraction practices, including recruitment and selection, job analysis and employer branding. Also, the findings could be useful to the management of HEIs in developing policy towards talent attraction. The findings, when applied, will contribute to addressing labour turnover issues in HEIs.

Limitations and directions for future research

The scope of the study was limited to academics and professional service staff at the South African HEIs, making the generalisation of the results challenging because of the differences in the organisational context. Therefore, future studies should combine more than one specific industry. Additionally, the study included only academics and professional service staff in top management positions in South African HEIs. This implies that other professional staff, such as administrative staff in the same HEIs, were excluded from the research. Hence, future research should include other administrative staff in HEIs.

Conclusion and recommendations

Recently, many firms, including HEIs, faced the daunting task of identifying and attracting high performers needed to achieve a competitive advantage in the labour market. However, this study revealed that talent attraction strategies, including recruitment and selection, job analysis and employer branding, could be leveraged by HEIs to achieve a competitive advantage. Based on the findings, the following recommendations are made: firstly, HEIs commit resources to build their brands and image through employer branding in the labour market. Investing in employer brands can help improve brand equity and build up the customers' mindset, leading to a competitive advantage. Secondly, HEIs should design an inclusive and effective recruitment and selection policy and procedures to attract the most qualified candidates to achieve a sustainable competitive advantage. The recruitment and selection policy and procedures should contain detailed information such as the preferred staffing practices, hiring philosophy, recruitment and selection methods, selection tests, interviews, assessments and reference checks. Thirdly, the recruitment and selection process in HEIs should be merit and action based with the potency to attract and maintain the talented, knowledgeable and skilled academics required to compete in the global market. Fourthly, HEIs should invest in TM practices to attract and retain people with KSAs required to achieve the set goals. Fifthly, HEIs should develop a detailed job analysis with a clear job description and a person's specifications. The detailed job analysis should indicate the specific KSAs, experience and qualifications required for various positions.

Authors' contributions

The contributions of the corresponding author, L.A., include conceptualisation, methodology, formal analysis, investigation, writing – original draft, visualisation, project administration, software, validation, data curation and resources. I.M.'s contributions include supervision, reviewing and editing.

Data availability

The authors confirm that the data supporting the findings of this study are available within the article and from the corresponding author, L.A. upon reasonable request.

Disclaimer

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